

## **Prefatory Note**

The attached document represents the most complete and accurate version available based on original files from the FOMC Secretariat at the Board of Governors of the Federal Reserve System.

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## **Part 2**

April 21, 2010

# **CURRENT ECONOMIC AND FINANCIAL CONDITIONS**

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## **Recent Developments**

April 21, 2010

## **Recent Developments**

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## **Domestic Nonfinancial Developments**

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## Domestic Nonfinancial Developments

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Economic activity appears to have expanded at a moderate rate in the first quarter, as private final demand has strengthened further and the pace of inventory liquidation has greatly diminished. Consumer spending has increased solidly since the beginning of the year, and business investment in equipment and software appears to have posted another sizable gain last quarter. On the downside, activity in the housing market has remained lackluster since the middle of last year, and conditions in the nonresidential construction sector generally remain bleak. In addition, budgetary pressures led to a further significant contraction in state and local expenditures last quarter. Turning to other indicators of economic activity, industrial production advanced briskly again in the first quarter, and labor market conditions improved, on net. Meanwhile, both headline and core consumer price inflation have been soft in recent months.

### Labor Market Developments

The labor market is showing signs of a nascent recovery. After falling steeply through most of 2009, private nonfarm payroll employment increased about 50,000 per month, on average, over the first quarter of 2010—the first quarterly increase since the onset of the recession.<sup>1</sup> With the average workweek also up last quarter, aggregate hours of all employees increased at an annual rate of about 2 percent for the quarter, after declining 6 percent in 2009.<sup>2</sup> The upturn in private employment has been widespread across industries, as the three-month diffusion index in March moved above 50 for the first time since January 2008.

Data from the household survey also point to a firming in labor market conditions.<sup>3</sup> The unemployment rate held steady at 9.7 percent throughout the first quarter—

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Note: A list of abbreviations is available at the end of Part 2.

<sup>1</sup> Government employment was little changed in the first quarter, as declines in state and local employment were offset by hiring for the decennial census. Temporary census hiring totaled 87,000 through March, similar to the average pace seen for the 1990 and 2000 censuses. In the 2000 census, the temporary workforce rose to 530,000 in May.

<sup>2</sup> We estimate that the February snowstorms depressed the change in private payroll employment in February by about 75,000 and boosted the change in March by a similar amount. We also think that the 0.1 hour decline in the average workweek for all employees in February—and its subsequent reversal in March—were due to the snowstorms.

<sup>3</sup> In the first quarter of this year, employment increases in the household survey (adjusted for updates to population estimates) averaged 450,000 per month, about 400,000 per month more than the employment gains in the establishment survey. Large discrepancies are common; in the fourth quarter of last year, for example, employment in the household survey fell by 235,000 per month more, on average, than employment in the establishment survey. We tend to view the establishment survey as the more reliable indicator of changes in employment at quarterly frequencies.

### Changes in Employment

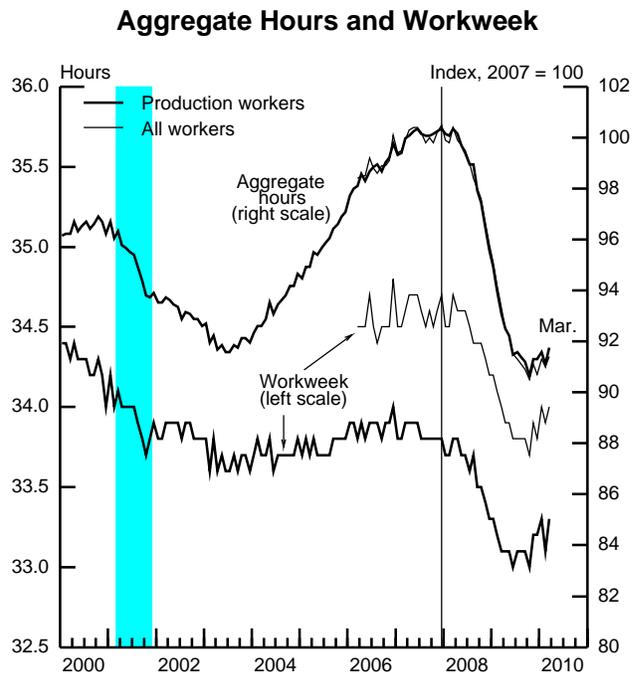
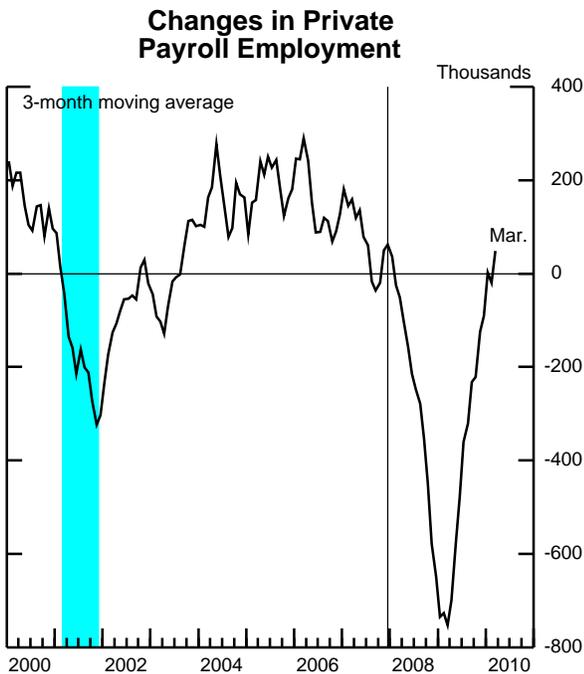
(Thousands of employees; seasonally adjusted)

Measure and sector	2009	2009		2010			
		Q3	Q4	Q1	Jan.	Feb.	Mar.
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-395	-261	-90	54	14	-14	162
Private	-388	-233	-90	49	16	8	123
Natural resources and mining	-8	-5	0	8	8	6	9
Manufacturing	-107	-49	-33	15	22	6	17
Ex. motor vehicles	-97	-59	-33	9	-5	16	15
Construction	-84	-72	-39	-35	-60	-59	15
Residential	-32	-22	-6	-13	-17	-12	-10
Nonresidential	-52	-50	-33	-22	-43	-46	25
Wholesale trade	-19	-11	-5	2	-8	4	9
Retail trade	-42	-39	-23	24	49	8	15
Financial activities	-29	-20	-9	-19	-22	-15	-21
Temporary help services	-12	-11	62	42	49	37	40
Nonbusiness services <sup>1</sup>	-6	18	-12	47	35	34	73
Total government	-7	-28	0	5	-2	-22	39
Federal government	4	3	2	29	33	6	48
Total employment (household survey)	-450	-423	-325	371	541	308	264
Memo:							
Aggregate hours (percent change) <sup>2</sup>							
All employees	-6.1	-4.1	-1.5	2.1	.7	-.3	.4
Production workers	-5.6	-2.9	-1.4	1.8	.3	-.5	.7
Average workweek (hours) <sup>3</sup>							
All employees	33.9	33.8	33.8	34.0	34.0	33.9	34.0
Production workers	33.1	33.1	33.1	33.2	33.3	33.1	33.3
Manufacturing	39.8	39.9	40.3	40.8	40.9	40.5	41.0

1. Nonbusiness services comprises education and health, leisure and hospitality, and "other."

2. Establishment survey. 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.

3. Establishment survey.



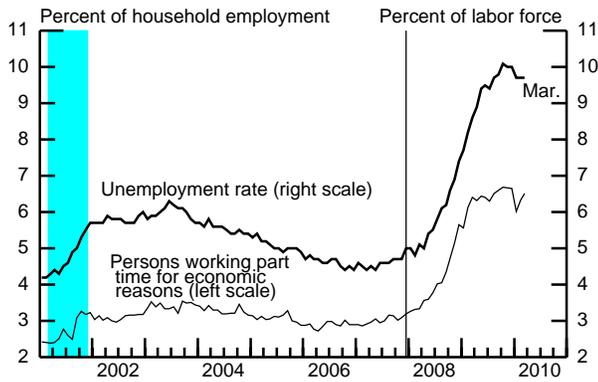
Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.  
Source: U.S. Department of Labor, Bureau of Labor Statistics.

### Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

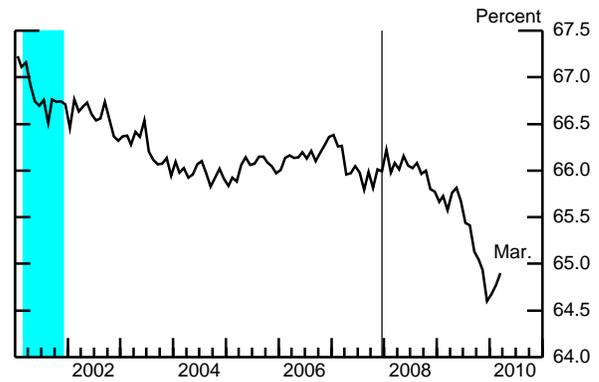
Rate and group	2009	2009		2010			
		Q3	Q4	Q1	Jan.	Feb.	Mar.
<i>Civilian unemployment rate</i>							
Total	9.3	9.7	10.0	9.7	9.7	9.7	9.7
Teenagers	24.3	25.4	27.2	25.8	26.4	25.0	26.1
20-24 years old	14.8	15.1	15.7	15.9	15.8	16.0	15.8
Men, 25 years and older	8.8	9.4	9.5	9.0	9.0	9.1	9.0
Women, 25 years and older	6.9	7.1	7.5	7.4	7.3	7.4	7.5
<i>Labor force participation rate</i>							
Total	65.4	65.3	64.9	64.8	64.7	64.8	64.9
Teenagers	37.5	37.4	35.8	35.4	35.2	35.1	35.8
20-24 years old	73.0	72.8	71.4	71.1	70.7	71.3	71.4
Men, 25 years and older	74.7	74.8	74.3	73.9	73.7	74.0	74.1
Women, 25 years and older	59.9	59.8	59.6	59.8	59.8	59.7	59.8

**Unemployment Rate and Persons Working Part Time for Economic Reasons**



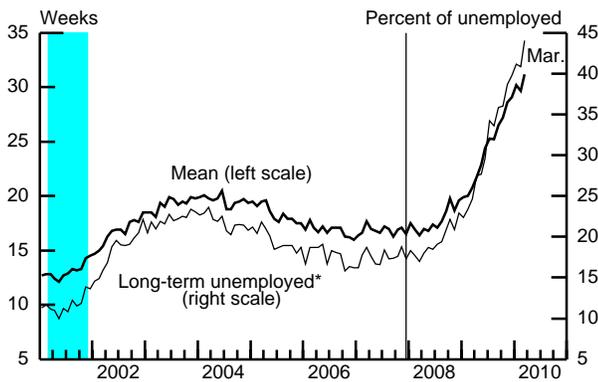
Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Labor Force Participation Rate**



Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Duration of Unemployment**



\*Unemployed more than 26 weeks.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

**Job Losers Unemployed Less Than 5 Weeks**



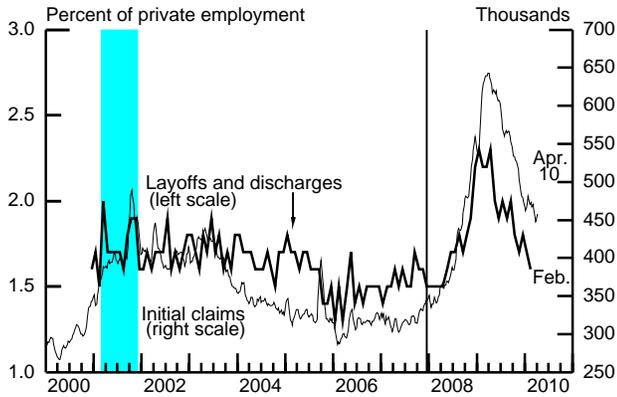
Note: Thick line is the 3-month moving average.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

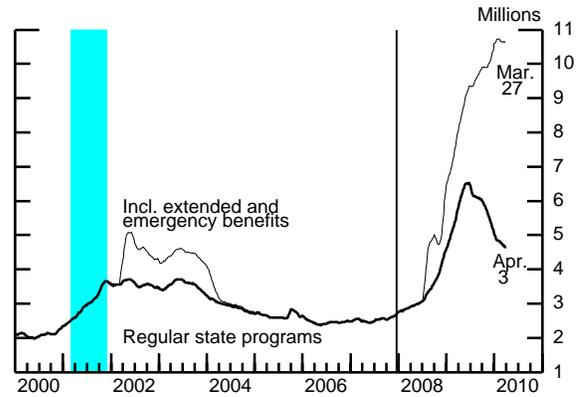
## Labor Market Indicators

Layoffs and Initial Claims



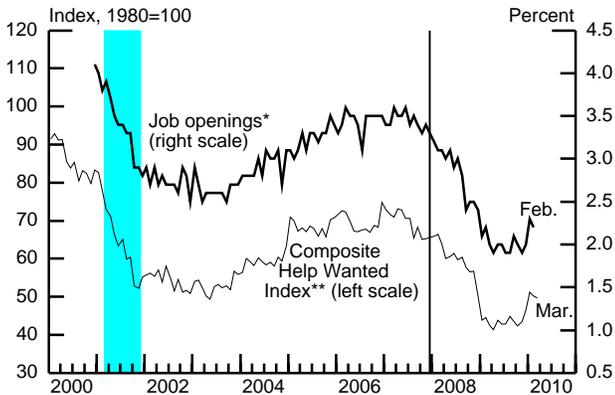
Note: Data for initial claims are 4-week moving averages.  
 Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for initial claims, U.S. Dept. of Labor, Employment and Training Administration.

Insured Unemployment



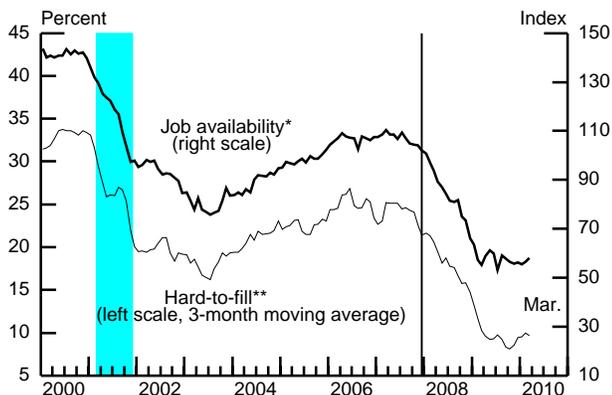
Note: 4-week moving averages.  
 Source: U.S. Dept. of Labor, Employment and Training Administration.

Job Openings



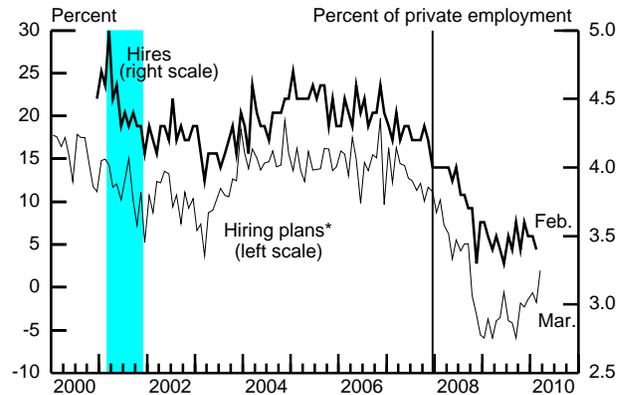
\*Percent of private employment plus job openings.  
 \*\*Index of staff composite help-wanted advertising as a percent of payroll employment.  
 Source: For job openings, Job Openings and Labor Turnover Survey; for Composite Help Wanted Index, Conference Board and staff calculations.

Job Availability and Hard-to-Fill Positions



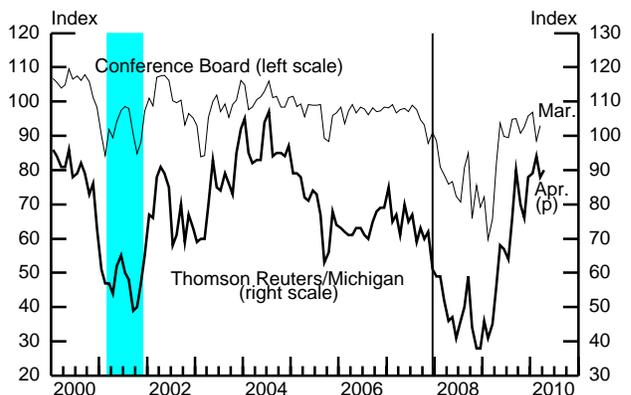
\*Proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100.  
 \*\*Percent of small businesses surveyed with at least one "hard-to-fill" job opening. Seasonally adjusted by FRB staff.  
 Source: For job availability, Conference Board; for hard-to-fill, National Federation of Independent Business.

Hires and Hiring Plans



\*Percent planning an increase in employment minus percent planning a reduction. Seasonally adjusted by FRB staff.  
 Source: For hires, Job Openings and Labor Turnover Survey; for hiring plans, National Federation of Independent Business.

Expected Labor Market Conditions



Note: The proportion of households expecting labor market conditions to improve, minus the proportion expecting conditions to worsen, plus 100.  
 p Preliminary.  
 Source: Conference Board; Thomson Reuters/University of Michigan Surveys of Consumers.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

0.3 percentage point lower than the fourth-quarter average.<sup>4</sup> Furthermore, the number of new job losers as a percent of household employment continued to drop, and the fraction of workers on part-time schedules for economic reasons has moved down, on net, since the end of last year. In addition, the labor force participation rate has increased over the past few months following sharp declines over the second half of last year. Nonetheless, finding a job remains very difficult, and unemployment durations—as gauged by the mean duration of unemployment and by the share of the unemployed out of work for more than 26 weeks—continued to rise.

Other labor market indicators have improved somewhat in recent months. The layoff rate from JOLTS remained on a downward trajectory in February. And, although initial UI claims moved up over the first half of April, we think that at least part of that rise reflected seasonal adjustment difficulties and the four-week average still remains modestly lower than at the end of 2009. Vacancies, as measured by the job openings rate from JOLTS and the help-wanted advertising index, have moved noticeably above their end-of-year levels. In addition, alternative measures of labor market slack, namely the number of small firms with hard-to-fill positions and households' perceptions of job availability, have improved slightly, on balance, since the beginning of 2010. To be sure, the hiring rate in the JOLTS has yet to show clear evidence of a rebound. However, the signal from hiring plans in the March NFIB survey was more optimistic than the one suggested by the hiring rate, as the fraction of small firms planning to increase employment in the next three months exceeded the fraction planning to decrease employment for the first time since fall 2008. Finally, households' expectations of future labor market conditions, though only moving sideways in recent months, remained well above recession lows.

### **Industrial Production**

Industrial production (IP) continued to expand at a brisk pace last quarter. Despite only modest gains in February and March, total IP increased at an annual rate of nearly 8 percent in the first quarter, while manufacturing output rose more than 6½ percent.<sup>5</sup> In addition, the production gains were widespread across industries, with the March diffusion index of three-month changes in manufacturing IP reaching its highest level in almost seven years. According to the staff's flow-of-goods system, both foreign demand and a mild restocking of inventories contributed positively to output gains last quarter.

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<sup>4</sup> We estimate that the government's hiring of census workers had minimal effects on the unemployment and participation rates in March.

<sup>5</sup> The snowstorms that hit the East Coast held down production in February, and the swing from a cold February to a warm March was a large drag on utilities output last month.

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

Component	Proportion 2009 (percent)	2009 <sup>1</sup>	2009	2010	2010		
			Q4	Q1	Jan.	Feb.	Mar.
			Annual rate		Monthly rate		
<b>Total</b>	<b>100.0</b>	<b>-4.7</b>	<b>6.9</b>	<b>7.8</b>	<b>1.0</b>	<b>.3</b>	<b>.1</b>
Previous	100.0	-4.7	6.6	...	.9	.1	...
Manufacturing	79.8	-5.0	5.6	6.6	.9	.2	.9
Ex. motor veh. and parts	76.0	-4.9	4.6	6.2	.7	.4	.8
Mining	8.4	-6.2	5.8	17.6	2.2	1.7	2.3
Utilities	11.9	-1.4	17.2	9.3	.4	.0	-6.4
<i>Selected industries</i>							
Energy	22.7	-2.9	12.8	8.8	.1	.8	-2.5
High technology	3.7	-2.2	9.5	26.5	2.4	3.0	1.9
Computers	.8	-5.1	20.7	12.5	.9	.8	1.1
Communications equipment	1.4	-3.6	6.9	21.6	1.4	2.2	1.7
Semiconductors <sup>2</sup>	1.4	.8	5.9	40.1	4.1	5.1	2.4
Motor vehicles and parts	3.7	-7.3	24.2	14.4	4.8	-3.9	2.2
Aircraft and parts	2.7	8.4	-4.2	-10.3	.1	-1.5	-8
<i>Excluding selected industries</i>							
Total <sup>3</sup>	67.2	-5.9	4.4	6.9	1.0	.3	.8
Consumer goods	23.0	-2.2	4.5	4.4	.8	.2	.5
Durables	3.4	-9.9	-.8	2.4	.6	-.3	1.8
Nondurables	19.5	-.7	5.5	4.7	.9	.3	.2
Business equipment	6.7	-11.2	4.9	16.5	1.9	1.0	1.2
Defense and space equipment	1.3	1.6	-5.9	12.9	2.7	.7	2.3
Construction supplies	4.7	-14.1	-9.2	4.7	1.6	-.2	2.3
Business supplies	7.4	-8.5	3.9	.4	.3	-.7	.2
Materials	24.1	-5.5	7.9	8.9	.8	.7	.8
Durables	11.2	-13.0	9.4	14.8	1.6	.6	1.8
Nondurables	12.9	2.0	6.6	4.0	.1	.7	.0

1. From fourth quarter of preceding year to fourth quarter of year shown.

2. Includes related electronic components.

3. Includes manufactured homes (not shown separately).

... Not applicable.

Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

**Capacity Utilization**  
(Percent of capacity)

Sector	1972- 2009 average	1994- 95 high	2001- 02 low	2009		2010		
				Q3	Q4	Q1	Feb.	Mar.
<b>Total industry</b>	<b>80.6</b>	<b>84.9</b>	<b>73.5</b>	<b>70.0</b>	<b>71.4</b>	<b>73.0</b>	<b>73.0</b>	<b>73.2</b>
Manufacturing	79.2	84.5	71.4	67.0	68.2	69.5	69.4	70.0
Mining	87.5	89.1	84.9	83.2	84.7	88.3	88.2	90.2
Utilities	86.6	93.3	84.2	78.1	80.9	82.3	84.1	78.6
<i>Stage-of-process groups</i>								
Crude	86.5	89.9	81.7	82.4	83.9	86.4	86.3	87.4
Primary and semifinished	81.6	87.9	74.3	67.0	68.5	69.7	70.0	69.5
Finished	77.5	80.3	70.0	68.5	69.8	71.4	71.2	71.8

Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Capacity utilization in manufacturing, at 70.0 percent in March, stood nearly 5 percentage points above the trough recorded last June but was still more than 9 percentage points below its 1972–2009 average. With the exception of the aerospace product and parts and the food industries, most major industry groups continue to operate at rates of utilization well below their historical averages.

The production of light motor vehicles stepped up to an annual rate of 7.4 million units in March after being held down in February by a recall-related suspension of production at Toyota.<sup>6</sup> For the first quarter as a whole, light vehicle assemblies were at a pace of 7.4 million units, 400,000 units above the fourth-quarter average, as automakers cautiously began to rebuild dealers' inventories. Indeed, the overall stock-sales ratio—at 59 days in the first quarter—was well below the industry target of 65 days. Moreover, initial assembly plans for the second quarter indicate that light motor vehicle production will hold steady at first-quarter levels.

Production in high-tech industries increased solidly in the first quarter. The output of semiconductors rose briskly, and gains were widespread across chip types. The production of communications equipment accelerated substantially, with export demand surging early this year. By contrast, the rate of increase in computer output slowed somewhat last quarter following a fourth-quarter leap in output fueled by consumer demand.

Looking ahead, the available indicators point to a further expansion in the high-tech sector in the near term. Orders received by North American factories for circuit boards—a key input into electronics of all kinds—stood well above shipments in February, suggesting that further production gains are in train. In addition, Intel recently noted clear signs of improving business demand for personal computers, as corporate customers have moved to replace their aging stocks. Capital expenditure plans announced by major telecommunications service providers for this year also suggest further support for computer and communications equipment production in coming quarters.

Energy output rose at an annual rate of nearly 9 percent in the first quarter, reflecting increases in utilities output and in drilling activity. Available weekly product data indicate that energy output will contribute little to IP growth this month.

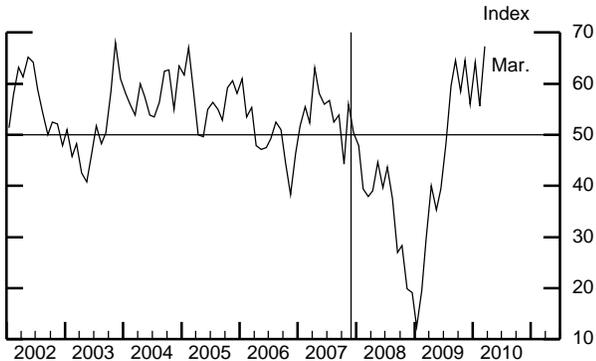
Production outside of energy, motor vehicles and parts, aircraft and parts, and high-tech industries—which accounts for roughly two-thirds of total IP—accelerated in the first

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<sup>6</sup> Toyota suspended production at four U.S. assembly plants for one week at the beginning of February; a more limited production downtime occurred in late February and the middle of April.

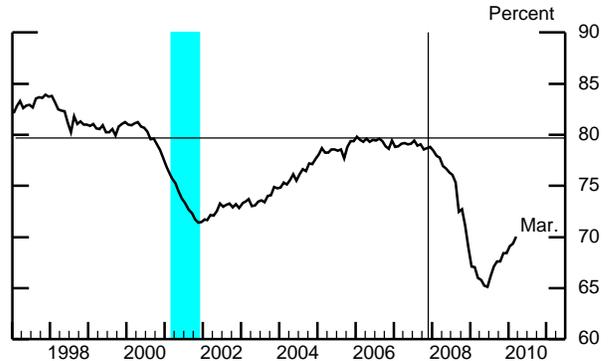
## Indicators of Industrial Activity

Manufacturing IP Diffusion Index



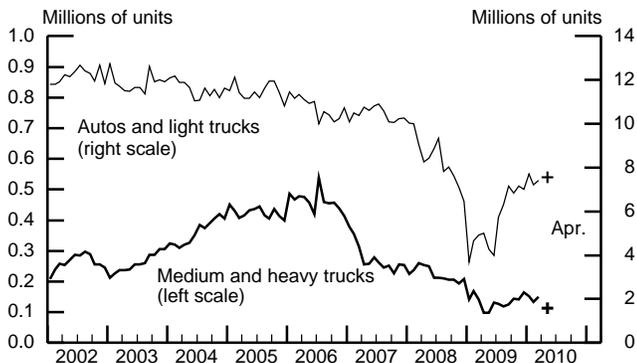
Note: The diffusion index equals the percentage of series that increased relative to 3 months earlier plus one-half the percentage that were unchanged.  
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Manufacturing Capacity Utilization



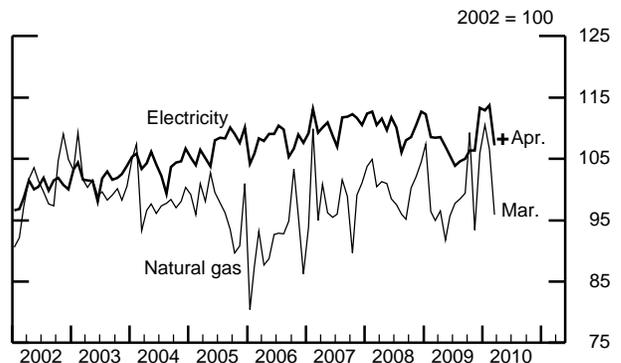
Note: Horizontal line is 1972-2009 average.  
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Motor Vehicle Assemblies



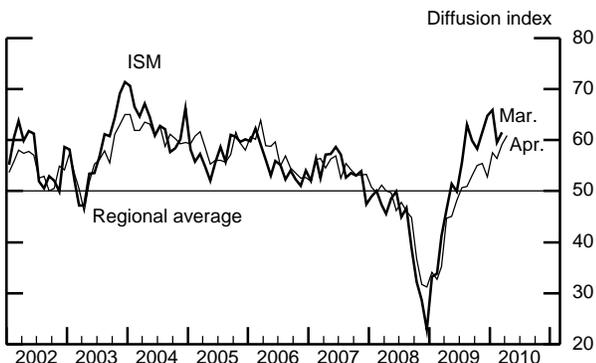
+ April values are based on latest industry schedules.  
Source: Ward's Communications.

Utilities Output



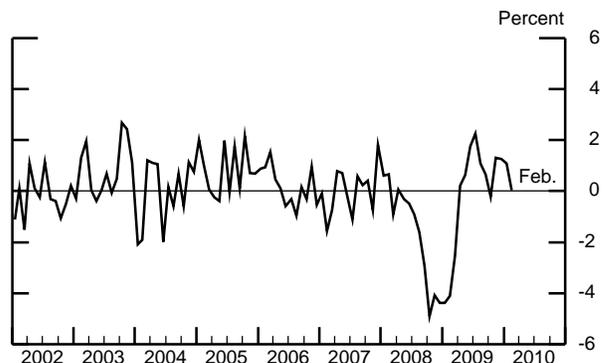
+ April value for electricity generation is based on weekly generation data from the Edison Electrical Institute (EEI).  
Source: EEI; Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

ISM Diffusion Index and Average of Regional New Orders Diffusion Indexes



Note: Regional average consists of new orders indexes from the Chicago, Dallas, Kansas City, New York, Philadelphia, and Richmond surveys. The April value for the regional average is based on data from the New York and Philadelphia surveys.  
Source: Institute for Supply Management (ISM); Federal Reserve.

Change in Real Adjusted Durable Goods Orders



Note: 3-month moving average.  
Source: Staff calculation based on data from the U.S. Census Bureau and the Bureau of Labor Statistics.

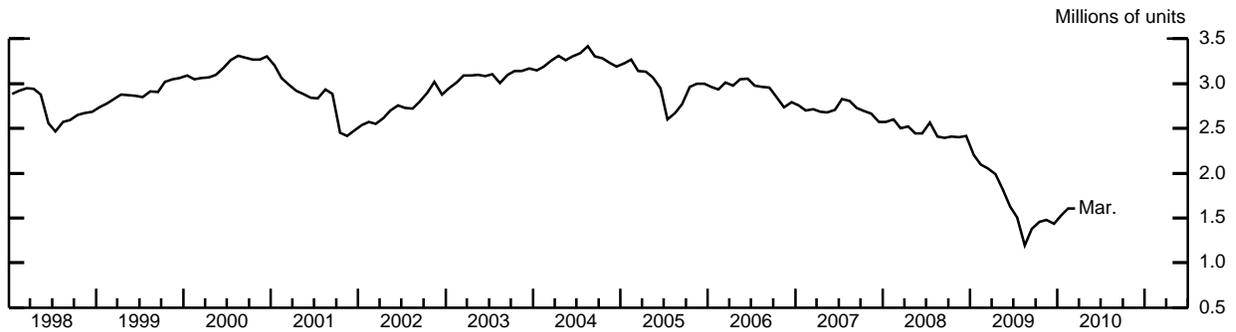
Note: The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

**Production of Domestic Light Vehicles**  
(Millions of units at an annual rate except as noted)

Item	2009		2010		2009	2010		
	Q3	Q4	Q1	Q2	Dec.	Jan.	Feb.	Mar.
U.S. production <sup>1</sup>	6.4	7.0	7.4	7.4	7.0	7.7	7.2	7.4
Autos	2.5	2.8	2.9	3.2	2.8	2.9	3.0	2.9
Light trucks	3.9	4.2	4.5	4.2	4.2	4.8	4.3	4.5
Days' supply <sup>2</sup>	50	53	59	n.a.	51	58	63	55
Autos	46	51	55	n.a.	48	54	58	51
Light trucks	55	55	63	n.a.	55	61	66	58
Inventories <sup>3</sup>	1.38	1.43	1.60	n.a.	1.43	1.53	1.60	1.60
Autos	.63	.65	.71	n.a.	.65	.67	.71	.71
Light trucks	.75	.79	.90	n.a.	.79	.86	.89	.90
Memo: U.S. production, total motor vehicles <sup>4</sup>	6.5	7.2	7.6	7.6	7.2	7.8	7.3	7.6

Note: FRB seasonals. Components may not sum to totals because of rounding.  
 1. Production rates for the second quarter of 2010 reflect the latest industry schedules.  
 2. Quarterly values are calculated with end-of-period stocks and average reported sales.  
 3. End-of-period stocks.  
 4. Includes medium and heavy trucks.  
 n.a. Not available.  
 Source: Ward's Communications.

**Inventories of Light Vehicles**



Source: Ward's Communications. Adjusted using FRB seasonals.

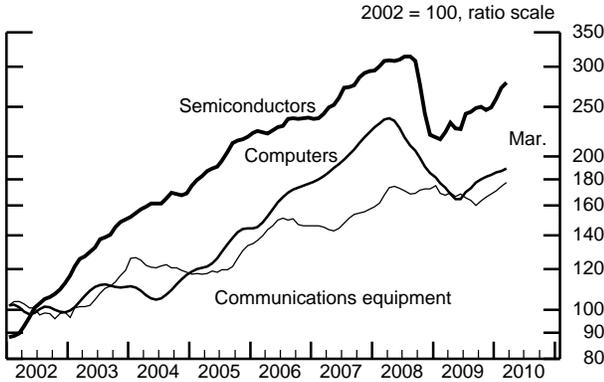
**Days' Supply of Light Vehicles**



Source: Constructed from Ward's Communications data. Adjusted using FRB seasonals.

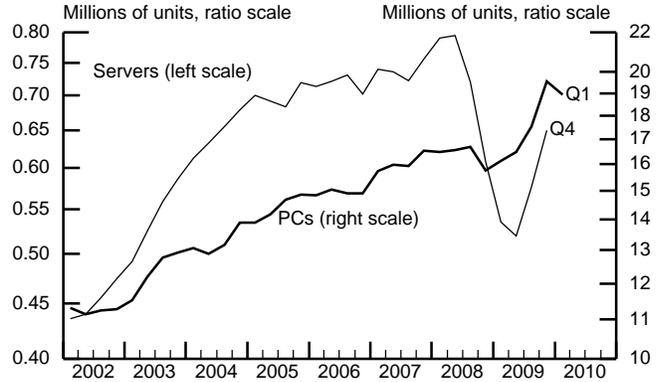
## Indicators of High-Tech Manufacturing Activity

Industrial Production in the High-Tech Sector



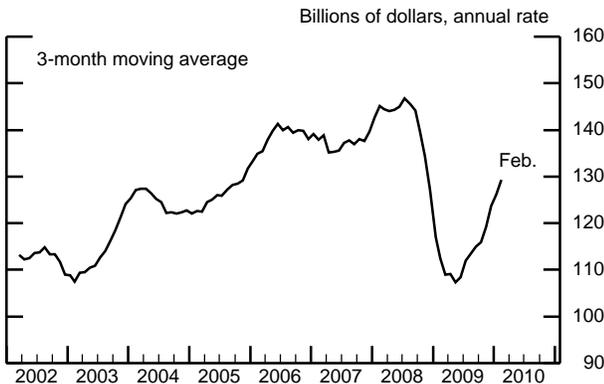
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

U.S. Personal Computer and Server Absorption



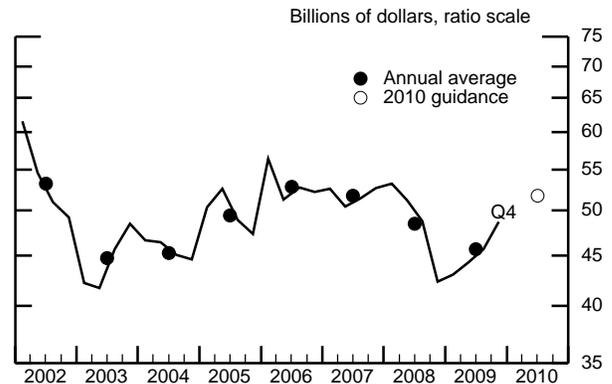
Note: FRB seasonals.  
Source: IDC.

High-Tech Exports



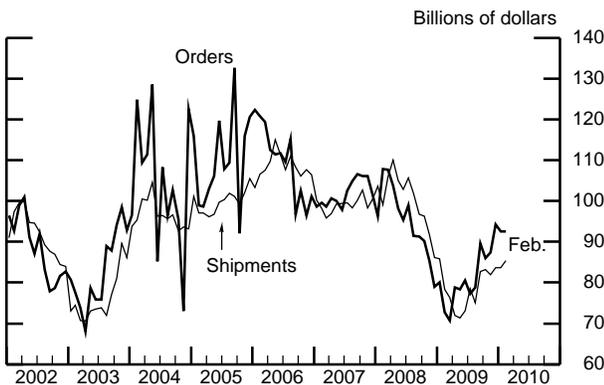
Note: Includes semiconductors and related equipment, communications equipment, and computers and peripherals.  
Source: U.S. International Trade Commission.

Capital Expenditures by Selected Telecommunications Service Providers



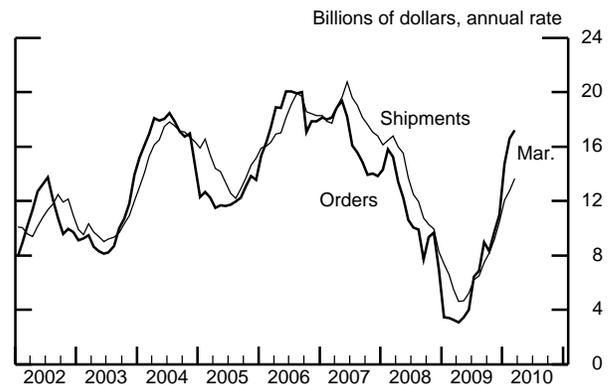
Note: FRB seasonals. Includes 11 North American service providers. 2010 outlook based on guidance from companies representing 89 percent of total capital expenditures in 2009.  
Source: Dell'Oro Group.

Circuit Board Orders and Shipments



Note: U.S. and Canadian orders and shipments of bare and loaded circuit boards.  
Source: IPC.

Semiconductor Manufacturing Equipment Orders and Shipments



Note: FRB seasonals. North American headquartered manufacturers.  
Source: SEMI's Book-to-Bill Report.

quarter. Indeed, the nearly 7 percent annual rate of increase was the largest since late 1999, and gains were widespread across all major market groups. In particular, the production of business equipment increased 16½ percent last quarter.

On balance, the available indicators of near-term manufacturing activity remain quite positive. The new orders diffusion index from the national ISM survey and the average of the new orders indexes from the regional surveys moved up in March to levels consistent with brisk increases in manufacturing output in the second quarter. Moreover, the first readings on new orders for April, from the New York and Philadelphia surveys, both increased. In contrast, the three-month moving average of the staff's series on real orders for durable goods (adjusted to exclude industries for which reported orders have little information content for predicting shipments) flattened out in February and suggests only moderate gains in the near future.

### **Motor Vehicle Sales**

Sales of light motor vehicles jumped in March to an annual rate of 11.8 million units after falling for two consecutive months. This increase was likely due, in large part, to Toyota's aggressive incentive program and the quick matching of these incentives by other automakers.<sup>7</sup> J.D. Power and Associates estimates that sales this month have been running below the March pace despite the recent improvement in consumer attitudes toward car-buying conditions and the continuation of automakers' generous financing incentives.

For the first quarter as a whole, sales of light motor vehicles averaged about 200,000 units above their fourth-quarter level.

. Orders for medium and heavy trucks fell sharply, on net, in the first quarter, likely because of the new environmental regulations on diesel engines that took effect at the start of the year. Even so, truck sales in the first quarter were little changed from their modest fourth-quarter level.

### **Consumer Spending**

Consumer spending has continued to rise at a solid pace so far this year. Real PCE increased at an average monthly rate of 0.4 percent in January and February, and nominal

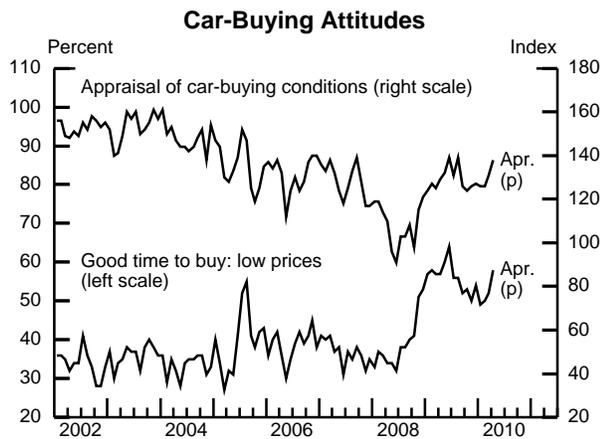
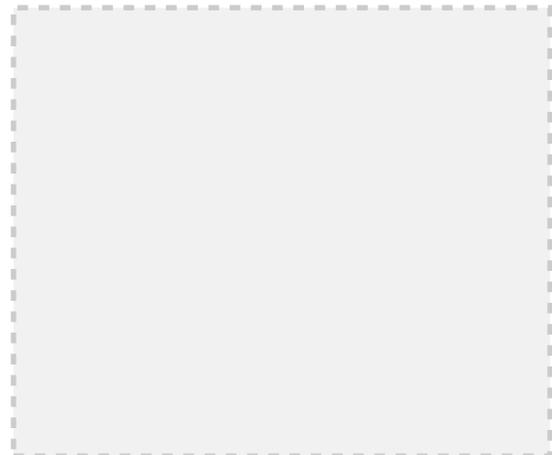
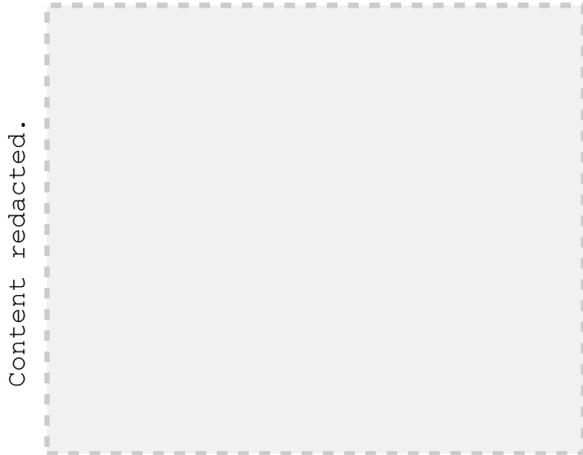
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<sup>7</sup> After its major safety recall in late January and early February, Toyota ratcheted up financing and leasing incentives in March, and other automakers quickly followed suit. More recently, several automakers extended and expanded these incentives for an additional month.

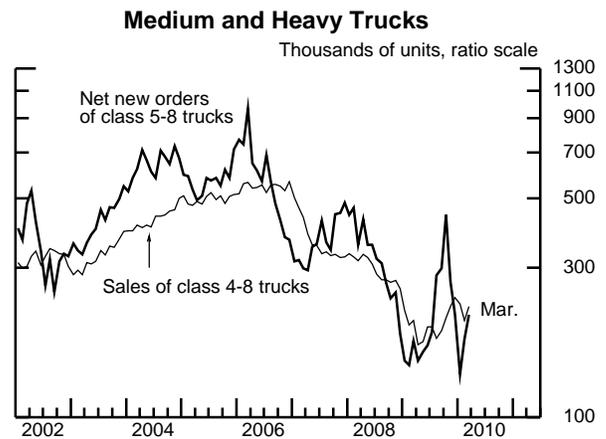
**Sales of Light Vehicles**  
(Millions of units at an annual rate; FRB seasonals)

Category	2009	2009		2010			
		Q3	Q4	Q1	Jan.	Feb.	Mar.
Total	10.3	11.5	10.8	11.0	10.8	10.3	11.8
Autos	5.4	6.4	5.7	5.7	5.7	5.4	6.0
Light trucks	4.9	5.1	5.2	5.3	5.1	4.9	5.8
North American <sup>1</sup>	7.6	8.4	8.2	8.3	8.1	7.9	9.0
Autos	3.6	4.2	3.9	3.9	3.8	3.7	4.3
Light trucks	4.0	4.2	4.4	4.4	4.3	4.1	4.7
Foreign-produced	2.7	3.1	2.6	2.6	2.6	2.5	2.8
Autos	1.8	2.1	1.8	1.8	1.9	1.7	1.7
Light trucks	.9	.9	.8	.9	.8	.8	1.0
Memo: Detroit Three market share (percent) <sup>2</sup>	44.7	43.1	45.0	45.1	45.7	46.3	43.5

Note: Components may not sum to totals because of rounding.  
 1. Excludes some vehicles produced in Canada that are classified as imports by the industry.  
 2. Includes domestic and foreign brands affiliated with the Detroit Three.  
 Source: Ward's Communications. Adjusted using FRB seasonals.



p Preliminary.  
 Source: Thomson Reuters/University of Michigan Surveys of Consumers.



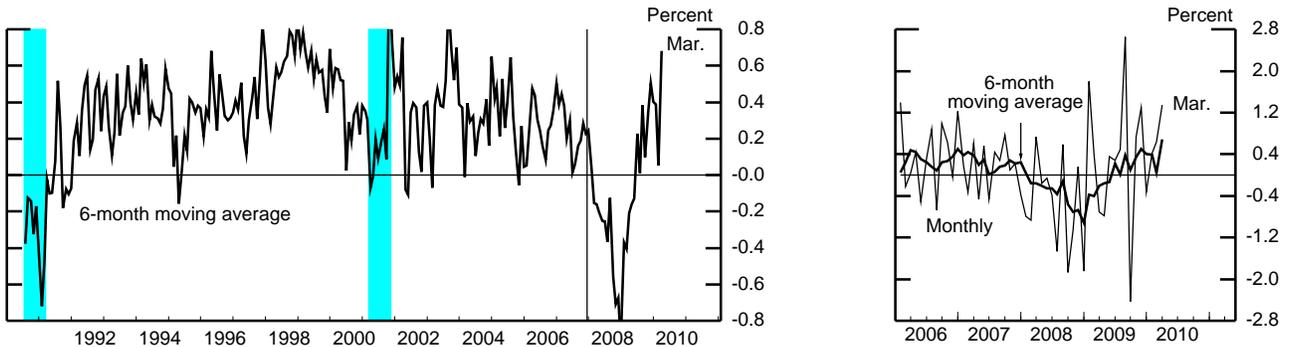
Note: Annual rate, FRB seasonals.  
 Source: For sales, Ward's Communications; for orders, ACT Research.

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

Category	2009		2010	2010		
	Q3	Q4	Q1 <sup>e</sup>	Jan. <sup>e</sup>	Feb. <sup>e</sup>	Mar. <sup>e</sup>
	Annual rate			Monthly rate		
<b>Total real PCE</b>	<b>2.8</b>	<b>1.6</b>	<b>n.a.</b>	<b>.3</b>	<b>.5</b>	<b>n.a.</b>
Motor vehicles	53.7	-23.7	-7.4	-5.2	-3.8	11.7
Goods ex. motor vehicles	3.8	5.6	7.4	.9	1.0	.5
Services	.8	1.0	n.a.	.2	.4	n.a.
Ex. energy	.8	.5	n.a.	.1	.2	n.a.
Memo:						
Real PCE control <sup>1</sup>	3.2	6.0	7.7	.6	1.4	.5
Nominal retail control <sup>2</sup>	1.4	5.4	7.4	.7	1.2	.5

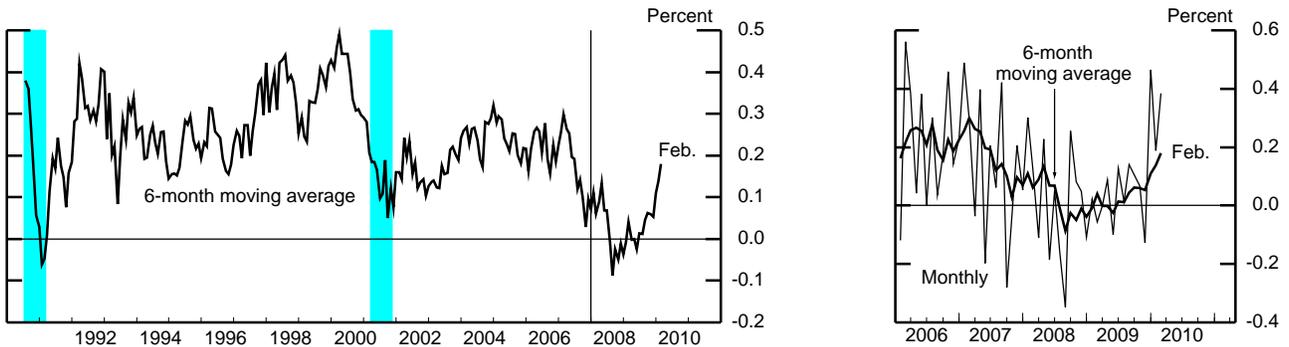
1. Durables excluding motor vehicles, nondurables excluding gasoline, and food services.  
 2. Total sales less outlays at building material and supply stores, automobile and other motor vehicle dealers, and gasoline stations.  
 e Staff estimate.  
 n.a. Not available.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

**Change in Real PCE Goods**



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

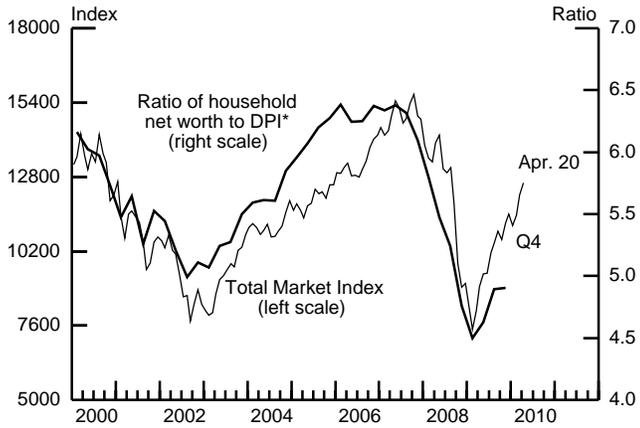
**Change in Real PCE Services**



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

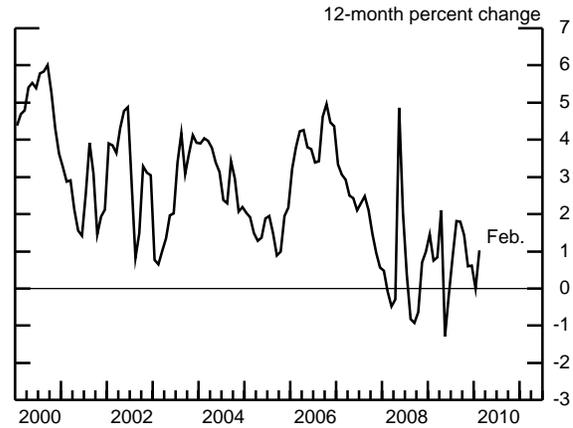
## Fundamentals of Household Spending

Household Net Worth and Dow Jones Total Market Index



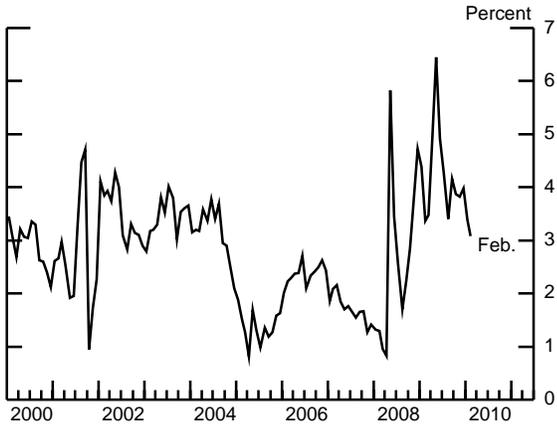
\* The value for 2004:Q4 excludes the effect on income of the one-time Microsoft dividend in December 2004.  
 Source: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; *Wall Street Journal*.

Change in Real Disposable Personal Income



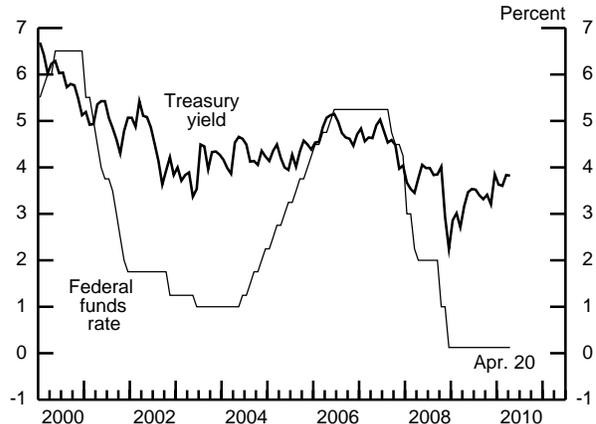
Note: Values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Personal Saving Rate



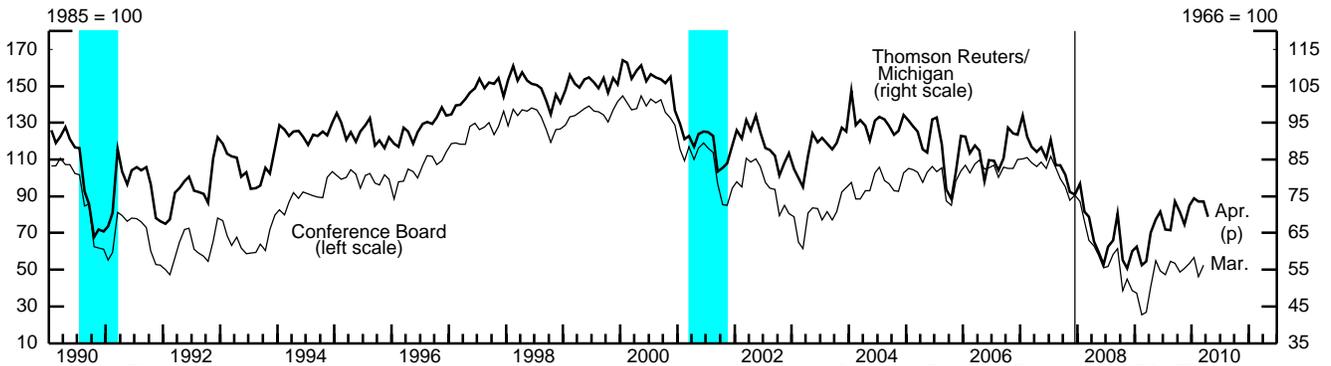
Note: The value for December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Target Federal Funds Rate and 10-Year Treasury Yield



Source: Federal Reserve Board.

Consumer Confidence



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

Source: Thomson Reuters/University of Michigan Surveys of Consumers; Conference Board.

sales at establishments in the retail control category—which the BEA uses to estimate expenditures on most non-auto goods and food services—moved up robustly again in March. Together, these data suggest that spending for the first quarter as a whole increased noticeably faster than the 2¼ percent annual rate in the second half of last year.

The recent spending gains have been especially pronounced for most non-auto goods and food services. Factoring in our estimate of prices in March, increases in real spending in the control category averaged about ¾ percent per month in the first three months of this year—stronger than the already solid increases in the second half of last year. Real spending on services continued to increase at a moderate pace early this year, abstracting from the weather-related pickup in energy services through February. In contrast, outlays on new and used motor vehicles fell again in the first quarter.<sup>8</sup>

Although the usual determinants of spending have shown some signs of improvement recently, they remain at generally lackluster levels. For example, while equity prices have risen strongly since the start of the year, household net worth remains well below its pre-recession level and is likely a continued source of restraint on spending. Similarly, although wages and salaries picked up earlier this year with the apparent stabilization in the labor market, real disposable income was flat in February after a ½ percent decline in January that reflected a one-time jump in personal taxes. Furthermore, banks have indicated somewhat greater willingness to lend to consumers in recent months, which has likely provided some support to spending increases, but terms and standards on consumer loans remain restrictive. (For more information, see the appendix on SLOOS at the end of the financial section.) Finally, as a sign that households are still anxious about their economic prospects, consumer sentiment dropped back in early April and has changed little, on net, since the beginning of the year.

### **Housing**

The recovery in the housing market remains stalled. Single-family housing starts edged up, on net, over February and March, but much of this gain likely reflected delayed projects getting under way as weather conditions returned to normal. The small positive gap between adjusted permits and starts in March suggests that we might see some further pickup in starts in April. Weather effects aside, new construction has not moved up much since last summer. Activity has likely been held down by builders' difficulties in obtaining construction financing, by new homes selling below construction costs, and by the large number of distressed properties on the market. Multifamily starts have also

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<sup>8</sup> While real outlays on motor vehicles surged in March, the recent increase in this category followed two months of sizable declines that reflected weaker spending on both new and used motor vehicles.

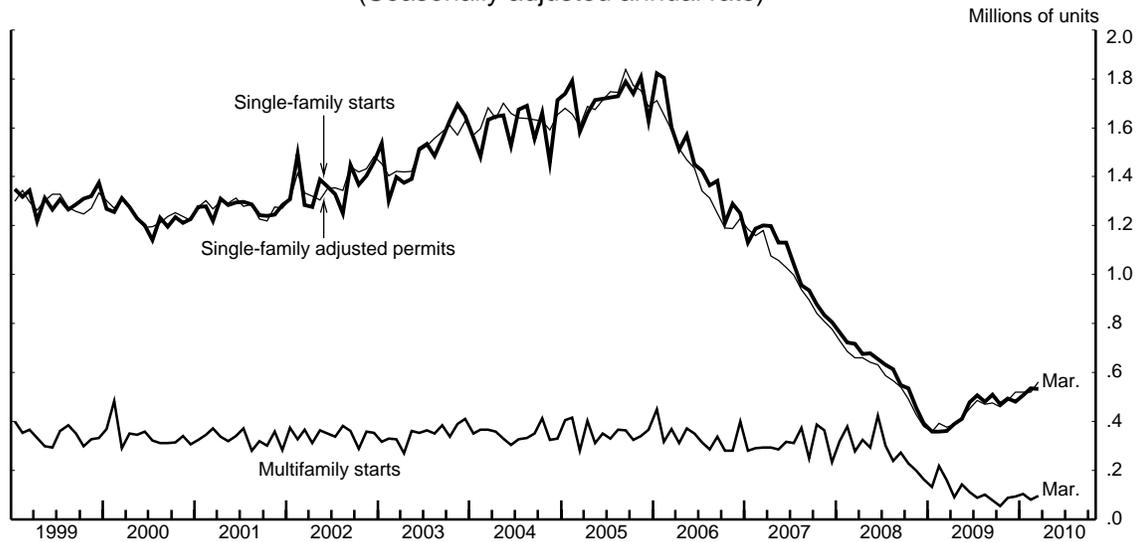
**Private Housing Activity**

(Millions of units, seasonally adjusted; annual rate except as noted)

Sector	2009	2009		2010			
		Q3	Q4	Q1	Jan.	Feb.	Mar.
<i>All units</i>							
Starts	.55	.59	.56	.62	.61	.62	.63
Permits	.57	.57	.60	.65	.62	.64	.69
<i>Single-family units</i>							
Starts	.45	.50	.48	.53	.51	.54	.53
Permits	.44	.46	.47	.52	.50	.51	.54
Adjusted permits <sup>1</sup>	.44	.48	.49	.53	.52	.52	.56
New homes							
Sales	.37	.41	.37	n.a.	.32	.31	n.a.
Months' supply <sup>2</sup>	9.12	7.72	7.72	n.a.	8.88	9.19	n.a.
Existing homes							
Sales	4.57	4.65	5.23	n.a.	4.43	4.37	n.a.
Months' supply <sup>2</sup>	8.34	8.07	6.90	n.a.	8.20	8.48	n.a.
<i>Multifamily units</i>							
Starts	.11	.09	.08	.09	.10	.08	.10
Built for rent	.09	.08	.06	n.a.	n.a.	n.a.	n.a.
Built for sale	.02	.01	.02	n.a.	n.a.	n.a.	n.a.
Permits	.14	.11	.12	.13	.12	.12	.14
<i>Condos and co-ops</i>							
Existing home sales	.59	.63	.73	n.a.	.62	.65	n.a.

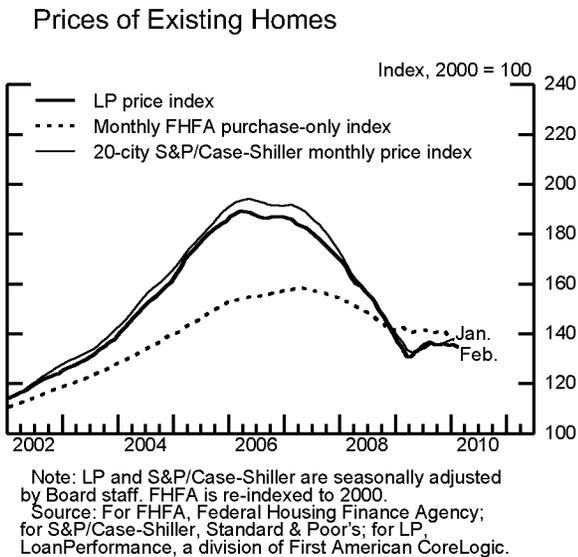
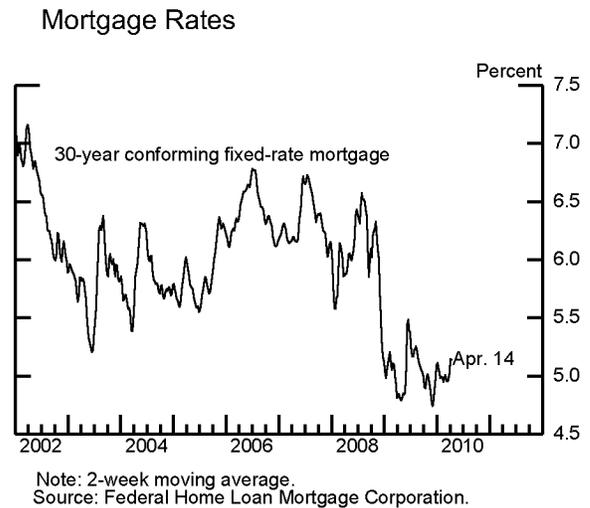
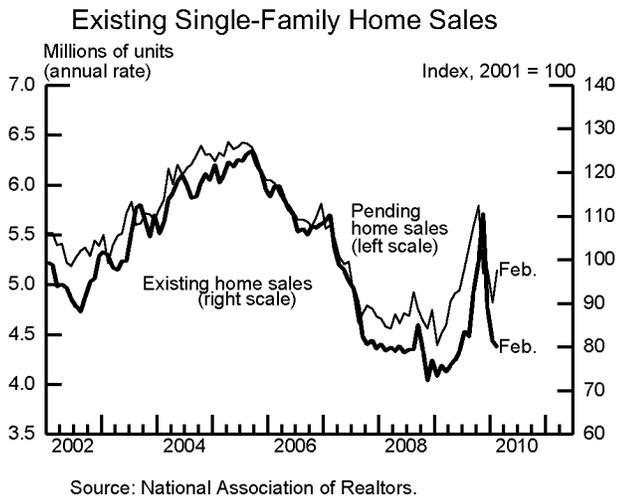
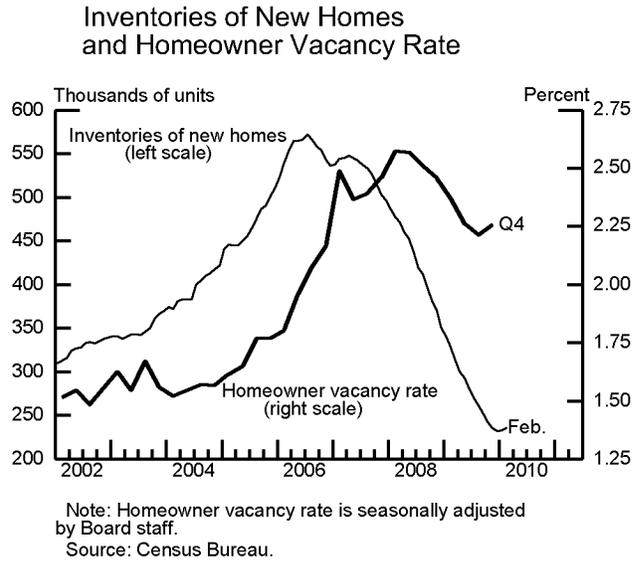
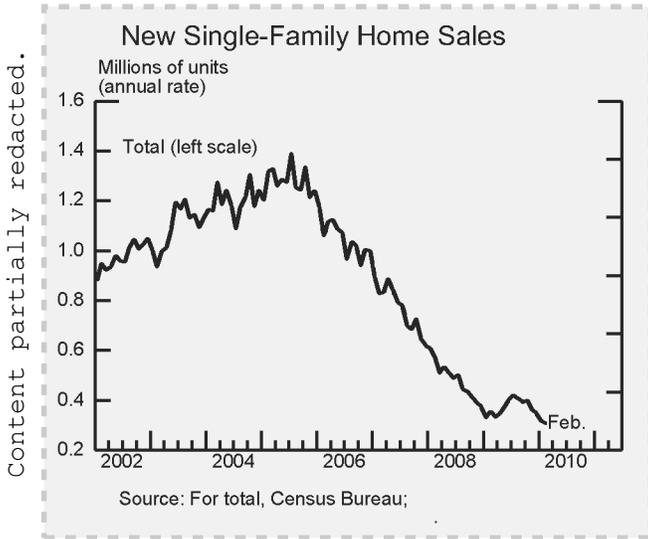
1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.
  2. At current sales rate; expressed as the ratio of seasonally adjusted inventories to seasonally adjusted sales. Quarterly and annual figures are averages of monthly figures.
- n.a. Not available.  
Source: Census Bureau.

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



Note: Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.  
Source: Census Bureau.

## Indicators of Single-Family Housing



### Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

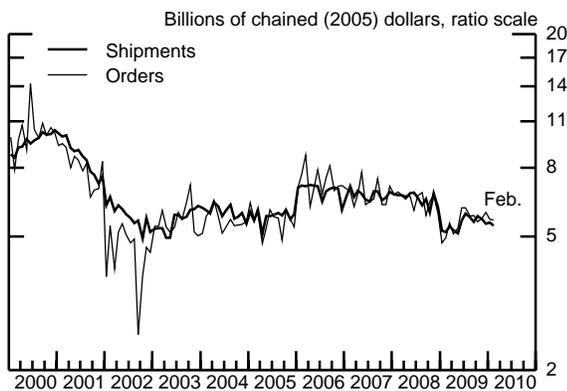
Category	2009			2010	
	Q3	Q4	Dec.	Jan.	Feb.
	Annual rate			Monthly rate	
Shipments	3.8	9.0	4.1	-4.4	.1
Excluding aircraft	2.2	8.7	2.3	-1.9	.6
Computers and peripherals	.1	22.0	2.2	4.0	-6.9
Communications equipment	33.5	-5.0	-3.0	1.4	-2.6
All other categories <sup>1</sup>	-.2	8.8	2.8	-2.8	1.8
Orders	28.6	1.6	2.2	3.9	6.0
Excluding aircraft	14.1	13.5	3.0	-4.4	2.0
Computers and peripherals	5.5	26.4	.4	-10.6	3.1
Communications equipment	31.2	-10.4	3.7	-3.9	-1.2
All other categories <sup>1</sup>	13.4	14.9	3.3	-3.7	2.1
Memo: Shipments of complete aircraft <sup>2</sup>	36.4	39.8	48.3	31.7	31.5

1. Excludes most terrestrial transportation equipment.

2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate.

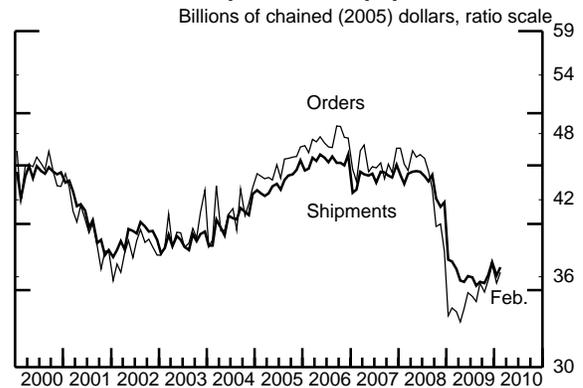
Source: Census Bureau.

#### Communications Equipment



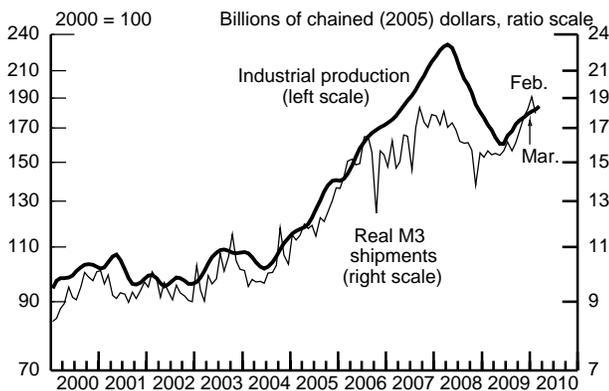
Note: Shipments and orders are deflated by a price index that is derived from the quality-adjusted price indexes of the Bureau of Economic Analysis and uses the producer price index for communications equipment for monthly interpolation.  
Source: Census Bureau.

#### Non-High-Tech, Nontransportation Equipment



Note: Shipments and orders are deflated by the staff price indexes for the individual equipment types included in this category. Indexes are derived from the quality-adjusted price indexes of the Bureau of Economic Analysis.  
Source: Census Bureau.

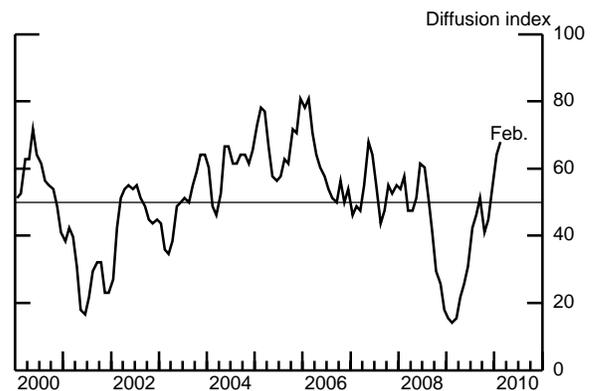
#### Computers and Peripherals



Note: Shipments are deflated by the staff price index for computers and peripheral equipment, which is derived from the quality-adjusted price indexes of the Bureau of Economic Analysis.

Source: Census Bureau; FRB Industrial Production.

#### Shipments Diffusion Index



Note: 3-month moving average. The diffusion index equals the percentage of 26 nontransportation equipment categories that experienced an increase in shipments relative to 3 months prior.

Source: Census Bureau.

remained at a low level due to elevated vacancy rates and tight credit conditions for builders.

The demand for new homes has been especially weak in recent months. The Census Bureau's measure of new home sales agreements inched down further in February following a sizable decline in January.

.<sup>9</sup> As the pace of sales has slowed, the inventory of unsold new homes has edged up after sharp declines last year. Consequently, the months' supply of new homes moved back up above nine months in February—only about three months below its peak in January 2009. Sales of existing homes, which are recorded at closing, also ticked down in February, but the increase in pending home sales in February suggests that resales might move up some as the homebuyer tax credit expiration deadline approaches.<sup>10</sup>

The softness in housing demand has persisted despite a favorable level of housing affordability and an apparent stabilization of residential real estate values. Interest rates for conforming 30-year fixed-rate mortgages have changed little in recent months and remain at levels that are very low by historical standards. And, while the repeat-sales price index for existing single-family homes calculated by LoanPerformance edged down in February, its current level is 3 percent above its trough in April 2009. Looking forward, the early April reading of the diffusion index for year-ahead house price expectations constructed from the Thomson Reuters/University of Michigan Surveys of Consumers remained markedly more positive than it was last spring, with the number of respondents who expect house prices to increase about the same as the number of respondents who expect prices to decrease.

### **Equipment and Software**

Real spending on equipment and software continued to rebound in the first quarter. Investment in both high-tech and transportation equipment advanced further, and the gains now appear to be spreading to other categories of capital goods as well.

Real spending on high-tech equipment and software appears to have increased at a solid pace so far this year, albeit less than the gain of over 30 percent (annual rate) posted in the fourth quarter. The recent increases in high-tech investment continue to be concentrated in computers and software. The average level of nominal shipments of

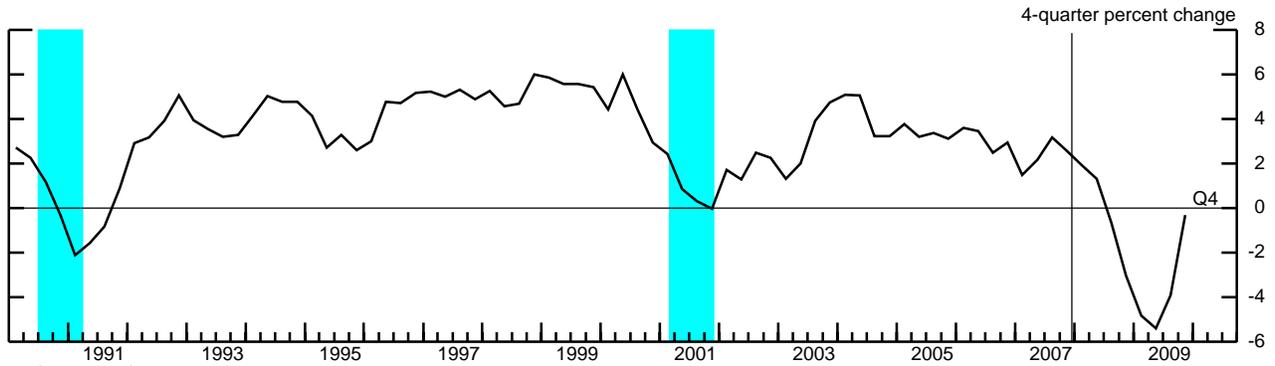
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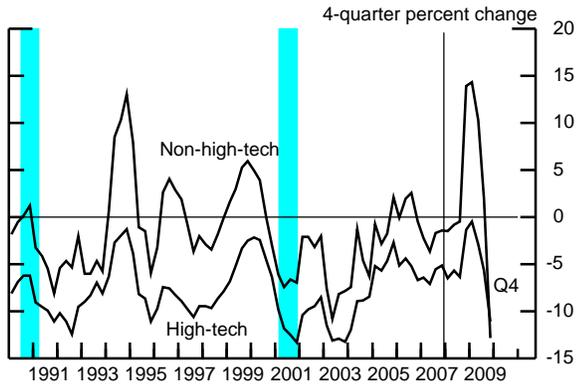
<sup>10</sup> In order to qualify for the homebuyer tax credit, purchasers must sign by April and close by June.

## Fundamentals of Equipment and Software Investment

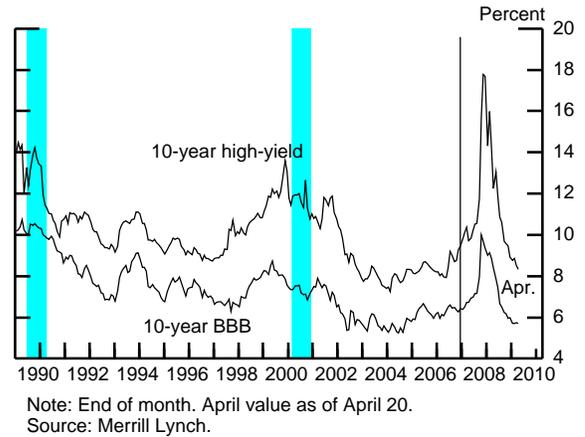
Real Business Output



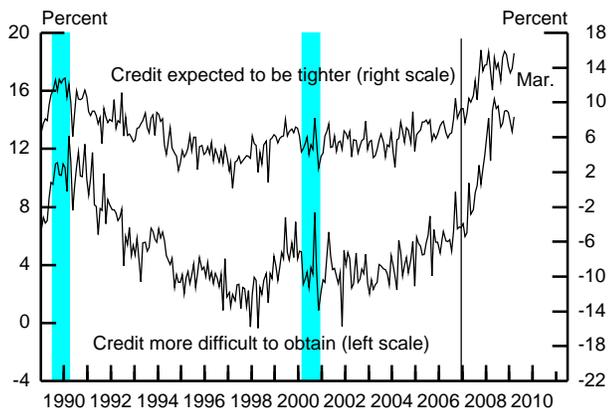
User Cost of Capital



Corporate Bond Yields

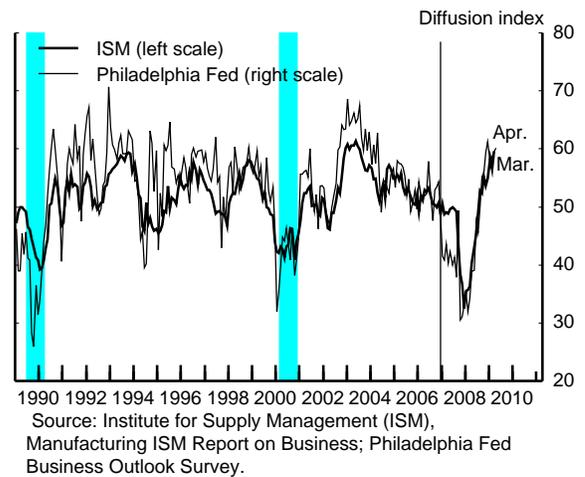


NFIB: Survey on Loan Availability



Note: Of borrowers who sought credit in the past 3 months, the proportion that reported or expected more difficulty in obtaining credit less the proportion that reported or expected more ease in obtaining credit. Seasonally adjusted.  
Source: National Federation of Independent Business (NFIB).

Surveys of Business Conditions



Note: Shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

computers and peripheral equipment in January and February was well above the fourth-quarter level, which combined with falling prices implies strong real increases. In addition, imports of computers increased briskly in February, and IP for this category registered a solid gain last quarter. Moreover, Adobe, Oracle, and IBM reported substantial revenue gains in the first quarter, which, together with upbeat revenue estimates for other major software companies, indicates another large increase in business spending on software last quarter. In contrast, shipments of communications equipment in January and February were below their fourth-quarter average, suggesting that the recovery in domestic business outlays on communications equipment may have paused in the first quarter. Looking ahead, a number of major high-tech companies have reported that business demand appears to be picking up further, as firms continue to replace aging equipment and are starting to expand capacity with the construction of new data centers and the buildup of wireless networks.

Real investment in equipment other than high-tech and transportation, a broad category of capital goods that accounts for nearly half of the total outlays on equipment and software, appears to have turned up sharply in the first quarter after falling for more than a year. Excluding the volatile engines and turbines category, average orders and shipments of other equipment in January and February were each more than 2 percent above their fourth-quarter average. This, together with the recent increase in the diffusion index for shipments of nondefense capital goods excluding aircraft, suggests that the recovery in spending has now become more broadly based.

The recovery in investment spending is consistent with the strengthening in many indicators of business activity. Business output likely posted its third consecutive gain in the first quarter, and the recent readings of the ISM and Philadelphia Fed indicators of business conditions have now moved above the levels that prevailed during the recovery that followed the prior recession. Furthermore, the cost of capital has fallen sharply over the past year, as corporate bond yields returned to levels seen before the recession, and the April SLOOS reported that, for the first time in about three years, a majority of banks eased standards and some terms on loans to large businesses. In contrast, small businesses, which are more likely to depend on bank credit for funds, continue to face difficult credit conditions: A relatively high fraction of respondents in the March NFIB survey still reported tighter credit conditions, while the April SLOOS indicated that, on net, banks continued to tighten terms on loans to small businesses.

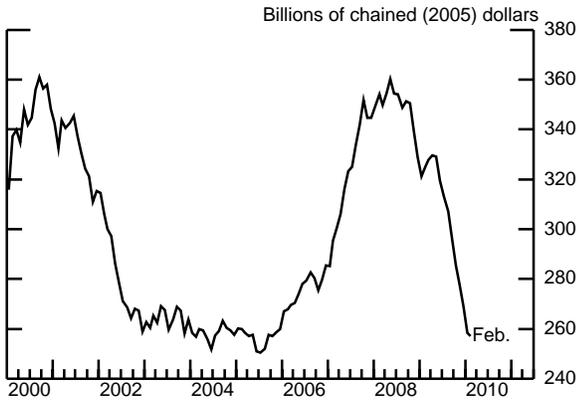
### **Nonresidential Construction**

The nonresidential construction sector remains on a downward track. Real outlays on structures outside drilling and mining plunged throughout last year, and recent data on

### Nonresidential Construction and Indicators

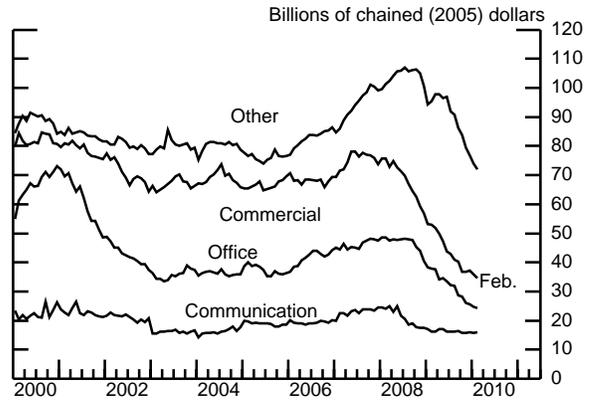
(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q4 and by staff projection thereafter)

Total Structures



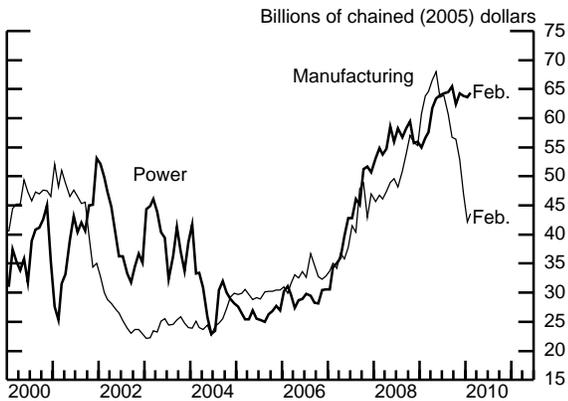
Source: Census Bureau.

Office, Commercial, Communication, and Other



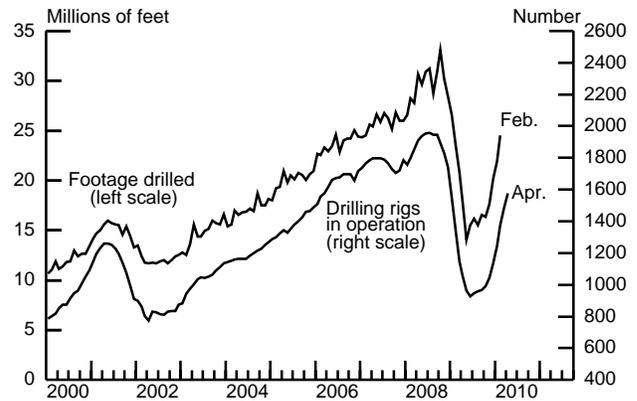
Note: Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care.  
Source: Census Bureau.

Manufacturing and Power



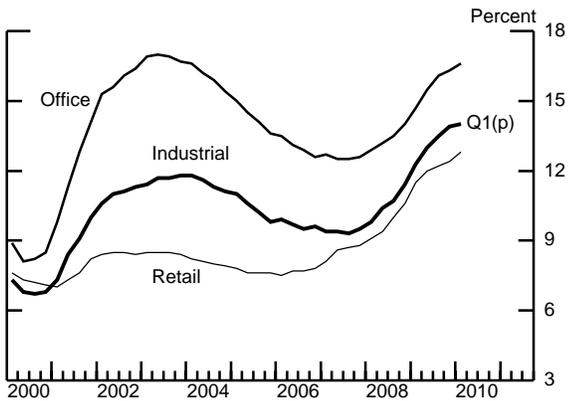
Source: Census Bureau.

Drilling and Mining Indicators



Note: The April readings for drilling rigs are based on data through April 16, 2010. Both series are seasonally adjusted by FRB staff.  
Source: For footage drilled, U.S. Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

Vacancy Rates



Note: Industrial space includes both manufacturing structures and warehouses.  
p Preliminary.  
Source: CB Richard Ellis Economic Advisors.

Architectural Billings and Nonresidential Construction Employment



Note: Both series are 3-month moving averages. Employment consists of industrial, commercial, and specialty trade construction.  
Source: For billings, American Institute of Architects; for employment, U.S. Department of Labor, Bureau of Labor Statistics.

**Nonfarm Inventory Investment**  
(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2009				2010	
	Q2	Q3	Q4	Dec.	Jan.	Feb.
<i>Real inventory investment (chained 2005 dollars)</i>						
<b>Total nonfarm business</b>	<b>-163.1</b>	<b>-141.4</b>	<b>-13.7</b>	...	...	...
Motor vehicles	-48.1	-4.6	21.0	...	...	...
Nonfarm ex. motor vehicles	-115.1	-136.9	-34.7	...	...	...
<b>Manufacturing and trade ex. wholesale and retail motor vehicles and parts</b>						
<b>Manufacturing</b>	<b>-110.9</b>	<b>-129.3</b>	<b>-16.4</b>	<b>-57.4</b>	<b>-19.8</b>	<b>n.a.</b>
Manufacturing	-39.8	-55.3	-6.1	-22.1	-4.6	n.a.
Wholesale trade ex. motor vehicles & parts	-52.5	-51.9	-1.4	-42.3	-1.9	n.a.
Retail trade ex. motor vehicles & parts	-18.6	-22.1	-8.8	6.9	-13.3 <sup>e</sup>	n.a.
<i>Book-value inventory investment (current dollars)</i>						
<b>Manufacturing and trade ex. wholesale and retail motor vehicles and parts</b>	<b>-146.3</b>	<b>-121.8</b>	<b>20.5</b>	<b>-18.7</b>	<b>19.2</b>	<b>54.5</b>
Manufacturing	-66.0	-49.8	7.5	-10.0	16.1	30.2
Wholesale trade ex. motor vehicles & parts	-56.5	-47.8	13.9	-25.5	11.7	28.4
Retail trade ex. motor vehicles & parts	-23.7	-24.2	-9	16.7	-8.6	-4.2

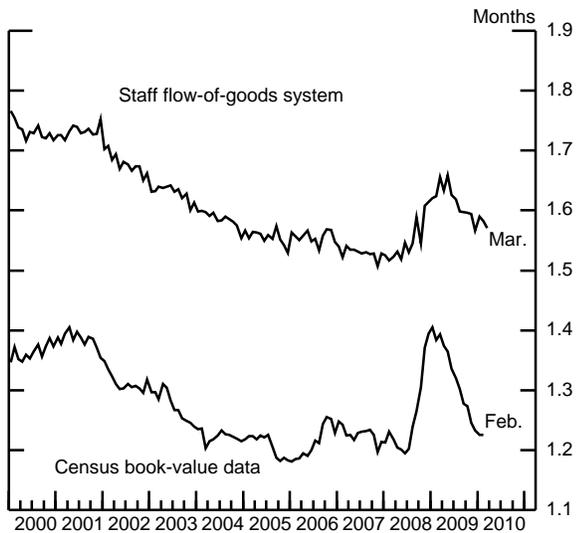
n.a. Not available.

... Not applicable.

<sup>e</sup> Staff estimate of real inventory investment based on revised book-value data.

Source: For real inventory investment, U.S. Dept. of Commerce, Bureau of Economic Analysis; for book-value data, Census Bureau.

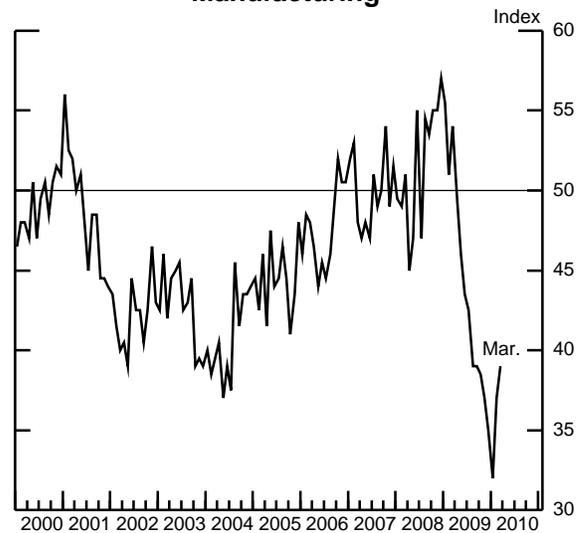
**Inventory Ratios ex. Motor Vehicles**



Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.

Source: Census Bureau; staff calculation.

**ISM Customers' Inventories: Manufacturing**

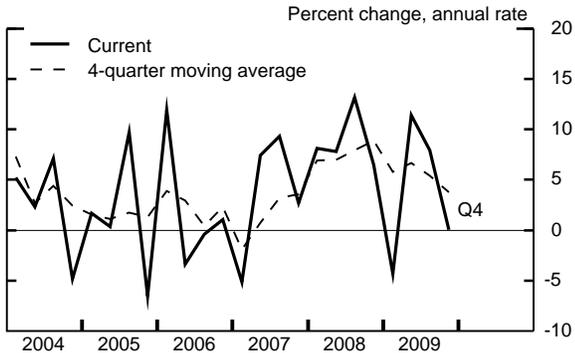


Note: A number below 50 indicates inventories are "too low."

Source: Institute for Supply Management (ISM), Manufacturing ISM Report on Business.

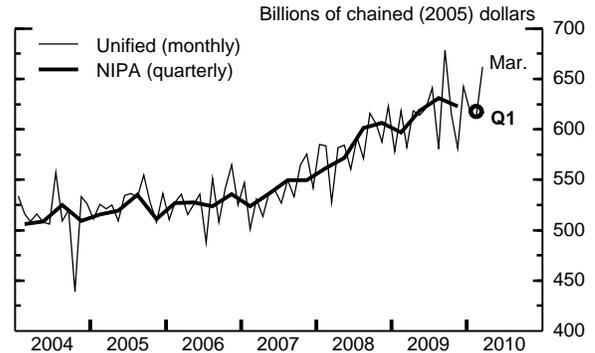
## Federal Government Indicators

### Total Real Federal Purchases



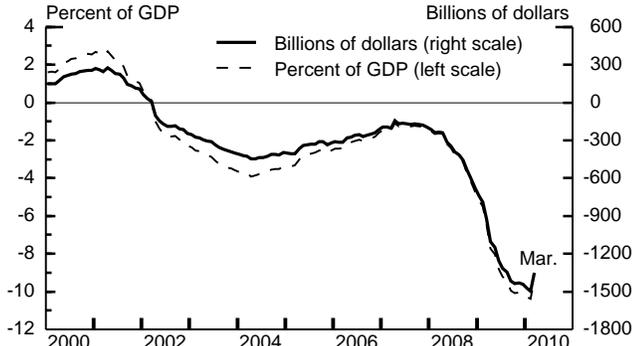
Note: National income and product accounts measure.  
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

### Real Defense Spending



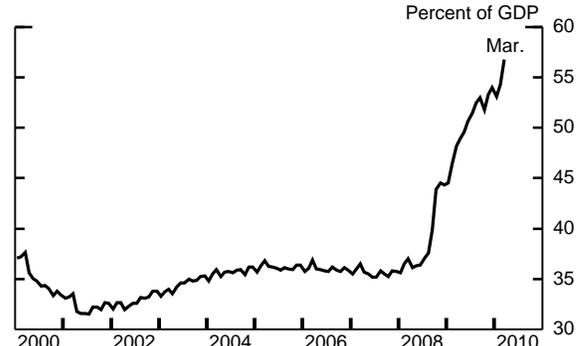
Note: Nominal unified defense spending is seasonally adjusted and deflated by BEA prices. NIPA defense purchases exclude consumption of fixed capital; Q1 is an estimate.  
Source: Monthly Treasury Statement; U.S. Department of Commerce, Bureau of Economic Analysis.

### Unified Budget Deficit



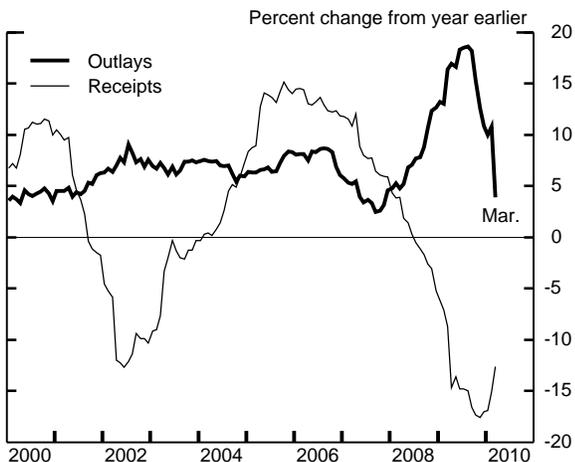
Note: Adjusted for payment-timing shifts; cumulative deficit over the previous 12 months.  
Source: Monthly Treasury Statement.

### Federal Debt Held by the Public



Source: Monthly Treasury Statement.

### Unified Outlays and Receipts



Note: Adjusted for payment-timing shifts; based on cumulative outlays or receipts over the previous 12 months.  
Source: Monthly Treasury Statement.

### Recent Unified Federal Outlays and Receipts

Function or source	Jan.-Mar. 2010	
	Billions of dollars	Percent change*
<b>Outlays</b>	835	-7.4
National defense	169	9.5
Major transfers <sup>1</sup>	562	11.2
Other primary spending	50	-74.9
Net interest	53	33.2
<b>Receipts</b>	466	5.4
Individual income and payroll taxes	391	-1.5
Corporate income taxes	20	241.5
Other	55	39.7
<b>Deficit (-)</b>	-369	-19.6

Note: Adjusted for payment-timing shifts.

\* Relative to same year-earlier period. Percent change in deficit is calculated on an absolute-value basis.

<sup>1</sup> Includes Social Security, Medicare, Medicaid, and income security programs.

Source: Monthly Treasury Statement.

nominal expenditures through February suggest a further decline in the first quarter. The weakness has been widespread across categories and likely reflects the drag from elevated vacancy rates, low levels of property prices, and difficult financing conditions for new projects.<sup>11</sup> In addition, the most recent reading from the architectural billings index edged up but remained at a level consistent with further declines in spending over the near term, and, smoothing through weather-induced swings, nonresidential construction employment continued to decline, though at a slower pace compared with the sharp falls early last year.

In contrast, real spending on drilling and mining structures picked up strongly over the second half of last year in response to the rebound in oil and natural gas prices. And increases in the number of drilling rigs in operation and in footage drilled suggest that spending continued to rise rapidly in the first quarter, likely returning to levels posted prior to the large swings in energy prices over the past four years.

### **Business Inventories**

The data in hand for the nonfarm business sector excluding motor vehicles suggest that the pace of inventory liquidation moderated further in the first quarter after slowing sharply in the fourth quarter of last year. Moreover, information from the motor vehicle sector indicates that auto dealers added to their stocks in the first quarter.

The staff's flow-of-goods system also suggests that large-scale liquidations have substantially subsided, and indeed, it shows a small uptick in inventories over the past three months. Inventories appear to be approaching comfortable levels relative to sales in the aggregate, although there is some divergence in inventory positions across industries. Months' supply remains elevated (when measured at the current pace of sales) for equipment, materials, and, to a lesser degree, construction supplies. By contrast, inventories of consumer goods (particularly motor vehicles), business supplies, and high-tech goods appear low relative to demand. Finally, the ISM index on customers' inventories remained at a very low level in March, despite increasing from its record low in January; this reading implies that supply managers in manufacturing continue to expect their customers to do some restocking in the coming months.

### **Federal Government Sector**

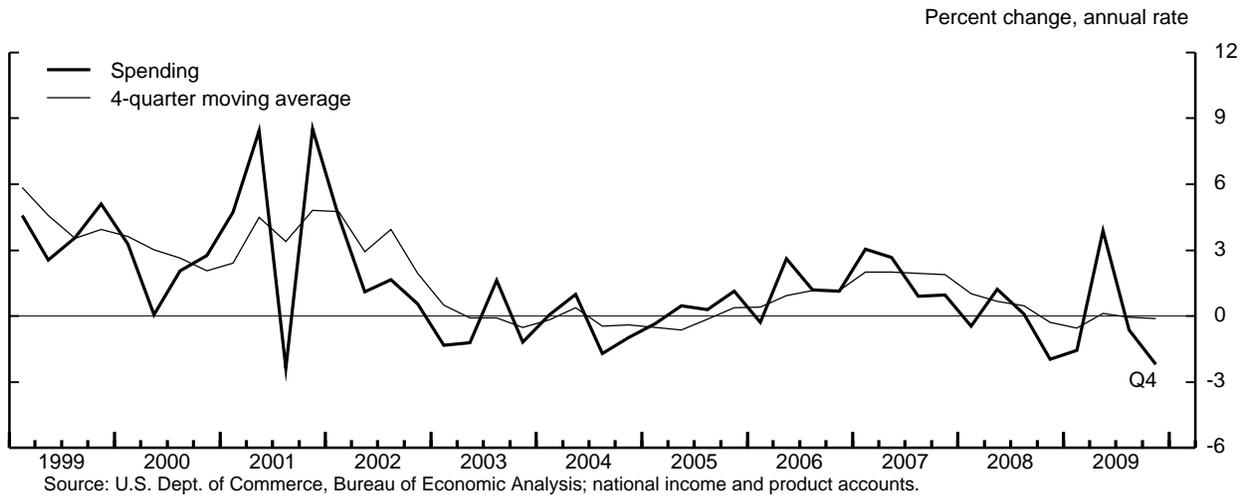
Real federal government purchases appear likely to hold steady in the first quarter. Data from the Monthly Treasury Statements through March suggest that real defense spending edged down last quarter, reflecting a temporarily slow rate of spend-out from the hefty

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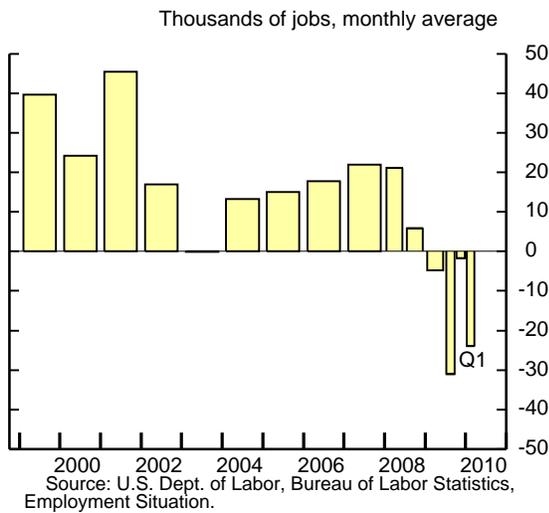
<sup>11</sup> According to the latest SLOOS, banks continued to report that they tightened policies further on commercial real estate loans.

## State and Local Indicators

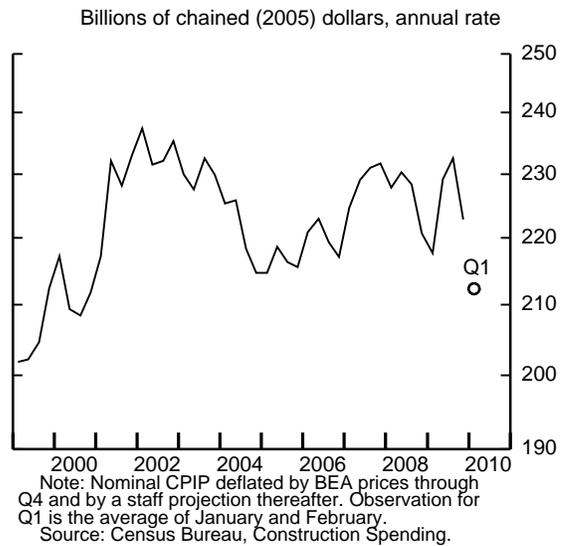
### Real Spending on Consumption and Investment



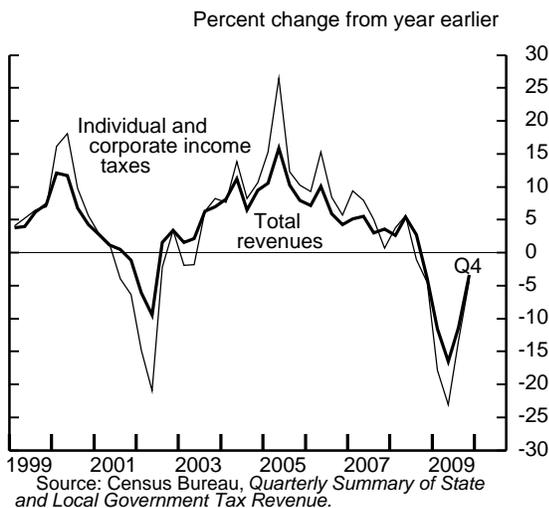
### Net Change in Employment



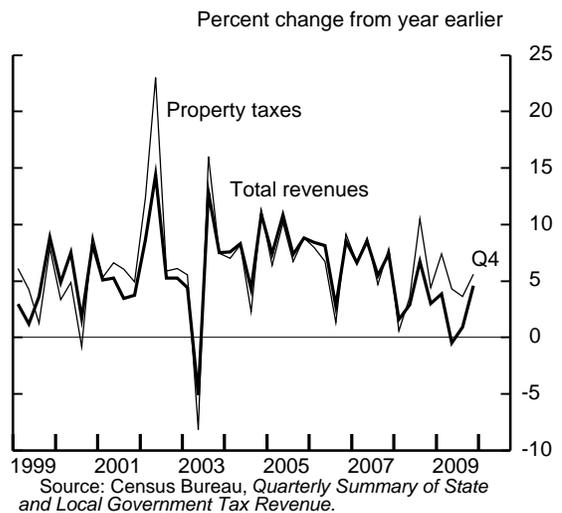
### Real Construction



### State Revenues



### Local Revenues



amount of budget authority available for these programs. Meanwhile, nondefense purchases should be bolstered in the first quarter by stimulus-related spending.

Although federal debt continues to climb steeply, the deficit in the federal budget may be starting to stabilize following its significant deterioration over the last year or so: The budget deficit in the first half of fiscal year 2010 was a little narrower than in the first half of fiscal year 2009. In particular, receipts in the first quarter were up nearly 5½ percent relative to the same year-earlier period, even though last year's stimulus policies appear to have held down tax receipts this year more than last year; indeed, we think that the revenues excluding the effects of stimulus tax cuts may have increased at a double-digit pace in the first quarter. Total federal spending fell roughly \$100 billion in the first quarter relative to a year earlier, reflecting lower outlays associated with the Troubled Asset Relief Program (TARP).<sup>12</sup> However, outlays excluding financial transactions rose 15 percent compared with a year ago, due both to the effects of the weak labor market on low-income support programs and to the spending associated with the American Recovery and Reinvestment Act (ARRA). Through the end of March, the ARRA had boosted spending and had reduced taxes by a combined amount of about \$370 billion, still less than half of the total \$862 billion stimulus package.

### **State and Local Government Sector**

State and local governments continue to struggle with significant budgetary pressures, and incoming data point to a sharp decline in real expenditures by these governments in the first quarter. Real outlays on construction plunged at an average annual rate of 18 percent in January and February. Moreover, state and local hiring continued to contract, as employment decreased at an average of about 25,000 per month in the first quarter.

Nonetheless, there are some tentative signs that the fiscal stress faced by states and localities may have begun to ease a bit. The Census Bureau's *Quarterly Summary of State and Local Government Tax Revenue* indicates that local government tax receipts posted a strong increase in the fourth quarter relative to the same period a year earlier because of rising property tax collections. Furthermore, at the state level, the pace of revenue declines moderated noticeably.<sup>13</sup> For the sector as a whole, total tax collections by state and local governments increased almost 1 percent over the four quarters of 2009, the first four-quarter increase in their total revenues since the third quarter of 2008.

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<sup>12</sup> The Treasury now estimates that the expected losses from last year's TARP transactions were less than originally anticipated, and, in March, it recorded a downward adjustment of \$115 billion in outlays.

<sup>13</sup> Preliminary data collected by the Rockefeller Institute, based on a sample of 45 states, suggest that the decline in state revenues lessened even further in January and February.

### Consumer Price Measures (Percent change)

Measures	12-month change		3-month change		1-month change	
	Mar. 2009	Mar. 2010	Annual rate		Monthly rate	
			Dec. 2009	Mar. 2010	Feb. 2010	Mar. 2010
<i>CPI</i>						
<b>Total</b>	<b>-.4</b>	<b>2.3</b>	<b>2.5</b>	<b>.9</b>	<b>.0</b>	<b>.1</b>
Food	4.4	.2	1.0	2.3	.1	.2
Energy	-23.0	18.3	15.3	9.2	-.5	.0
<b>Ex. food and energy</b>	<b>1.8</b>	<b>1.1</b>	<b>1.3</b>	<b>-.2</b>	<b>.1</b>	<b>.0</b>
Core goods	.4	1.9	2.9	-.1	-.1	-.1
Core services	2.3	.8	.7	-.2	.1	.1
Housing services	1.5	-.7	-.6	-2.3	.0	-.1
Other services	3.5	2.8	2.6	2.5	.3	.3
Memo: Trimmed mean	2.3	1.0	1.2	.6	.0	.0
Chained CPI (n.s.a.) <sup>1</sup>	-.1	2.5	...	...	...	...
Ex. food and energy <sup>1</sup>	1.7	.8	...	...	...	...
<i>PCE prices</i> <sup>2</sup>						
<b>Total</b>	<b>.2</b>	<b>2.0</b>	<b>2.5</b>	<b>1.0</b>	<b>.0</b>	<b>.1</b>
Food and bev. at home	4.6	-.5	1.4	2.3	.1	.3
Energy	-24.8	18.5	16.1	8.6	-.6	-.1
<b>Ex. food and energy</b>	<b>1.7</b>	<b>1.3</b>	<b>1.8</b>	<b>.4</b>	<b>.0</b>	<b>.1</b>
Core goods	.7	.1	-.7	-1.6	-.1	-.1
Core services	2.0	1.7	2.6	1.1	.1	.2
Housing services	2.4	.0	-.4	-.5	.0	-.1
Other services	1.9	2.2	3.5	1.6	.1	.2
Memo: Trimmed mean	2.3	...	1.4	...	.0	...
Core market-based	2.1	1.1	1.0	.4	.1	.1
Core non-market-based	-.9	2.5	6.4	.8	-.1	.2

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.).

2. PCE prices in March are staff estimates.

... Not applicable.

Source: For consumer price index (CPI), U.S. Dept. of Labor, Bureau of Labor Statistics; for personal consumption expenditures (PCE), U.S. Dept. of Commerce, Bureau of Economic Analysis.

### Producer Price Measures (Percent change)

Measures	12-month change		3-month change		1-month change	
	Feb. 2009	Feb. 2010	Annual rate		Monthly rate	
			Nov. 2009	Feb. 2010	Jan. 2010	Feb. 2010
<i>PPI</i>						
<b>Total finished goods</b>	<b>-1.4</b>	<b>4.4</b>	<b>5.9</b>	<b>5.1</b>	<b>1.4</b>	<b>-.6</b>
Food	.8	3.4	8.0	8.6	.4	.4
Energy	-18.5	16.6	24.7	11.7	5.1	-2.9
<b>Ex. food and energy</b>	<b>3.8</b>	<b>1.0</b>	<b>-.5</b>	<b>1.6</b>	<b>.3</b>	<b>.1</b>
Core consumer goods	4.0	1.7	.0	2.7	.4	.2
Capital equipment	3.6	.1	-1.3	.5	.3	-.1
Intermediate materials	-5.2	5.6	7.3	9.9	1.7	.1
Ex. food and energy	-.2	2.8	4.0	7.8	.5	.9
Crude materials	-34.5	28.6	41.4	28.9	9.6	-3.5
Ex. food and energy	-29.7	34.9	13.6	50.4	6.6	-.6

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Looking forward, the National Conference of State Legislatures reports that 42 states project revenues in fiscal 2011—which will begin on July 1 in most states—to rise above their level in the current fiscal year. In addition, federal stimulus funds for states and localities continue to ramp up, and municipal borrowing for new capital projects has remained solid at relatively low interest rates.

### **Prices**

Consumer price inflation has been soft recently. Both headline and core PCE prices are estimated to have inched up 0.1 percent in March after no change in February. This increase would put the rise in core PCE prices over the past three months at an annual rate of only  $\frac{1}{2}$  percent. Taking a longer view, core consumer price inflation slowed to an estimated  $1\frac{1}{4}$  percent over the 12 months ending in March, compared with  $1\frac{3}{4}$  percent over the year-earlier period. In contrast, the 12-month change in the headline index moved up noticeably over the past year, to 2 percent in March, as energy prices rebounded. Survey measures of long-run inflation expectations have been fairly stable in recent months at levels slightly lower than those posted a year ago.

After rising sharply into the beginning of this year, PCE energy prices are estimated to have edged down in both February and March. Retail prices for gasoline declined again last month, and consumer prices for natural gas moved down after being boosted by unusually cold weather in January and February. However, these price declines were mostly offset by a sizable jump in consumer electricity prices in March.<sup>14</sup> Survey data through mid-April suggest that consumer prices for gasoline have declined again this month. The spot price of crude oil has swung widely since the March Greenbook but ended up slightly, on balance. However, the spot price of natural gas has declined more than 10 percent since the time of the March Greenbook, and this will probably push down retail rates for natural gas somewhat further in coming months.

The PCE price index for food and beverages is estimated to have risen 0.3 percent in March, reflecting a jump in the prices for fruits and vegetables. Nonetheless, food prices in March remained nearly  $\frac{1}{2}$  percentage point below their year-earlier level. So far this year, spot prices of farm commodities are up a bit, as small declines in crop prices have only partly offset increases in prices for livestock products.

As noted, PCE prices excluding food and energy decelerated over the past year, with the 12-month change ending in March estimated to be  $\frac{1}{2}$  percentage point less than in the

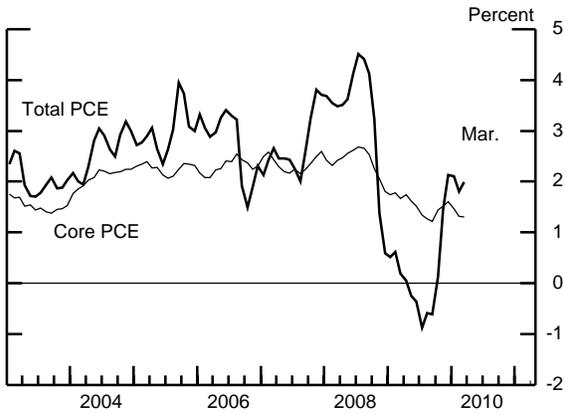
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<sup>14</sup> Although roughly one-third of the March increase in consumer electricity prices reflected a rebound in rates in the mid-Atlantic region following a February rebate, consumer electricity prices were up in all reporting regions last month.

### Consumer Prices

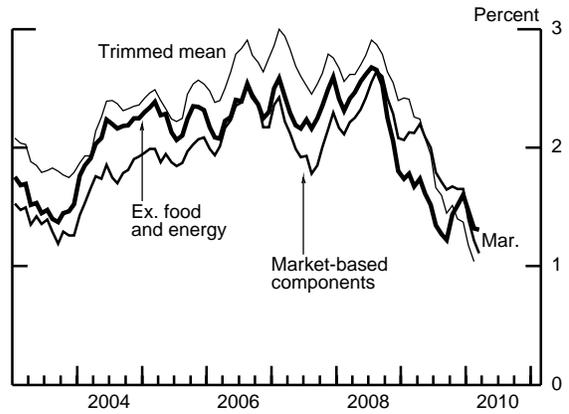
(12-month change except as noted; PCE prices in March are staff estimates)

PCE Prices



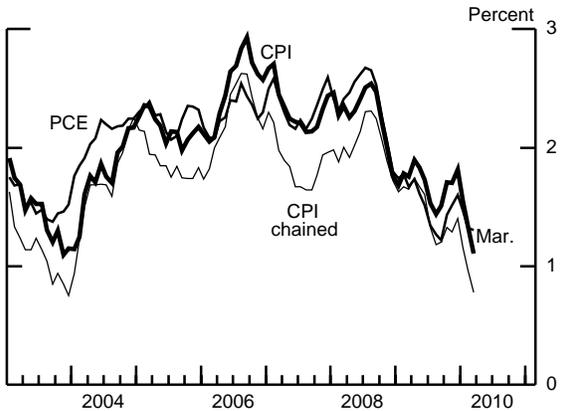
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Measures of Core PCE



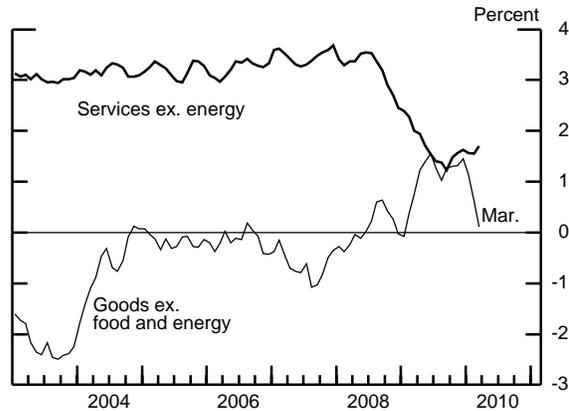
Source: For trimmed mean, Federal Reserve Bank of Dallas; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

CPI and PCE excluding Food and Energy



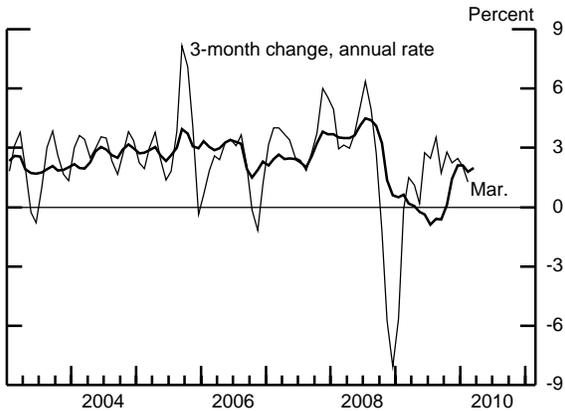
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for PCE, U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Goods and Services



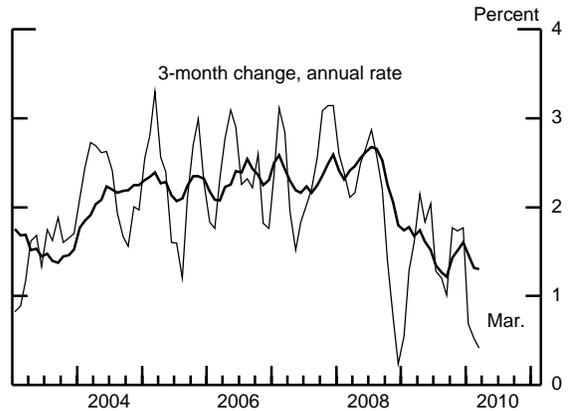
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE excluding Food and Energy

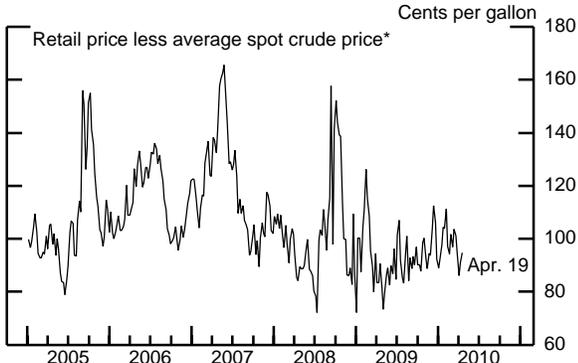


Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

## Energy and Food Price Indicators

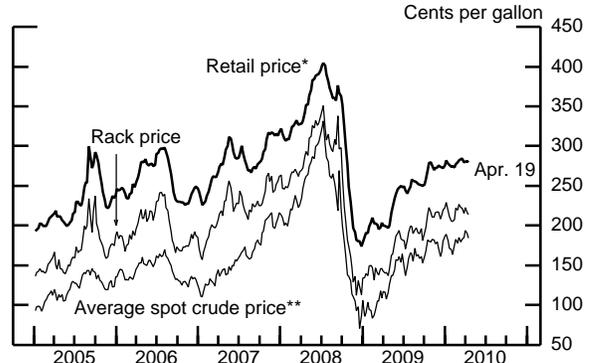
(Data from U.S. Department of Energy, Energy Information Administration, except as noted)

### Total Gasoline Margin



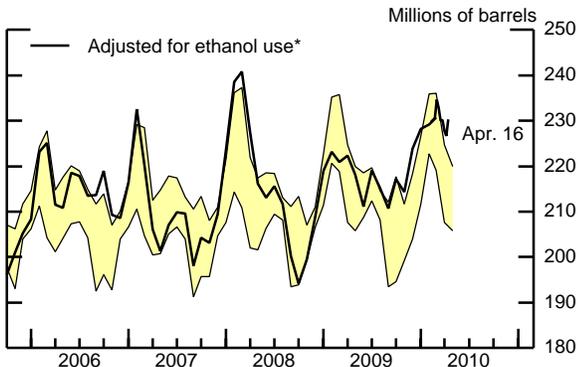
\* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas Intermediate, 40% Maya heavy crude. Includes gasoline taxes.

### Gasoline Price Decomposition



\* Regular grade seasonally adjusted by FRB staff.  
\*\* 60% West Texas Intermediate, 40% Maya heavy crude.

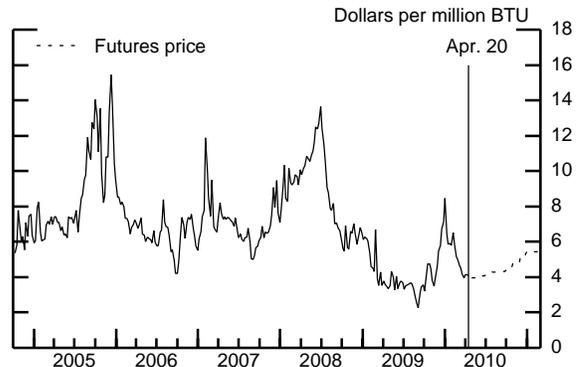
### Gasoline Inventories



Note: Bounds are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. Monthly data through December 2009, weekly data thereafter.

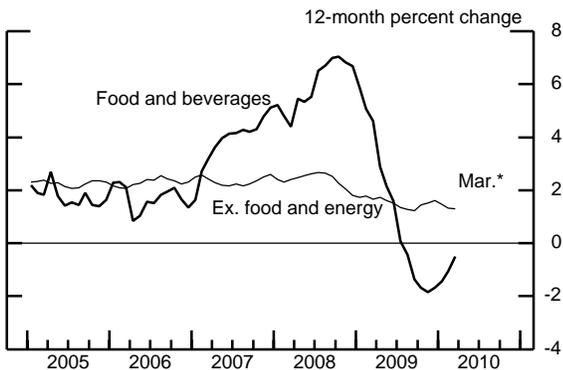
\* The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff.

### Natural Gas Prices



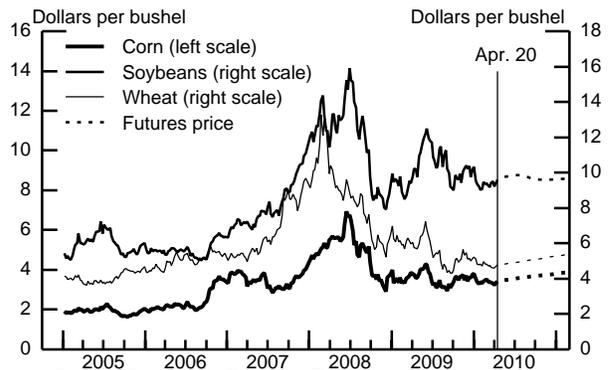
Note: National average spot price.  
Source: Bloomberg.

### PCE: Food at Home and Core Prices



\*Staff estimate.  
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

### Spot Prices of Agricultural Commodities



Source: Commodity Research Bureau.

**Broad Measures of Inflation**  
(Percent change, Q4 to Q4)

Measure	2006	2007	2008	2009
<i>Product prices</i>				
GDP price index	2.9	2.7	1.9	.7
Less food and energy	3.0	2.8	1.7	.8
Nonfarm business chain price index	2.3	2.2	1.6	.6
<i>Expenditure prices</i>				
Gross domestic purchases price index	2.6	3.5	1.9	.6
Less food and energy	2.9	2.8	2.0	.7
PCE price index	1.9	3.6	1.7	1.2
Less food and energy	2.3	2.5	2.0	1.5
PCE price index, market-based components	1.8	3.5	1.9	1.3
Less food and energy	2.2	2.2	2.3	1.7
CPI	1.9	4.0	1.6	1.5
Less food and energy	2.7	2.3	2.0	1.7
Chained CPI	1.7	3.6	1.8	1.6
Less food and energy	2.3	1.9	1.9	1.3
Median CPI	3.0	3.1	2.9	1.2
Trimmed mean CPI	2.6	2.8	2.9	1.2
Trimmed mean PCE	2.7	2.7	2.5	1.4

Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for median and trimmed mean CPI, Federal Reserve Bank of Cleveland; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

**Surveys of Inflation Expectations**  
(Percent)

Period	Actual CPI inflation <sup>1</sup>	Thomson Reuters/Michigan Survey				Professional forecasters (10 years) <sup>4</sup>	
		1 year <sup>2</sup>		5 to 10 years <sup>3</sup>		CPI	PCE
		Mean	Median	Mean	Median		
2008:Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
Q4	1.6	3.0	2.8	2.9	2.8	2.5	2.2
2009:Q1	.0	2.4	2.0	3.3	2.9	2.4	2.2
Q2	-1.2	3.4	2.9	3.1	2.9	2.5	2.3
Q3	-1.6	3.1	2.6	3.2	2.9	2.5	2.2
Q4	1.4	3.1	2.7	3.1	2.9	2.3	2.1
2010:Q1	2.4	3.5	2.7	3.2	2.8	2.4	2.1
2009:Dec.	2.7	3.0	2.5	3.0	2.7	...	...
2010:Jan.	2.6	3.4	2.8	3.3	2.9	...	...
Feb.	2.1	3.6	2.7	3.3	2.7	2.4	2.1
Mar.	2.3	3.4	2.7	3.1	2.7	...	...
Apr.	n.a.	3.8	2.9	3.2	2.7	...	...

1. Percent change from the same period in the preceding year.

2. Responses to the question, By about what percent do you expect prices to go up, on 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 average, during the next 5 to 10 years?

4. Median CPI and PCE price projections.

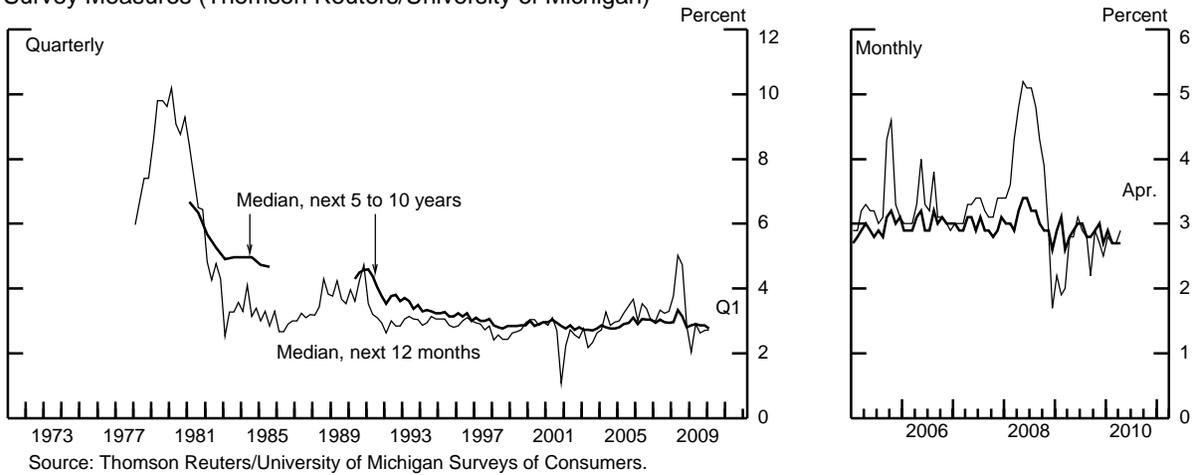
... Not applicable.

n.a. Not available.

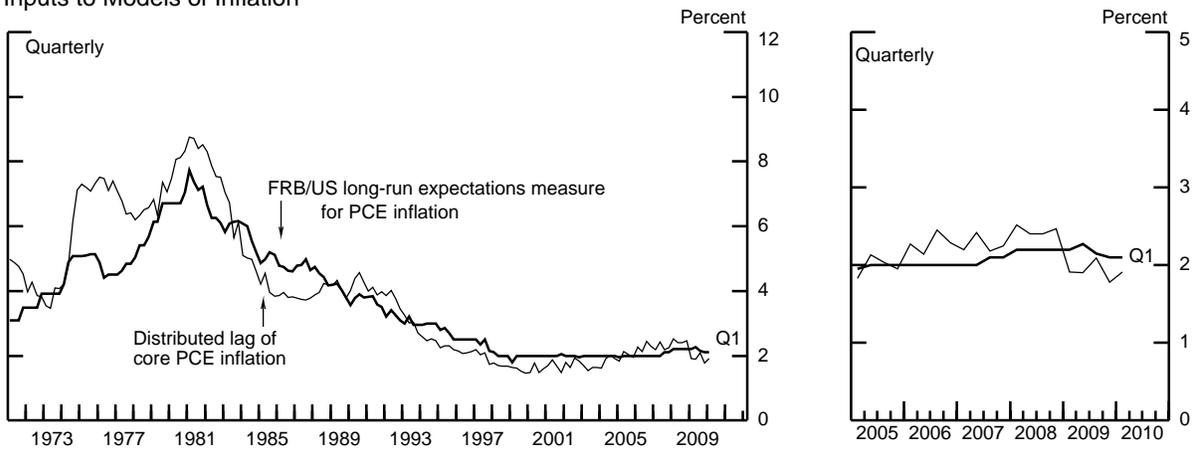
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for Thomson Reuters/Michigan Survey, Thomson Reuters/University of Michigan Surveys of Consumers; for professional forecasters, the Federal Reserve Bank of Philadelphia.

## Measures of Expected Inflation

Survey Measures (Thomson Reuters/University of Michigan)

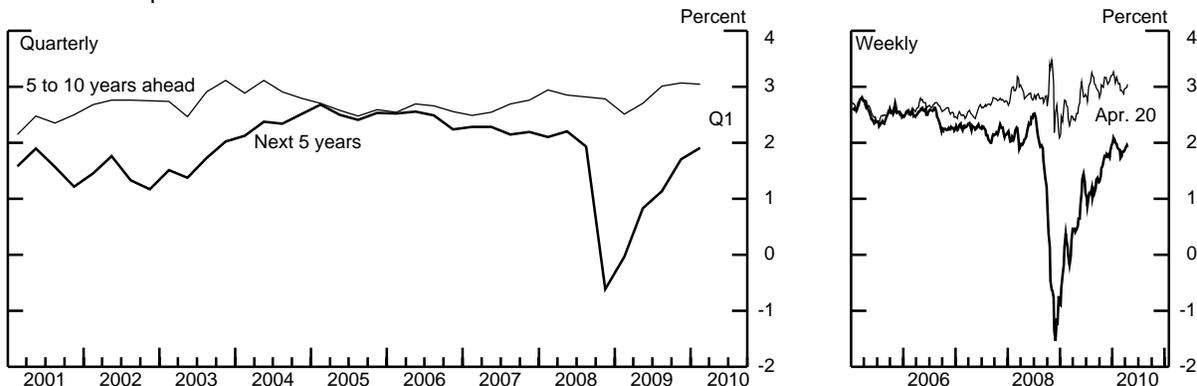


Inputs to Models of Inflation



Note: The distributed lag of core PCE inflation is derived from one of the reduced-form Phillips curves used by Board staff.  
 Source: For the distributed lag of core PCE inflation, FRB staff calculations; for the FRB/US measure, for 2007 forward, the median projection for PCE inflation over the next 10 years from the Survey of Professional Forecasters (SPF); for 1990 to 2006, the equivalent SPF projection for the CPI; for 1981 to 1989, a related survey for the CPI conducted by Richard Hoey; and for the period preceding 1981, a model-based estimate constructed by Board staff. The survey data before 2007 are adjusted down 0.5 percentage point to put the CPI projections approximately on a PCE basis.

Inflation Compensation from TIPS

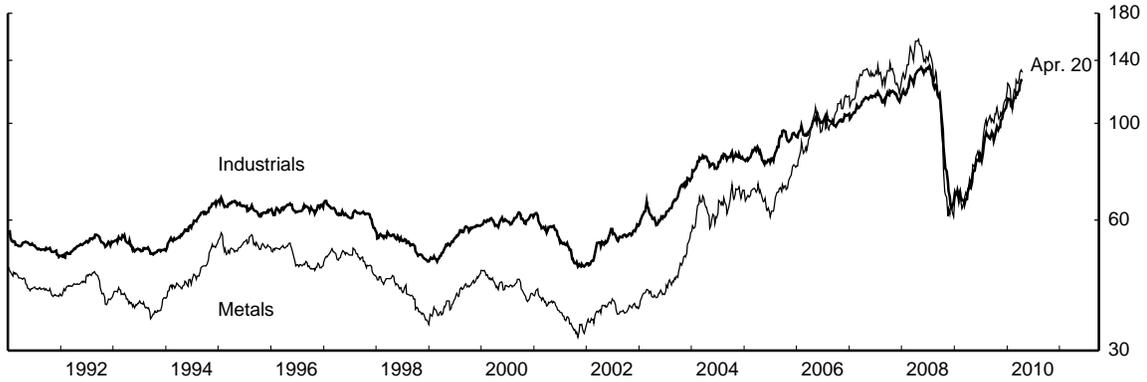


Note: Based on a comparison of an estimated TIPS (Treasury inflation-protected securities) yield curve with an estimated nominal off-the-run Treasury yield curve, with an adjustment for the indexation-lag effect.  
 Source: FRB staff calculations.

## Commodity Price Indexes

Journal of Commerce

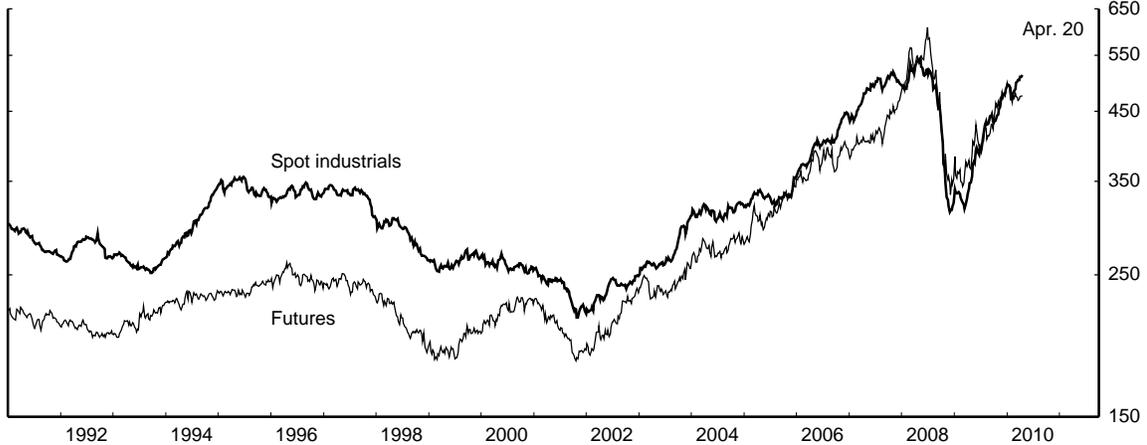
Ratio scale, 2006 = 100



Note: The *Journal of Commerce* (JOC) industrial price index is based almost entirely on industrial commodities, with a small weight given to energy commodities. Copyright for JOC data is held by CIBCR, 1994.

Commodity Research Bureau

Ratio scale, 1967 = 100



Note: The Commodity Research Bureau (CRB) spot industrials 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.

### Selected Commodity Price Indexes (Percent change)

Index	2009 <sup>1</sup>	12/29/09 to 3/9/10 <sup>2</sup>	3/9/10 to 4/20/10 <sup>2</sup>	52-week change to 4/20/10
JOC industrials	65.1	8.2	7.0	75.0
JOC metals	86.6	10.9	4.4	76.1
CRB spot industrials	50.9	2.2	2.8	47.6
CRB spot foodstuffs	16.9	4.9	1.0	18.3
CRB futures	38.4	-2.6	.3	29.3

1. From the last week of the preceding year to the last week of the year indicated.
2. March 9, 2010, is the Tuesday preceding publication of the March Greenbook.

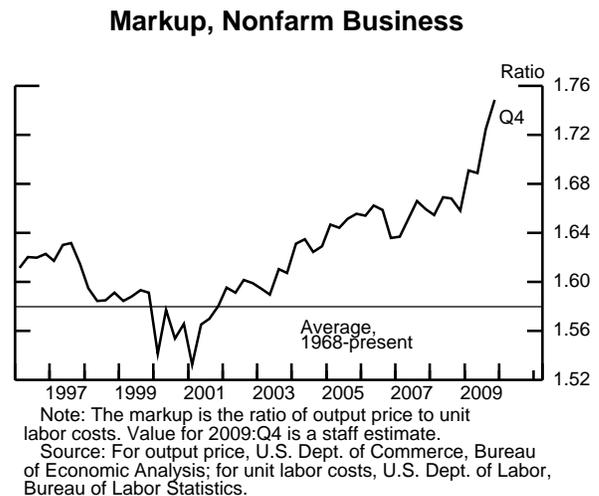
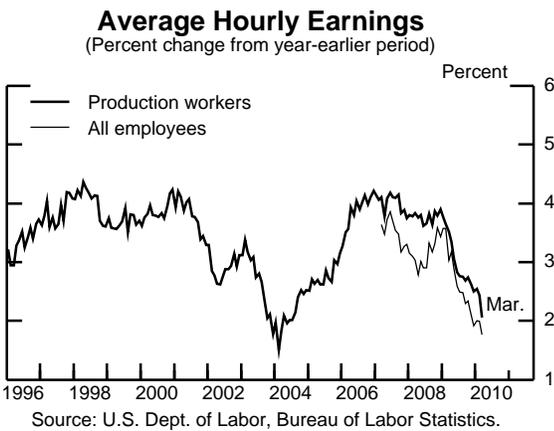
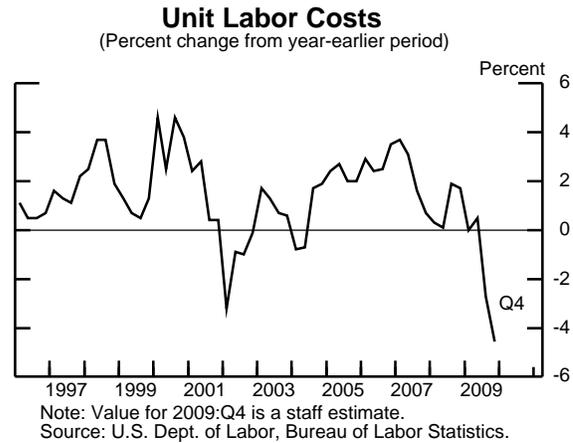
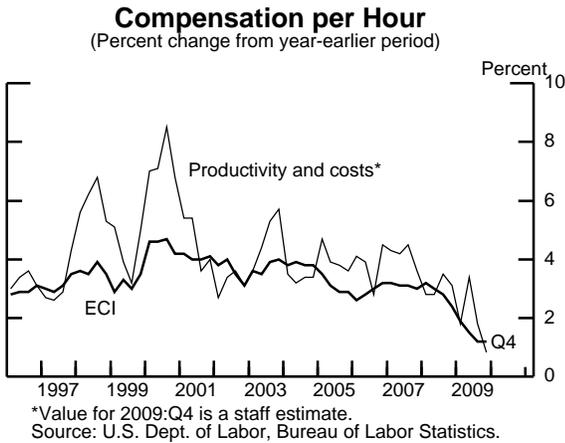
### Hourly Compensation and Unit Labor Costs

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

Category	2007:Q4 to 2008:Q4	2008:Q4 to 2009:Q4 <sup>e</sup>	2009			
			Q1	Q2	Q3	Q4 <sup>e</sup>
<i>Compensation per hour</i> Nonfarm business	3.1	.8	-4.2	7.7	-.4	.5
<i>Output per hour</i> Nonfarm business	1.4	5.6	.9	7.6	7.8	6.3
<i>Unit labor costs</i> Nonfarm business	1.7	-4.6	-5.0	.1	-7.6	-5.5

<sup>e</sup> Staff estimate.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



previous 12 months. Market-based core prices decelerated even more noticeably, increasing only about 1 percent over the 12 months ending in March, down 1 percentage point from the increase over the year-earlier period. Furthermore, this deceleration has been widespread, with the 12-month changes in prices for housing services, market-based services excluding energy and housing, core nondurable goods, and durable goods excluding motor vehicles all down relative to the year-earlier period.

Measures of inflation expectations have held fairly steady in recent months. In the Thomson Reuters/University of Michigan preliminary survey for April, median year-ahead inflation expectations edged up to 2.9 percent, while median 5-to-10-years-ahead inflation expectations were unchanged at 2.7 percent—a reading that is near the low end of the range observed over the past few years. Meanwhile, the TIPS-based measures of inflation compensation for both 5 years and 5-to-10 years ahead have both edged up slightly since the March Greenbook.

Cost pressures from rising commodity prices are showing through to prices at earlier stages of processing. The PPI for core intermediate materials continued to rise at a brisk pace through February, and the 12-month change in this index was nearly 3 percent, compared with a small decline posted over the year-earlier period. Commodity prices have also extended their sizable rebound following their collapse in 2008. Since the March Greenbook, the Commodity Research Bureau spot price index of industrial materials has increased about 3 percent, while the *Journal of Commerce* index of industrial materials has moved up 7 percent; commodity prices increases were widespread but especially pronounced for wood products.

### **Labor Costs**

Measures of labor costs decelerated sharply over the past year. Compensation per hour in the nonfarm business sector increased only  $\frac{3}{4}$  percent over the four quarters of 2009, down from a 3 percent increase over the four quarters of 2008. As a result of this small increase in compensation and the outsized gain in productivity last year, unit labor costs fell  $4\frac{1}{2}$  percent in 2009 after rising  $1\frac{3}{4}$  percent in 2008.

Average hourly earnings of all employees also decelerated during the past year. Over the 12 months ending in March, this wage measure increased  $1\frac{3}{4}$  percent, down from an increase of 3 percent over the year-earlier period. In the first three months of this year, the average monthly increase in average hourly earnings was only 0.1 percent.

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## **Domestic Financial Developments**

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## Domestic Financial Developments

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### Overview

Market participants appeared to become more optimistic about economic conditions over the intermeeting period. Better-than-expected news about the economy and generally favorable earnings reports pushed stock prices higher while corporate bond spreads narrowed amid improved credit quality. Yields on Treasury securities moved up a bit, but the expected path of the federal funds rate edged down, on net, largely reflecting FOMC communications. The end of the Federal Reserve's programs to purchase agency debt and agency mortgage-backed securities (MBS) elicited little response in financial markets.

Indicators of credit flow were mixed over the intermeeting period. Corporate bond issuance was extraordinarily strong, and commercial paper outstanding increased. However, bank loans to businesses and households continued to contract significantly. Respondents to the April Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that, on balance, lending standards were little changed in the first quarter, but some terms on loans to businesses and households were tightened further and loan demand continued to weaken broadly.

### Policy Expectations and Treasury Yields

Although investors seemed to read the incoming economic data as pointing to continued firming in economic activity, expectations for the path of monetary policy fell slightly, on net, over the intermeeting period, largely in response to Federal Reserve communications. Some market participants reportedly interpreted the retention of the "extended period" language and the lack of a comment on an exit strategy in the March FOMC statement as indications that the federal funds rate might stay in a low range for a longer period than was previously expected. Policy expectations also decreased in response to other official communications during the intermeeting period, including the minutes of the March FOMC meeting and testimony by the Chairman, which were generally perceived to be somewhat less upbeat about the overall economic situation than had been expected.

Futures quotes continue to suggest that investors expect the federal funds rate to exceed 25 basis points in the fourth quarter of this year and to reach 1½ percent by the end of 2011. Market quotes for interest rate caps provide information on the anticipated distribution of the federal funds rate at future dates, and these distributions suggest that investors' assessment of the most likely level of the federal funds rate does not move above 25 basis points until 2011. Results from the Desk's primary dealer survey suggest that dealers on average see about a 40 percent chance that the first policy tightening will

## Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008	2010			Change to Apr. 20 from selected dates (percentage points)			
	Sept. 12	Jan. 26	Mar. 15	Apr. 20	2008 Sept. 12	2010 Jan. 26	2010 Mar. 15	
<i>Short-term</i>								
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00	
Treasury bills <sup>1</sup>								
3-month	1.46	.07	.17	.16	-1.30	.09	-.01	
6-month	1.80	.14	.24	.24	-1.56	.10	.00	
Commercial paper (A1/P1 rates) <sup>2</sup>								
1-month	2.39	.14	.21	.23	-2.16	.09	.02	
3-month	2.75	.20	.20	.28	-2.47	.08	.08	
Large negotiable CDs <sup>1</sup>								
3-month	2.79	.20	.23	.30	-2.49	.10	.07	
6-month	3.09	.29	.34	.41	-2.68	.12	.07	
Eurodollar deposits <sup>3</sup>								
1-month	2.60	.28	.28	.30	-2.30	.02	.02	
3-month	3.00	.40	.40	.40	-2.60	.00	.00	
Bank prime rate	5.00	3.25	3.25	3.25	-1.75	.00	.00	
<i>Intermediate- and long-term</i>								
U.S. Treasury <sup>4</sup>								
2-year	2.24	.85	.95	1.02	-1.22	.17	.07	
5-year	2.97	2.38	2.42	2.56	-.41	.18	.14	
10-year	3.93	3.80	3.84	3.91	-.02	.11	.07	
U.S. Treasury indexed notes <sup>5</sup>								
5-year	1.33	.38	.56	.65	-.68	.27	.09	
10-year	1.77	1.37	1.56	1.53	-.24	.16	-.03	
Municipal general obligations (Bond Buyer) <sup>6</sup>	4.54	4.30	4.33	4.43	-.11	.13	.10	
Private instruments								
10-year swap	4.26	3.72	3.77	3.80	-.46	.08	.03	
10-year FNMA <sup>7</sup>	4.36	4.14	4.18	4.27	-.09	.13	.09	
10-year AA <sup>8</sup>	6.62	5.04	5.02	4.92	-1.70	-.12	-.10	
10-year BBB <sup>8</sup>	7.22	5.74	5.72	5.70	-1.52	-.04	-.02	
10-year high yield <sup>8</sup>	10.66	8.76	8.64	8.34	-2.32	-.42	-.30	
Home mortgages (FHLMC survey rate)								
30-year fixed	5.78	4.98	4.96	5.07	-.71	.09	.11	
1-year adjustable	5.03	4.29	4.12	4.13	-.90	-.16	.01	
<b>Stock exchange index</b>								
Stock exchange index	Record high		2010			Change to Apr. 20 from selected dates (percent)		
	Level	Date	Jan. 26	Mar. 15	Apr. 20	Record high	2010 Jan. 26	2010 Mar. 15
Dow Jones Industrial	14,165	10-9-07	10,194	10,642	11,117	-21.51	9.05	4.46
S&P 500 Composite	1,565	10-9-07	1,092	1,151	1,207	-22.87	10.53	4.92
Nasdaq	5,049	3-10-00	2,204	2,362	2,500	-50.48	13.46	5.85
Russell 2000	856	7-13-07	612	674	722	-15.68	17.87	6.99
D.J. Total Stock Index	15,807	10-9-07	11,282	11,980	12,600	-20.29	11.69	5.18

1. Secondary market.
2. Financial commercial paper.
3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time.
4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities.
5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities and adjusted for the carry effect.
6. Most recent Thursday quote.
7. Constant-maturity yields estimated from Fannie Mae domestic noncallable coupon securities.
8. Derived from smoothed corporate yield curves estimated using Merrill Lynch bond data.

## NOTES:

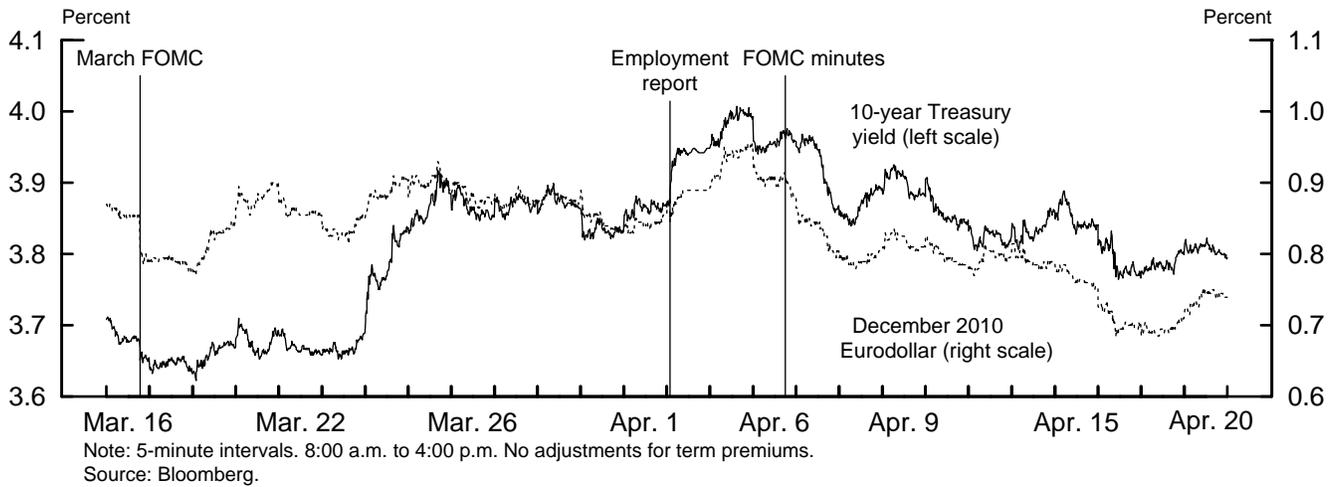
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.

January 26, 2010, is the day before the January 2010 FOMC monetary policy announcement.

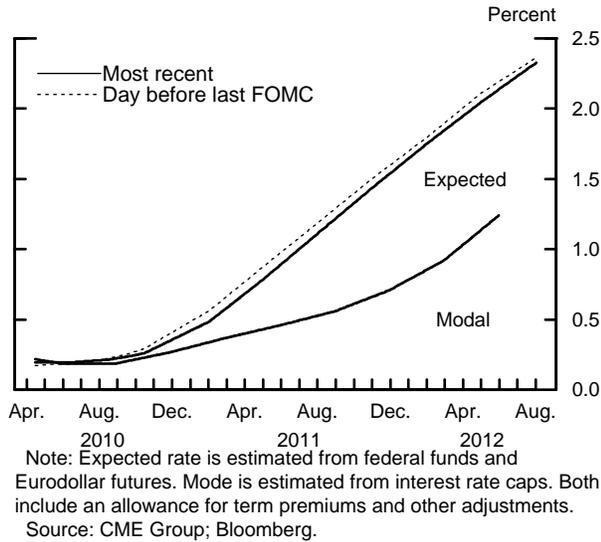
March 15, 2010, is the day before the most recent FOMC monetary policy announcement.

# Policy Expectations, Treasury Yields, and Liquidity Facilities

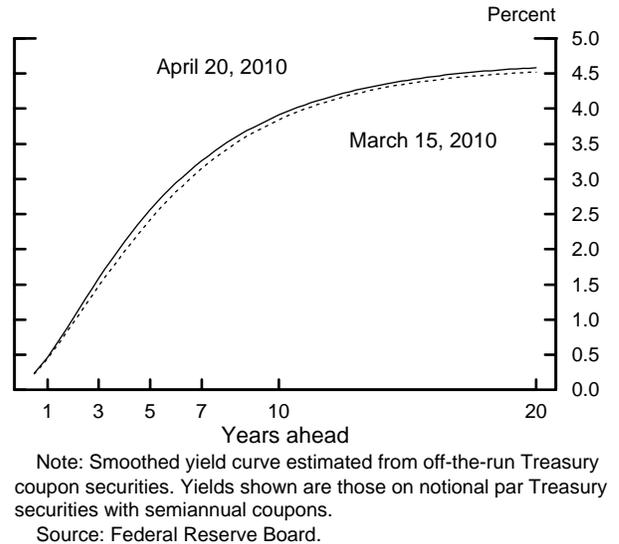
## Interest Rates



## Implied Federal Funds Rate



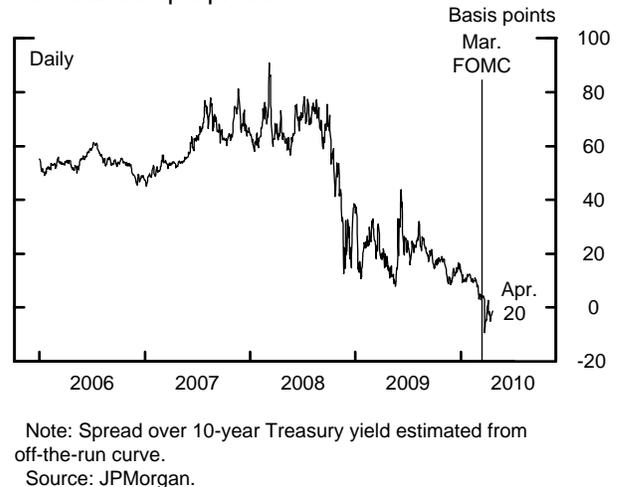
## Treasury Yield Curve



## Inflation Compensation

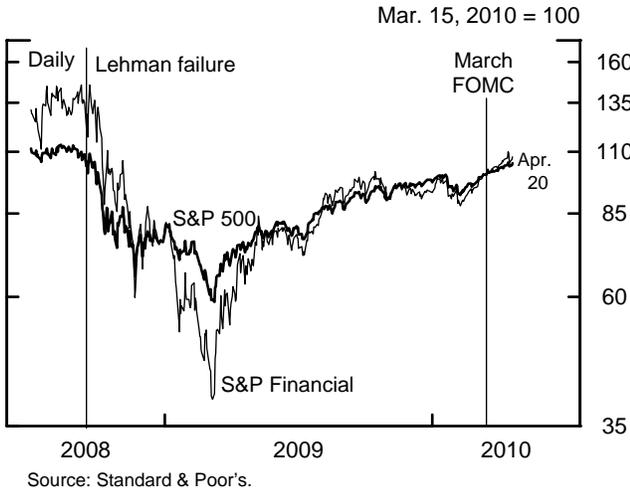


## 10-Year Swap Spread

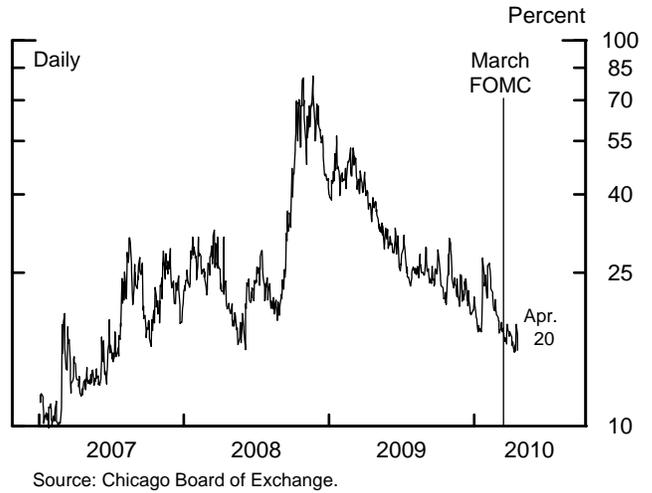


# Corporate Yields, Risk Spreads, and Stock Prices

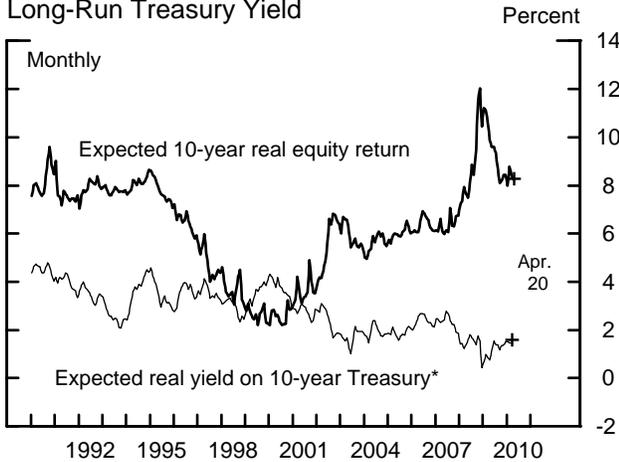
Selected Stock Price Indexes



Implied Volatility on S&P 500 (VIX)

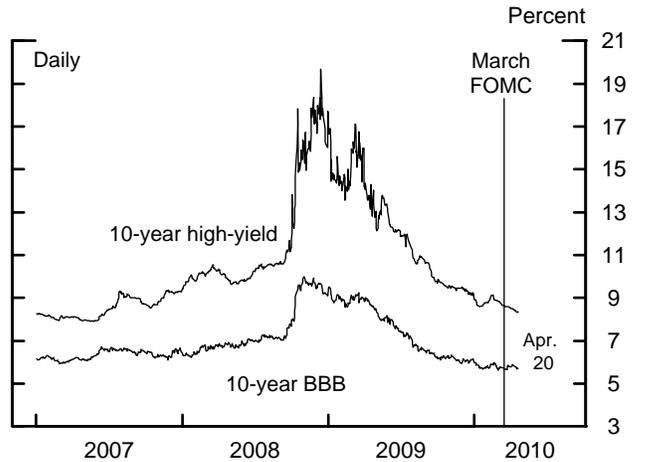


Expected Real Equity Return and Long-Run Treasury Yield

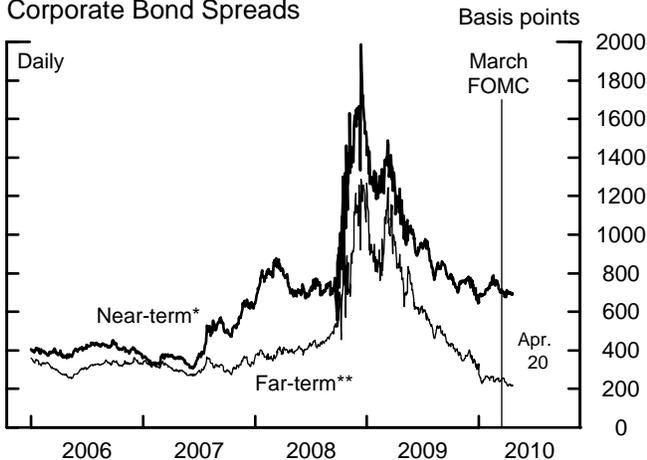


\* Off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation.  
 + Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.  
 Source: Thomson Financial.

Corporate Bond Yields

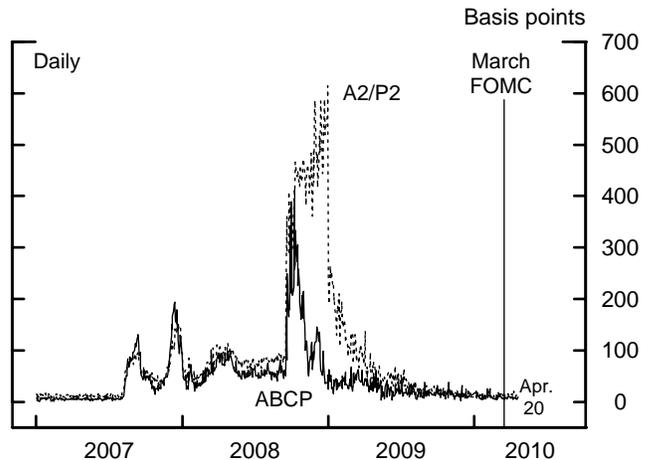


Far-Term and Near-Term Forward High-Yield Corporate Bond Spreads



\* Forward spread between years 2 and 3.  
 \*\* Forward spread between years 9 and 10.  
 Source: Staff estimates.

30-Day Commercial Paper Spreads



Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.  
 Source: Depository Trust & Clearing Corporation.

occur before year-end, which is not inconsistent with our interpretation of the March survey.

Yields on nominal Treasury securities increased slightly over the intermeeting period, with the 2-year and 10-year yields up 7 basis points. Yields were apparently boosted by greater confidence in the economic recovery as well as increased concerns about the fiscal outlook; but these gains were tempered, in part, by reactions to FOMC communications. TIPS-based inflation compensation also moved up slightly over the intermeeting period; however, survey-based measures of longer-term inflation expectations were little changed.

The spread of the 10-year swap rate to the 10-year Treasury yield, which narrowed sharply in the fall of 2008 and has continued to trend down since then, dipped into negative territory during the intermeeting period. Several factors appear to have contributed to the downward trend in the swap spread over recent quarters, including projections of elevated federal deficits, reduced demands for hedging private holdings of agency MBS, and declining risk premiums embedded in Libor rates.

#### **Federal Reserve Purchase Programs and Facilities**

Over the intermeeting period, the legacy CMBS TALF program expired with little effect on related markets. The Federal Reserve Bank of New York requested term sheets by April 19 for any new-issue CMBS deal proposed for TALF financing; no term sheets were received. AAA CMBS spreads to Treasury yields dropped substantially, on net, over the period but remain elevated relative to pre-crisis levels. Also of note, the first multiborrower CMBS offering since 2008 was scheduled to be issued on April 22. The deal was not designed as TALF-eligible, and, indeed, the AAA tranche priced below the TALF lending rate.

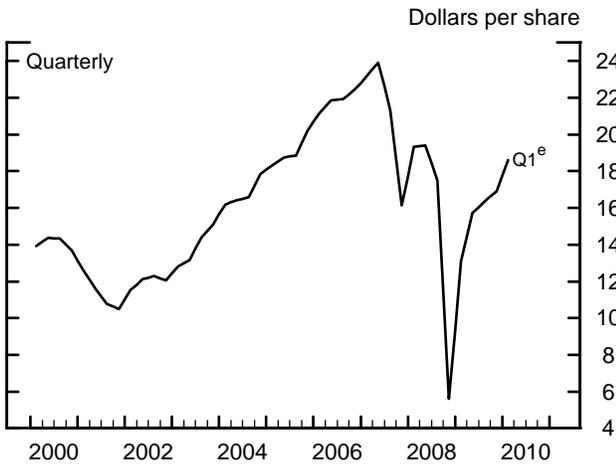
The Federal Reserve's programs to purchase agency debt and agency MBS came to an end in late March, with little apparent effect on markets. Agency debt spreads and the Fannie Mae 30-year current coupon spread were little changed, on net, over the intermeeting period. Failures to deliver in the agency MBS repo market have continued to come down, reportedly reflecting decreased purchases by the Federal Reserve, which has increased the supply of securities available to market participants.

#### **Stock Prices and Corporate Interest Rates**

Broad stock price indexes rose about 5 percent, on net, over the intermeeting period, boosted by generally better-than-expected economic data and surprisingly strong first-

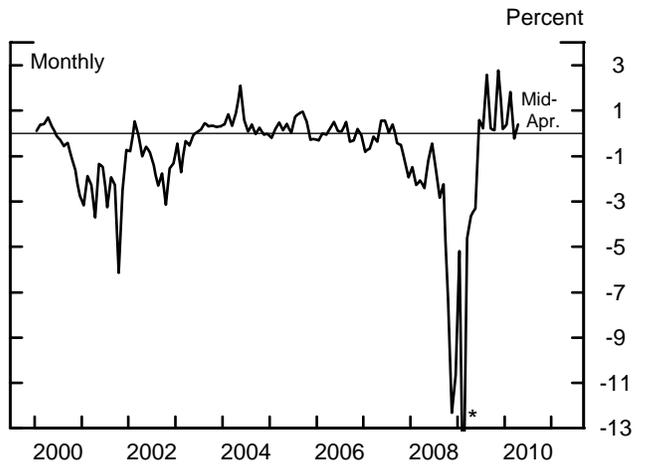
# III-6 Corporate Earnings and Credit Quality

### S&P 500 Earnings Per Share



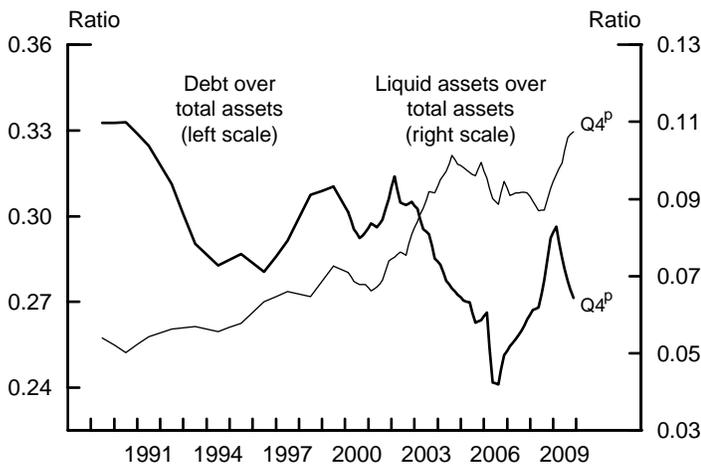
Note: Data are seasonally adjusted by Board staff.  
 e Staff estimate based on earnings reports of firms that have reported earnings for Q1 and Wall Street analyst forecasts.  
 Source: Thomson Financial.

### Revisions to Expected S&P 500 Earnings



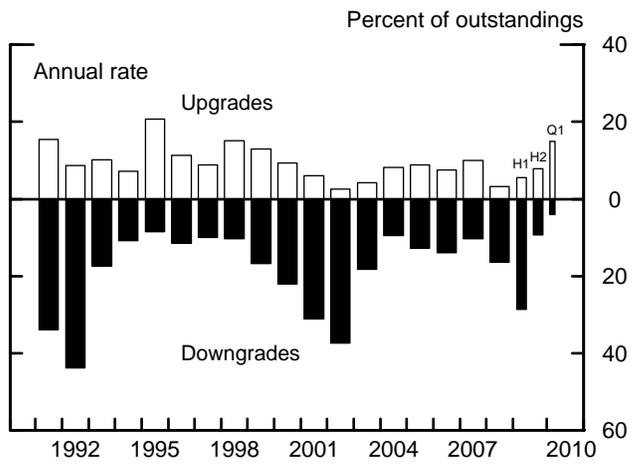
Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample.  
 \* Revision in Feb. 2009 was -17.2%.  
 Source: Thomson Financial.

### Financial Ratios for Nonfinancial Corporations



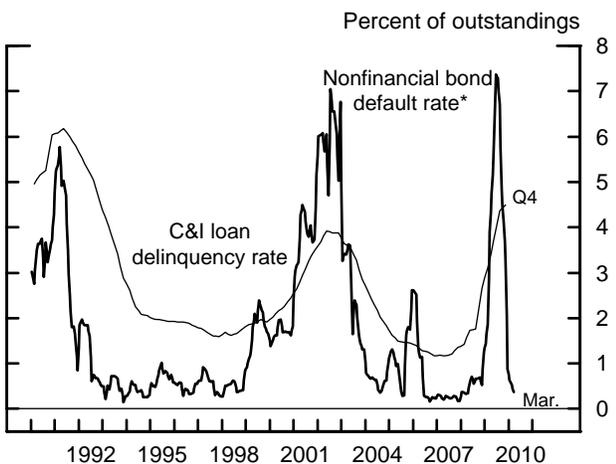
Note: Data are annual through 1999 and quarterly thereafter.  
 p Preliminary.  
 Source: Compustat.

### Bond Ratings Changes of Nonfinancial Companies



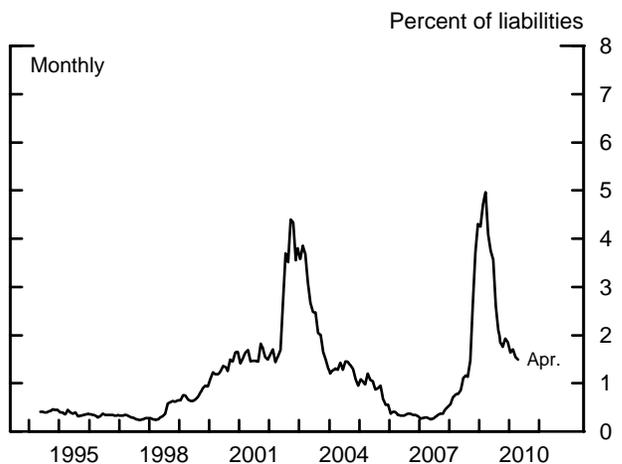
Source: Calculated using data from Moody's Investors Service.

### Selected Default and Delinquency Rates



\* 6-month trailing defaults divided by beginning-of-period outstandings, at an annual rate.  
 Source: For default rate, Moody's Investors Service; for delinquency rate, Call Report data.

### Expected Nonfinancial Year-Ahead Defaults



Note: Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms.  
 Source: Calculated using firm-level data from Moody's KMV.

quarter earnings reports. Leading up to the earnings announcements, financial sector share prices outperformed the broader equity markets, but they retraced some of those gains following the SEC announcement of legal action against Goldman Sachs. Option-implied volatility on the S&P 500 index generally trended down over the intermeeting period but spiked on the SEC announcement. The spread between the staff's estimate of the expected real equity return over the next 10 years for S&P 500 firms and an estimate of the expected real return on a 10-year nominal Treasury note—a measure of the equity risk premium—narrowed a bit but remained above its longer-run average.

Over the intermeeting period, yields on BBB-rated corporate bonds were little changed, leaving their spreads to yields on comparable-maturity Treasury securities slightly lower. Yields on speculative-grade corporate bonds declined about 30 basis points, and their spreads narrowed about 35 basis points. The term structure of corporate bond spreads suggests that investors are expecting continued higher-than-average default risk in the near term, but that the required compensation for risk-taking, a dominant influence in the movement of far-term spreads, now stands near the lower end of its historical range. Spreads on A2/P2-rated commercial paper and AA-rated ABCP remained low.

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

Based on the initial spate of earnings reports and Wall Street analyst forecasts, the staff estimates that profits for firms in the S&P 500 index rose about 10 percent at a quarterly rate in the first quarter. This growth reflects both a continuation of strong gains for firms in nonfinancial industries and an upturn in financial sector profits from recent rock-bottom levels. The first-quarter earnings of banking institutions have been well above analysts' forecasts, on balance, with the largest banks posting strong capital markets revenue and banks of all sizes reporting a decrease in loss provisioning. Leading up to the earnings reporting season, revisions to analysts' forecasts of year-ahead earnings for S&P 500 firms were, on balance, positive.

The credit quality of nonfinancial firms improved further over the past few months. The ratio of aggregate liquid assets to total assets for nonfinancial corporations moved further into record-high territory in the fourth quarter, while the aggregate debt-to-asset ratio declined somewhat. Upgrades by Moody's of nonfinancial corporate bonds in the first quarter significantly outpaced downgrades, with more than one-third of the dollar value of upgrades coming from the auto sector. With no bonds defaulting last month, the six-month trailing default rate for bonds issued by nonfinancial firms edged down a bit more in March to the low end of its historical range. Earnings reports for some of the largest early-reporting banks suggest that delinquency rates on loans held by those banks

## Business Finance

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

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

Type of security	2006	2007	2008	2009		2010		
				H1	H2	Q1	Mar.	Apr. <sup>p</sup>
<i>Nonfinancial corporations</i>								
Stocks <sup>1</sup>	4.7	5.5	3.7	5.3	5.2	4.2	7.0	6.2
Initial public offerings	1.8	1.6	.3	.2	1.1	.7	1.2	.8
Seasoned offerings	2.9	3.8	3.4	5.1	4.1	3.5	5.8	5.4
Bonds <sup>2</sup>	29.3	35.1	27.7	50.1	31.1	40.2	64.8	45.0
Investment grade	13.1	17.5	19.5	32.6	13.9	16.3	23.5	18.0
Speculative grade	6.2	7.5	1.8	5.3	7.8	6.4	8.4	9.0
Other (sold abroad/unrated)	10.1	10.0	6.4	12.2	9.5	17.5	32.9	18.0
<i>Memo</i>								
Net issuance of commercial paper <sup>3</sup>	2.4	-.4	1.6	-12.4	-1.9	4.5	17.2	6.4
Change in C&I loans at commercial banks <sup>3</sup>	11.8	21.8	11.2	-22.2	-28.6	-25.9	-32.2	n.a.
<i>Financial corporations</i>								
Stocks <sup>1</sup>	5.3	8.6	13.5	15.9	12.6	6.3	9.0	6.7
Bonds <sup>2</sup>	180.6	151.7	45.4	44.5	33.9	36.2	52.7	35.0

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

1. Excludes private placements and equity-for-equity swaps that occur in restructurings.

2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's.

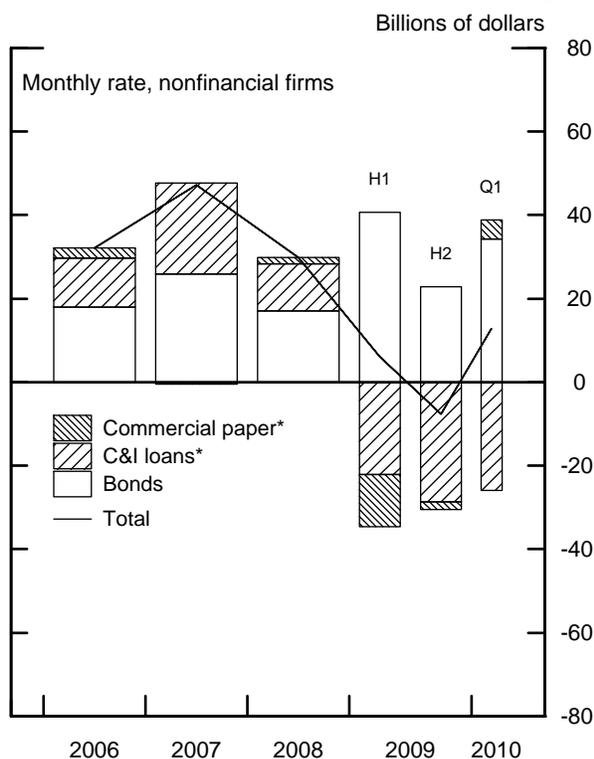
3. For all nonfinancial firms; period-end basis, seasonally adjusted.

n.a. Not available.

p Forecast based on preliminary data.

Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

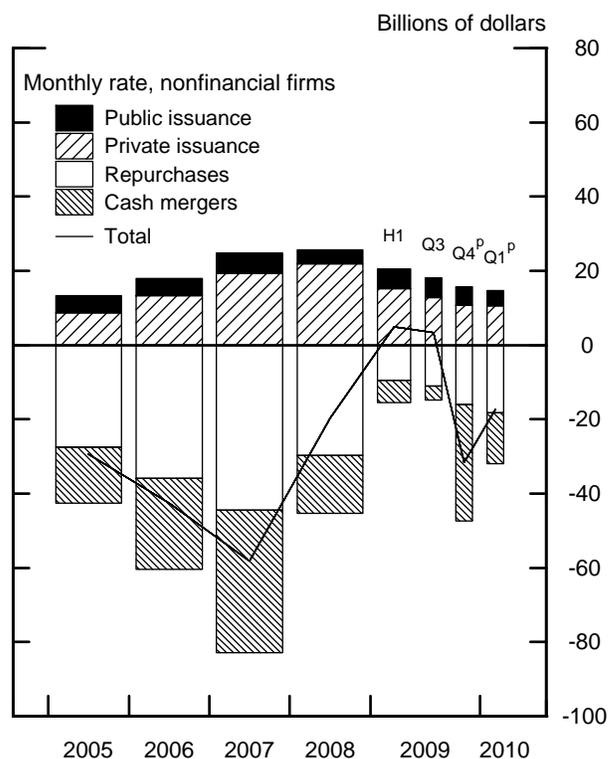
#### Selected Components of Net Debt Financing



\* Seasonally adjusted, period-end basis.

Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

#### Components of Net Equity Issuance



p Preliminary.

Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

declined in the first quarter. The expected default rate for nonfinancial firms from the Moody's KMV model ticked down but remained elevated relative to its typical levels in expansionary periods.

### **Business Finance**

Overall, net debt financing by nonfinancial corporations turned positive in the first quarter after being negative in the second half of last year. Gross bond issuance by nonfinancial corporations surged in March and remained robust in early April, and nonfinancial commercial paper increased significantly as well. In contrast, C&I loans outstanding contracted again in March, reflecting both subdued demand and lending standards that only recently appear to have ceased becoming tighter.

Gross public equity issuance by nonfinancial firms picked up in March, boosted by strong seasoned equity offerings, and has continued to be solid in April. In the first quarter, equity retirements from share repurchases are estimated to have picked up, and equity retirements from cash-financed mergers decreased to still-robust levels, leaving net equity issuance negative in the first quarter.

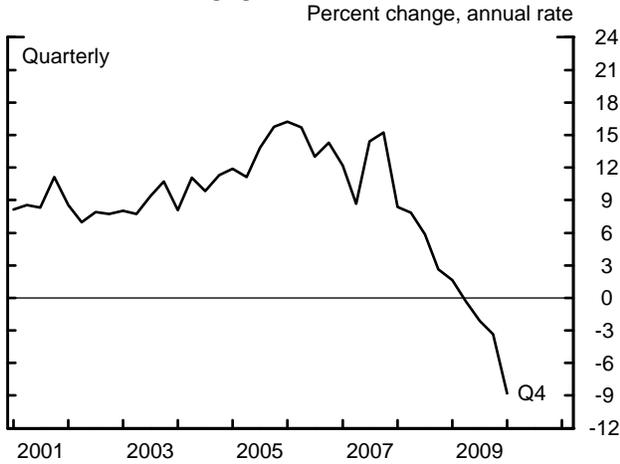
Gross issuance of corporate bonds by financial firms was very strong in March and has been solid again in April. Gross equity issuance by financial firms has also picked up, but remained below its robust pace in 2008 and the first half of 2009.

### **Commercial Real Estate Finance**

Credit quality in commercial real estate markets continued to deteriorate over the intermeeting period. The delinquency rate for securitized commercial mortgages jumped in March, although one large loan accounted for most of the increase; excluding that loan, the increase in the delinquency rate last month was close to that in previous months. The decline in outstanding commercial mortgage debt in the fourth quarter of last year, nearly 9 percent at an annual rate, was the largest in the roughly 60-year history of the series, and the available indicators suggest that another contraction in the first quarter is likely. The volume of commercial property sales remained low, with roughly one-half of sellers incurring a nominal loss. Commercial real estate prices continued to fall in the fourth quarter, while the Moody's index of commercial real estate prices ticked up in December and January before falling again in February. Nonetheless, indexes of commercial mortgage CDS prices ticked up noticeably over the intermeeting period, putting AAA-rated tranches at their highest levels since mid-2008, in line with the overall reduction in financial market risk premiums.

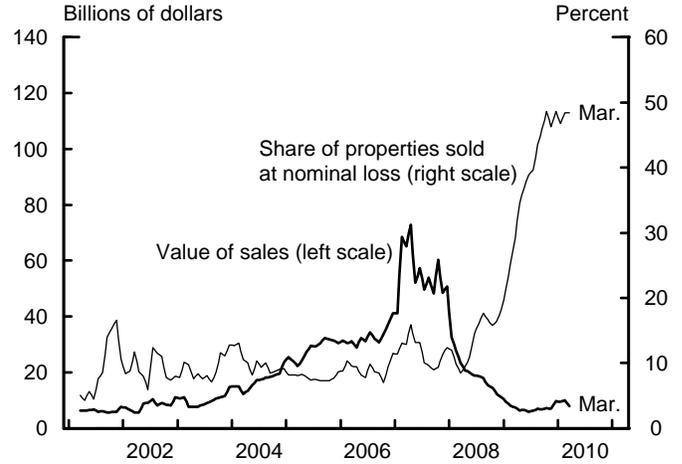
## Commercial Real Estate

Commercial Mortgage Debt



Source: Federal Reserve.

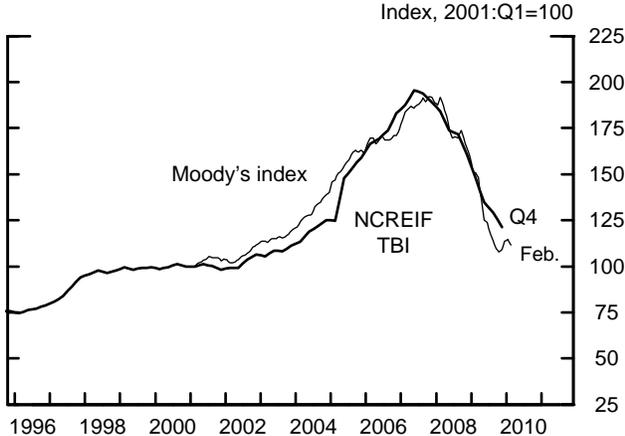
Commercial Real Estate Sales



Note: 3-month moving averages.

Source: Real Capital Analytics.

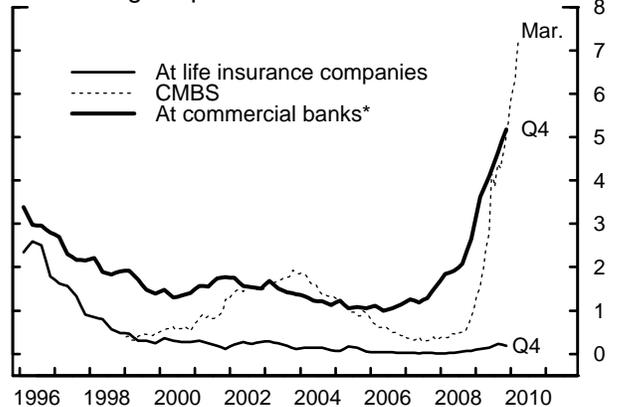
Prices of Commercial Real Estate



Note: NCREIF TBI series re-weighted by staff to exclude multifamily.

Source: NCREIF; MIT Center for Real Estate; Moody's Investors Service.

Delinquency Rates on Commercial Mortgages on Existing Properties

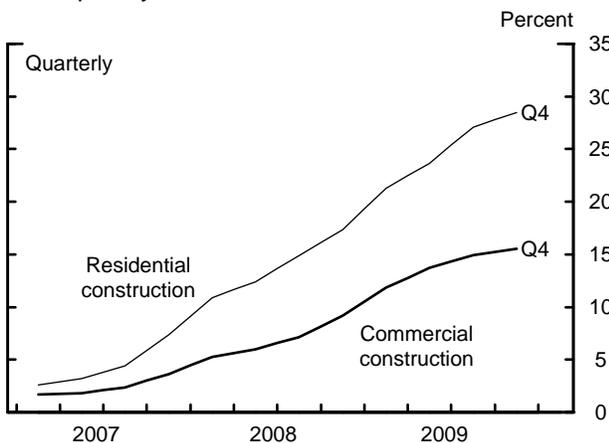


Note: CMBS are commercial mortgage-backed securities.

\* Excluding farmland.

Source: Citigroup; Call Report data; ACLI.

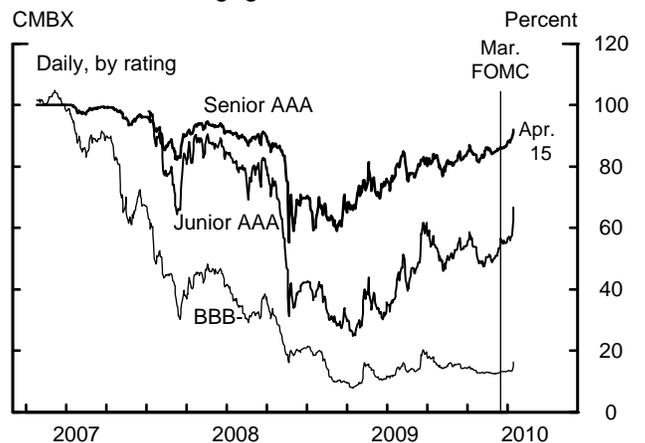
Delinquency Rates on Construction Loans at Banks



Note: Data series begin in 2007:Q1.

Source: Call Report data.

Commercial Mortgage CDS Index Prices

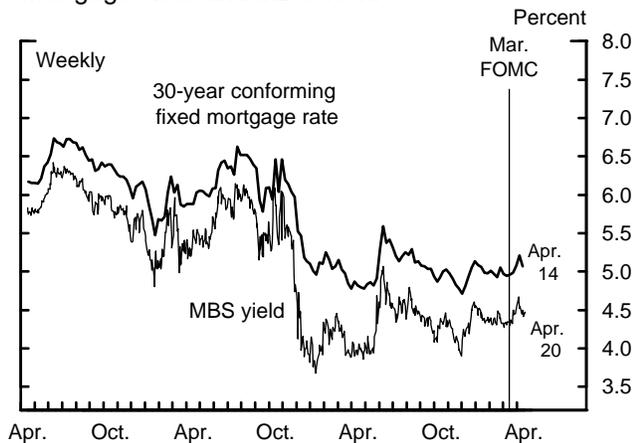


Note: Each index corresponds to pools of mortgages securitized in 2006:H1.

Source: JPMorgan Chase & Co.

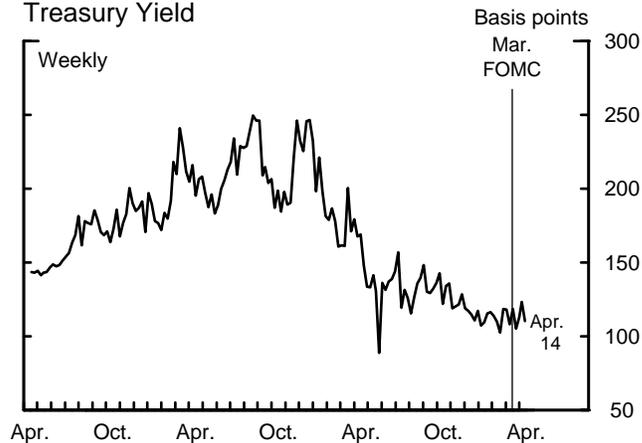
## Residential Mortgages

Mortgage Rate and MBS Yield



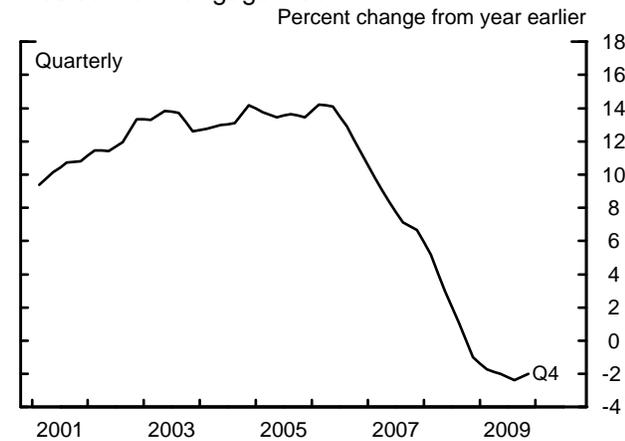
Note: For MBS yield, Fannie Mae 30-year current coupon rate.  
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Spread of Fixed Mortgage Rate to 10-year Treasury Yield



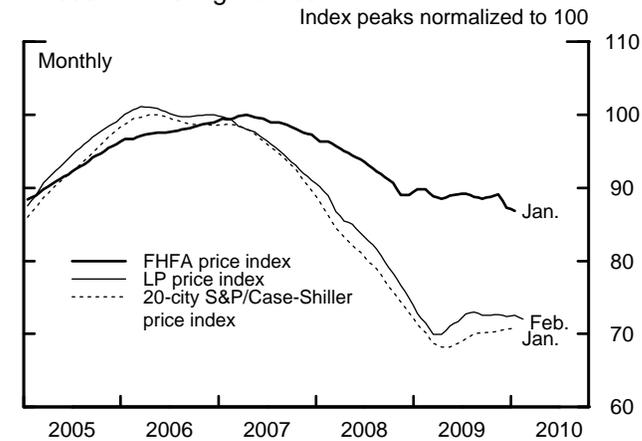
Note: Treasury yield estimated from off-the-run curve.  
Source: Bloomberg; Freddie Mac.

Residential Mortgage Debt



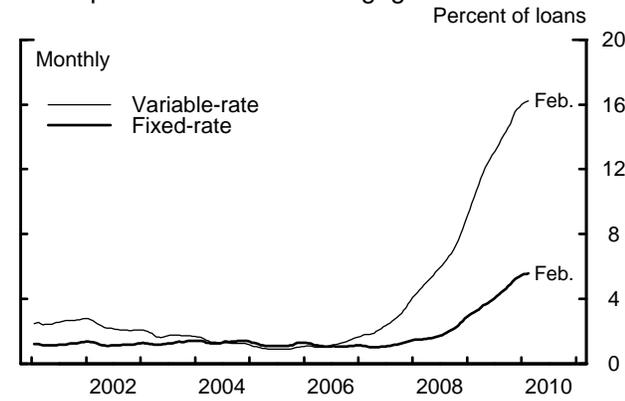
Source: Federal Reserve Board.

Prices of Existing Homes



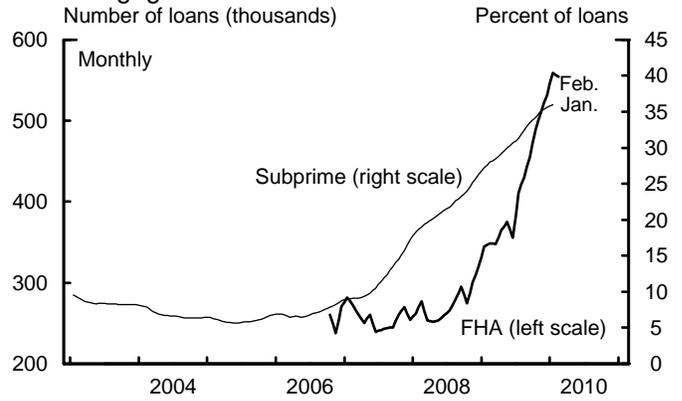
Source: For FHFA, Federal Housing Finance Agency; for LP, LoanPerformance, a division of First American CoreLogic; for S&P/Case-Shiller, Standard & Poor's.

Delinquencies on Prime Mortgages



Note: Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages.  
Source: McDash Analytics.

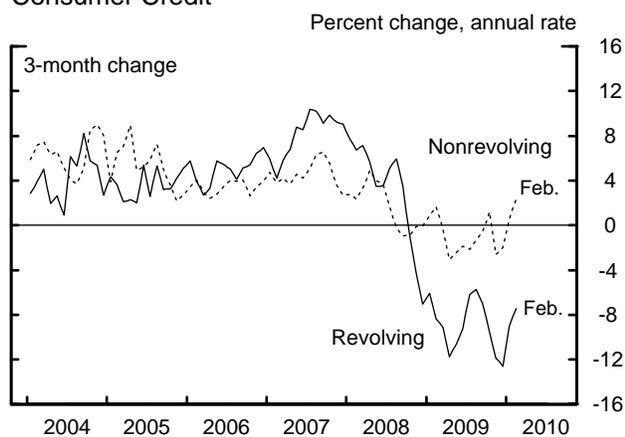
Delinquencies on Subprime and FHA-Backed Mortgages



Note: Percent of loans 90 or more days past due or in foreclosure. For subprime mortgages, rates are for securitized loans.  
Source: For FHA-backed mortgages, U.S. Department of Housing and Urban Development; for subprime mortgages, LoanPerformance, a division of First American CoreLogic.

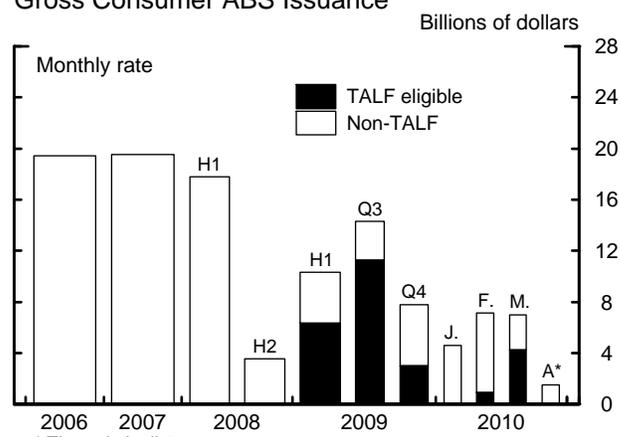
## Consumer Credit and Mutual Funds

Consumer Credit



Source: Federal Reserve Board.

Gross Consumer ABS Issuance

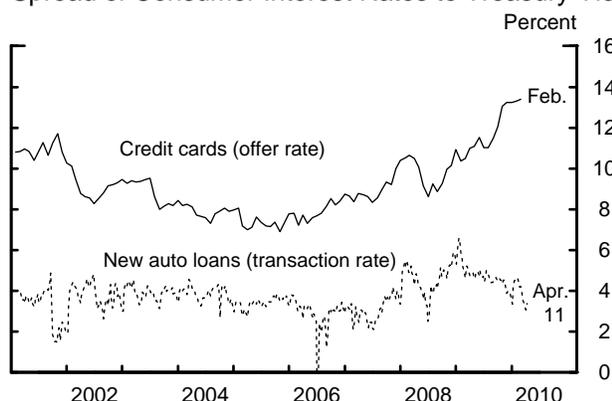


\* Through April 16.

Note: Credit card, auto, and student loan ABS.

Source: Inside MBS & ABS; Merrill Lynch; Bloomberg; Federal Reserve Board.

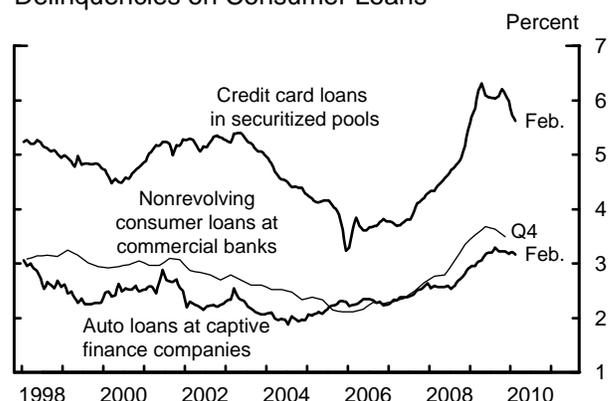
Spread of Consumer Interest Rates to Treasury Yield



Note: Spreads are relative to 2-year Treasury yields. For credit cards, monthly; for auto loans, weekly.

Source: For credit cards, Intel; for auto loans, PIN.

Delinquencies on Consumer Loans



Source: For auto loans, Federal Reserve Board; for credit cards, Moody's Investors Service; for nonrevolving consumer loans, Call Report.

### Net Flows into Mutual Funds

(Billions of dollars, monthly rate)

Fund type	2008	2009			2010			Assets Feb.
		H1	Q3	Q4	Jan.	Feb.	Mar. <sup>e</sup>	
<b>Total long-term funds</b>	<b>-18.8</b>	<b>23.3</b>	<b>47.9</b>	<b>34.0</b>	<b>47.7</b>	<b>29.0</b>	<b>49.3</b>	<b>7,831</b>
<b>Equity funds</b>	<b>-19.4</b>	<b>-0.1</b>	<b>0.9</b>	<b>-4.4</b>	<b>16.9</b>	<b>0.1</b>	<b>8.7</b>	<b>4,891</b>
Domestic	-12.6	0.9	-3.7	-10.8	6.8	-5.0	1.1	3,656
International	-6.9	-1.0	4.6	6.4	10.1	5.1	7.6	1,234
<b>Hybrid funds</b>	<b>-1.7</b>	<b>-0.3</b>	<b>5.2</b>	<b>2.8</b>	<b>3.5</b>	<b>2.3</b>	<b>3.9</b>	<b>645</b>
<b>Bond funds</b>	<b>2.3</b>	<b>23.7</b>	<b>41.8</b>	<b>35.7</b>	<b>27.3</b>	<b>26.5</b>	<b>36.7</b>	<b>2,296</b>
High-yield	-0.1	2.8	1.4	0.5	0.7	-2.8	2.3	187
Other taxable	1.7	16.2	31.8	30.4	22.1	24.4	30.3	1,636
Municipals	0.7	4.8	8.7	4.8	4.5	4.9	4.1	472
<b>Money market funds</b>	<b>57.9</b>	<b>-27.3</b>	<b>-81.1</b>	<b>-43.0</b>	<b>-83.0</b>	<b>-68.9</b>	<b>-167.7</b>	<b>3,151</b>

Note: Excludes reinvested dividends.

e Staff estimate.

Source: Investment Company Institute.

**Household Finance**

The average interest rate on 30-year conforming fixed-rate mortgages rose about 10 basis points, on net, over the intermeeting period. That increase was roughly in line with changes in yields on Treasury securities, suggesting that the completion of the Federal Reserve's large-scale asset purchase program has not triggered a notable increase in mortgage funding costs.

House price index changes were mixed but slightly negative, on balance, in January and February. Delinquency rates for prime and subprime mortgages climbed further in January, while the number of delinquent FHA-backed mortgages topped 550,000 again in February, up from 350,000 a year earlier.

Consumer credit, particularly revolving credit, remained weak in recent months, and consumer credit ABS issuance slowed in the first quarter, reflecting the persistently weak loan originations. Consumer credit quality, however, continued to improve, with the latest data and anecdotes indicating slight declines in the delinquency rates of most types of consumer credit. Spreads of yields on high-quality credit card and auto loan ABS over yields on comparable-maturity Treasury securities edged down to levels last seen in 2007. Spreads on new auto loans also declined appreciably over the intermeeting period. However, the spreads of credit card interest rates edged up again in February.

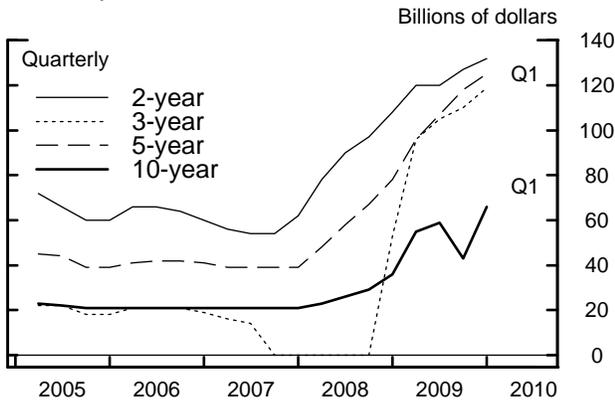
Long-term mutual funds, particularly bond funds, received large net inflows in March, while net flows to equity funds remained moderate. In contrast, money market funds continued to experience sizable net outflows in the same month, as yields paid by these funds remained extremely low.

**Treasury Finance**

During the intermeeting period, the Treasury issued about \$200 billion of nominal coupon securities across the maturity spectrum. Some of the auctions held before the end of the quarter, particularly those for 5- and 7-year notes, saw somewhat weak demand, and stop-out rates in these auctions were noticeably above when-issued rates. However, the 3-year, 10-year, and 30-year auctions in the week of April 5 were better received, with strong bid-to-cover ratios and stop-out rates closer to when-issued rates. The Treasury also conducted a 10-year TIPS reopening of \$8 billion on April 5, which was met with robust demand. The Treasury continued to ramp up its issuance of bills to finance increases in balances at the Federal Reserve under the Supplementary Financing Program; those balances reached the targeted level of \$200 billion on April 15.

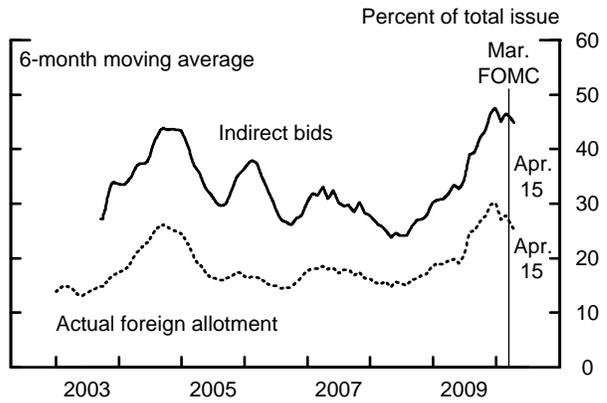
# Treasury Finance

Treasury Auction Amounts



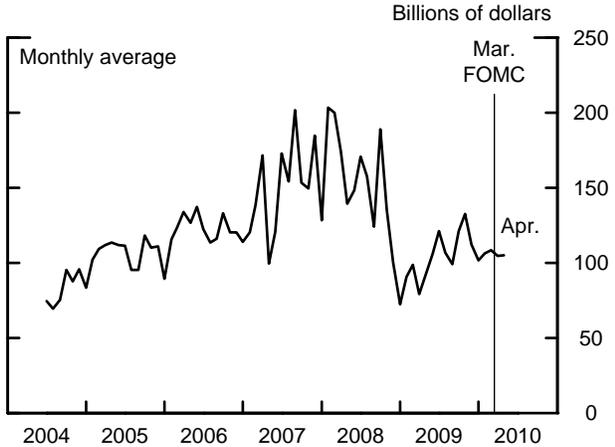
Note: No 3-year issuance occurred between 2007:Q3 and 2008:Q3.  
Source: U.S. Treasury.

Foreign Participation in Treasury Auctions



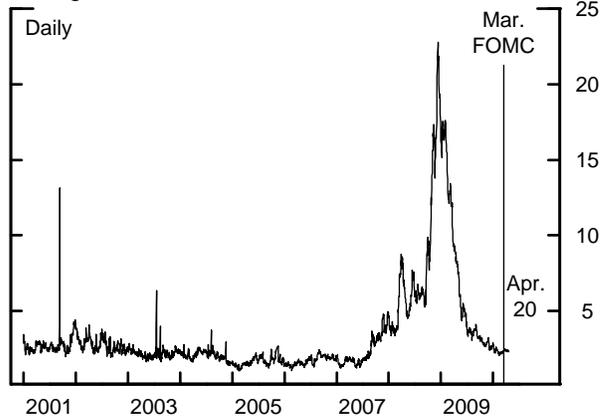
Note: Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2-, 5-, and 10-year original auctions and reopenings.  
Source: Federal Reserve Board.

Daily Treasury Market Volume



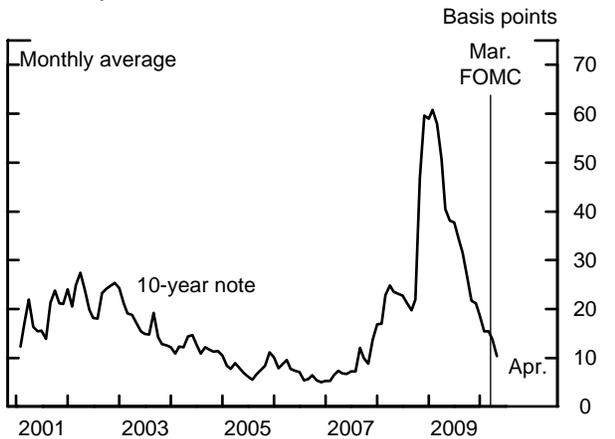
Note: April observation is the month-to-date average.  
Source: Bloomberg.

Average Absolute Nominal Yield Curve Fitting Error



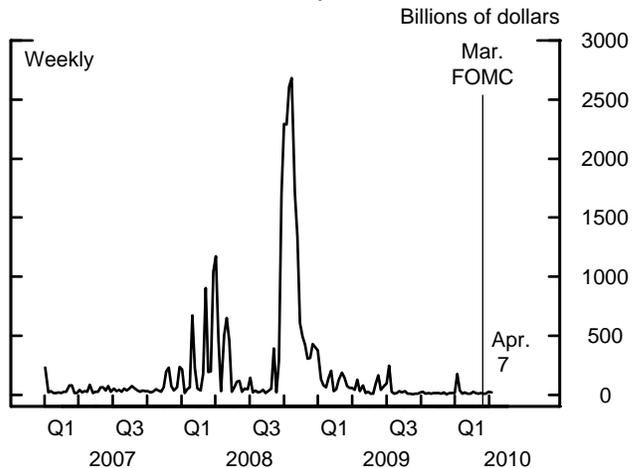
Note: Calculated from securities with 2 to 10 years until maturity, excluding on-the-run and first off-the-run securities.  
Source: Federal Reserve Board.

Treasury On-the-Run Premium



Note: Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. March observation is the month-to-date average.  
Source: Federal Reserve Board.

Fails-to-Deliver of Treasury Securities



Source: Federal Reserve Board, FR 2004, Government Securities Dealers Reports.

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

The municipal bond market remained receptive to issuers, despite continued concerns over the financial health of state and local governments. Gross issuance of long-term municipal bonds remained solid, helped by continued strength in new capital issuance under the Build America Bonds program. The pace of short-term issuance was seasonally slow. Yields on long-term municipal bonds moved in line with those on comparable-maturity Treasury securities, leaving their ratios to long-term Treasury yields little changed.

### **Money and Bank Credit**

M2 contracted moderately in March as the growth of liquid deposits slowed significantly, and retail money market mutual funds and small time deposits continued to contract sharply. Currency growth moved up to an annual rate of 6 percent, and staff estimates suggest that this reflects solid domestic demand and a pickup in overseas demand. The monetary base contracted at an annual rate of 19 percent because of a drain in reserves associated with the increase in the Treasury's balances under the Supplementary Financing Program.

After the adoption of Financial Accounting Standards (FAS) 166 and 167, loans held on banks' balance sheets increased about \$450 billion, or 7 percent, at the end of the first quarter.<sup>1</sup> This amount was substantially less than initial industry estimates (some as high as \$1 trillion), in part because FASB indefinitely deferred the date by which banks would need to consolidate certain bank-sponsored investment funds. According to the results of a special question on the April Senior Loan Officer Opinion Survey, banks did not tighten their lending standards or terms in response to these accounting changes.

After adjusting to remove the effects of the FAS 166/167 consolidations, bank credit fell about 5 percent at an annual rate in March. The principal driver behind the decrease was core loans, which dropped 9 percent, with all major components of core loans contributing to the decline. Commercial and industrial loans fell sharply again in March, continuing the streak of monthly declines that began in October 2008. Commercial real

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<sup>1</sup> The new accounting standards make it more difficult for U.S. banks to hold assets off balance sheet. Banks adopted the standards in the fourth and first quarters, and the cumulative effects were folded into the bank balance sheet data published by the Federal Reserve as of March 31. While all major loan categories were affected to some degree by banks' adoption of FAS 166/167, the largest effect was on credit card loans on commercial bank balance sheets, which nearly doubled as a result. The largest 25 banks brought all of their previously securitized credit card loans (nearly \$300 billion) back on balance sheet, while smaller reporting banks returned all but \$16 billion to their balance sheets. Banks also consolidated significant amounts of other consumer loans (\$41 billion), C&I loans (\$33 billion), and residential real estate loans (\$27 billion). In addition, the allowance for loan and lease losses increased \$36 billion.

## State and Local Government Finance

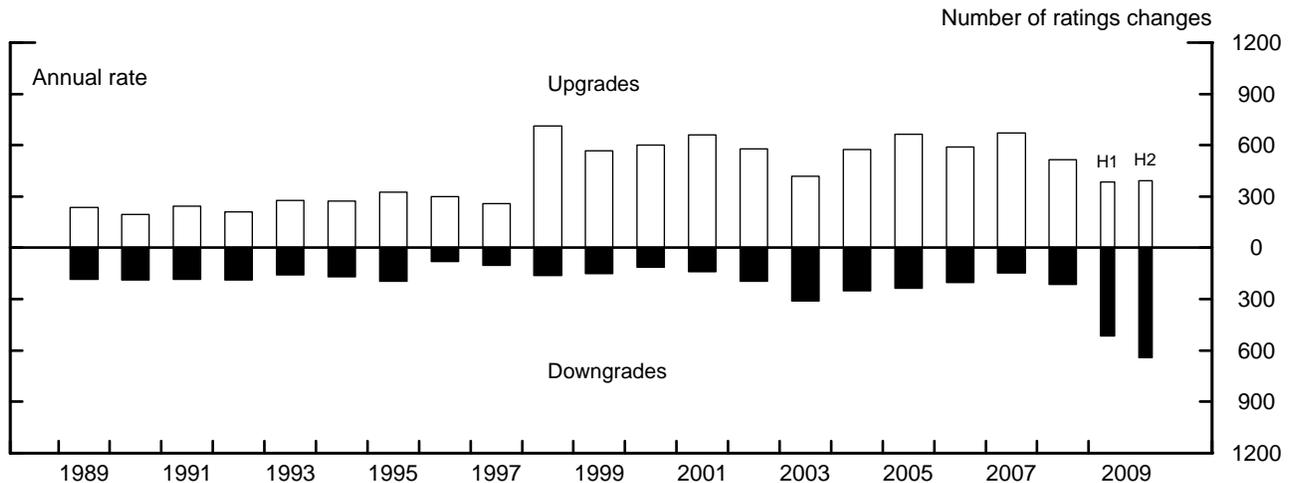
### Gross Offerings of Municipal Securities

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

Type of security	2006	2007	2008	2009		2010		
				H1	H2	Q1	Mar.	Apr. <sup>p</sup>
Total	36.1	40.4	37.6	36.6	42.7	36.2	46.0	37.0
Long-term <sup>1</sup>	32.5	35.5	32.6	33.0	35.5	34.4	43.5	34.0
Refundings <sup>2</sup>	10.6	12.6	14.6	11.6	13.1	11.9	13.4	11.0
New capital	21.9	22.9	17.9	21.3	22.5	22.4	30.1	23.0
Short-term	3.7	4.9	5.0	3.6	7.2	1.8	2.5	3.0
Memo: Long-term taxable	2.5	2.4	2.3	4.5	9.9	11.3	14.6	10.0

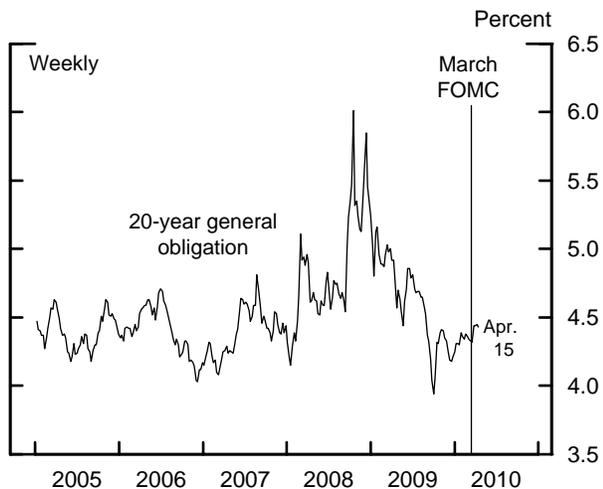
1. Includes issues for public and private purposes.  
 2. All issues that include any refunding bonds.  
 p Forecast based on preliminary data through April 15, 2010.  
 Source: Thomson Financial.

### Ratings Changes



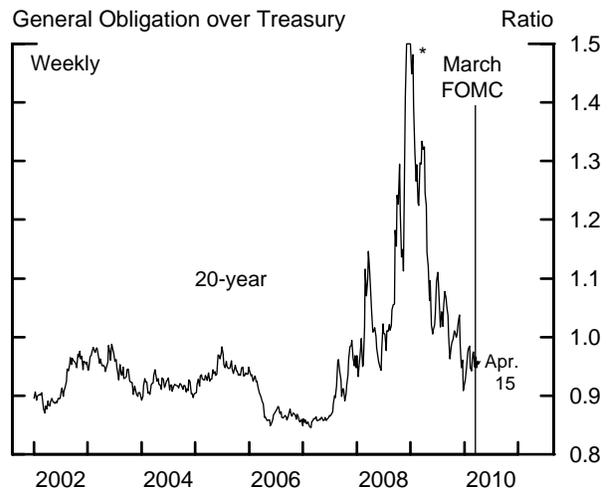
Source: Moody's Credit Trends.

### Municipal Bond Yields



Source: Municipal Market Advisors; Bond Buyer.

### Municipal Bond Yield Ratio



\* Yield ratio peak is at 1.87 on December 15, 2008.  
 Source: Bond Buyer.

**M2 Monetary Aggregate**  
(Based on seasonally adjusted data)

Aggregate and components	Percent change (annual rate) <sup>1</sup>					Level (billions of dollars)
	2008	2009	2010			Mar. (p)
			Jan.	Feb.	Mar. (p)	
M2	8.5	5.1	-8.2	7.8	-4.0	8,513
Components <sup>2</sup>						
Currency	5.8	7.0	-1.4	8.5	6.1	872
Liquid deposits <sup>3</sup>	6.9	17.2	-1.6	17.5	3.9	5,771
Small time deposits	12.3	-15.9	-28.8	-18.4	-21.8	1,105
Retail money market funds	13.4	-21.6	-31.3	-23.6	-47.8	760
Memo:						
Institutional money market funds	24.6	-2.1	-22.8	-39.4	-47.8	2,021
Monetary base	70.3	41.6	-18.4	74.0	-19.3	2,075

1. For years, Q4 to Q4; for quarters and months, calculated from corresponding average levels.

2. Nonbank traveler's checks are not listed.

3. Sum of demand deposits, other checkable deposits, and savings deposits.

p Preliminary.

Source: Federal Reserve Board.

**Commercial Bank Credit**

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

Type of credit	2008	2009	H1 2009	Q3 2009	Q4 2009	Q1 2010	Mar. 2010	Level <sup>1</sup> Mar. 2010
Total	4.2	-7.1	-5.5	-8.7	-9.3	-6.8	-5.3	9,308
<i>Loans<sup>2</sup></i>								
Total	4.2	-10.2	-7.5	-14.4	-12.7	-10.1	-6.3	6,983
Core	4.6	-8.3	-4.6	-12.4	-12.5	-11.5	-9.1	6,201
To businesses								
Commercial and industrial	14.6	-18.6	-14.7	-26.2	-23.8	-20.6	-17.9	1,284
Commercial real estate	6.4	-4.4	-1.4	-6.1	-8.9	-9.5	-8.1	1,609
To households								
Residential real estate	-3.9	-6.2	-1.7	-11.3	-10.4	-6.6	-6.1	2,120
Revolving home equity	12.8	.5	6.0	-4.9	-4.8	-3.3	-2.0	605
Closed-end mortgages	-8.8	-8.5	-4.5	-13.7	-12.5	-7.9	-7.9	1,515
Consumer	7.2	-3.7	-.6	-5.6	-8.1	-12.8	-6.1	1,187
Memo: Originated <sup>3</sup>	7.0	-3.9	-1.0	-5.7	-8.0	-12.8	-9.2	1,216
Other	1.6	-23.4	-28.1	-30.3	-14.3	1.8	16.6	783
<i>Securities</i>								
Total	4.1	4.1	1.8	10.7	1.9	3.5	-2.3	2,325
Treasury and agency	16.2	9.2	1.9	23.9	8.4	8.5	4.3	1,463
Other <sup>4</sup>	-9.5	-3.3	1.6	-8.3	-8.1	-4.5	-13.5	862

Note: Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FAS 115) and the initial consolidation of certain variable interest entities (FIN 46) and off-balance-sheet vehicles (FAS 166 and 167). Data also account for the effects of nonbank structure activity of \$5 billion or more.

1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels.

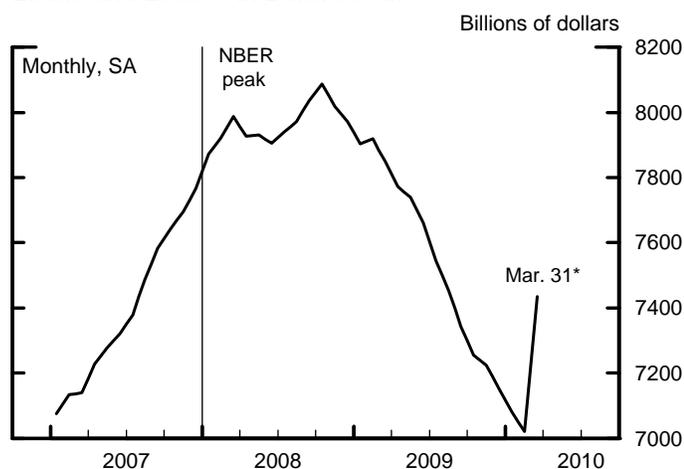
2. Excludes interbank loans.

3. Includes an estimate of outstanding loans securitized by commercial banks that retained recourse or servicing rights.

4. Includes private mortgage-backed securities; securities of corporations, state and local governments, and foreign governments; and any trading account securities that are not Treasury or agency securities.

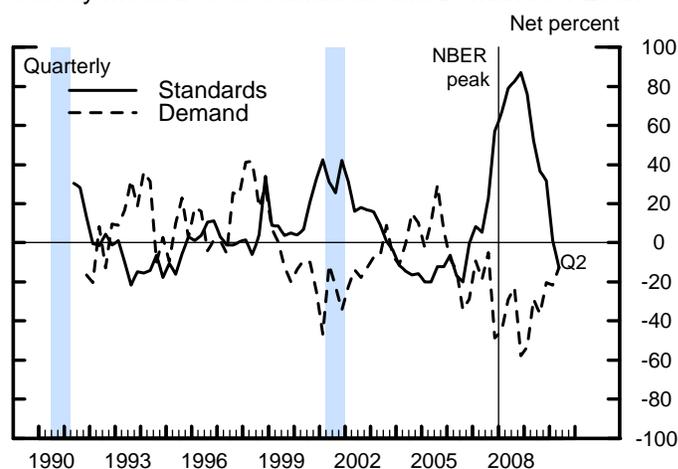
Source: Federal Reserve Board.

Loans and Leases in Bank Credit



\*Data for March 31, 2010, reflect banks adoptions of FAS166/167.  
Source: Federal Reserve.

Survey Measures of Standards and Demand for Loans



Note: The aggregate indexes of changes can be interpreted as the net percentage of core loans on SLOOS respondents' balance sheets each quarter that were in categories for which banks reported a tightening in standards or strengthening in loan demand.

Source: Senior Loan Officer Opinion Survey.

Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER).

estate loans contracted again in March, at roughly the same rate as in recent months. Residential real estate loans also decreased further, though their rate of decline in the first quarter as a whole was somewhat less than the rate posted in the second half of 2009. Both credit card loans and other consumer loans declined in March. Banks' holdings of securities also contracted, as continued strong purchases of Treasury and agency debt securities were more than offset by sales and maturities of MBS and other securities.

The steep decline in core loans during the first quarter is consistent with the further widespread weakening of loan demand and the continued tight supply conditions reported in the Senior Loan Officer Opinion Survey conducted in April. Although most banks reported that lending standards were little changed over the previous three months, if the responses are weighted by the share of outstanding loans each respondent has in each category, the survey implies a small net easing of bank lending standards during the first quarter, the first such net easing in more than three years. However, this change likely reversed only a small amount of the previous cumulative tightening of standards, and banks continued to tighten some terms on loans to both households and businesses, on balance.

## Appendix

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### Senior Loan Officer Opinion Survey on Bank Lending Practices

The April 2010 Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that most banks kept their lending standards unchanged in the first quarter, but that moderate net fractions of banks further tightened many terms on loans to businesses and households. However, when each response is weighted by the bank's share of outstanding loan balances in each major loan category, the April survey implied a small overall easing of lending standards in the first quarter, the first such easing in about three years. Moreover, for almost all loan categories for which the survey did indicate a further net tightening of credit standards, the fraction of banks that reported having done so edged down. On balance, the April survey points to a small improvement in credit availability from banks, although the improvement generally appears to be limited to higher-quality borrowers. The survey also indicated that loan demand generally weakened further.<sup>1</sup>

Most of the banks that reported having eased some lending policies in the April survey were large banks.<sup>2</sup> A number of large domestic banks eased standards and some terms on commercial and industrial (C&I) loans to large and middle-market firms. Branches and agencies of foreign banks, which tend to lend to relatively large firms, also reported easing standards and terms on C&I loans, on net. However, standards on C&I loans to small firms were roughly unchanged, and terms on such loans were tightened further over the past three months. Turning to lending to households, three of the respondent panel's largest residential real estate lenders, which account for 40 percent of such loans on the books of domestic banks, reported that they had eased standards on residential mortgages for prime borrowers or home equity lines of credit. On net, large banks also accounted for an easing of standards on non-credit card consumer loans. In contrast, modest net fractions of large and other domestic banks continued to tighten standards and terms on credit card loans over the past three months.

Domestic survey respondents indicated that demand weakened further for all loan types. A decline in demand for residential real estate loans was reported by a larger net fraction of domestic banks than in the January survey, but for other types of loans the net fractions of banks

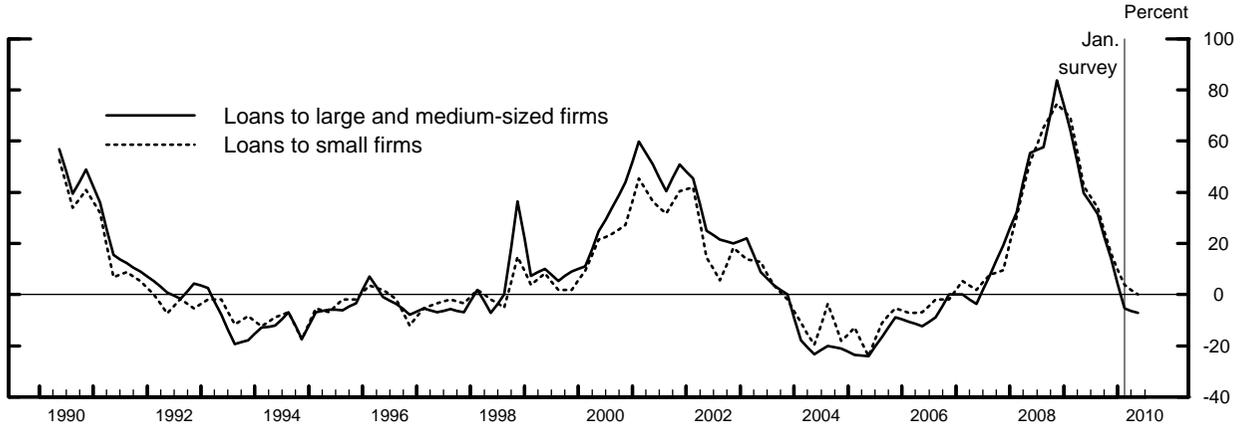
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<sup>1</sup> The April 2010 survey addressed changes in the supply of, and demand for, loans to businesses and households over the past three months. The survey also included three sets of special questions. The first set asked banks about lending policies regarding business credit card accounts for use by small firms. The second set queried banks about the use of loan extensions on commercial real estate loans. The last set asked banks about the effects of new statements issued by the Financial Accounting Standards Board on standards and terms. This appendix is based on responses from 56 domestic banks and 23 U.S. branches and agencies of foreign banks. Respondent banks received the survey on or after March 30, 2010, and responses were due by April 13, 2010.

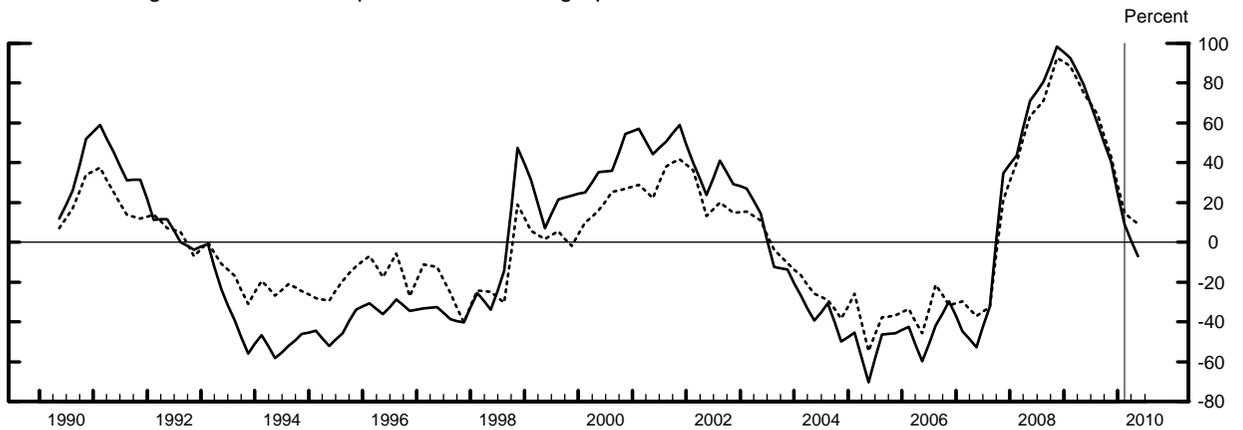
<sup>2</sup> Large banks are institutions with more than \$20 billion in total assets as reported on the December 31, 2009, Call Report.

## Measures of Supply and Demand for Commercial and Industrial Loans, by Size of Firm Seeking Loan

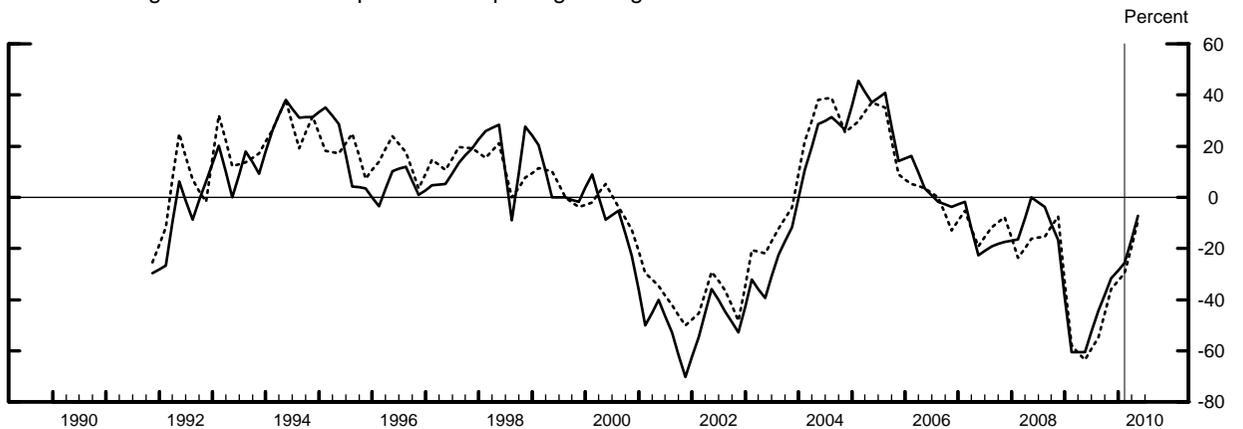
Net Percentage of Domestic Respondents Tightening Standards for Commercial and Industrial Loans



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



Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial and Industrial Loans



that reported weaker demand continued to wane. Indeed, branches and agencies of foreign banks reported an increase in demand for C&I loans, on net, over the past three months.

### **Lending to Businesses**

**Questions on commercial and industrial lending.** On balance, a small net fraction of banks reported easing their lending standards on C&I loans to large and medium-sized firms. The previous survey in January showed the first net easing of standards on such loans since the onset of the financial crisis in the summer of 2007. While the net fraction of banks that eased standards on these loans in the April survey increased only slightly, the latest survey marked the first time since 2006 that banks reportedly eased standards in two consecutive quarters. However, standards likely remain quite stringent following the prolonged and widespread tightening that took place over the past few years.

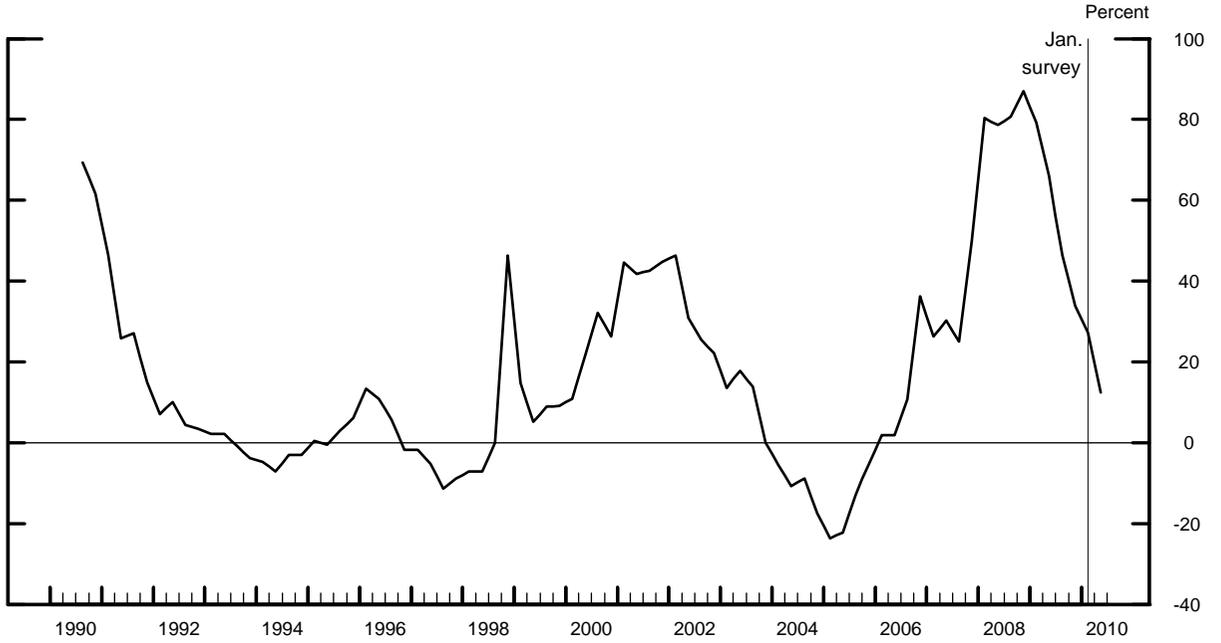
Among domestic institutions, large banks were responsible for the reported easing of standards to larger C&I borrowers. None of the smaller banks, which compose roughly half of the respondent panel, indicated that they had eased their standards on C&I loans to large firms over the past three months. On net, a small fraction of branches and agencies of foreign banks participating in the survey reported easing standards on C&I loans. These respondents tend to be subsidiaries of large global institutions and concentrate on lending to relatively large firms. Large domestic banks also eased some terms on C&I loans for large and middle-market firms, on net, as did the foreign branches and agencies. On balance, the large domestic institutions mostly trimmed their pricing terms, including the cost of credit lines and the spreads of loan rates over their costs of funds, while the branches and agencies eased each of the seven surveyed C&I lending terms, on net.

When asked about changes in standards on C&I loans to smaller firms, almost all domestic banks, regardless of size, reported little change. However, significant net fractions of domestic institutions reported tightening terms on C&I loans extended to smaller firms. This reported tightening of terms was more prevalent at smaller banks. Notably, the net fraction of banks that had increased premiums on loans to riskier borrowers remained fairly elevated in the April survey.

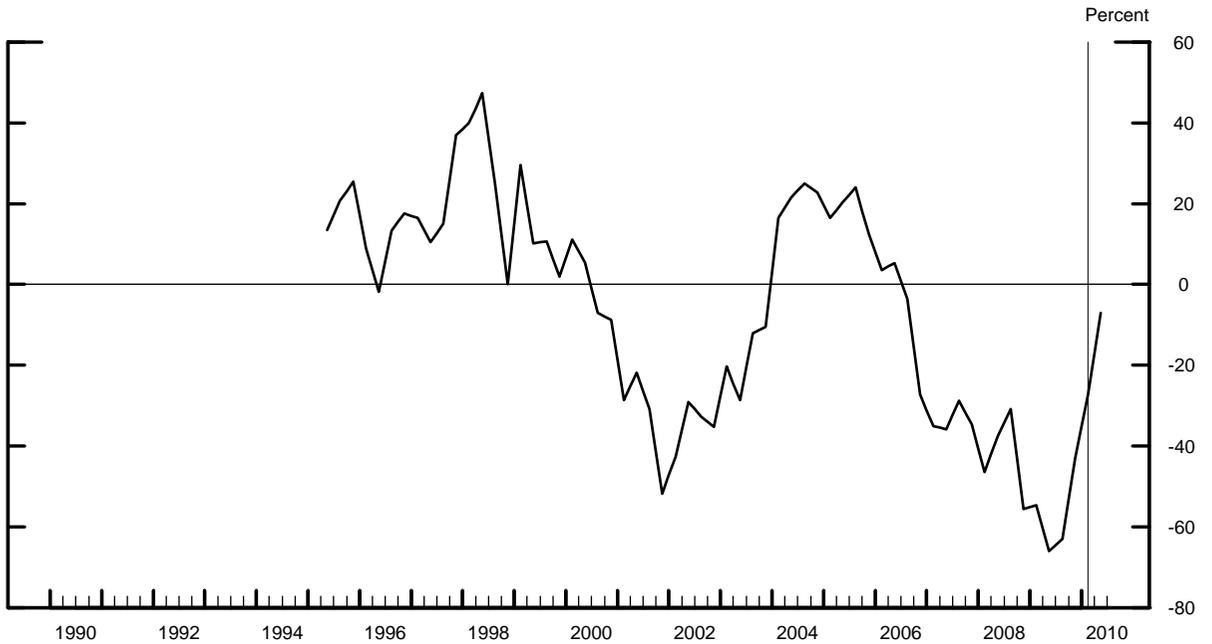
According to the survey, competitive pressures, the economic outlook, and tolerance for risk in the C&I loan market were the three factors that exerted the greatest influence on banks' C&I lending policies over the past three months. In particular, domestic banks that eased their C&I lending standards pointed to increased competition from other banks or nonbank sources of credit as an important factor in their decision, a response consistent with the receptive financing conditions in the corporate bond market and reported changes in the lending stance of foreign institutions. Also, about two-thirds of such banks cited a more favorable or less uncertain economic outlook. Only a few banks reported having eased lending policies in response to an increased tolerance for risk. By contrast, banks that tightened standards or terms on C&I loans

# Measures of Supply and Demand for Commercial Real Estate Loans

Net Percentage of Domestic Respondents Tightening Standards for Commercial Real Estate Loans



Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial Real Estate Loans



generally indicated that they viewed the economic outlook as less favorable or more uncertain and also reported further reductions in their tolerance for risk.

Small net fractions of banks reported that demand for C&I loans from large and middle-market firms and from small firms weakened further over the past three months. The reported weakness in loan demand was concentrated at smaller domestic banks, while large domestic banks reported little change in demand on net. A moderate net fraction of foreign banks indicated that demand for C&I loans strengthened over the same period. Nearly all of the domestic respondents that reported weaker demand cited borrowers' reduced need to finance plant and equipment investment, and large majorities also indicated that demand for inventory and accounts receivable financing declined. Among the domestic banks that reported increased demand for C&I loans, the most commonly cited reasons were increased needs to finance inventories and accounts receivable, as well as a pickup in mergers and acquisitions. About half of those banks also reported having seen a shift of demand to their bank from other sources of external finance.

**Special questions on credit card loans to small firms.** The April survey included a set of special questions that asked domestic banks about standards and terms on credit cards for use by small firms. A majority of respondents indicated that their standards for approving such business credit card accounts are currently tighter than the longer-run average level that prevailed before the crisis. In addition, significant net fractions of respondents to these special questions indicated that their banks had tightened their terms on business credit card loans to small firms—for both new and existing accounts—over the past six months.

**Questions on commercial real estate lending.** With fundamentals in the commercial real estate (CRE) sector remaining weak, a significant number of domestic banks, on balance, continued to report having tightened standards on CRE loans. However, this net fraction was considerably smaller than in the January survey. As in the previous survey, domestic banks reported weaker demand for CRE loans, on net. However, in the latest survey, the net fraction of banks reporting weaker demand moved below 10 percent for the first time since the financial crisis began. In contrast, branches and agencies of foreign banks reported no change in CRE lending standards, on balance, and a small net fraction of these respondents experienced an increase in demand for CRE loans.

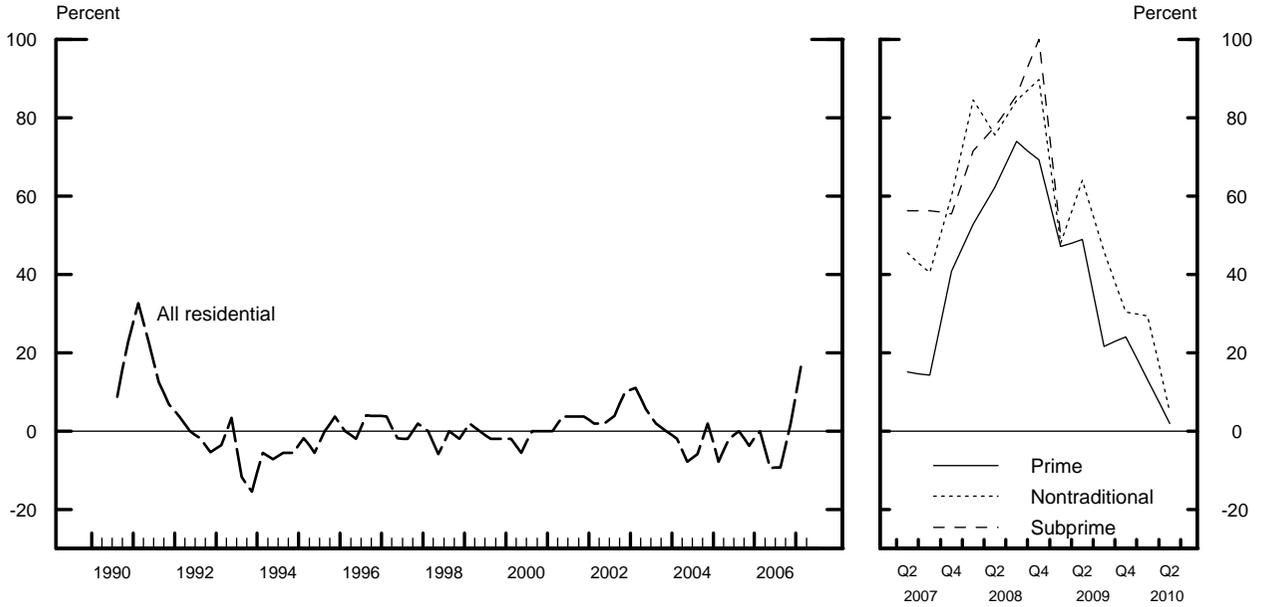
**Special question on the use of CRE loan extensions.** In response to a special question, sizable fractions of both domestic and foreign respondents reported having increased their use of CRE loan extensions over the previous six months.<sup>3</sup> A few banks reported having reduced their use of loan extensions during that period. The beginning of the six-month period that this special

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<sup>3</sup> Survey respondents were instructed that for the purposes of the special question, a loan extension was to be defined as a modification of a loan at or near the end of the original term that extends the term of the loan, as opposed to a newly underwritten loan used to refinance a maturing loan.

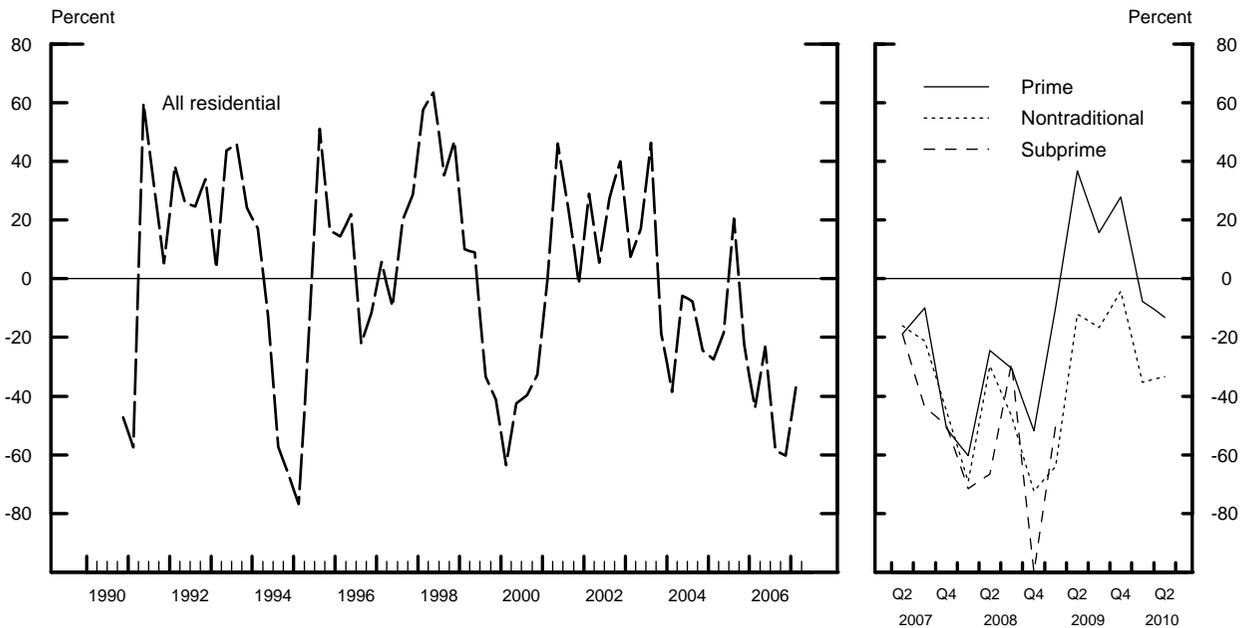
# Measures of Supply and Demand for Residential Mortgage Loans

Net Percentage of Domestic Respondents Tightening Standards for Residential Mortgage Loans



Note: For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is 3 or fewer.

Net Percentage of Domestic Respondents Reporting Stronger Demand for Residential Mortgage Loans



Note: For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is 3 or fewer.

question referenced roughly coincides with guidance that the Board and other financial regulators issued at the end of October that addressed CRE loan workouts.<sup>4</sup>

### **Lending to Households**

**Questions on residential real estate lending.** With regard to loans secured by residential real estate, most banks reported essentially no change in their standards on prime and nontraditional mortgages over the past three months. A few of the largest banks eased standards for prime mortgages, while a roughly comparable number of the remaining banks indicated that they had tightened standards on such loans. A handful of large banks also contributed to the first net easing of standards on home equity lines of credit since the question was first asked in January 2008, a change that may reflect the stabilization in home prices since the middle of last year. Compared with the January survey, a more sizable fraction of banks indicated that demand for prime mortgages weakened over the past three months, a result that is consistent with the weaker-than-expected readings on home sales during the first quarter. Fairly large net fractions of banks also reported that demand for home equity loans weakened over the survey period.

**Questions on consumer lending.** On balance, domestic banks reported tightening their lending standards and terms for credit cards, but their lending stance toward other consumer loans eased. A small net fraction of banks reported having tightened standards for credit cards, and moderate fractions reported having reduced credit limits and increased spreads of interest rates charged on outstanding credit card balances. The further tightening of standards and terms on credit card loans, however, did not carry over into other consumer loans, as small net fractions of banks reported having eased standards and reduced spreads for such loans. Moreover, the net fraction of banks that reported an increased willingness to make consumer installment loans increased again, putting this indicator of credit availability near the upper end of its range over the past decade. As in recent quarters, a moderate net fraction of respondents reported weaker demand for consumer loans of all types.

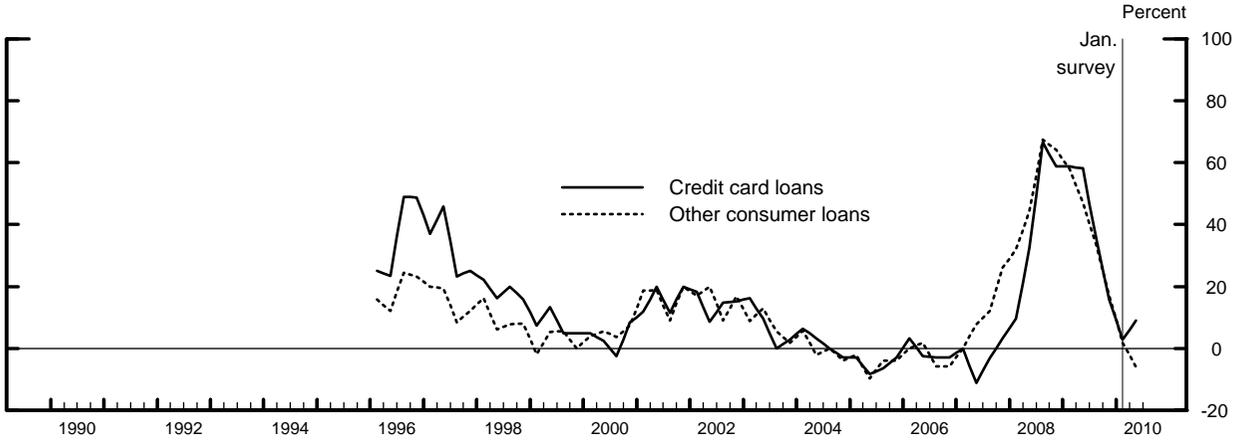
**Special question on Statements of Financial Accounting Standards Nos. 166 and 167 (FAS 166 and 167).** A final special question on the April survey asked banks whether their lending policies for businesses and households had changed in response to FAS 166 and 167, new

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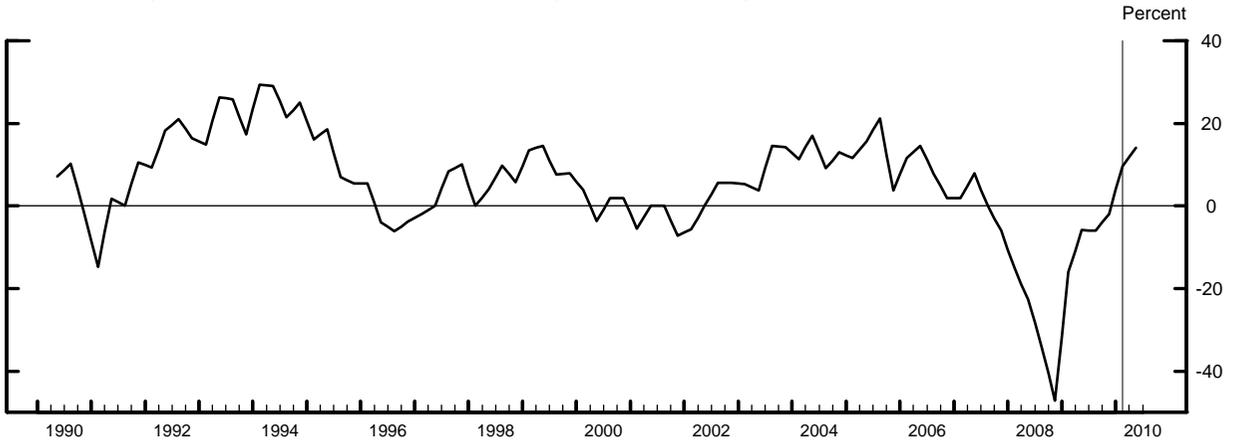
<sup>4</sup> For complete text of the policy statement, see Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation (2009), Supervision and Regulation Letter SR 09-7 (October 30), “Prudent Commercial Real Estate Loan Workouts,” [www.federalreserve.gov/boarddocs/srletters/2009/SR0907.htm](http://www.federalreserve.gov/boarddocs/srletters/2009/SR0907.htm).

# Measures of Supply and Demand for Consumer Loans

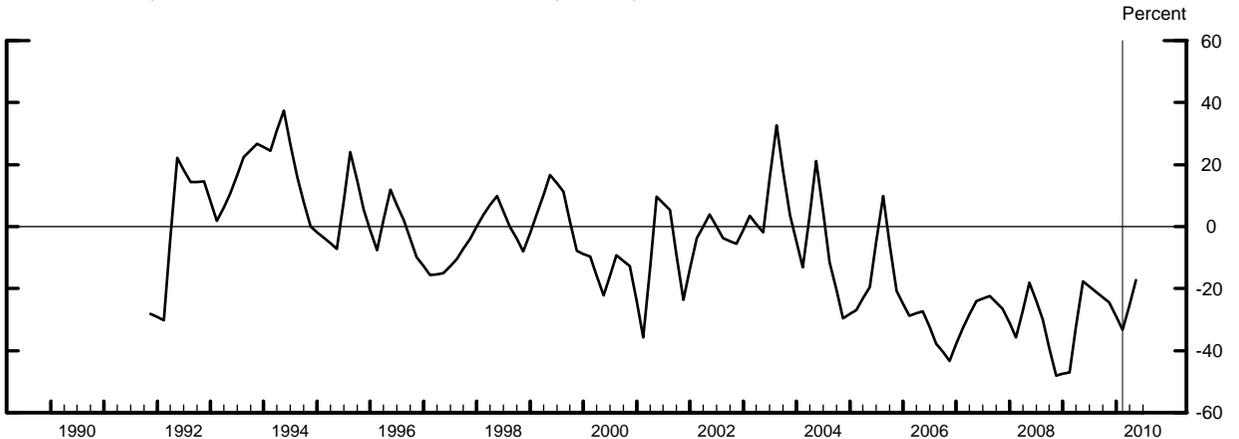
Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans



Net Percentage of Domestic Respondents Reporting Increased Willingness to Make Consumer Installment Loans



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



accounting rules that most banking institutions adopted with their first-quarter financial statements.<sup>5</sup> No respondents to this question indicated that their banks' lending standards and terms had changed as a result of the new rules.

Last page of Domestic Financial Developments

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<sup>5</sup> Published by the Financial Accounting Standards Board in June 2009, FAS 166 and 167 eliminated the concept of a "qualifying special-purpose entity" and made achieving off-balance-sheet treatment of assets much more difficult. For more information on FAS 166 and 167, please see Financial Accounting Standards Board (2009) "FASB Issues Statements 166 and 167 Pertaining to Special Purpose Entities," news release, June 12, [www.fasb.org/cs/ContentServer?c=FASBContent\\_C&pagename=FASB/FASBContent\\_C/NewsPage&cid=1176156240834](http://www.fasb.org/cs/ContentServer?c=FASBContent_C&pagename=FASB/FASBContent_C/NewsPage&cid=1176156240834).

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## **International Developments**

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## International Developments

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### U.S. International Transactions

#### Trade in Goods and Services

The U.S. international trade deficit widened to \$39.7 billion in February, from \$37 billion in January, as a rise in nominal imports outpaced a small increase in exports.

#### Trade in Goods and Services

	2009	Annual rate			Monthly rate		
		2009		2010	2009	2010	
		Q3	Q4	Q1 <sup>e</sup>	Dec.	Jan.	Feb.
<b>Percent change</b>							
<i>Nominal BOP</i>							
Exports	-1.3	25.4	29.1	10.3	3.4	-.2	.2
Imports	-7.2	36.8	35.3	13.1	4.9	-1.8	1.7
<i>Real NIPA</i>							
Exports	-.7	17.8	22.8	...	...	...	...
Imports	-6.6	21.3	15.8	...	...	...	...
<b>Billions of dollars</b>							
<i>Nominal BOP</i>							
Net exports	-378.6	-385.5	-435.8	-459.9	-39.9	-37.0	-39.7
Goods, net	-517.0	-528.4	-582.0	-604.0	-51.9	-49.4	-51.3
Services, net	138.4	142.9	146.2	144.0	12.0	12.4	11.6

... Not applicable.

BOP Balance of payments.

NIPA National income and product accounts.

<sup>e</sup> BOP data are two months at an annual rate.

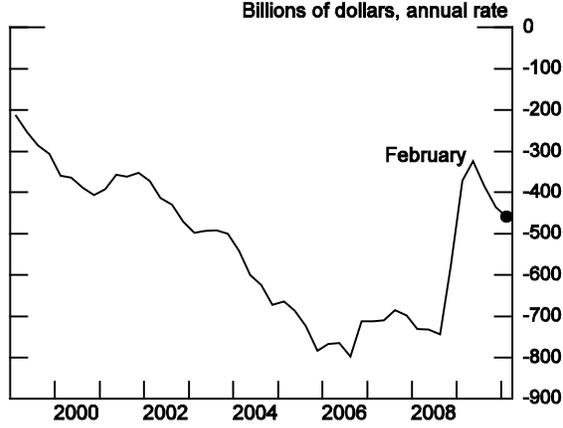
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

The value of exports of goods and services moved up 0.2 percent in February after decreasing by about the same amount in January. The February increase was fairly broad based across product categories with the exception of agricultural goods and consumer goods, both of which fell back slightly. Capital goods rose in spite of falling aircraft and computer sales, driven by a large increase in machinery and semiconductors. Automotive products moved up, though only partially reversing a sizable decline in January.

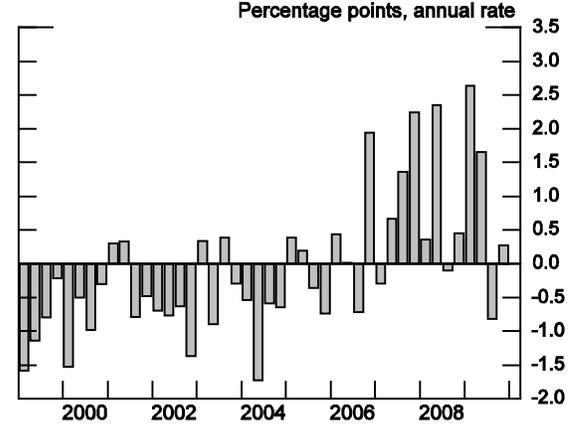
On average in January and February, nominal exports increased 10¼ percent at an annual rate. The increase reflects the quarterly arithmetic of a sharp jump in December, as the level of exports in February was almost unchanged from the December level.

## U.S. International Trade in Goods and Services (Quarterly)

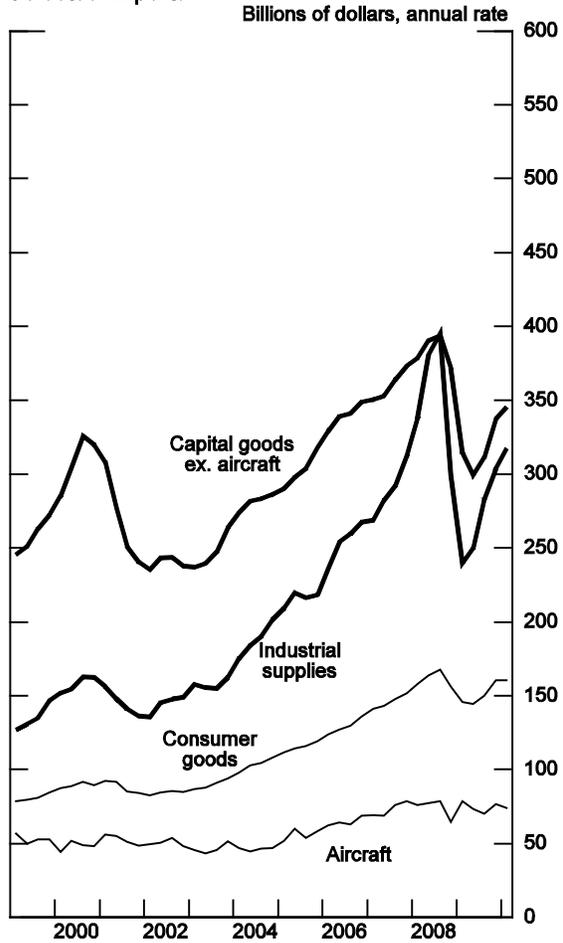
**Trade Balance**



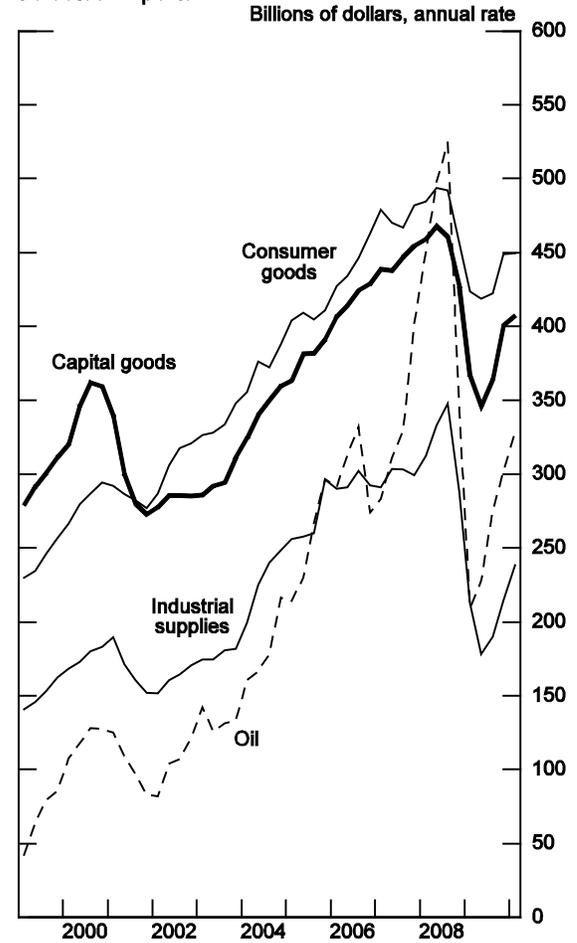
**Contribution of Net Exports to Growth of Real Gross Domestic Product**



**Selected Exports**



**Selected Imports**



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

**U.S. Exports and Imports of Goods and Services**  
(Billions of dollars; annual rate, balance of payments basis)

	Levels				Change <sup>1</sup>			
	2009	2010	2010		2009	2010	2010	
	Q4	Q1 <sup>e</sup>	Jan.	Feb.	Q4	Q1 <sup>e</sup>	Jan.	Feb.
<b>Exports of goods and services</b>	<b>1674.7</b>	<b>1716.4</b>	<b>1714.6</b>	<b>1718.1</b>	<b>103.5</b>	<b>41.6</b>	<b>-3.2</b>	<b>3.5</b>
Goods exports	1147.7	1181.6	1181.1	1182.0	93.1	33.9	-7.9	1.0
Gold	15.3	16.9	18.9	14.9	1.0	1.6	1.6	-4.0
Other goods	1132.4	1164.7	1162.2	1167.2	92.1	32.3	-9.5	5.0
Capital goods	414.1	419.5	417.2	421.9	32.5	5.4	-12.6	4.7
Aircraft & parts	76.7	73.8	77.8	69.9	6.5	-2.9	-6.3	-7.9
Computers & accessories	40.9	42.7	43.4	41.9	3.4	1.8	1.7	-1.5
Semiconductors	42.9	44.3	43.1	45.6	4.4	1.5	.7	2.6
Other capital goods	253.7	258.7	252.9	264.5	18.2	5.0	-8.7	11.6
Automotive	104.1	108.8	107.5	110.0	18.0	4.7	-6.5	2.4
Ind. supplies (ex. ag., gold)	303.8	317.3	314.2	320.3	20.7	13.4	2.5	6.1
Consumer goods	160.2	160.2	161.6	158.8	10.3	.0	2.1	-2.9
Agricultural	109.6	113.9	116.5	111.4	10.4	4.3	1.6	-5.1
All other goods	40.6	45.0	45.1	44.8	.2	4.4	8.2	-.3
Services exports	527.0	534.8	533.5	536.0	10.4	7.8	4.7	2.5
<b>Imports of goods and services</b>	<b>2110.5</b>	<b>2176.3</b>	<b>2158.0</b>	<b>2194.5</b>	<b>153.8</b>	<b>65.8</b>	<b>-38.6</b>	<b>36.5</b>
Goods imports	1729.7	1785.5	1773.6	1797.5	146.7	55.8	-38.3	23.9
Oil	301.8	328.6	326.0	331.3	26.2	26.8	-12.3	5.3
Gold	10.7	9.3	9.9	8.7	2.0	-1.4	-.4	-1.2
Other goods	1417.1	1447.6	1437.7	1457.5	118.5	30.5	-25.7	19.8
Capital goods	400.7	407.5	405.3	409.7	36.2	6.8	-13.7	4.4
Aircraft & parts	31.2	28.3	29.6	26.9	2.1	-2.9	-4.3	-2.6
Computers & accessories	114.6	116.9	113.6	120.1	19.2	2.3	-8.1	6.5
Semiconductors	23.6	23.0	22.9	23.2	1.4	-.6	-.2	.3
Other capital goods	231.3	239.3	239.1	239.5	13.6	8.1	-1.1	.3
Automotive	207.4	197.9	202.7	193.2	29.9	-9.4	-16.8	-9.5
Ind. supplies (ex. oil, gold)	214.6	238.3	234.3	242.4	24.6	23.8	11.5	8.1
Consumer goods	448.9	450.0	443.1	456.8	26.5	1.1	-10.4	13.7
Foods, feeds, beverages	82.8	85.9	86.3	85.4	2.0	3.1	1.6	-.9
All other goods	62.8	68.0	66.0	70.0	-.8	5.2	2.1	4.0
Services imports	380.8	390.8	384.5	397.1	7.1	9.9	-.3	12.6
Memo:								
Oil quantity (mb/d)	11.41	12.05	11.82	12.28	.11	.65	-.67	.45
Oil import price (\$/bbl)	72.37	74.69	75.49	73.88	5.68	2.30	1.36	-1.61

1. Change from previous quarter or month.

e Estimate based on average of two months.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

The value of imports of goods and services increased 1.7 percent in February, undoing a similar sized decrease in January. Imports of oil accounted for more than one-third of the January decline, reflecting lower volumes, but only about a tenth of the February uptick, as volumes rebounded but prices fell. Services imports recorded a large increase reflecting royalty payments associated with broadcast rights for the winter Olympic games. Capital goods rose as strong computer imports more than offset falling aircraft sales, and industrial supplies and consumer goods also moved up. There was a notable decline in automotive products driven by sharply falling imports from outside of North America.

For the first quarter, nominal imports rose 13 percent at an annual rate. However, as with exports, the increase is wholly reflected in the quarterly arithmetic of a sharp increase in December, with the level of imports in February actually coming in lower than that recorded in December.

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

**Non-oil imports.** Prices for imported non-oil goods fell 0.2 percent in March because of a sharp drop in natural gas prices, while core import prices rose 0.3 percent. Within core imports, prices for material-intensive goods rose 0.7 percent in March, the same pace as in February. After declining in February, prices for finished goods were little changed in March, as falling prices for automotive products and capitals goods (excluding computers and semiconductors) offset rising prices for consumer goods.

As measured by the Bureau of Labor Statistics (BLS), core import prices rose 5 percent at an annual rate in the first quarter, as prices for material-intensive goods rose almost 16 percent at an annual rate. Overall, prices for finished goods were little changed, as slightly higher prices for consumer goods were offset by lower prices for automotive products.

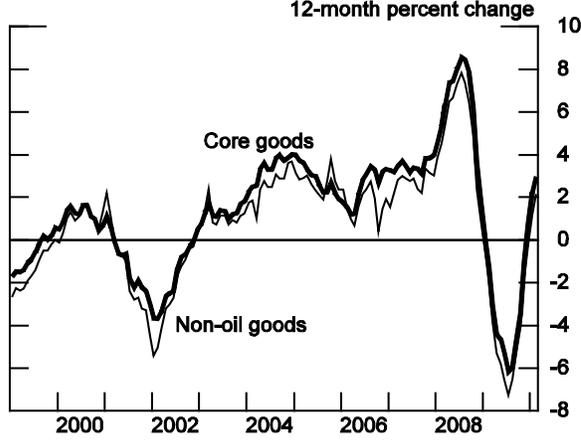
**Oil.** The BLS price index of imported oil rose 4 percent in March after a decrease of 1.4 percent in February. The spot price of West Texas Intermediate (WTI) crude oil followed a broadly similar pattern, dropping 2½ percent in February before increasing about 6 percent to average just over \$81 per barrel in March. Thus far in April, spot WTI has continued to edge higher, closing most recently on April 20 at over \$83. The modestly higher oil prices may reflect a more optimistic outlook regarding the global economic activity and, in particular, the prospects for stronger oil demand in developed economies.

**Exports.** Prices of exported core goods rose 0.9 percent in March following February's 0.5 percent decline. This pattern largely reflects movements in prices for agricultural products, which fell 3.8 percent in February and increased 2.1 percent in March. In addition, after a 0.4 percent drop in February, prices for industrial supplies increased 1.6 percent. As in February, prices for finished goods were flat.

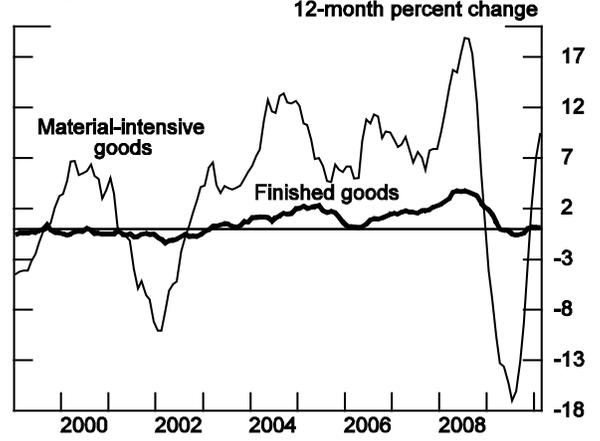
In the BLS data, prices of exported core goods rose 7½ percent at an annual rate in the first quarter, largely because of higher prices for material-intensive goods. Non-agricultural industrial supplies experienced the largest increase. Prices for all major categories of finished goods were also up in the first quarter.

## Prices of U.S. Imports and Exports

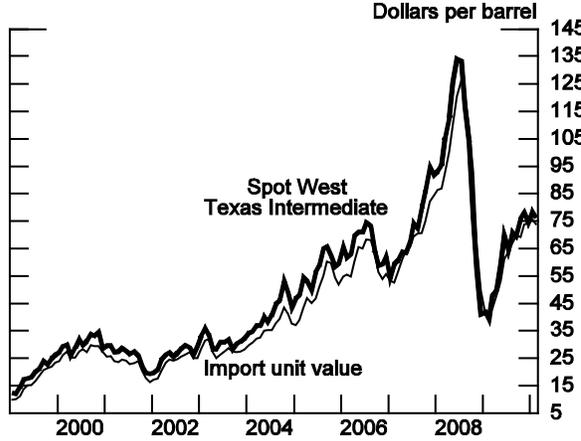
**Merchandise Imports**



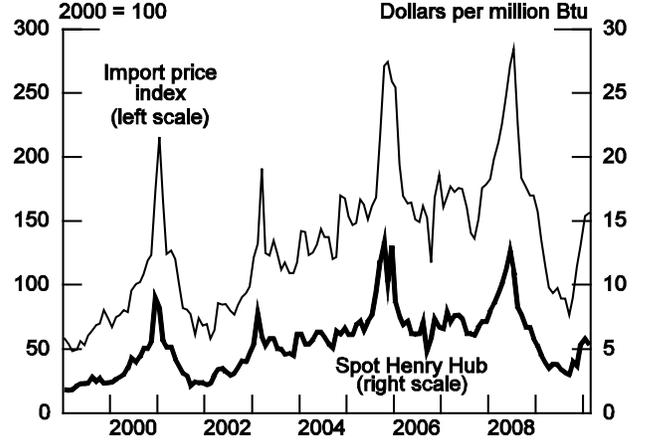
**Categories of Core Imports**



**Oil**



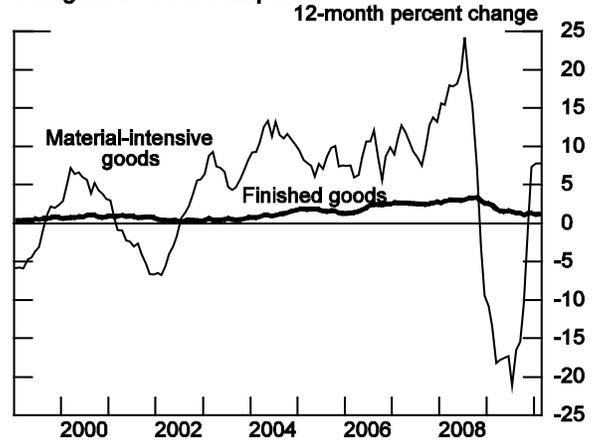
**Natural Gas**



**Merchandise Exports**



**Categories of Core Exports**



Source: Bureau of Labor Statistics; Wall Street Journal; Commodity Research Bureau.

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

	Annual rate			Monthly rate		
	2009		2010	2010		
	Q3	Q4	Q1	Jan.	Feb.	Mar.
	----- BLS prices -----					
<b>Merchandise imports</b>	12.0	10.4	8.2	1.2	-.2	.7
Oil	88.4	35.2	23.0	3.8	-1.4	4.0
Non-oil	1.1	5.7	4.9	.5	.2	-.2
Core goods <sup>1</sup>	2.3	6.1	5.0	.6	.2	.3
Finished goods	.4	1.0	.1	.1	-.1	.0
Cap. goods ex. comp. & semi.	.4	.7	.2	.0	-.1	-.2
Automotive products	2.0	1.6	-1.7	-.3	-.1	-.2
Consumer goods	-.4	.8	.9	.2	-.1	.3
Material-intensive goods	6.9	18.6	15.8	1.6	.7	.7
Foods, feeds, beverages	.9	8.6	9.7	1.3	-.5	1.4
Industrial supplies ex. fuels	8.4	21.7	17.7	1.6	1.0	.6
Computers	.3	-2.2	-3.5	-.6	.0	-.4
Semiconductors	-5.4	-.5	-8.0	.9	-.5	-3.6
Natural gas	-39.4	197.5	216.2	17.6	1.7	-12.4
<b>Merchandise exports</b>	3.4	3.6	5.5	.7	-.4	.7
Core goods <sup>2</sup>	4.1	5.0	7.5	.9	-.5	.9
Finished goods	2.1	.9	1.5	.2	.1	.0
Cap. goods ex. comp. & semi.	2.2	.9	1.7	.3	.0	.1
Automotive products	-.5	.9	1.7	.3	.2	.0
Consumer goods	4.3	1.1	1.0	.0	.4	-.1
Material-intensive goods	6.5	10.0	14.3	1.6	-1.1	1.7
Agricultural products	-7.8	2.1	7.9	1.3	-3.8	2.1
Industrial supplies ex. ag.	12.1	13.1	16.4	1.8	-.4	1.6
Computers	-1.5	6.0	-9.5	-1.8	-2.0	2.2
Semiconductors	-.8	-14.6	-.4	.6	-.3	-.6
	----- NIPA prices -----					
<b>Chain price index</b>						
Imports of goods & services	11.4	16.5	n.a.	...	...	...
Non-oil merchandise	.6	5.0	n.a.	...	...	...
Core goods <sup>1</sup>	1.3	4.7	n.a.	...	...	...
Exports of goods & services	4.6	5.8	n.a.	...	...	...
Total merchandise	4.6	5.7	n.a.	...	...	...
Core goods <sup>2</sup>	5.1	5.6	n.a.	...	...	...

1. Excludes computers, semiconductors, and natural gas.

2. Excludes computers and semiconductors.

... Not applicable.

n.a. Not available.

BLS Bureau of Labor Statistics.

NIPA National income and product accounts.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Bureau of Labor Statistics.

### U.S. Current Account

The U.S. current account deficit was \$462 billion at an annual rate in the fourth quarter of 2009, \$53 billion wider than in the third quarter (revised) and the second consecutive quarter of widening deficits since the low reached in the second quarter of 2009. The widening resulted primarily from an increase in the trade deficit. In addition, the surplus on investment income decreased as profits earned on foreign direct investment in the United States recovered strongly from a dip in the third quarter and increased more than those on U.S. direct investment abroad.

### U.S. Current Account

(Billions of dollars, seasonally adjusted annual rate)

Period	Goods and services, net	Investment income, net	Other income and transfers, net	Current account balance	Current account/GDP
<i>Annual</i>					
2008	-695.9	125.6	-135.7	-706.1	-4.9
2009	-378.6	96.1	-137.3	-419.9	-2.9
<i>Quarterly</i>					
2009:Q1	-368.9	80.1	-128.0	-416.7	-2.9
Q2	-324.3	73.4	-140.0	-391.0	-2.8
Q3	-385.5	123.3	-147.2	-409.4	-2.9
Q4	-435.8	107.6	-134.2	-462.4	-3.2
<i>Change</i>					
Q1-Q4	209.1	-12.0	5.7	202.8	1.4
Q2-Q1	44.6	-6.8	-12.1	25.8	0.2
Q3-Q2	-61.2	50.0	-7.1	-18.4	-0.1
Q4-Q3	-50.3	-15.7	13.0	-53.0	-0.3

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

**U.S. International Financial Transactions**

Since the March Greenbook, we have received balance of payments data for the fourth quarter of 2009, Treasury (TIC) data on U.S. international financial transactions for February, and partial and confidential data on custody accounts at the Federal Reserve Bank of New York (FRBNY) through mid-April. The data show that acquisitions of U.S. Treasury securities by foreign official institutions remain strong and that foreign official net purchases continue to provide the major share of net financial inflows.

In February, foreign official net purchases of U.S. Treasuries picked up to nearly \$30 billion following two months of relatively small inflows (see lines 1a and 1b of the table “Summary of U.S. International Transactions”).

. Custody data from FRBNY suggest particularly strong official inflows for March, including the largest acquisition of U.S. agency securities since mid-2008, and similar strength thus far in April. This strength runs counter to news reports in recent months of slowing official inflows. Such reports often point to the unadjusted TIC data, particularly for December and January, and the lower share of foreign participation in Treasury auctions in February and March (not shown). However, official institutions often use private foreign entities to purchase securities, and these purchases would not be recorded as foreign official in the published TIC data. Confidential adjustments to TIC data for this effect using daily custody data from FRBNY yield the stronger inflows reported here. Furthermore, while foreign participation in Treasury auctions has declined, the FRBNY custody data confirm that foreign officials are nonetheless acquiring substantial amounts of Treasury securities.

Foreign private net purchases of U.S. securities continue to be mixed, although stronger overall in February than in January. Private foreign investors, mainly in Asia, made unusually large purchases of Treasury securities in February (line 4a). In addition, foreign purchases of equities returned to a strong pace in February after a somewhat slower January (line 4b). But private foreign acquisitions of agency securities remained fairly flat, and foreigners continued to sell U.S. corporate bonds, on net, as discussed in the previous Greenbook (lines 4b and 4c). In banking, strong growth in gross positions, led by continued recovery in the RP market, netted to a small outflow (line 3).

U.S. investors slowed their pace of acquiring foreign stocks and long-term bonds in February (line 5). For foreign stocks, this is a continuation of a slowdown from the fourth quarter. However, we also received additional data for the fourth quarter of 2009 showing that U.S. investors purchased almost \$100 billion of foreign negotiable CDs and

other short-term securities (included in line 10). Therefore, the slowdown in long-term securities purchases may reflect more of a shift in instrument preference rather than an overall decline in U.S. demand for foreign assets.

Turning to the fourth quarter-balance of payments data, U.S. direct investment abroad (line 6) was healthy, driven by strong retained earnings. Retained earnings also boosted foreign direct investment in the United States (line 7), although they were offset by declining inflows from intercompany debt. But most strikingly, recorded net financial inflows fell far short of the recorded current account, resulting in a sizable \$70 billion statistical discrepancy for the quarter and a \$225 billion discrepancy for 2009. This positive statistical discrepancy indicates some combination of under recorded net financial inflows or over recorded net imports of goods and services and other transactions measured in the current account balance.

Since the balance of payments data were published, we also received derivatives data for the fourth quarter. They show a decline in gross outstandings and a record net inflow of \$21 billion (line 8). (By convention, we show the headline numbers of the published balance of payments in the attached table, but all else equal, the derivatives data should narrow the fourth-quarter statistical discrepancy by \$21 billion).

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

	2008	2009	2009				2010	
			Q1	Q2	Q3	Q4	Jan.	Feb.
<b>Official financial flows</b>	<b>-54.1</b>	<b>939.4</b>	<b>321.3</b>	<b>315.2</b>	<b>123.5</b>	<b>179.5</b>	<b>28.7</b>	<b>22.2</b>
1. Change in foreign official assets in the U.S. (increase, +)	480.5	405.5	78.5	123.7	71.6	131.7	18.8	22.4
a. Long-term Treasury securities	203.8	426.8	35.0	103.2	99.7	188.8	44.1	35.3
b. Short-term Treasury securities	272.4	68.4	84.8	21.2	25.8	-63.4	-25.8	-5.7
c. Long-term agency securities	66.9	-35.0	1.0	-1.3	-28.1	-6.6	0.0	2.3
d. Other <sup>1</sup>	-62.7	-54.8	-42.4	0.6	-25.9	12.9	0.5	-9.6
2. Change in U.S. official assets (decrease, +) <sup>2</sup>	-534.6	534.0	242.8	191.4	51.9	47.8	9.9	-0.1
<b>Private financial flows</b>	<b>559.1</b>	<b>-741.7</b>	<b>-286.4</b>	<b>-252.5</b>	<b>-37.8</b>	<b>-133.9</b>	...	...
<b>Banks</b>								
3. Change in net foreign positions of banking offices in the U.S. <sup>3</sup>	-4.6	-462.2	-293.0	-175.0	0.9	5.0	35.9	-11.0
<b>Securities<sup>4</sup></b>								
4. Foreign net purchases (+) of U.S. securities	70.1	36.4	2.7	-3.6	17.0	20.3	-33.1	13.0
a. Treasury securities	196.1	33.2	52.7	-21.0	-12.0	13.4	6.3	21.5
b. Agency bonds	-186.2	-46.6	-49.0	2.9	6.7	-7.2	-12.1	-4.5
c. Corporate and municipal bonds	3.1	-85.7	-10.9	-22.5	-28.8	-23.5	-32.5	-16.7
d. Corporate stocks <sup>5</sup>	57.2	135.6	9.9	37.0	51.1	37.5	5.1	12.8
5. U.S. net acquisitions (-) of foreign securities	46.5	-219.7	-33.5	-91.3	-48.0	-46.9	-21.8	-4.8
a. Bonds	46.8	-151.1	-32.4	-54.3	-21.1	-43.3	-16.5	-3.4
b. Stocks <sup>5</sup>	-0.4	-68.7	-1.1	-37.0	-26.9	-3.6	-5.2	-1.5
<b>Other flows<sup>6</sup></b>								
6. U.S. direct investment (-) abroad	-332.0	-221.0	-40.9	-48.1	-68.5	-63.5	...	...
7. Foreign direct investment in the U.S.	319.7	152.1	24.0	37.0	47.5	43.6	...	...
8. Net derivatives (inflow, +)	-28.9	50.8	7.2	11.3	11.5	20.8	...	...
9. Foreign acquisitions of U.S. currency	29.2	12.6	11.8	-1.9	4.2	-1.4	...	...
10. Other (inflow, +) <sup>7</sup>	459.2	-90.7	35.3	19.2	-2.2	-111.8	...	...
<b>U.S. current account balance<sup>6</sup></b>	<b>-706.1</b>	<b>-419.9</b>	<b>-104.2</b>	<b>-97.7</b>	<b>-102.3</b>	<b>-115.6</b>	...	...
<b>Capital account balance<sup>8</sup></b>	<b>1.0</b>	<b>-2.9</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-0.7</b>	...	...
<b>Statistical discrepancy<sup>6</sup></b>	<b>200.1</b>	<b>224.9</b>	<b>70.0</b>	<b>35.8</b>	<b>17.4</b>	<b>70.6</b>	...	...

Note: Data in lines 1 through 5 differ in timing and coverage from the balance of payments data published by the Department of Commerce. Details may not sum to totals because of rounding.

1. Includes foreign official net purchases of stocks, bonds, short-term securities, and changes in other bank-reported liabilities to foreign official institutions.

2. Includes changes in U.S. official reserve assets (other than allocations of Special Drawing Rights) and in outstanding reciprocal currency swaps with certain foreign central banks.

3. 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.

4. Includes commissions on securities transactions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce.

5. Includes stocks acquired through nonmarket means such as mergers and reincorporations.

6. Quarterly data; seasonally adjusted.

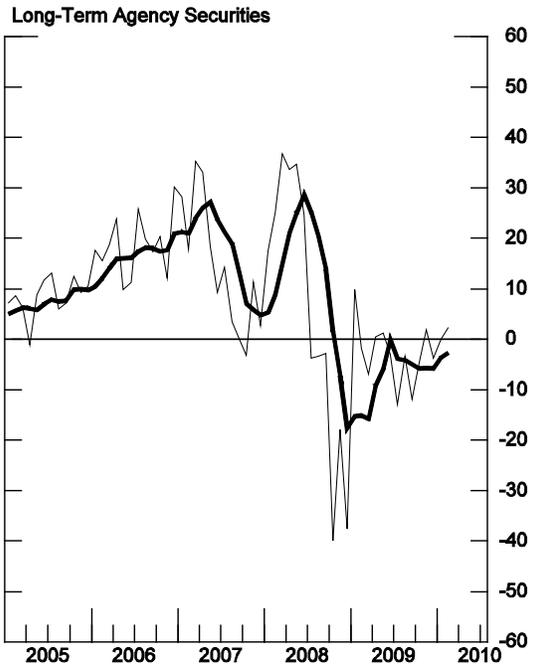
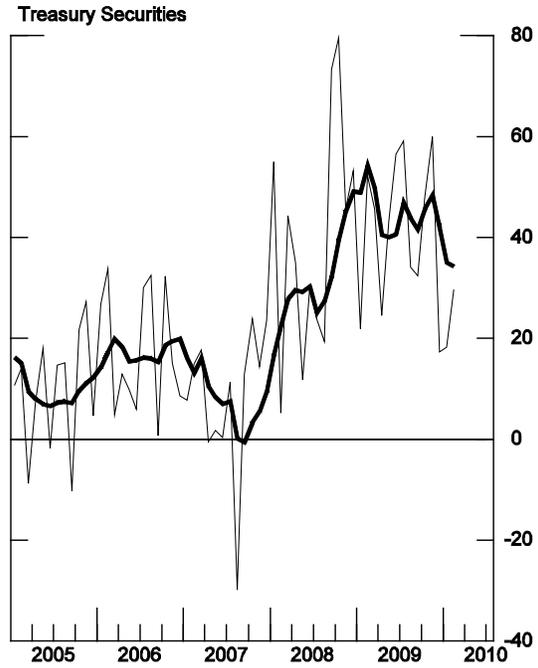
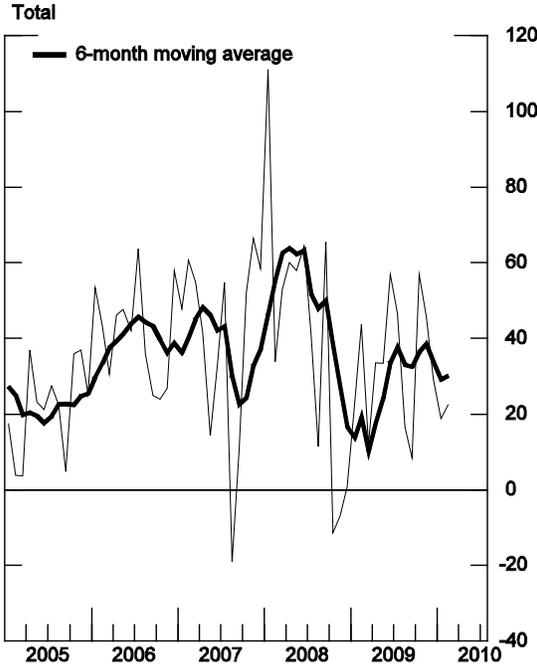
7. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business.

8. Seasonally adjusted; consists of transactions in nonproduced nonfinancial assets and capital transfers.

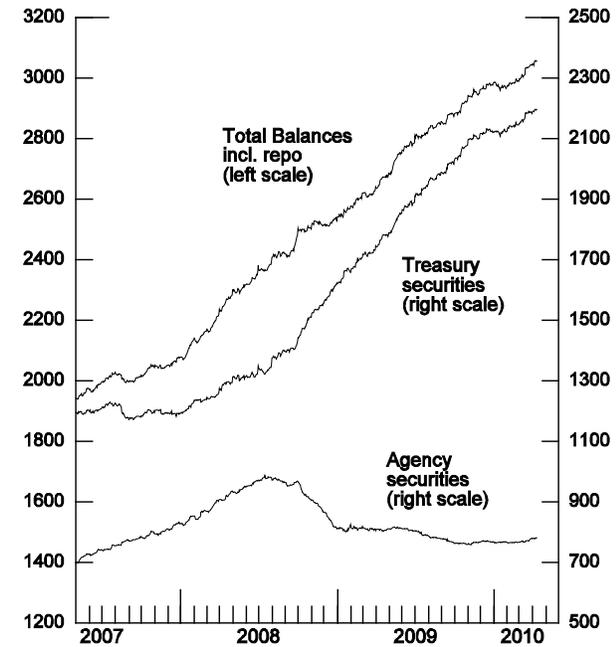
... Not applicable.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

**Foreign Official Financial Inflows (+) through February 2010**  
 (Billions of dollars; monthly rate, not seasonally adjusted)



**Foreign Official Balances Held at the Federal Reserve Bank of New York, Daily through April 9, 2010**

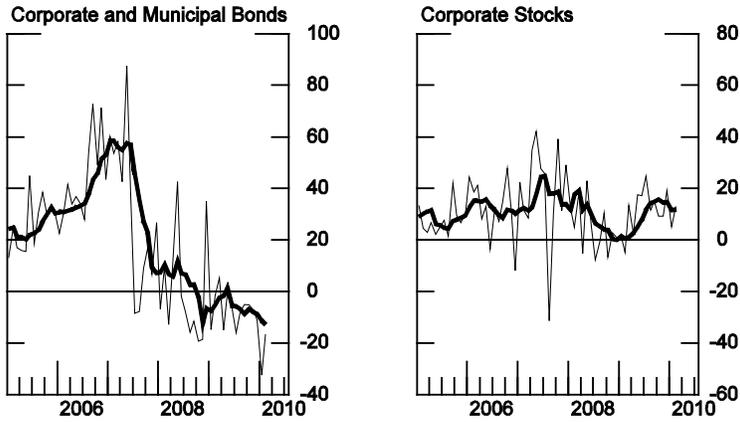
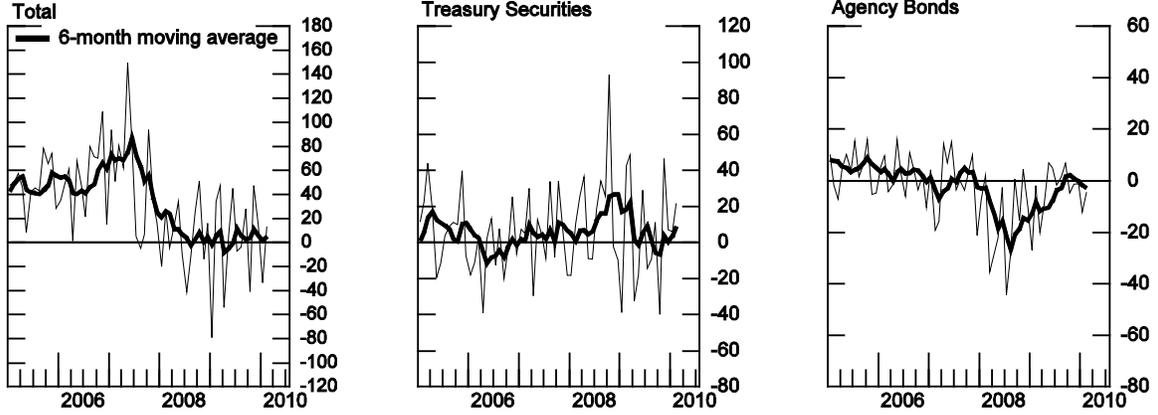


Note: Total foreign official inflows consists of net purchases of Treasury securities, long-term agency securities, short-term securities, corporate stocks and bonds, and bank flows.

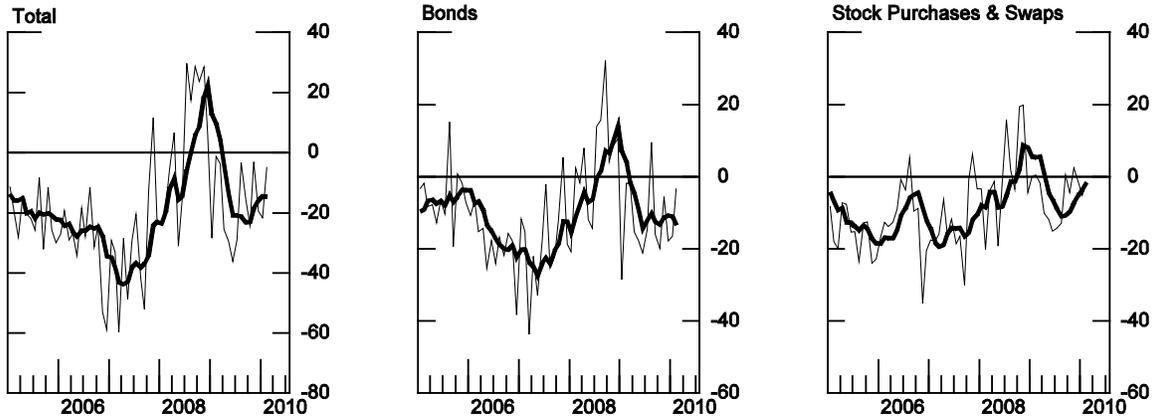
Source: U.S. Treasury International Capital reports with staff adjustments and the Federal Reserve Bank of New York.

**Private Securities Flows through February 2010**  
 (Billions of dollars; monthly rate, not seasonally adjusted)

**Foreign Net Purchases (+) of U.S. Securities**



**U.S. Net Acquisitions (-) of Foreign Securities**



Source: For all figures, U.S. Treasury International Capital reports with staff adjustments.

## **Foreign Financial Markets**

Asset prices in most foreign financial markets appeared to reflect growing confidence that the global recovery is gaining momentum, particularly in emerging market economies. Equity indexes rose in most countries, implied volatilities remained low, and emerging-market risk spreads generally declined. However, despite the European Union's announcement that it was negotiating a substantial package of financial assistance for Greece, Greek sovereign debt remained under severe pressure.

The trade-weighted value of the dollar, as measured by the staff's broad nominal index, has declined  $\frac{3}{4}$  percent since the March Greenbook, as gains against the euro and yen were more than offset by declines against the Canadian dollar and most emerging market currencies. The dollar appreciated 1 percent versus the euro, which was buffeted daily by news about Greece, and nearly 4 percent against the yen. But the dollar depreciated  $2\frac{1}{2}$  percent against the Canadian dollar, which was supported by Canada's solid recovery and by rising commodity prices. Late in the period, the Bank of Canada dropped its "conditional commitment" to keep policy rates unchanged until July, which supported the Canadian dollar. Chinese authorities did not allow the renminbi spot exchange rate to fluctuate meaningfully against the dollar. There are, however, widespread expectations among market participants that China will soon let the renminbi appreciate, particularly in light of China's very strong GDP data for the first quarter, and the dollar depreciated against most other currencies in emerging Asia. Of some note, the Monetary Authority of Singapore revalued its currency about  $1\frac{1}{2}$  percent after strong first-quarter GDP data. The dollar depreciated more than 2 percent against the Mexican peso and the Brazilian *real*.

Despite promises of financial support by euro-area countries, spreads of Greek sovereign debt over German debt began to rise again in the second half of March. In early April, ten-year spreads rose above 400 basis points, and one-year Greek government bond yields shot up to more than 7 percent. These spreads fell after the April 11 announcement by the European Union of a potential assistance package of up to

€45 billion to be funded by bilateral loans from euro-area countries and by the IMF. However, as it became clear that parliamentary approval for the aid would be required in several potential donor countries, including Germany, spreads on Greek sovereign debt rose again, reaching record highs as the period ended. On net since the March Greenbook, the ten-year spread of Greek debt over German debt has risen 210 basis points. The debt spreads of most other “peripheral” euro-area countries only showed a modest response to the gyrations in Greek debt, with the exception of Portuguese debt spreads, which rose 80 basis points over the period. Fitch cut Portugal’s sovereign rating and the EU warned that the Portuguese government may need to enact further fiscal cuts to meet its deficit goals.

Reflecting widespread optimism that the global recovery is well under way, headline equity indexes rose in many industrial countries (Greece was one exception). Equity prices also generally rose in Latin America, emerging Asia, and, particularly, in Eastern Europe. Share prices in China declined slightly, likely affected by the Chinese authorities’ efforts to slow the growth of credit. EMBI spreads declined in all regions: the Greek situation did not lead to a widespread pullback from risk. Ten-year sovereign yields in Germany and other “core” euro-area countries were little changed on balance, as were U.K. and Japanese yields. However Canadian and Australian ten-year yields rose about 20 and 30 basis points, respectively, reflecting stronger economic growth and firming expectations of future policy tightening.

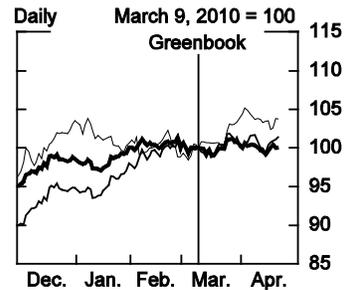
### Exchange Value of the Dollar and Stock Market Indexes

	Latest	Percent change since March Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.3446	1.0
Yen (¥/\$)	93.280	3.8
Sterling (\$/£)	0.0154	-2.4
Canadian dollar (C\$/\\$)	0.9984	-2.6
<i>Nominal dollar indexes*^</i>		
Broad index	102.2	-0.7
Major Currencies index	75.7	-0.1
OITP index	130.6	-1.3
<i>Stock market indexes</i>		
DJ Euro Stoxx	283	4.3
Nikkei 225	10901	3.2
FTSE 100	5784	3.2
S&P 500	1207	5.9

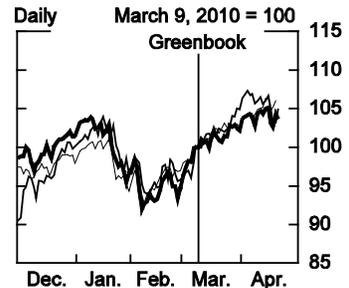
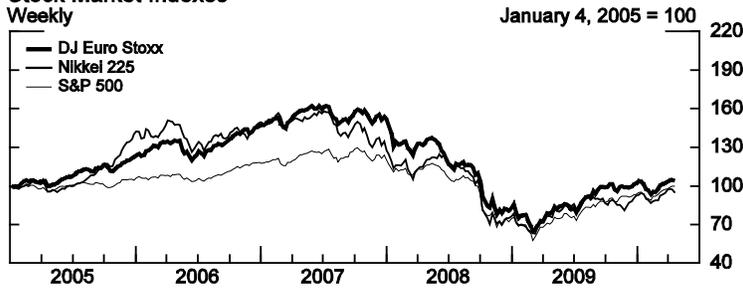
\* Positive percent change denotes appreciation of U.S. dollar.

^ Indexed to 100 in Jan. 1997 for the Broad and OITP indexes and Mar. 1973 for the Major Currencies index.

**Exchange Value of the Dollar**  
Weekly



**Stock Market Indexes**  
Weekly



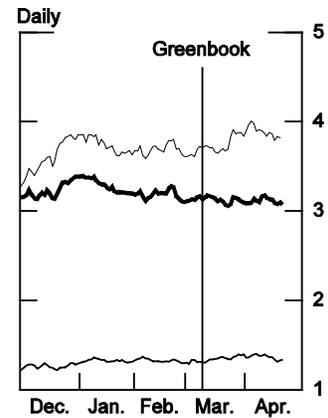
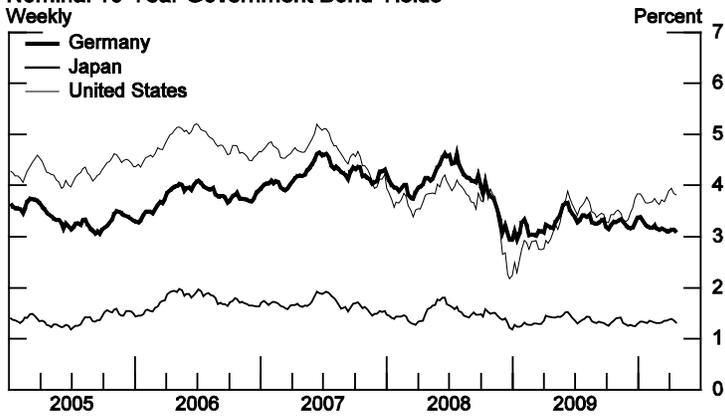
**Industrial Countries: Nominal and Real Interest Rates**

	3-month Libor		10-year nominal		10-year indexed		Percent
	Latest	Change since Mar. Greenbook	Latest	Change since Mar. Greenbook	Latest	Change since Mar. Greenbook	
Germany	0.58	-0.02	3.10	-0.03	0.69	-0.07	
Japan	0.24	-0.01	1.33	0.02	1.34	-0.35	
United Kingdom	0.65	0.01	4.02	-0.03	0.70	-0.19	
Canada	0.43	0.04	3.71	0.20	...	...	
United States	0.31	0.05	3.82	0.11	1.51	-0.06	

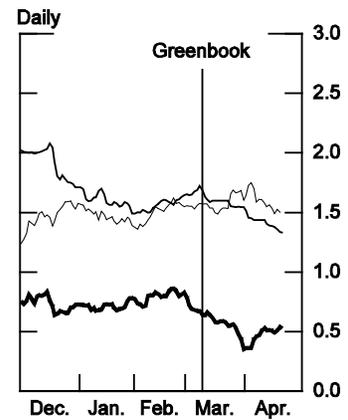
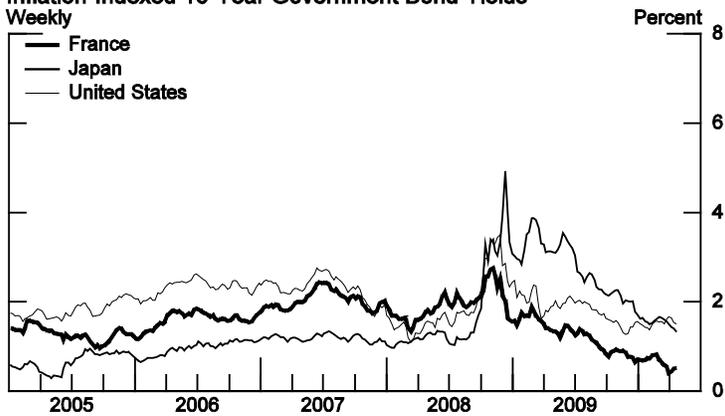
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Libor: London interbank offered rate.

**Nominal 10-Year Government Bond Yields**  
Weekly

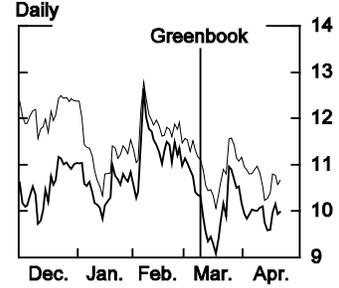
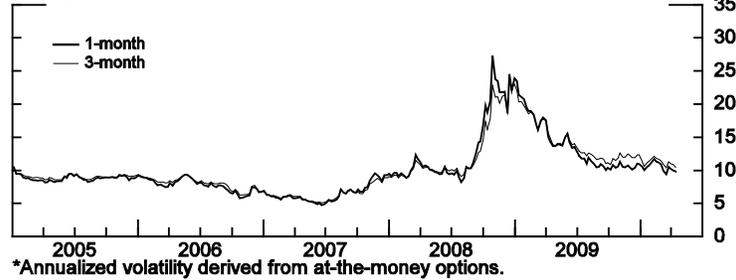


**Inflation-Indexed 10-Year Government Bond Yields**  
Weekly

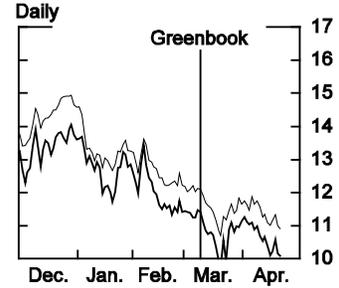
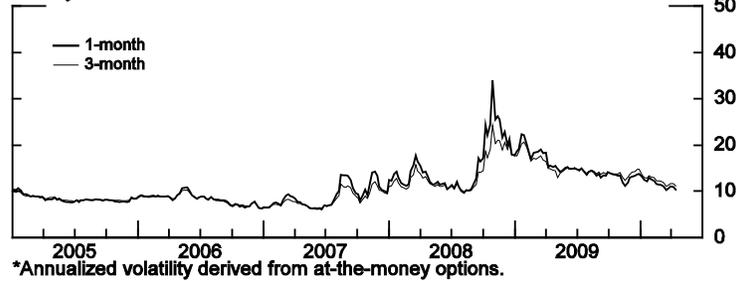


**Measures of Market Volatility**

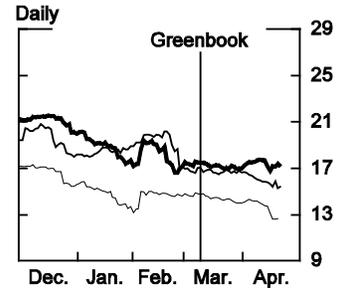
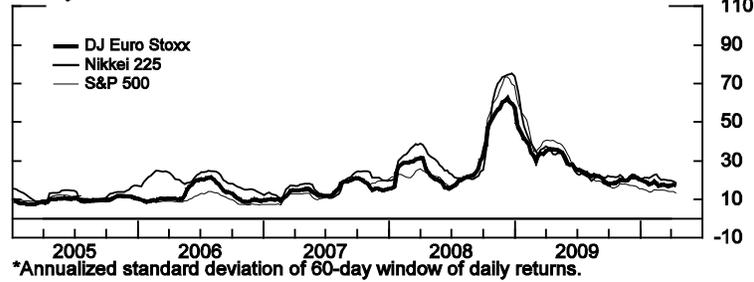
**Dollar-Euro Options-Implied Volatility\***  
Weekly



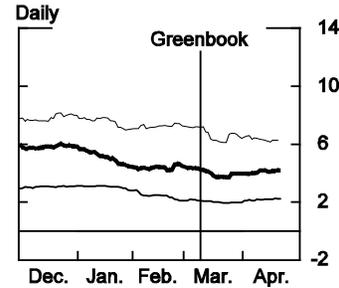
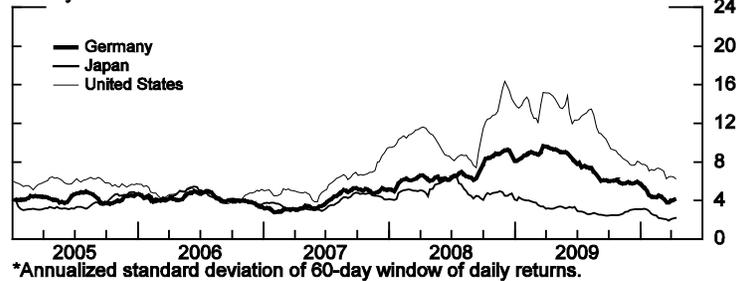
**Yen-Dollar Options-Implied Volatility\***  
Weekly



**Realized Stock Market Volatility\***  
Weekly



**Realized 10-Year Bond Volatility\***  
Weekly

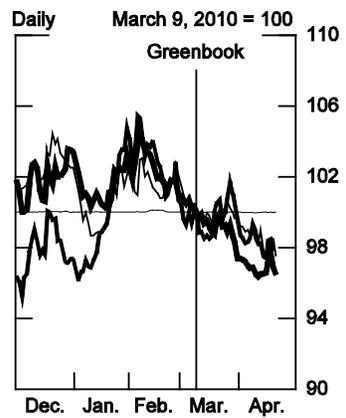
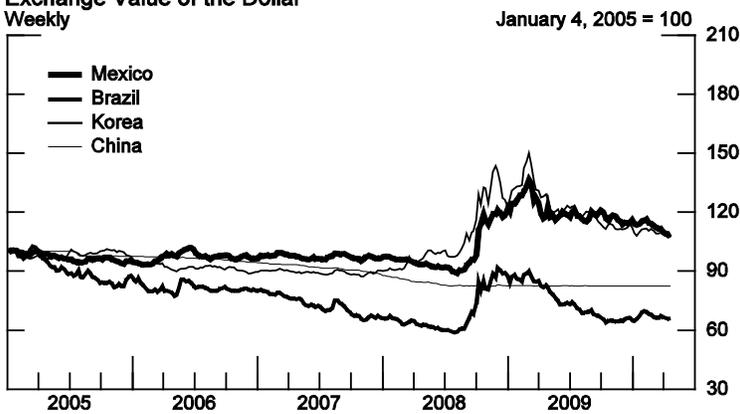


**Emerging Markets: Exchange Rates and Stock Market Indexes**

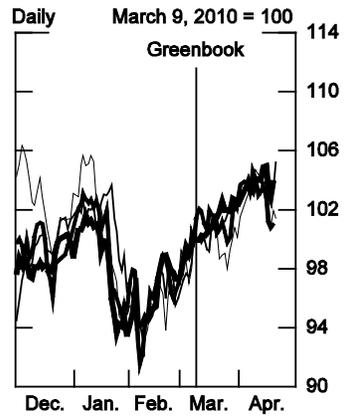
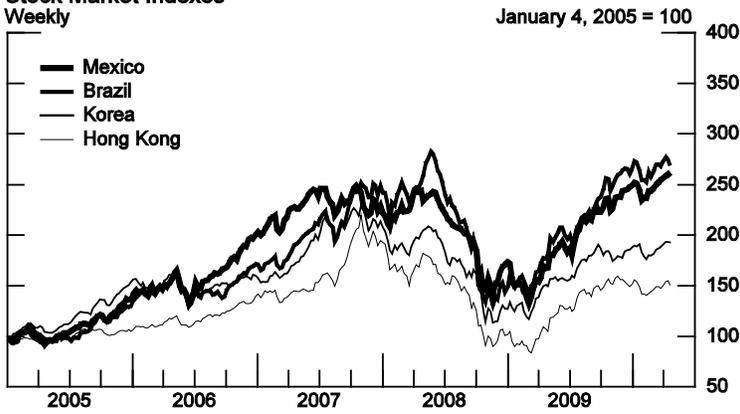
	<u>Exchange value of the dollar</u>		<u>Stock market index</u>	
	Latest	Percent change since Mar. Greenbook*	Latest	Percent change since Mar. Greenbook
Mexico	12.2220	-3.2	33813	4.0
Brazil	1.7509	-2.2	69318	-0.4
China	6.8253	-0.0	2980	-2.9
Hong Kong	7.7634	0.0	21623	2.0
Korea	1117.8	-1.5	1718	3.4
Thailand	32.16	-1.7	766	6.5

\* Positive percent change denotes appreciation of U.S. dollar.

**Exchange Value of the Dollar**  
Weekly



**Stock Market Indexes**  
Weekly



**Emerging Markets: Short-Term Interest Rates and Dollar-Denominated Bond Spreads**

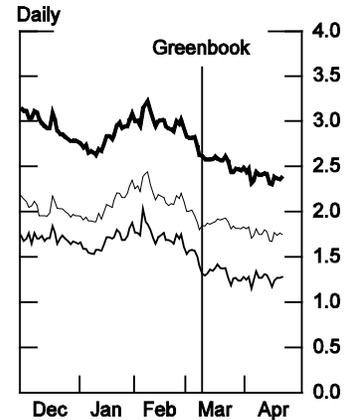
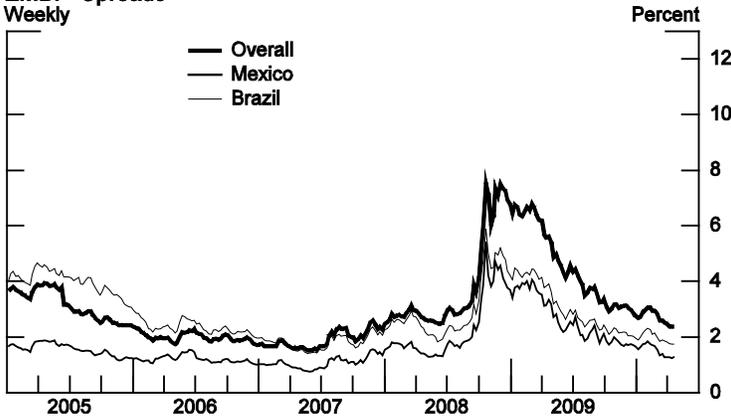
	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Mar. Greenbook	Latest	Change since Mar. Greenbook
Mexico	4.46	0.02	1.27	-0.05
Brazil	8.95	-0.18	1.76	-0.09
Argentina	10.69	-0.13	6.19	-0.89
China	...	...	0.26	-0.62
Korea	2.10	0.00	...	...
Taiwan	1.23	-0.01	...	...
Singapore	0.25	-0.06	...	...
Hong Kong	0.09	0.01	...	...

\*One-month interest rate except 1-week rate for Korea. (No reliable short-term interest rate exists for China.)

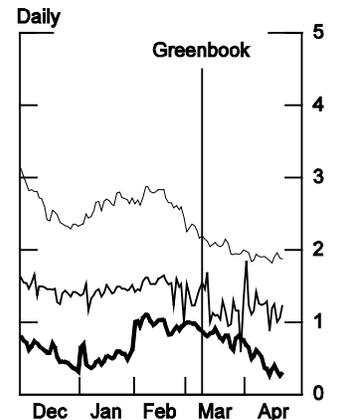
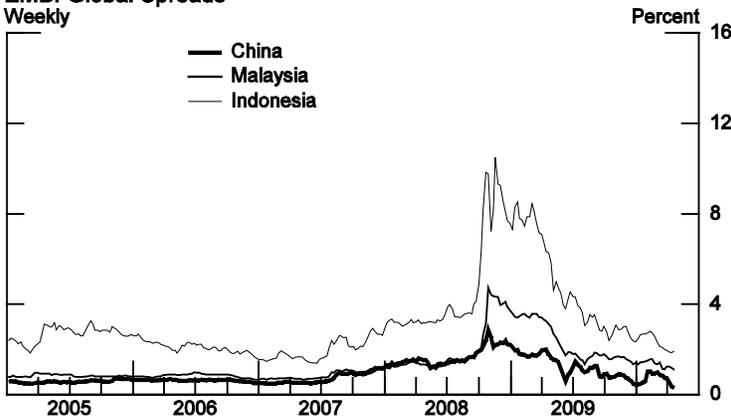
\*\*EMBI+ Spreads or EMBI Global Spreads over similar-maturity U.S. Treasury securities.

... Not applicable. Korea, Taiwan, and Hong Kong have no outstanding dollar-denominated sovereign bonds.

**EMBI+ Spreads**  
Weekly



**EMBI Global Spreads**  
Weekly

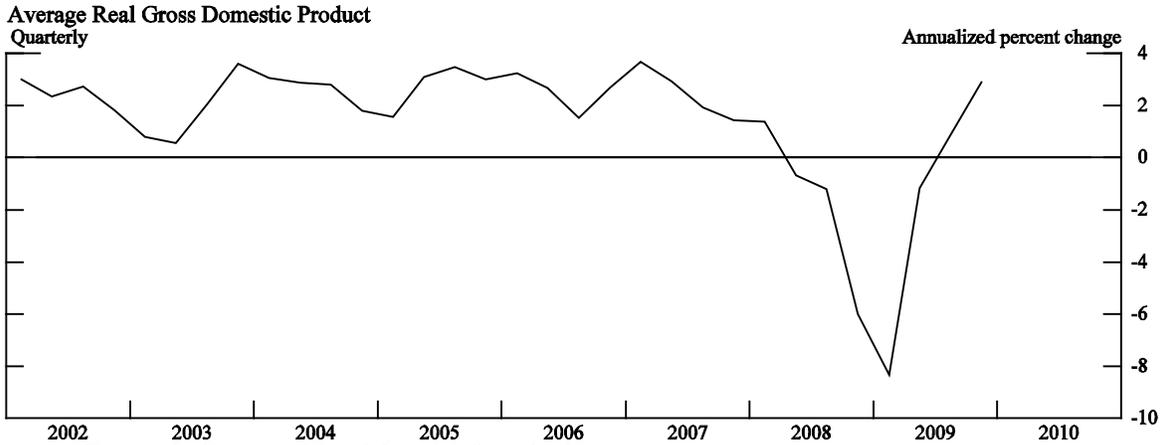


**Developments in Advanced Foreign Economies**

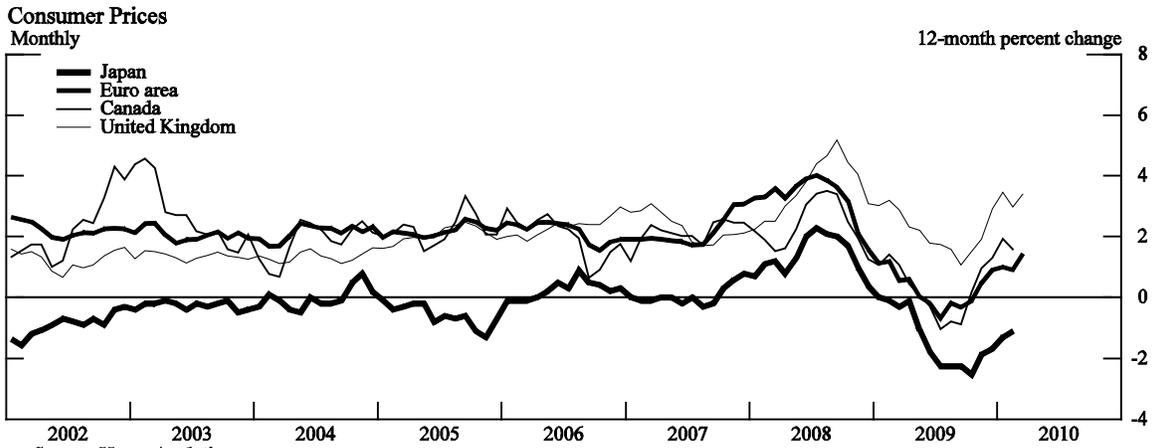
Recent indicators in the advanced foreign economies suggest a continued divergence in the pace of recovery, with a strong performance in Canada, a moderate expansion in Japan, and a more sedate rebound in Europe. Canadian household spending continues to grow at a solid pace, and the contribution of external demand is positive. Japanese trade is rebounding further and business confidence is improving, but other recent indicators have been mixed. In Europe, PMIs and other indicators point to a pickup in the pace of manufacturing production; however, household spending is lagging markedly, and consumer sentiment remains subdued. The Greek debt crisis intensified during the intermeeting period and, in mid-April, euro-area member states announced a plan to provide financing aid to Greece if necessary, in coordination with the International Monetary Fund.

The recent increase in commodity prices is pushing up 12-month headline inflation rates across the advanced foreign economies. However, core inflation performance has remained more subdued, with the exception of the United Kingdom. All major foreign central banks kept their policy rates unchanged since the time of the March Greenbook. In addition, the Bank of Japan doubled the size of its three-month fixed-rate loan facility, and the European Central Bank announced that it would extend its special collateral rules beyond the end of 2010. In contrast, in its April 20 meeting, the Bank of Canada dropped its conditional commitment to keep policy rates unchanged through the end of this quarter.

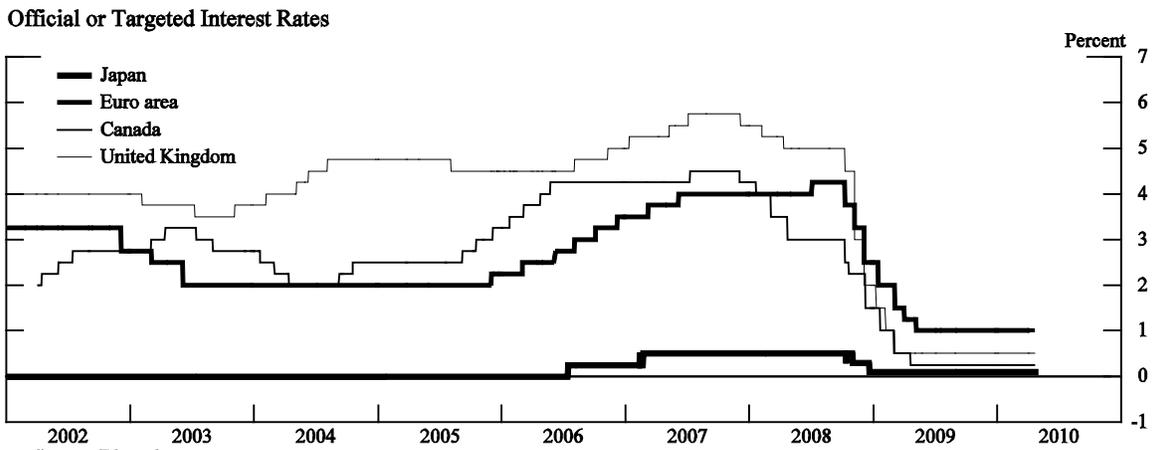
**Advanced Foreign Economies**



Note: Chain weighted by moving bilateral shares in U.S. merchandise exports.  
Source: FRB staff calculations.



Source: Haver Analytics.



Source: Bloomberg.

**Japanese Real GDP**  
(Percent change from previous period except as noted, annual rate)

Component	2008 <sup>1</sup>	2009 <sup>1</sup>	2009			
			Q1	Q2	Q3	Q4
<b>GDP</b>	-4.3	-1.4	-13.7	6.0	-6	3.8
Total domestic demand	-1.8	-3.3	-11.3	-1.1	-1.9	1.5
Consumption	-1.8	1.1	-5.2	4.6	2.4	2.8
Private investment	-5.3	-15.7	-29.5	-18.7	-12.9	1.2
Public investment	-8.7	7.4	15.3	28.9	-5.8	-5.0
Government consumption	-.5	1.8	3.2	1.1	.3	2.5
Inventories <sup>2</sup>	.5	-1.5	-3.3	-1.4	-.8	-.5
Exports	-13.4	-5.3	-66.3	42.2	37.8	21.7
Imports	.9	-15.5	-53.9	-14.7	23.3	5.1
Net exports <sup>2</sup>	-2.3	1.0	-5.4	5.9	2.1	2.2

1. Q4/Q4.

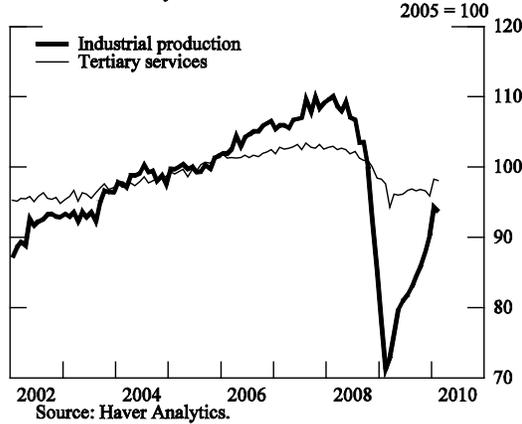
2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

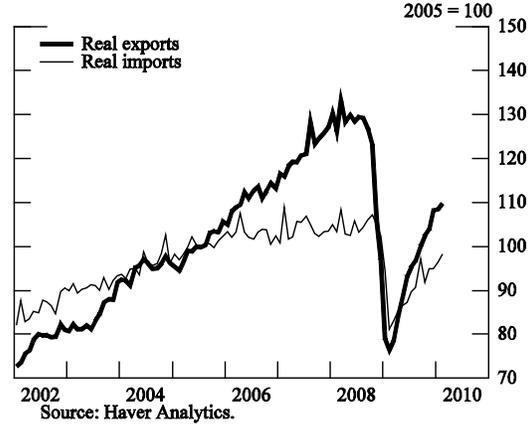
In **Japan**, real GDP rose 3.8 percent in the fourth quarter, 0.8 percentage point lower than reported in the preliminary release. Incoming indicators suggest that the recovery continued in the first quarter, led by exports. In February, real exports rose at a robust 1.1 percent monthly pace, just marginally below the fourth-quarter average; however, real imports continued to accelerate, rising 1.8 percent, indicating that the recovery is gradually spilling over to the domestic sector. In addition, consumer sentiment continued to improve, car sales reached a five-year peak in March, and the ratio in February of active job openings to applications edged up further. The Bank of Japan (BOJ) Tankan index, an important measure of business confidence, improved in March for the fourth consecutive quarter. According to the BOJ Senior Loan Officer Opinion Survey, demand for bank loans by individuals and firms increased in the first quarter. Others indicators, however, have softened. In February, the monthly index of real consumer spending was flat, industrial production fell, and machinery orders declined.

**Japan**

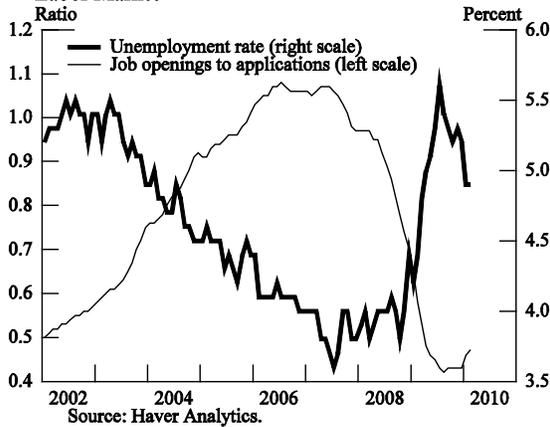
**Economic Activity**



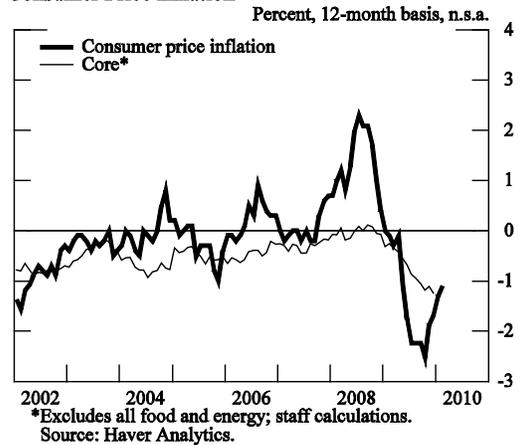
**Real Trade**



**Labor Market**



**Consumer Price Inflation**



**Economic Indicators**

(Percent change from previous period except as noted)

Indicator	2009		2010	2009				2010		
	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.			
Housing starts	-7.2	11.0	n.a.	3.3	5.4	-7.9	n.a.			
Machinery orders <sup>1</sup>	-9	.5	n.a.	20.1	-3.7	-5.4	n.a.			
Household expenditures	.6	.9	n.a.	.9	.3	-0	n.a.			
New car registrations	19.8	9.0	-3.1	.9	-1.2	-6.0	.6			
Business sentiment <sup>2</sup>	-38.0	-32.0	-24.0	...	...	...	...			
Wholesale prices <sup>3</sup>	-8.3	-5.2	-1.7	-3.8	-2.2	-1.6	-1.3			

1. Private sector excluding ships and electric power.  
 2. Tankan survey, diffusion index. Level.  
 3. Percent change from year earlier; not seasonally adjusted.  
 n.a. Not available. ... Not applicable.  
 Source: Haver Analytics.

The 12-month inflation rate edged up in February, to negative 1.1 percent, and core inflation (excluding food and energy prices) also increased. On a monthly seasonally adjusted basis, headline prices rose 0.4 percent and core prices edged up 0.1 percent, the first monthly increase since September 2008. Yet, much of February's outcome in headline inflation was attributable to an increase in gasoline and other retail energy prices, and preliminary data for the month of March, available only for the Tokyo metropolitan area, suggest that prices resumed declining, although at a more moderate pace than throughout 2009. In addition, the government's decision to eliminate public high school tuition fees is estimated to shave about 1/3 percentage point off the 12-month inflation rate in the current quarter.

On March 17, the BOJ took some modest steps to extend monetary policy easing out the yield curve, by doubling the size of a loan facility to 20 trillion yen (\$222 billion). Financial market reaction to the news was negligible. Thus far, the facility, which was set up in December and makes available three-month loans at a fixed interest rate of 0.1 percent against a broad range of collateral, has contributed to slightly lower short-term interest rates. On March 24, the Japanese parliament approved the budget for the 2010 fiscal year, in line with the government proposal announced last December, with spending of 92.3 trillion yen (\$1 trillion). This new budget, which calls for increased transfers to households and local governments but also for substantial cuts to public investment, is expected to result into a moderate increase in the deficit and to provide further stimulus to the economy.

**Euro-Area Real GDP**  
(Percent change from previous period except as noted, annual rate)

Component	2008 <sup>1</sup>	2009 <sup>1</sup>	2009			
			Q1	Q2	Q3	Q4
GDP	-1.9	-2.2	-9.5	-.5	1.6	.2
Total domestic demand	-.4	-2.9	-8.7	-3.2	1.6	-.9
Consumption	-.7	-.6	-1.9	.3	-.5	-.2
Investment	-6.0	-8.8	-19.3	-6.2	-3.7	-5.2
Government consumption	2.4	1.8	2.2	2.6	3.0	-.4
Inventories <sup>2</sup>	.8	-1.0	-4.0	-2.5	2.0	.5
Exports	-7.0	-4.6	-28.4	-4.1	12.1	7.6
Imports	-3.8	-6.3	-27.0	-10.6	12.2	5.1
Net exports <sup>2</sup>	-1.5	.7	-.8	2.7	.1	1.0
Memo: GDP of selected countries						
France	-1.7	-.3	-5.2	1.1	.9	2.4
Germany	-1.8	-2.4	-13.4	1.8	2.9	.0
Italy	-3.3	-3.0	-10.4	-1.9	2.1	-1.3

1. Q4/Q4.

2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

In the **euro area**, real GDP growth in the fourth quarter was revised down to an annual rate of 0.2 percent. Private investment fell 5¼ percent, and both private and government consumption also declined. Import growth slowed more than export growth, allowing net exports to make a 1 percentage point contribution to GDP growth. Inventory adjustment contributed ½ percentage point to growth.

Recent economic indicators show strength in manufacturing but suggest a subdued pace of overall activity. In January, euro-area industrial production posted an impressive gain of 1.6 percent, and it surpassed expectations again in February, growing 0.9 percent. In February, the trade balance of the euro area registered a €2.6 billion surplus, compared with a €9 billion deficit in January, as seasonally adjusted exports rose 2.7 percent while imports rose 1.5 percent. The composite PMI rose above expectations in March, reflecting ongoing improvement in the manufacturing PMI and a recovery in the services PMI, which had edged down in February. In contrast, real retail sales fell in both January and February, consistent with continued weak household demand. Moreover, while the business climate index and overall economic sentiment index continued to improve in March, the consumer sentiment index was flat after retreating in February. Labor market

conditions remain weak. In February, the unemployment rate ticked up to 10 percent, compared with a low of 7.2 percent in early 2008.

Twelve-month euro-area headline inflation moved up to 1.4 percent in March, from 0.9 percent in February. Core inflation, excluding all food and energy, edged up to 1 percent in March. Energy inflation accelerated in March to 7.2 percent, from 3.3 percent in February.

The European Central Bank (ECB) has kept its benchmark policy rate unchanged at 1 percent since May 2009. The ECB has continued to implement plans to buy €60 billion worth of covered bonds; by mid-April, it had purchased €46.4 billion in such bonds. On March 25, the ECB announced that it would continue to accept bonds as collateral with ratings as low as BBB- beyond the end of 2010. Details released following the April 8 policy meeting indicate that the ECB will implement a graduated schedule of haircuts to the value of assets rated in the BBB+ to BBB- range, and that this schedule will replace the uniform haircut of 5 percent currently applied to those assets.

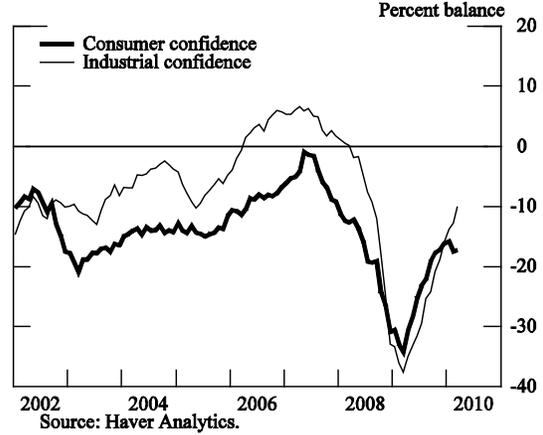
The Greek debt crisis intensified during the intermeeting period. In light of worsening market sentiment regarding the Greek turmoil, euro-area member states announced on April 11 a plan to provide financing to Greece via bilateral loans as part of a package co-financed by the International Monetary Fund (IMF). The program would cover a three-year period, with member states contributing up to €30 billion in the first year, in addition to potential IMF financing of €10-15 billion. The plan is expected to allow Greece to borrow at lower rates than in private capital markets; if fully implemented, this funding would probably be sufficient to meet Greece's financing needs for this year. In a letter to the European Union, the IMF, and the ECB, Greek Finance Minister George Papaconstantinou on April 15 asked to begin discussions on "a multi-year program of economic policies." The letter stopped short of asking to activate the aid package discussed above, but Papaconstantinou wrote that the program of economic policies "could be supported with financial assistance from the euro-area member states and the IMF, if the Greek authorities were to decide to request such assistance." Currently, teams from the IMF, the European Union, and the ECB are set to begin talks in Athens on April 21.

**Euro Area**

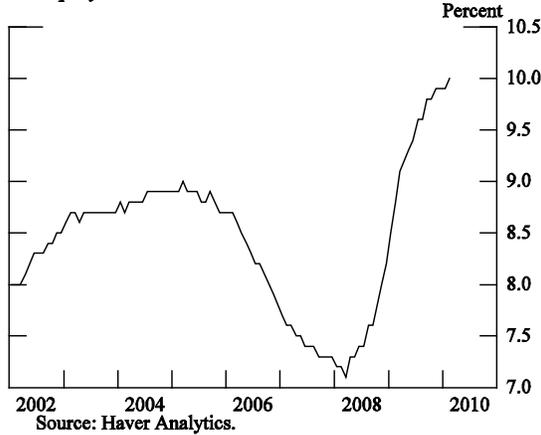
**Nominal Exports and Imports**



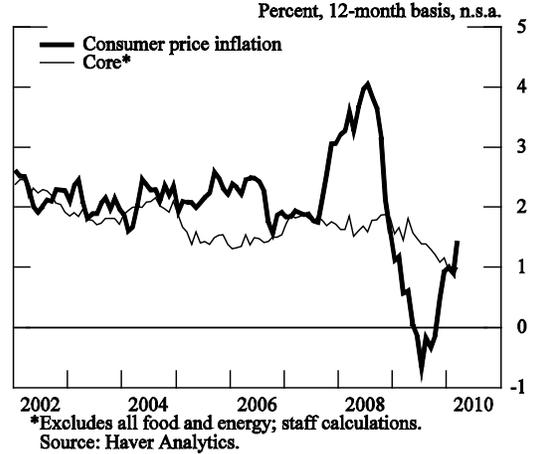
**Economic Sentiment**



**Unemployment Rate**



**Consumer Price Inflation**



**Economic Indicators**  
(Percent change from previous period except as noted)

Indicator	2009		2010	2009	2010		
	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.
Industrial production <sup>1</sup>	.8	2.0	n.a.	.8	1.6	.9	n.a.
Retail sales volume <sup>2</sup>	-2	-0	n.a.	.8	-3	-6	n.a.
New car registrations	2.6	1.0	-6.6	-1.7	-9.2	2.8	7.2
Employment	-5	-3	n.a.	...	...	...	...
Producer prices <sup>3</sup>	-7.1	-4.1	n.a.	-2.2	-6	.0	n.a.
M3 <sup>3</sup>	2.7	-3	n.a.	-7	-8	-1.2	n.a.

1. Excludes construction.

2. Excludes motor vehicles.

3. Eurostat harmonized definition. Percent change from year earlier.

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

Source: Haver Analytics.

In the **United Kingdom**, fourth-quarter real GDP growth was revised up to an annual rate of 1.8 percent. Inventories made a larger positive contribution to growth than initially estimated, as the moderation in the pace of inventory decumulation was revised up. Final domestic demand growth was flat, as increases in private and public consumption were offset by large cutbacks in investment.

**U.K. Real GDP**  
(Percent change from previous period except as noted, annual rate)

Component	2008 <sup>1</sup>	2009 <sup>1</sup>	2009			
			Q1	Q2	Q3	Q4
<b>GDP</b>	-2.1	-3.1	-10.0	-2.7	-1.1	1.8
Total domestic demand	-3.4	-2.7	-9.3	-3.9	-3	3.1
Consumption	-.9	-2.2	-6.2	-3.4	-2	1.2
Investment	-9.1	-14.0	-26.3	-25.9	11.8	-10.3
Government consumption	3.3	2.2	-1.6	3.7	2.5	4.2
Inventories <sup>2</sup>	-2.1	.5	-.5	2.3	-2.4	2.9
Exports	-3.6	-4.8	-25.7	-6.8	2.4	16.0
Imports	-8.1	-3.8	-23.6	-11.1	4.9	20.0
Net exports <sup>2</sup>	1.5	-.2	-.1	1.4	-.7	-1.3

1. Q4/Q4.

2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

First-quarter data on real activity have been mixed. The unemployment rate edged up to 8 percent in February, but the number of job seekers receiving unemployment benefits posted declines in February and March. The volume of retail sales grew 2.1 percent in February after a sharp drop in January, a pattern likely reflecting a temporary drag from the 2.5 percentage point hike in the value-added tax at the turn of the year. Industrial production firmed in February but remained near its nadir.

Forward-looking indicators continue to send conflicting signals about the strength of the recovery. March PMIs were consistent with the output of services and manufacturing industries expanding at their historical average. Confidence indicators and most components of the Bank of England's (BOE) Agents' Summary of Business Conditions posted gains in March, although they typically remained below their pre-recession levels.

By contrast, a survey conducted by the British Chamber of Commerce late in the first quarter pointed to further stagnation in domestic sales and orders.

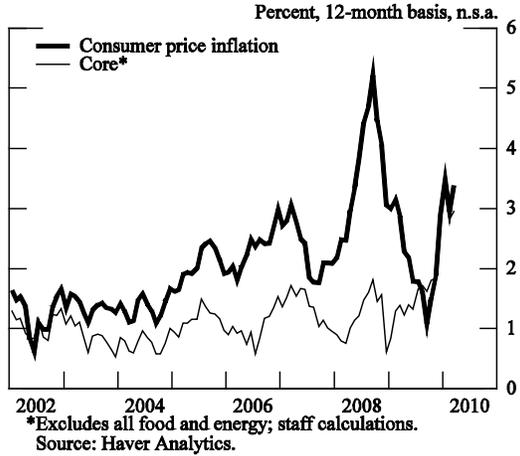
Rising commodity and energy prices continued to exert pressure on producer and tradable prices. A rise in gasoline prices pushed up headline inflation to 3.4 percent in March. However, the large amount of economic slack also had moderating effects on wages and services price growth. The 12-month change in average earnings excluding bonuses remained near a series record low in February.

In early April, the BOE voted to keep Bank Rate at 50 basis points and maintain at its current level (£200 billion) the stock of assets purchased through the issuance of central bank reserves.

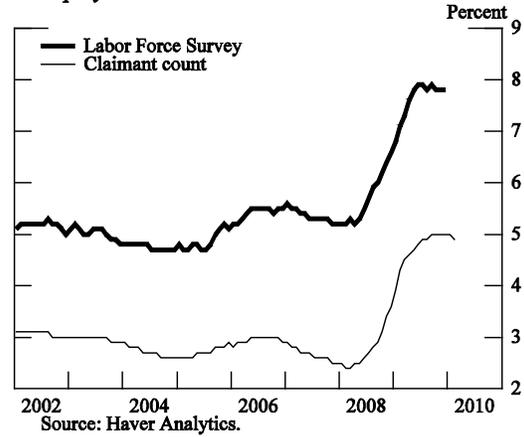
On March 24, the government released its budget for the 2010–11 fiscal year (which runs from April to March). The deficit is projected to edge down from 12.2 percent of GDP in 2009–10, to 11.2 percent in the current fiscal year, before declining to 4.2 percent by 2014–2015. Gross debt, currently at about 70 percent of GDP, is expected to peak near 90 percent of GDP in 2013–14. The budget provided few details about how the government intended to achieve its deficit path. On April 6, the Queen of England dissolved the U.K. parliament following a request from Prime Minister Gordon Brown to hold a general election on May 6.

**United Kingdom**

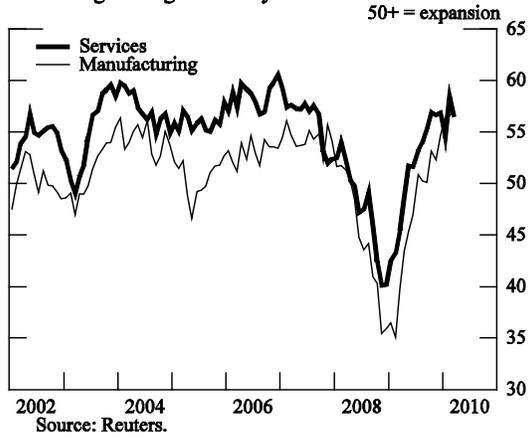
**Consumer Price Inflation**



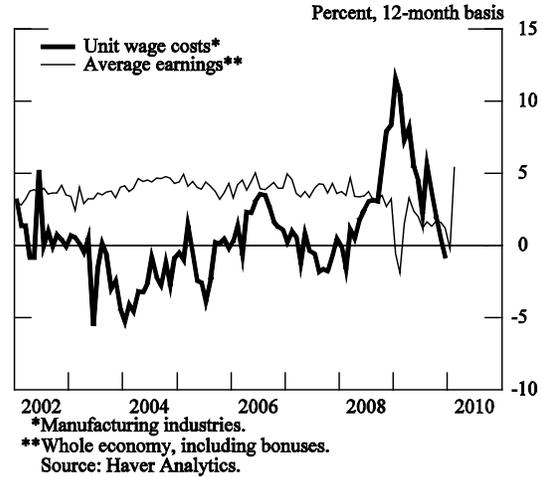
**Unemployment Rates**



**Purchasing Managers Survey**



**Labor Costs**



**Economic Indicators**  
(Percent change from previous period except as noted)

Indicator	2009		2010	2010			
	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.
Industrial production	-1.0	.4	n.a.	.5	-.5	.9	n.a.
Producer input prices <sup>1</sup>	-8.7	4.0	8.4	7.4	7.7	7.5	10.1
Retail sales volume	1.6	.6	n.a.	-.2	-3.0	2.1	n.a.
Business confidence <sup>2</sup>	-7.0	.3	5.3	-7.0	4.0	7.0	5.0
Consumer confidence <sup>2</sup>	-14.1	-8.8	-4.1	-9.7	-5.1	-2.2	-5.0
Trade balance <sup>3</sup>	-12.7	-14.1	n.a.	-4.5	-6.3	-3.2	n.a.

1. Percent change from year earlier.  
 2. Percent balance.  
 3. Level in billions of U.S. dollars.  
 n.a. Not available.  
 Source: Haver Analytics; FRB staff calculations.

In **Canada**, indicators for the first quarter point to robust near-term growth. In January, monthly GDP rose at an annual rate of 7.9 percent, exceeding the 5 percent growth rate in the fourth quarter by a sizable margin. Recent gains have been widespread across industries. Real exports continued to expand through February, as real import growth has remained tepid, setting the stage for a large positive net export contribution in the first quarter.

**Canadian Real GDP**  
(Percent change from previous period except as noted, annual rate)

Component	2008 <sup>1</sup>	2009 <sup>1</sup>	2009			
			Q1	Q2	Q3	Q4
<b>GDP</b>	-1.0	-1.2	-7.0	-3.5	.9	5.0
<b>Total domestic demand</b>	-1.1	-.3	-11.8	.7	7.1	3.8
<b>Consumption</b>	.2	1.9	-1.3	1.6	3.7	3.6
<b>Investment</b>	-3.6	-5.4	-27.5	-6.1	10.6	6.5
<b>Government consumption</b>	3.1	4.4	2.0	3.5	6.2	5.8
<b>Inventories<sup>2</sup></b>	-1.1	-1.1	-4.7	.3	1.3	-.7
<b>Exports</b>	-7.3	-7.5	-30.2	-19.1	12.2	15.4
<b>Imports</b>	-7.7	-4.0	-39.2	-5.7	36.0	8.9
<b>Net exports<sup>2</sup></b>	.7	-1.0	4.3	-4.2	-6.3	1.5

1. Q4/Q4.

2. Percentage point contribution to GDP growth.

Source: Haver Analytics.

The growth rate of business and household credit, which dipped but remained solidly positive throughout the downturn, rose to 4¼ percent in January, well above its low point in August 2009. Amid this solid credit growth, the Canadian housing market has continued to rebound forcefully. Building permits rose more than 50 percent over the 12 months ending in February, remaining in line with the average level of the boom years of 2006 and 2007. Prices for new houses are increasing.

The recovery in the business sector continues to lag behind the household sector but is starting to pick up steam. Over the six months ending in January, manufacturing industrial production rose more than 10 percent at an annual rate. Combined with the positive results from the Bank of Canada's Business Outlook Survey, the surge may indicate a rebound in business investment later this year. The recent rise in investment reported in the National Income Accounts primarily reflects the rebound in residential

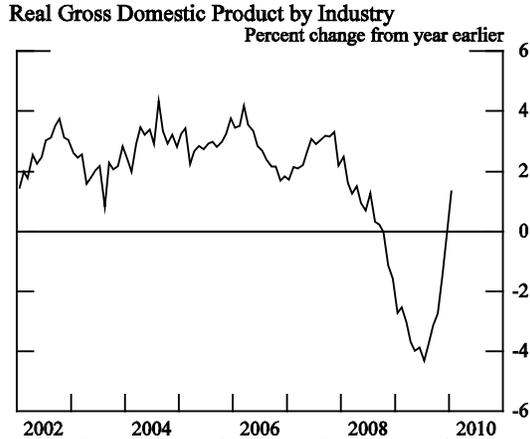
investment. Nonresidential structures and equipment investment fell 8.8 percent at an annual rate in the fourth quarter.

Labor market conditions continue to improve. Employment rose 1.2 percent at an annual rate over the six months ending in March, just below the 1.6 percent 10-year average annual growth rate. The unemployment rate has continued to decline so far this year, reaching 8.2 percent in February, from 8.7 percent in August 2009.

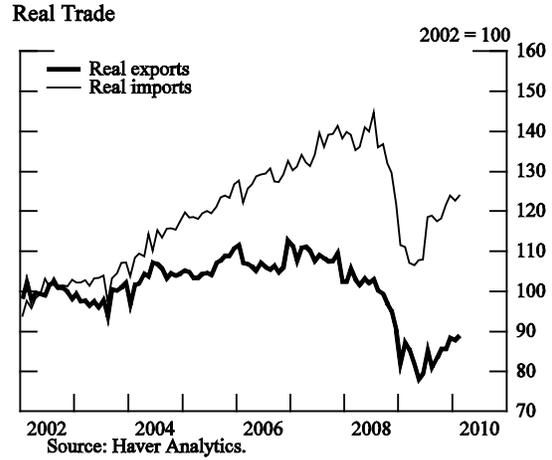
Consumer prices rose 1.6 percent over the 12 months ending in February, down slightly from January. Excluding food and energy, inflation was 1.5 percent.

The Bank of Canada maintained its policy rate at 0.25 percent at its April meeting. However, the Bank removed its conditional commitment, introduced in April 2009, to keep interest rates at this rate through the end of this quarter. In response, markets increased odds of a near-term policy-rate increase.

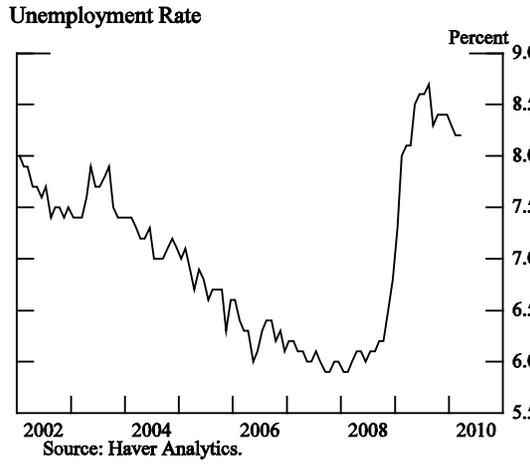
**Canada**



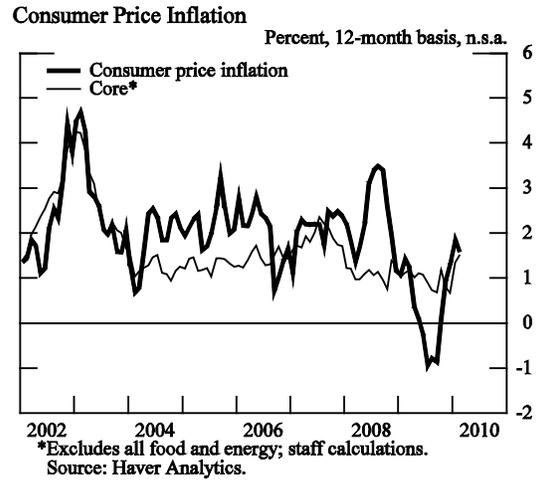
Note: Constructed from various Statistics Canada surveys and supplements to the quarterly income and expenditure-based estimates.  
Source: Haver Analytics.



Source: Haver Analytics.



Source: Haver Analytics.



\*Excludes all food and energy; staff calculations.  
Source: Haver Analytics.

**Economic Indicators**  
(Percent change from previous period except as noted)

Indicator	2009		2010		2010		
	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.
Industrial production	-1.2	2.1	n.a.	.5	1.3	n.a.	n.a.
New manufacturing orders	2.1	6.2	n.a.	11.1	-1.3	1.2	n.a.
Retail sales	1.4	1.3	n.a.	.8	.1	n.a.	n.a.
Employment	-.0	.3	.4	-.2	.3	.1	.1
Wholesale sales	3.0	3.7	n.a.	1.6	2.9	n.a.	n.a.
Ivey PMI <sup>1</sup>	56.4	55.2	53.5	48.4	50.8	51.9	57.8

1. PMI Purchasing managers index. Not seasonally adjusted. 50+ indicates expansion.  
n.a. Not available.  
Source: Haver Analytics; Bank for International Settlements.

## **Economic Situation in Other Countries**

Economic activity in the emerging market economies (EMEs) continued to expand robustly in the first quarter and appears to be supported by both domestic demand and external demand. Activity picked up in China, and incoming data point to a strong bounceback in growth in the first quarter in India, Singapore, and South Korea, which experienced anemic or negative growth in the fourth quarter. The expansion in the ASEAN-4<sup>1</sup> and Latin America remains strong, although it appears to be moderating to a more sustainable pace. Despite the strength of exports, merchandise trade balances declined for some countries where strong domestic demand caused imports to outpace exports, most notably in China. Although inflation has declined a bit in some key countries of emerging Asia, it has moved up in Mexico and Brazil. Food price increases remain a key driver of inflation in many EMEs.

In **China**, real GDP increased at a higher-than-expected annual rate of 11.3 percent in the first quarter. The economic recovery remained broad based, with industrial production, fixed asset investment, and domestic demand remaining robust. Auto sales in the first quarter reached 4.6 million units, up 72 percent from last year. With imports growing faster than exports, the trade surplus fell in the first quarter to its lowest level since 2005. Trade in March was essentially balanced on a seasonally adjusted basis, although commentators have been highlighting the headline nonseasonally adjusted number, which shows a trade deficit for the first time in six years.

Headline consumer price inflation came in at an annual rate of 3 percent in the first quarter, down from the fourth quarter on waning food price inflation, but 4-quarter inflation in March edged higher owing to deflation early last year. Bank lending slowed in March, but, for the quarter as a whole, outstanding loans rose 26 percent from a year earlier, owing to a large increase in January. Likely in response to the earlier pickup in lending, and as part of a general tightening in monetary policy, the People's Bank of China increased its issuance of bonds in the first quarter, draining liquidity from the banking sector.

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<sup>1</sup> The ASEAN-4 countries are Indonesia, Malaysia, the Philippines, and Thailand.

**Chinese Economic Indicators**  
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2008	2009	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	7.0	10.8	10.1	11.3	...	...	...
Industrial production	4.3	19.5	3.0	2.9	1.6	-3.0	6.4
Consumer prices <sup>2</sup>	1.2	1.9	.7	2.2	1.5	2.7	2.4
Merch. trade balance <sup>3</sup>	298.1	195.8	165.7	108.2	119.6	204.3	.6

1. Gross domestic product. Annual rate. Quarterly data estimated by staff from reported 4-quarter growth rates. Annual data are Q4/Q4.

2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.

3. Billions of U.S. dollars, annualized. Imports are valued at cost, insurance, and freight. n.a. Not available. ... Not applicable.

Source: CEIC.

In **India**, after a contraction of GDP in the fourth quarter, available indicators point to strong growth in the first quarter. The average level of industrial production over January and February was 3 percent above its fourth-quarter average. The PMI for manufacturing hovered around 58 throughout the first quarter, suggesting a vigorous pace of expansion, and was up significantly from the previous quarter. Despite a sharp rise in exports, strong demand for imports caused the trade deficit to widen in February. Favorable weather conditions point to a rebound in agricultural output in the first and second quarters, following the drought-related contraction in the fourth quarter of 2009.

Inflationary pressures have continued to mount. Twelve-month wholesale price inflation, which had been rising in recent months, nearly reached a double-digit pace in February and March, despite some signs of moderating food price inflation. In mid-March, the Reserve Bank of India (RBI) unexpectedly hiked the repo and reverse repo policy rates by 25 basis points each (to 5 and 3.5 percent, respectively) in an intermeeting decision. It followed up with an additional 25 basis points hike at its quarterly monetary policy meeting in mid-April. The RBI noted that the strong rebound in economic activity had raised the risk that inflationary pressures would spill over from food to other sectors of the economy and unhinge inflation expectations.

**Indian Economic Indicators**  
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2008	2009	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	3.2	6.0	-1.9	n.a.	...	...	...
Industrial production	4.4	6.6	2.9	n.a.	-.3	-.5	n.a.
Consumer prices <sup>2</sup>	9.7	13.9	12.6	n.a.	15.2	13.8	n.a.
Wholesale prices <sup>2</sup>	6.1	8.1	5.0	9.7	9.4	9.9	9.9
Merch. trade balance <sup>3</sup>	-126.2	-88.4	-116.6	n.a.	-135.1	-160.7	n.a.
Current account <sup>4</sup>	-31.0	-31.5	-48.1	n.a.	...	...	...

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.

3. Billions of U.S. dollars, annualized.

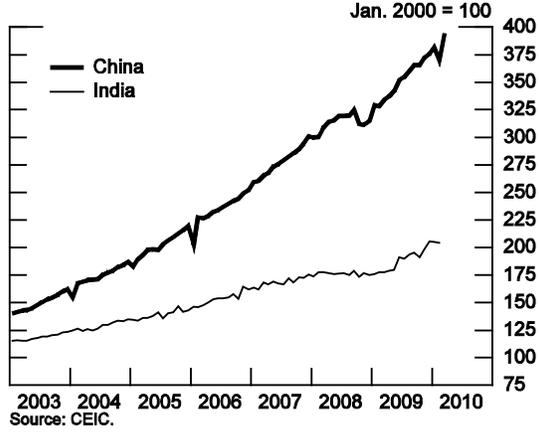
4. Billions of U.S. dollars, not seasonally adjusted, annualized.

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

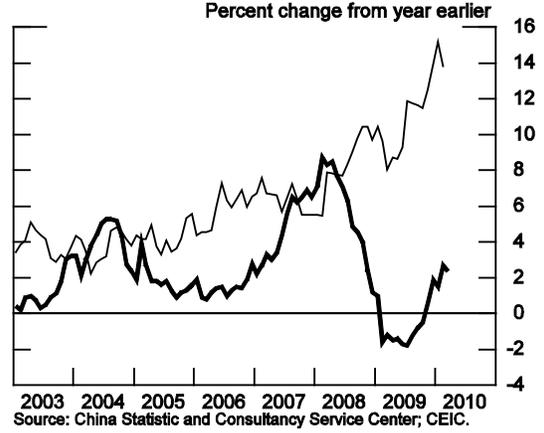
Source: CEIC.

## China and India

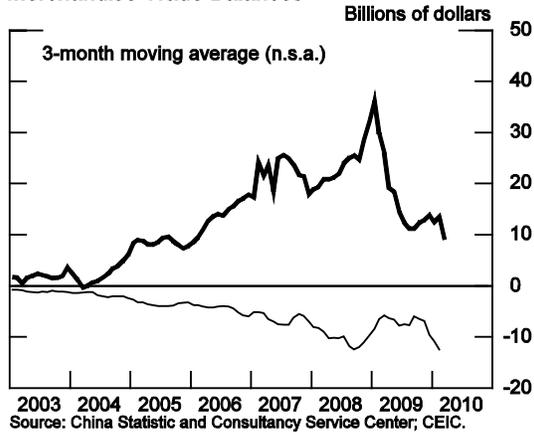
**Industrial Production**



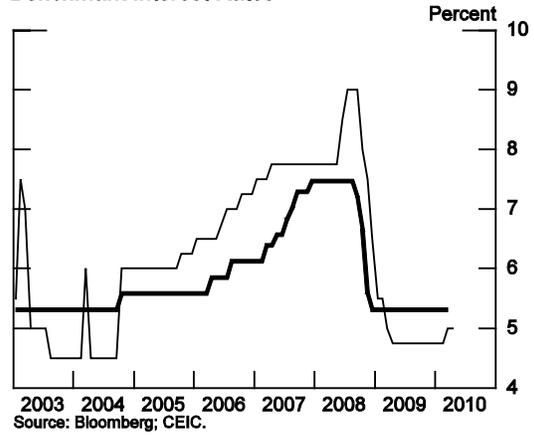
**Consumer Prices**



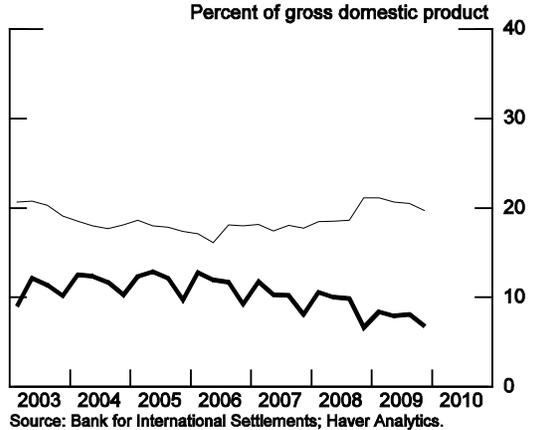
**Merchandise Trade Balances**



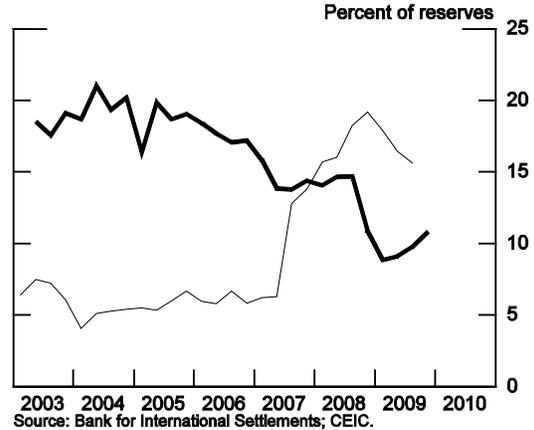
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In the **newly industrialized economies (NIEs)**,<sup>2</sup> economic activity appears to have accelerated in the first quarter, driven largely by an outsized gain of 32 percent at an annual rate in Singapore's GDP, according to the advance release; if this release is confirmed, this would be the highest quarterly growth rate on record. The strong performance reflected continued strength in exports and manufacturing, as well as a rebound in the volatile biomedical industry, which had contracted in the fourth quarter. Recent readings for industrial production and export orders in Taiwan, and robust retail sales and improving labor market conditions in Hong Kong, suggest continued strength in the first quarter. In Korea, where growth was anemic in the fourth quarter, the average level of industrial production in January and February was above the fourth quarter; confidence indicators, exports, and retail sales in recent months also suggest an upward trend in activity.

Headline inflation in the NIEs has generally risen this year from low levels, largely reflecting food price increases. Inflation appears to have peaked in Korea and Taiwan in January and February, respectively, and is now declining. To date, central banks in the region have kept policy rates on hold. The Monetary Authority of Singapore effectively tightened monetary policy at its semi-annual policy meeting by recentering its exchange rate target band, shifting it up by about 1 percent, thus allowing for more appreciation of the currency.

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<sup>2</sup> The NIEs are Hong Kong, South Korea, Singapore, and Taiwan.

**Economic Indicators for Newly Industrialized Economies: Growth**  
(Percent change from previous period, seasonally adjusted, except as noted)

	2008	2009	2009			2010	
			Q3	Q4	Dec.	Jan.	Feb.
<i>Real GDP<sup>1</sup></i>							
Hong Kong	-2.9	2.5	1.7	9.5	...	...	...
Korea	-3.2	6.1	13.4	.7	...	...	...
Singapore	-4.1	4.0	11.5	-2.8	...	...	...
Taiwan	-6.3	8.5	10.2	18.0	...	...	...
<i>Industrial production</i>							
Hong Kong	-6.6	-8.4	-2.6	.6	...	...	...
Korea	3.4	-1.3	6.9	1.2	2.4	.0	3.6
Singapore	-4.2	-4.2	8.4	-11.8	19.1	14.4	-3.6
Taiwan	-1.8	-8.4	8.0	9.7	4.6	1.5	4.1

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.  
n.a. Not available. ... Not applicable.  
Source: CEIC.

**Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance**  
(Billions of U.S. dollars; seasonally adjusted, annualized)

	2008	2009	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Hong Kong	-25.9	-28.9	-40.5	n.a.	-66.7	-34.0	n.a.
Korea	5.7	56.1	56.8	n.a.	33.2	36.2	n.a.
Singapore	18.4	24.1	34.6	n.a.	35.2	18.9	n.a.
Taiwan	4.4	20.3	10.4	5.6	11.0	2.8	3.0

Source: CEIC.

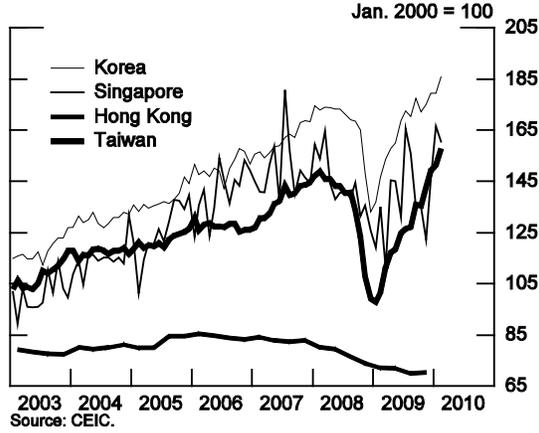
**Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation**  
 (Non-seasonally adjusted percent change from year earlier except as noted)

	2008 <sup>1</sup>	2009 <sup>1</sup>	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Hong Kong	2.1	1.2	1.3	n.a.	1.0	2.7	n.a.
Korea	4.1	2.8	2.4	2.7	3.1	2.7	2.3
Singapore	5.5	-5	-8	n.a.	.2	1.0	n.a.
Taiwan	1.3	-2	-1.3	1.3	.3	2.4	1.3

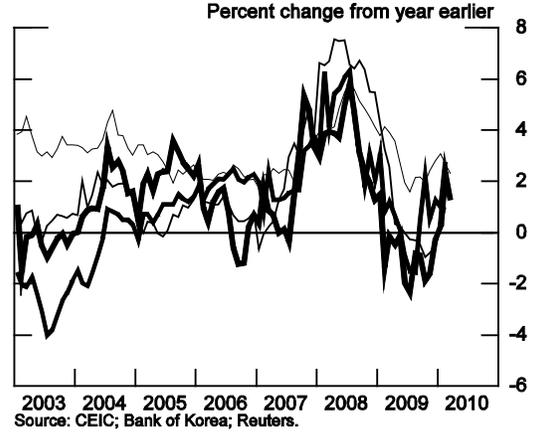
1. Dec./Dec.  
 n.a. Not available.  
 Source: CEIC.

### Newly Industrialized Economies

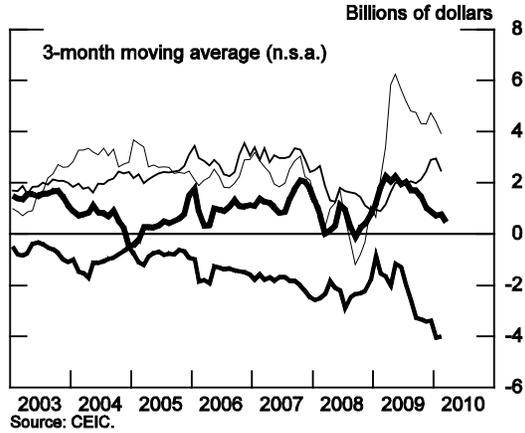
**Industrial Production**



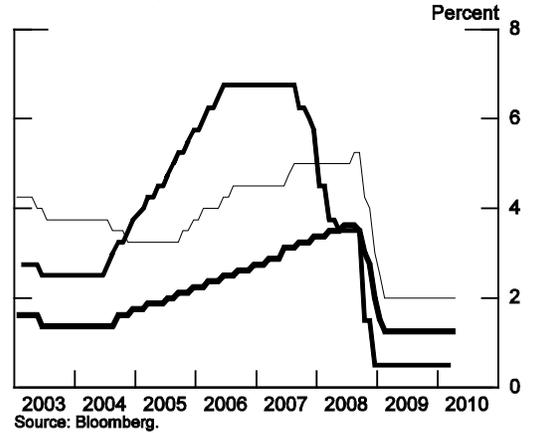
**Consumer Prices**



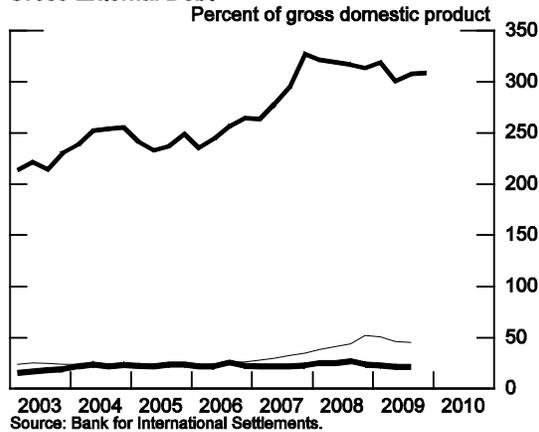
**Merchandise Trade Balances**



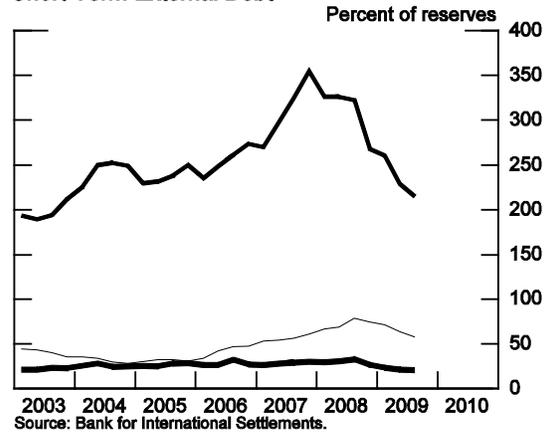
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In the **Association of Southeast Asian Nations (ASEAN-4)**, growth appears to have remained robust in the first quarter, although it moderated in some cases from the very rapid pace of the fourth quarter. The average level of industrial production in January and February was 3 percent above and 1½ percent above its fourth-quarter level in Thailand and Malaysia, respectively. In Indonesia and the Philippines, industrial production in January also improved over the previous quarter. Exports from the region continued to increase, causing the trade surplus to expand in Malaysia in the first quarter. However, spurred by strong domestic demand, imports outpaced exports in the Philippines, leading to a narrowing of the trade surplus.

With the exception of the Philippines, headline 12-month inflation has moderated in the region relative to earlier in the year, partly reflecting a decline in food price pressures at the outset of a better-than-expected rice harvest season. With inflation still below the target ranges of the central banks in Indonesia, the Philippines and Thailand, policy rates have remained unchanged.

Political tensions have intensified in Thailand. After four weeks of antigovernment protests in Bangkok, the government declared a state of emergency, and violent clashes between protesters and troops erupted in early April, leading to a declaration of a state of emergency by the government. Protesters claim that Prime Minister Abhisit Vejjajiva was not democratically elected (he was appointed by the parliament in 2008) and are demanding new elections.

**ASEAN-4 Economic Indicators: Growth**  
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2008	2009	2009			2010	
			Q3	Q4	Dec.	Jan.	Feb.
<i>Real GDP<sup>1</sup></i>							
Indonesia	5.4	5.2	7.7	4.3	...	...	...
Malaysia	.2	4.5	9.9	16.4	...	...	...
Philippines	2.6	1.8	3.1	3.5	...	...	...
Thailand	-4.1	6.0	6.9	15.3	...	...	...
<i>Industrial production<sup>2</sup></i>							
Indonesia <sup>3</sup>	3.0	1.5	.3	3.3	.0	1.9	n.a.
Malaysia	.7	-7.7	2.5	2.6	2.2	3.4	-4.2
Philippines	.3	-12.9	4.7	8.7	3.2	1.8	n.a.
Thailand	5.3	-5.1	3.7	9.5	10.8	-5.2	3.3

Note: ASEAN is the Association of Southeast Asian Nations.

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

2. Annual data are annual averages.

3. Staff estimate.

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

Source: CEIC.

**ASEAN-4 Economic Indicators: Merchandise Trade Balance**  
(Billions of U.S. dollars; seasonally adjusted, annualized)

Indicator	2008	2009	2009			2010	
			Q3	Q4	Dec.	Jan.	Feb.
Indonesia <sup>1</sup>	7.9	19.7	16.2	27.0	21.6	22.4	17.7
Malaysia	42.7	33.6	29.2	38.9	40.1	42.5	44.6
Philippines	-7.7	-4.7	-3.6	-2.4	-5.8	-9.4	n.a.
Thailand	.1	19.4	15.9	5.0	-6.3	14.3	6.7

Note: ASEAN is the Association of Southeast Asian Nations.

1. Imports prior to 2008 do not include trade through Indonesia's bonded zone, causing a break in the trade balance in 2008.

n.a. Not available.

Source: CEIC; Bank of Thailand; Philippines Economic Indicators Telegram (PEIT).

**ASEAN-4 Economic Indicators: Consumer Price Inflation**  
(Non-seasonally adjusted percent change from year earlier except as noted)

Indicator	2008 <sup>1</sup>	2009 <sup>1</sup>	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Indonesia	11.1	2.8	2.6	3.7	3.7	3.8	3.4
Malaysia	4.4	1.1	-2	n.a.	1.3	1.2	n.a.
Philippines	8.0	4.4	3.0	4.3	4.3	4.2	4.4
Thailand	.4	3.5	1.9	3.7	4.1	3.7	3.4

Note: ASEAN is the Association of Southeast Asian Nations.

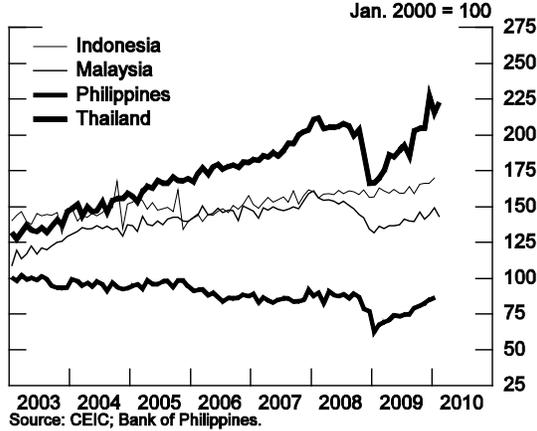
1. Dec./Dec.

n.a. Not available.

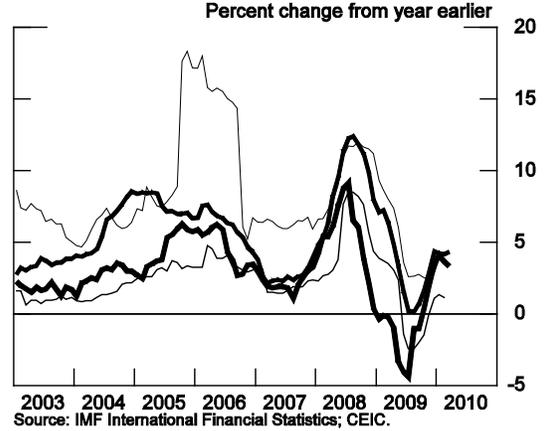
Source: CEIC; Haver Analytics; IMF International Financial Statistics database.

**ASEAN-4**

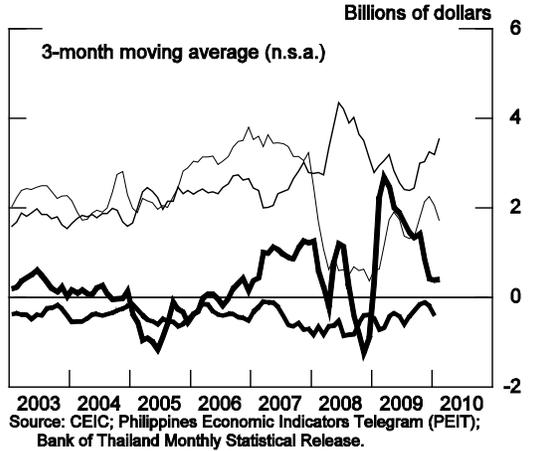
**Industrial Production**



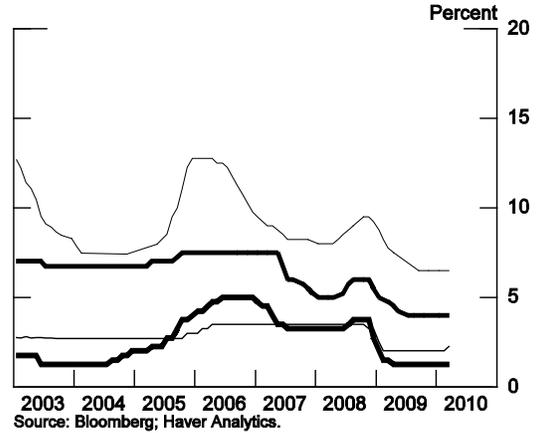
**Consumer Prices**



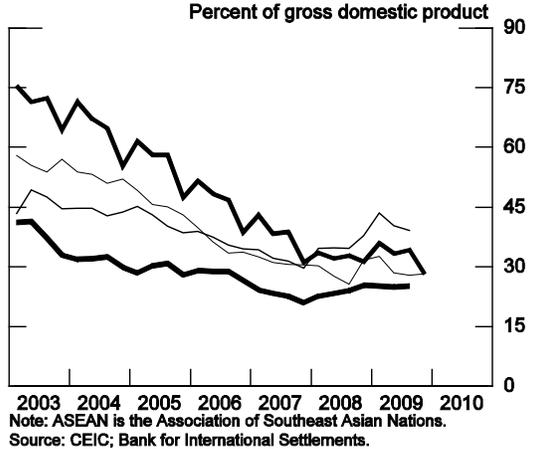
**Merchandise Trade Balances**



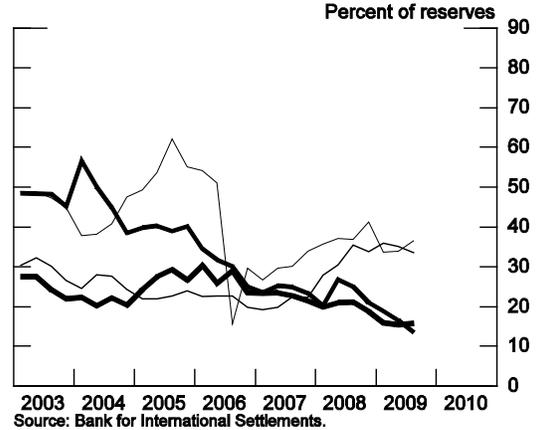
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In **Mexico**, indicators suggest that economic activity continued to expand in the first quarter, albeit at a slower pace than in the fourth quarter, when activity was boosted by the reversal of the effects of H1N1. Industrial production growth has slowed, after a rapid expansion in the fourth quarter. The PMIs for both the manufacturing and service sectors moved higher in March, and exports continued to gain strength in January and February. Domestic demand has been boosted by falling unemployment, and the trade balance turned to a deficit in the first quarter as imports rose more than exports.

Headline consumer price inflation on a 12-month basis remained elevated at about 5 percent in March, still above the Bank of Mexico's (BOM) target range of 2 percent to 4 percent. In addition to the effects of hikes in taxes and administered prices, a surge in prices of fruits and vegetables and an increase in air fares and vacation packages related to the Easter holiday period appear to have contributed to inflation remaining relatively high. In early April, the Foreign Exchange Commission—formed by the Ministry of Finance and BOM—announced the suspension of its daily dollar auctions, which were established in October 2008 to provide dollar liquidity to financial institutions. The BOM had sold nearly \$8.4 billion through this mechanism.

**Mexican Economic Indicators**  
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2008	2009	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	-1.2	-2.4	8.4	n.a.	...	...	...
Overall economic activity	1.3	-6.4	1.9	n.a.	-8	n.a.	n.a.
Industrial production	-9	-7.0	2.4	n.a.	-1	.5	n.a.
Unemployment rate <sup>2</sup>	4.0	5.5	5.6	n.a.	5.5	5.2	n.a.
Consumer prices <sup>3</sup>	6.5	3.6	4.0	4.8	4.5	4.8	5.0
Merch. trade balance <sup>4</sup>	-17.3	-4.7	1.9	n.a.	-3.0	-2.4	n.a.
Merchandise imports <sup>4</sup>	308.6	234.4	259.7	n.a.	273.3	279.4	n.a.
Merchandise exports <sup>4</sup>	291.3	229.7	261.5	n.a.	270.3	277.0	n.a.
Current account <sup>5</sup>	-15.8	-5.2	-2.8	n.a.	...	...	...

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

2. Percent; counts as unemployed those working 1 hour a week or less.

3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.

4. Billions of U.S. dollars, annualized.

5. Billions of U.S. dollars, not seasonally adjusted, annualized.

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

Source: Haver Analytics; Bank of Mexico.

In **Brazil**, data releases since the March Greenbook indicate that growth remained robust in the first quarter. In February, industrial production climbed further and retail sales continued to be strong. The March manufacturing PMI remained in expansion territory. In the first quarter, exports were boosted by higher commodity prices, but the trade surplus narrowed further, as import growth surged. Strong aggregate demand has strained capacity in several areas, fueling inflationary pressures. Headline inflation has climbed in recent months and came in at 5.2 percent on a 12-month basis in March, up from 4.3 percent in December. Finance Minister Mantega has suggested reducing tariffs to “combat abusive price increases.”

In March, the central bank voted 5 to 3 to maintain its policy rate at 8.75 percent, with three governors preferring an increase of 50 basis points, which the market now expects at the late April meeting. Central Bank President Henrique Meirelles announced that he will not run for office in the October elections, but he suggested that he may leave his central bank position early.

**Brazilian Economic Indicators**  
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2008	2009	2009	2010			
			Q4	Q1	Jan.	Feb.	Mar.
Real GDP <sup>1</sup>	.8	4.3	8.4	n.a.	...	...	...
Industrial production	3.1	-7.4	3.9	n.a.	1.2	1.5	n.a.
Unemployment rate <sup>2</sup>	7.9	8.1	7.7	n.a.	7.5	7.2	n.a.
Consumer prices <sup>3</sup>	5.9	4.3	4.2	4.9	4.6	4.8	5.2
Merch. trade balance <sup>4</sup>	25.0	25.3	15.8	14.3	13.7	11.3	17.8
Current account <sup>5</sup>	-28.2	-24.3	-48.9	n.a.	-46.1	-39.0	n.a.

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.

2. Percent.

3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Price index is IPCA.

4. Billions of U.S. dollars, annualized.

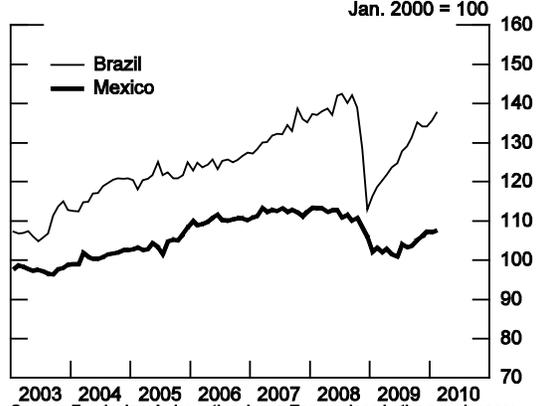
5. Billions of U.S. dollars, not seasonally adjusted, annualized.

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

Source: Haver Analytics; IMF International Financial Statistics database; Instituto Brasileiro de Geografia e Estatística.

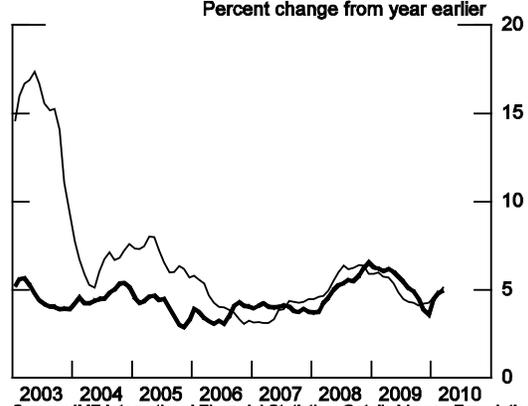
**Latin America**

**Industrial Production**



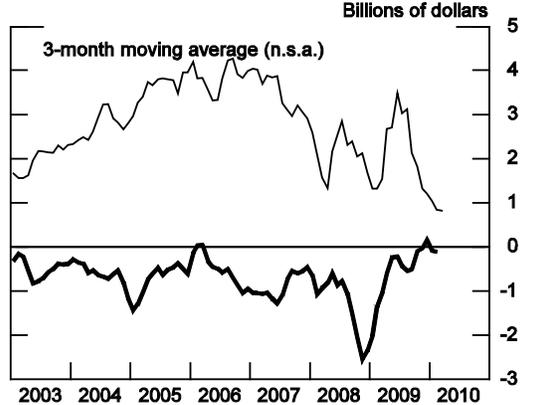
Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

**Consumer Prices**



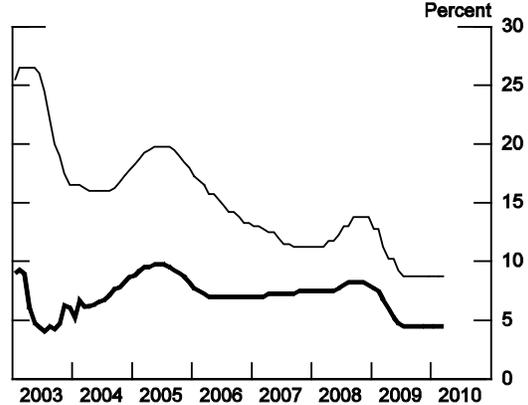
Source: IMF International Financial Statistics; Getulio Vargas Foundation; Haver Analytics; Bank of Mexico.

**Merchandise Trade Balances**



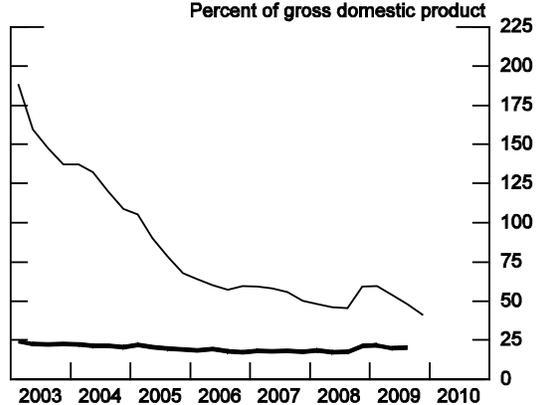
Source: IMF International Financial Statistics, Bank of Mexico.

**Benchmark Interest Rates**



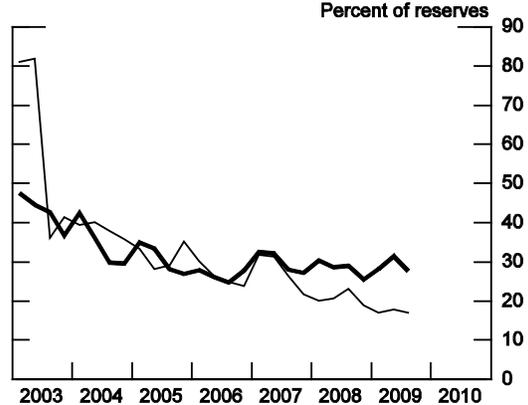
Source: Bloomberg.

**Gross External Debt**



Source: Haver Analytics; Bank for International Settlements.

**Short-Term External Debt**



Source: Bank for International Settlements.

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## **Abbreviations–Part 2**

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## Abbreviations—Part 2

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ABCP	asset-backed commercial paper
ABS	asset-backed securities
ARRA	American Recovery and Reinvestment Act
ASEAN-4	Association of Southeast Asian Nations (Indonesia, Malaysia, the Philippines, and Thailand)
BEA	Bureau of Economic Analysis, Department of Commerce
BLS	Bureau of Labor Statistics, Department of Labor
BOE	Bank of England
BOM	Bank of Mexico
CD	certificate of deposit
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CRE	commercial real estate
ECB	European Central Bank
EMBI	emerging markets bond index
EU	European Union
FAS	Financial Accounting Standards
FASB	Financial Accounting Standards Board
FHA	Federal Housing Administration, Department of Housing and Urban Development
FOMC	Federal Open Market Committee; also, the Committee
FRBNY	Federal Reserve Bank of New York
GDP	gross domestic product
IMF	International Monetary Fund
IP	industrial production
ISM	Institute for Supply Management
JOLTS	Job Openings and Labor Turnover Survey
MBS	mortgage-backed securities

NFIB	National Federation of Independent Business
NIEs	newly industrialized economies (Hong Kong, Singapore, South Korea, and Taiwan)
PCE	personal consumption expenditures
PMI	purchasing managers index
PPI	producer price index
RBI	Reserve Bank of India
RP	repurchase agreement
SEC	Securities and Exchange Commission
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TIC	Treasury International Capital
TIPS	Treasury inflation-protected securities
UI	unemployment insurance
WTI	West Texas Intermediate