

## **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.

Please note that some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

## **Part 2**

July 30, 2008

# **CURRENT ECONOMIC AND FINANCIAL CONDITIONS**

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## **Recent Developments**

July 30, 2008

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## **Domestic Nonfinancial Developments**

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## Domestic Nonfinancial Developments

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Aggregate economic activity held up reasonably well in the first half of the year despite a weakening labor market, adverse financial conditions for households and businesses, and the continued rapid descent in residential construction. Although sales of motor vehicles stepped down sharply over the course of the spring, consumer spending on other goods was surprisingly well maintained until seeming to falter in June. Similarly, investment in business equipment excluding transportation still appeared to be rising modestly.

Nonresidential construction activity has not tapered off yet even though vacancy rates have risen and credit conditions have tightened. Industrial production (IP) declined in the second quarter after little change over the previous two quarters, but the decline was not as sharp as in a typical recession. At the same time, core consumer price inflation has remained relatively stable in recent months, while headline inflation has been elevated, reflecting large increases in prices of food and energy.

### Labor Market Developments

Labor demand continued to contract in the second quarter. Private payroll employment fell 91,000 in June, and the level of employment in May was revised down by about 75,000. Losses now average 91,000 over the three months ending in June, close to the first quarter's average monthly decline of 97,000. In the household survey, the unemployment rate remained at 5.5 percent in June. Unemployment rates for those aged 16 to 24 partly retraced their jump in May, but this decrease was offset by a further increase in the unemployment rate among those aged 25 and older. The June reading on the unemployment rate brought the second-quarter average to 5.3 percent, up from 4.9 percent in the first quarter. Another measure of slack, the fraction of workers who are working part time for economic reasons, has continued to rise.

Other indicators point toward continued weakness in the labor market. The level of insured unemployment has continued to move up, and the number of individuals unemployed due to job loss has risen further as a percentage of the labor force.<sup>1</sup> Most indicators of layoffs—including the short-term job losers rate and announcements of downsizing plans compiled by Challenger, Gray, and Christmas, Inc.—suggest that flows into unemployment remained elevated through June, and initial claims for unemployment insurance have drifted up a bit since then.

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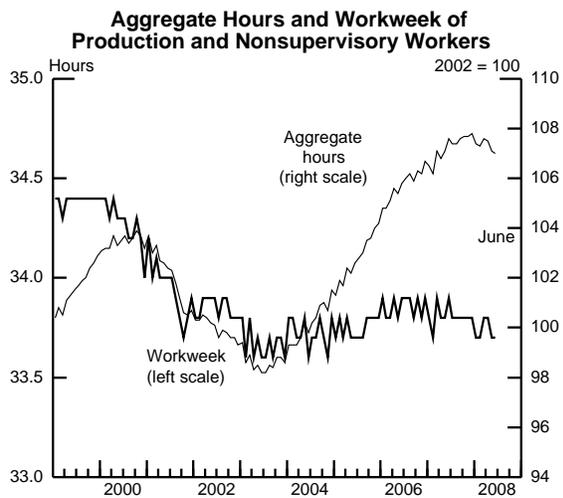
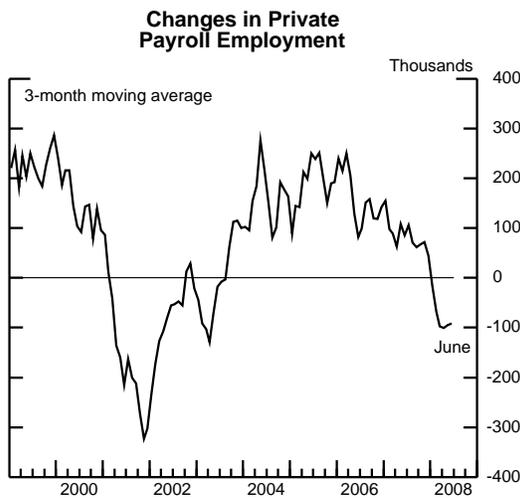
<sup>1</sup> Since the June Greenbook, the Supplemental Appropriations Act of 2008 was passed. Legislation included in the act provides extended unemployment insurance benefits for unemployed individuals who filed a claim for state benefits on May 7, 2007, or later; have exhausted their regular benefits; and meet earnings and work requirements. Individuals could start filing for extended benefits during the week of July 6, 2008; the Employment and Training Administration will begin to report claims for extended benefits in August.

### Changes in Employment

(Thousands of employees; seasonally adjusted)

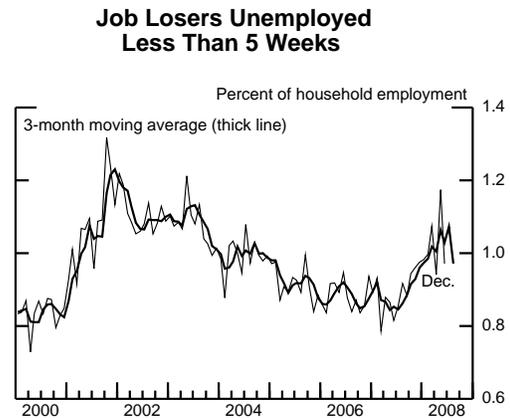
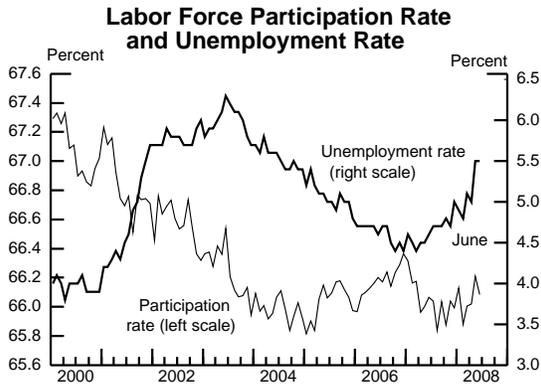
Measure and sector	2007	2008					
		Q4	Q1	Q2	Apr.	May	June
	Average monthly change			Monthly change			
Nonfarm payroll employment (establishment survey)	91	80	-82	-64	-67	-62	-62
Private	71	45	-97	-91	-91	-91	-91
Natural resources and mining	3	4	4	5	2	5	7
Manufacturing	-22	-17	-43	-36	-52	-22	-33
Ex. motor vehicles	-15	-8	-31	-32	-33	-24	-39
Construction	-19	-41	-41	-46	-59	-37	-43
Residential	-20	-39	-30	-28	-32	-30	-21
Nonresidential	1	-2	-11	-18	-27	-7	-22
Wholesale trade	9	6	-6	-6	-10	-4	-2
Retail trade	6	0	-29	-25	-46	-23	-8
Financial activities	-9	-14	-7	-5	-2	-3	-10
Professional and business services	26	44	-39	-28	17	-49	-51
Temporary help services	-7	4	-24	-27	-19	-32	-30
Nonbusiness services <sup>1</sup>	76	71	66	58	65	56	52
Total government	21	35	15	27	24	29	29
Total employment (household survey)	22	-16	-81	-26	362	-285	-155
<b>Memo:</b>							
Aggregate hours of private production workers (percent change) <sup>2</sup>	1.3	1.0	-1.1	-.9	-.1	-.4	-.1
Average workweek (hours) <sup>3</sup>	33.8	33.8	33.7	33.7	33.8	33.7	33.7
Manufacturing (hours)	41.2	41.2	41.1	40.9	41.0	40.9	40.8

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.



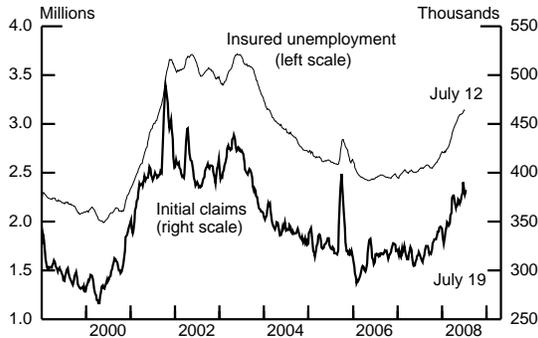
**Selected Unemployment and Labor Force Participation Rates**  
(Percent; seasonally adjusted)

Rate and group	2007	2007	2008				
		Q4	Q1	Q2	Apr.	May	June
<i>Civilian unemployment rate</i>							
Total	4.6	4.8	4.9	5.3	5.0	5.5	5.5
Teenagers	15.7	16.4	16.8	17.4	15.4	18.7	18.1
20-24 years old	8.2	8.6	9.0	9.8	8.9	10.4	10.1
Men, 25 years and older	3.6	3.7	3.8	4.2	4.0	4.2	4.3
Women, 25 years and older	3.6	3.8	3.9	4.1	3.9	4.1	4.2
<i>Labor force participation rate</i>							
Total	66.0	66.0	66.0	66.1	66.0	66.2	66.1
Teenagers	41.3	41.0	40.3	41.4	41.1	42.6	40.5
20-24 years old	74.4	74.0	73.9	74.6	74.2	75.0	74.8
Men, 25 years and older	75.6	75.5	75.5	75.2	75.2	75.2	75.3
Women, 25 years and older	59.7	59.7	59.9	60.0	60.0	60.0	60.1



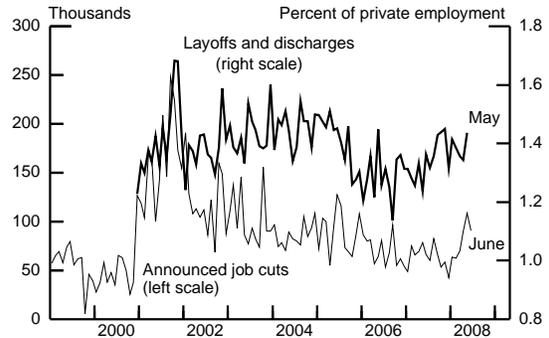
## Labor Market Indicators

Unemployment Insurance



Note. 4-week moving averages.

Layoffs and Job Cuts



Note. Both series are seasonally adjusted by FRB staff. Source. For layoffs and discharges, Job Openings and Labor Turnover Survey; for job cuts, Challenger, Gray, and Christmas, Inc.

Job Openings and Hires



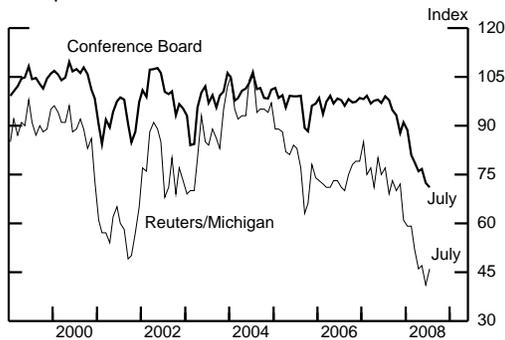
Source. Job Openings and Labor Turnover Survey.

Job Availability and Hard-to-Fill Positions



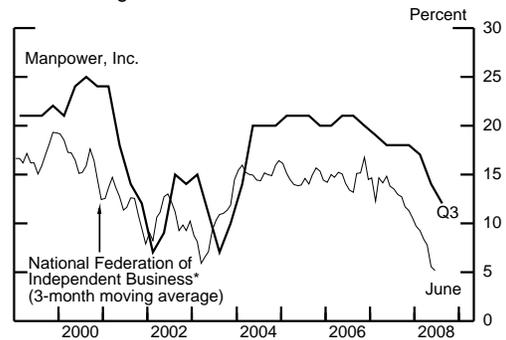
\*Proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100.  
 \*\*Percent of small businesses surveyed with at least one "hard-to-fill" job opening. Seasonally adjusted by FRB staff. Source. For job availability, Conference Board; for hard-to-fill,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

Expected Labor Market Conditions



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

Net Hiring Plans



Note. Percent planning an increase in employment minus percent planning a reduction. \*Seasonally adjusted by FRB staff.

Evidence on hiring also is gloomy. The hires rate, as measured by the Job Openings and Labor Turnover Survey (JOLTS), moved down a bit further in May, while the JOLTS job openings rate held steady at a level ½ percentage point below its year-earlier level. Moreover, the most recent readings on net hiring plans from both the Manpower and the National Federation of Independent Business (NFIB) surveys suggest further reductions in hiring in coming months. Perceptions of job availability in the Conference Board survey eroded a bit further in July. The NFIB measure of hard-to-fill positions remained at a very low level in June.

Households are very pessimistic about the outlook for the labor market. Both the Reuters/University of Michigan and Conference Board surveys remain near the lows of the early 1980s.

We will receive the employment report for July two days after this Greenbook is published and will discuss that report in the Supplement to be distributed on August 1.

### **Industrial Production**

IP remains weak.<sup>2</sup> For the second quarter as a whole, IP fell at an annual rate of 3.1 percent after having been flat over the previous two quarters. The decline in IP last quarter reflected weak domestic demand for industrial goods and a smaller boost from net trade than had been provided in the previous few quarters. The factory operating rate held steady at 77.6 percent in June—about 2 percentage points below its long-run average but still more than 6 percentage points above its 2001-02 low.

Motor vehicle assemblies tumbled more than 1 million units in the second quarter to an annual rate of 8.8 million. The downshift in production reflected both the effect of strikes, which restrained output at General Motors from March to May, and soft demand for full-size pickup trucks and sport-utility vehicles. In June, with the end of the strikes, motor vehicle production rebounded to a still-subdued pace of 9.3 million units. As for the third quarter, the domestic vehicle makers have substantially pared back their assembly plans from an initial rate of 10.5 million units to 9.6 million units.

Vehicle inventories edged down, on balance, over the second quarter, but the drop-off in the pace of sales pushed up days' supply to an uncomfortably high 75 days at the end of June. The recent shift in demand toward smaller, more fuel-efficient vehicles is affecting

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<sup>2</sup> Although IP advanced 0.5 percent in June, output last month was boosted by a rebound in motor vehicle production and a jump in both mining and utilities output. Manufacturing production excluding motor vehicles edged down 0.1 percent in June.

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

Component	Proportion 2007 (percent)	2007 <sup>1</sup>	2008		2008		
			Q1	Q2	Apr.	May	June
			Annual rate		Monthly rate		
<b>Total</b>	<b>100.0</b>	<b>2.1</b>	<b>.5</b>	<b>-3.1</b>	<b>-7</b>	<b>-2</b>	<b>.5</b>
Previous	100.0	2.1	-.3	...	-7	-2	...
Manufacturing	78.7	2.3	-.9	-3.7	-9	-1	.2
Ex. motor veh. and parts	73.6	2.6	.0	-1.9	-5	-1	-1
Ex. high-tech industries	69.3	1.3	-1.1	-3.2	-7	-1	-2
Mining	11.6	.2	3.1	1.4	-4	.3	1.1
Utilities	9.7	3.1	9.6	-3.7	.4	-2.1	2.1
<i>Selected industries</i>							
Energy	24.7	2.3	7.6	-1.3	.2	-8	1.2
High technology	4.3	22.3	17.7	19.7	1.3	.1	1.8
Computers	1.0	16.7	22.8	5.7	-2	.3	.8
Communications equipment	1.3	20.6	6.8	20.4	2.6	.1	1.6
Semiconductors <sup>2</sup>	2.0	25.9	22.8	26.3	1.3	.1	2.4
Motor vehicles and parts	5.1	-2.2	-14.3	-28.5	-6.7	.6	5.4
<i>Total ex. selected industries</i>	65.9	1.1	-2.0	-3.1	-8	.0	-2
Consumer goods	19.9	.3	-1.4	-1.3	-6	.1	-2
Durables	3.6	-2.4	-10.3	-4.4	-9	-1	-7
Nondurables	16.3	.9	.6	-.6	-6	.1	-1
Business equipment	7.3	2.8	2.8	-6.2	-2.0	.1	-1
Defense and space equipment	1.7	4.2	1.0	-4.5	-3	-1.0	1.1
Construction supplies	4.2	-1.9	-7.8	-6.9	-1.2	.5	-9
Business supplies	7.4	-1	-3.4	-4.4	-1.0	-2	-7
Materials	25.4	1.8	-2.7	-2.7	-4	-2	-1
Durables	13.6	2.9	-.9	-3.2	-5	-6	.2
Nondurables	11.7	.6	-4.7	-2.0	-4	.3	-4

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

2. Includes related electronic components.

... Not applicable.

**Capacity Utilization**  
(Percent of capacity)

Sector	1972- 2007 average	1994- 95 high	2001- 02 low	2007	2008			
				Q4	Q1	Q2	May	June
<b>Total industry</b>	<b>81.0</b>	<b>85.1</b>	<b>73.6</b>	<b>81.0</b>	<b>80.6</b>	<b>79.8</b>	<b>79.6</b>	<b>79.9</b>
Manufacturing	79.7	84.6	71.5	79.3	78.7	77.6	77.6	77.6
Ex. motor veh. and parts	79.9	84.3	71.2	79.8	79.4	78.6	78.6	78.4
Mining	87.5	88.7	84.8	90.2	90.4	90.5	90.3	91.2
Utilities	86.8	93.9	84.6	85.9	86.7	86.1	84.9	86.5
<i>Stage-of-process groups</i>								
Crude	86.6	89.5	81.9	89.3	89.5	89.5	89.6	89.7
Primary and semifinished	82.2	88.2	74.6	81.3	80.8	79.9	79.6	79.9
Finished	77.7	80.4	69.9	77.6	77.2	75.9	75.8	76.0

the composition of the inventory stock: Days' supply of light trucks rose sharply in the second quarter and stood at a very elevated 100 days at the end of June, while supplies of autos remained relatively lean. Capacity utilization rates for domestic auto production have increased in recent months. Indeed, production is running at or near capacity for a few models of small cars.<sup>3</sup> In contrast, the operating rate at domestic plants producing light trucks has averaged about 55 percent since the spring.

Elsewhere in transportation equipment, the output of aircraft and parts picked up in June after having been little changed, on balance, since the end of 2007. The first deliveries of Boeing's fuel-efficient 787 are expected in the second quarter of 2009; given the lead times for assembling these aircraft, the output of aircraft and parts will need to continue to ramp up in the near term to meet the scheduled deliveries.<sup>4</sup>

Production of high-tech equipment expanded at an annual rate of 20 percent in the second quarter after a similar-sized gain in the first quarter; these increases are relatively moderate by historical standards. Semiconductor production rose at a solid clip throughout the first half of the year, as sharp increases in a few categories in the first quarter were followed by more broad-based increases in the second quarter. Intel's second-quarter revenues came in at the high end of their guidance and indicated robust demand for microprocessors and chipsets during the quarter. Downstream from semiconductors, computer output decelerated in the second quarter as increases in sales of both servers and personal computers were offset by a shift in demand toward lower-value products. The output of communications equipment rose solidly in the second quarter after a lull in the first quarter.

The available indicators of high-tech manufacturing activity point to slower production in the current quarter. The midpoint of Intel's third-quarter guidance suggests a much more modest rise in real microprocessor output, and recent industry anecdotes point to weak downstream demand for semiconductors and the possibility of oversupply for certain chips. For manufacturers of equipment used to produce semiconductors, bookings have fallen to their lowest level in several years. Elsewhere, the book-to-bill ratio for circuit

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<sup>3</sup> These models include the Ford Focus (produced in Michigan), the Honda Civic (produced in Ohio), and the Toyota Corolla (produced in Ohio). In addition, inventories of Toyota's popular Prius and Camry hybrid models, which are both produced in Japan, are extremely tight.

<sup>4</sup> Recent industry anecdotes suggest that financial stress in the airline industry has placed at risk roughly one-third of the unfilled orders at both Boeing and Airbus. However, the current backlog of orders—more than seven years for both manufacturers at current production rates—suggests that even if cancellations were to soar, production would likely continue at high levels for several years.

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

Item	2007	2008						
	Q4	Q1	Q2	Q3	Mar.	Apr.	May	June
U.S. production <sup>1</sup>	10.3	9.7	8.6	9.4	9.1	8.2	8.4	9.1
Autos	4.0	3.9	3.6	4.6	4.0	3.5	3.6	3.7
Light trucks	6.3	5.7	4.9	4.8	5.1	4.7	4.8	5.3
Days' supply <sup>2</sup>	64	65	72	n.a.	67	72	69	75
Autos	51	51	47	n.a.	52	53	44	49
Light trucks	76	76	95	n.a.	80	88	95	100
Inventories <sup>3</sup>	2.59	2.45	2.41	n.a.	2.45	2.47	2.36	2.41
Autos	.90	.84	.78	n.a.	.84	.85	.77	.78
Light trucks	1.69	1.61	1.63	n.a.	1.61	1.62	1.59	1.63
Memo: U.S. production, total motor vehicles <sup>4</sup>	10.5	9.9	8.8	9.6	9.4	8.4	8.7	9.3

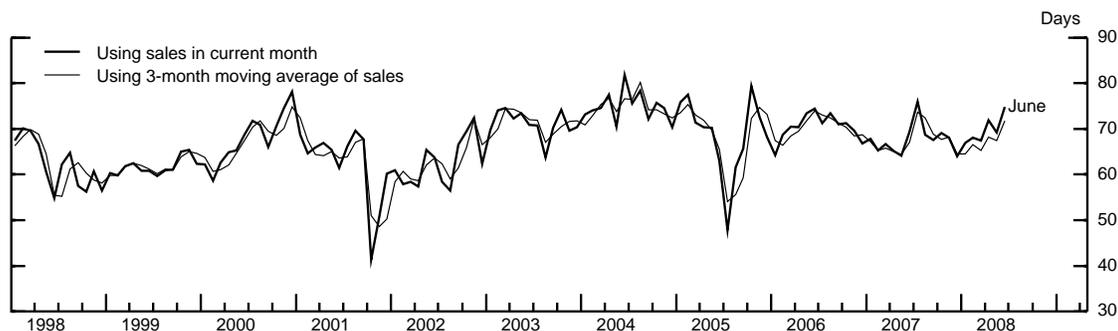
Note. FRB seasonals. Components may not sum to totals because of rounding.

1. Production rates for the third quarter 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.

**Inventories of Light Vehicles**

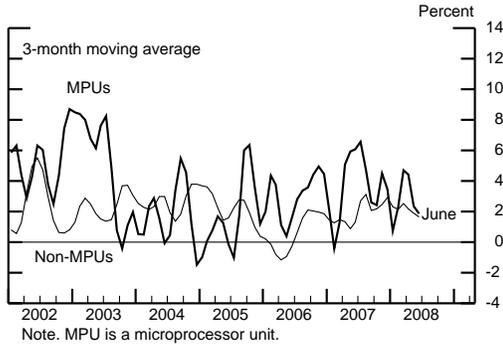


**Days' Supply of Light Vehicles**

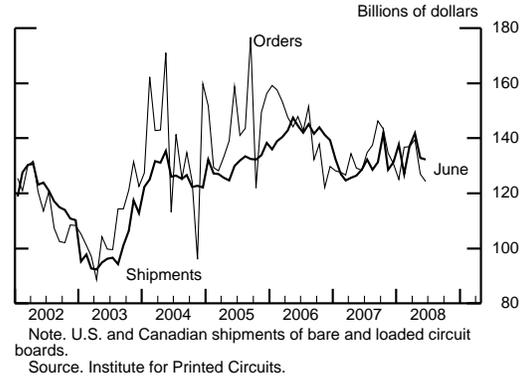


## Indicators of High-Tech Manufacturing Activity

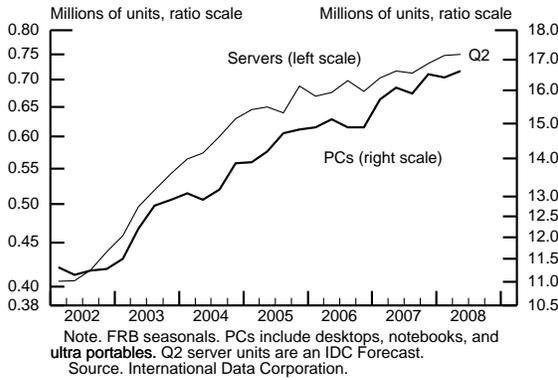
**Rate of Change in Semiconductor Industrial Production**



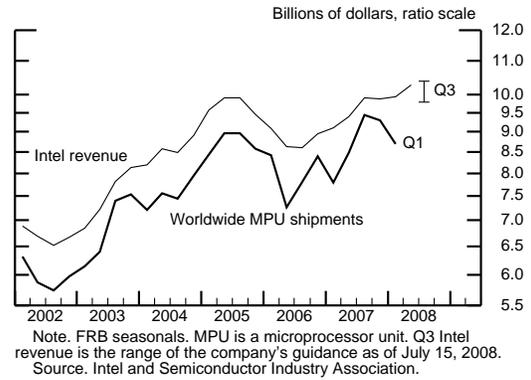
**Circuit Board Orders and Shipments**



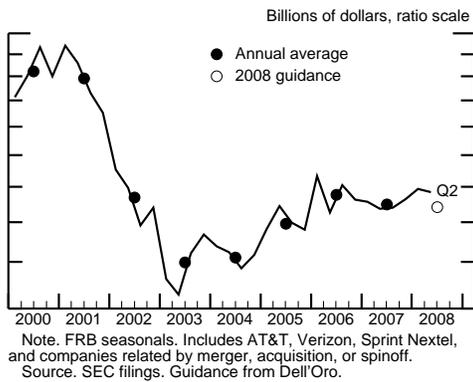
**U.S. Personal Computer and Server Absorption**



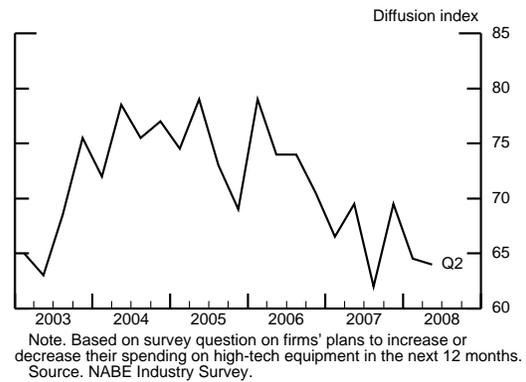
**MPU Shipments and Intel Revenue**



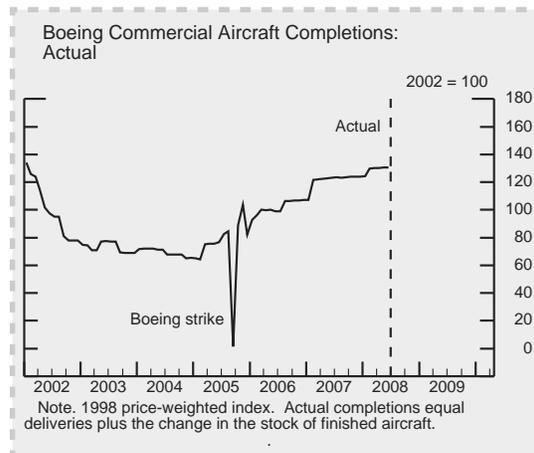
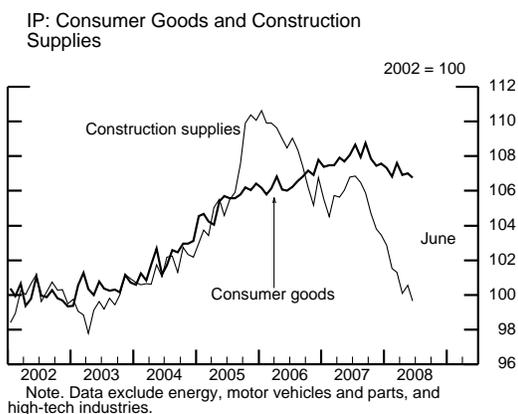
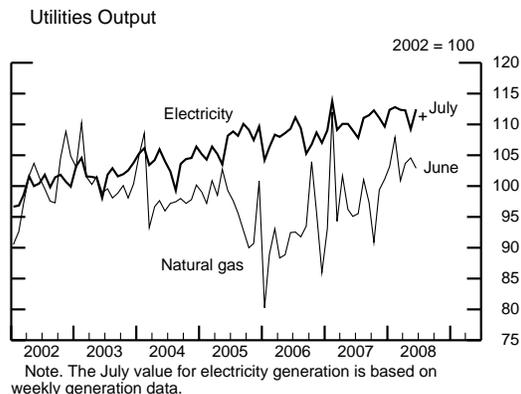
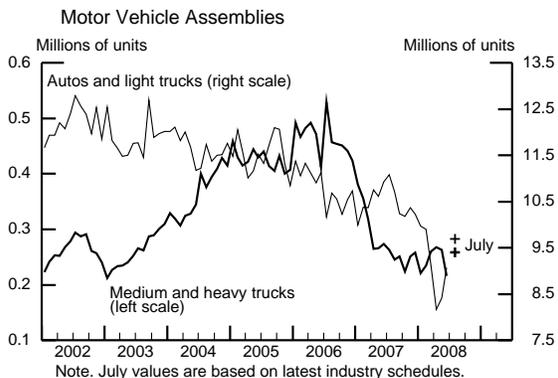
**Capital Expenditures by Selected Telecommunications Service Providers**



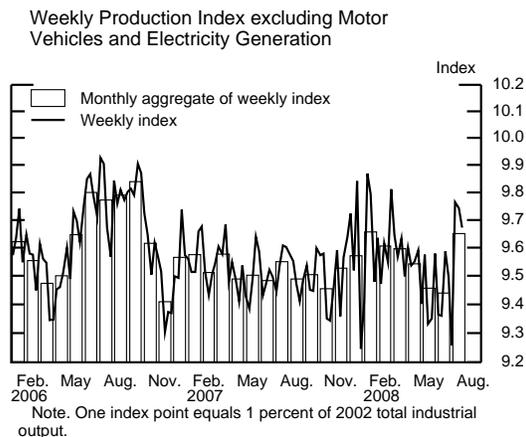
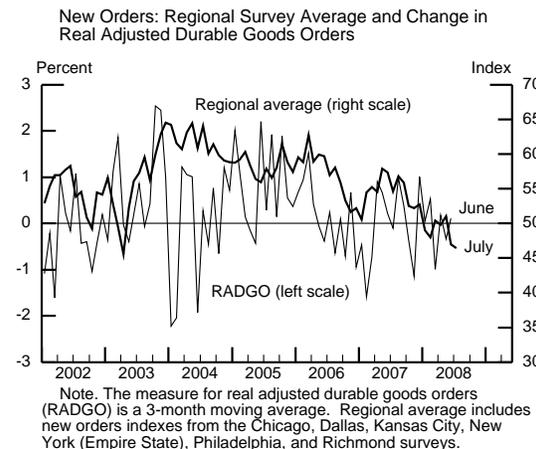
**High-Tech Spending Plans**



Indicators of Industrial Activity



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boards remained below 1 in June.<sup>5</sup> For communications equipment, the annual guidance by telecommunications service providers suggests that capital expenditures will decline over the remainder of the year; capital spending at AT&T and Verizon edged down in the second quarter.<sup>6</sup> For computers, industry anecdotes project that production is likely to continue to rise only moderately in the near term. In the most recent survey by the National Association for Business Economics, business plans for future spending on high-tech equipment edged down further in the second quarter; although the diffusion index remains above 50, it is at a relatively low level by historical standards.

Output excluding the production of energy, motor vehicles and parts, and high-tech products decreased at an annual rate of more than 3 percent in the second quarter after having declined at a rate of about 2 percent in each of the two preceding quarters. The index for business equipment fell more than 6 percent in the second quarter, as the production of industrial and other equipment—in particular farm machinery—dropped sharply. The output of consumer goods decreased for a third consecutive quarter, with declines in both durable and nondurable consumer goods.

The output of construction supplies continued to fall in the second quarter, and production in June was about 9½ percent below its peak at the beginning of 2006. The output of products associated with nonresidential construction, such as architectural and structural metals and construction steel, which previously had partially offset the production losses related to residential investment, moved lower in the second quarter. The output of business supplies and materials also moved down.

Indicators of near-term production generally point to further declines in manufacturing activity. Despite an uptick in June, the three-month moving average of real adjusted durable goods orders has decreased, on balance, since the start of the year. The average of the new orders diffusion indexes from the regional manufacturing surveys edged down to 46 in July after having fallen sharply in June. In contrast, the available weekly physical product data for July are on track to contribute positively to IP, mainly because of higher output of motor vehicles, crude oil, and refined petroleum products.

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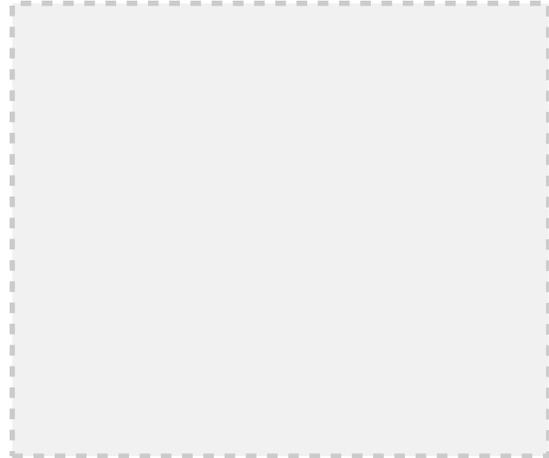
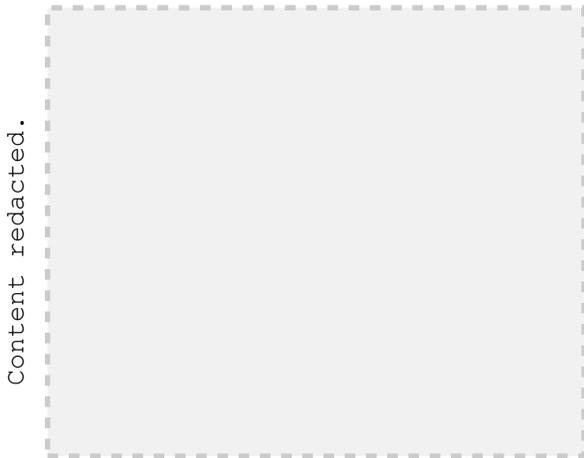
<sup>5</sup> Two counterpoints to the evidence of weakness in semiconductors—and indications that at least the bottom is not dropping out of the market—are a recent upgrade of Gartner’s semiconductor forecast and an “Apple effect” on flash memory due to strong demand for mobile devices.

<sup>6</sup> In addition, capital expenditures by major Internet portals, such as Google, Microsoft, and eBay, were down in the second quarter, and a recent statement by Cisco suggests that most communications equipment customers do not foresee a rebound in activity until early 2009.

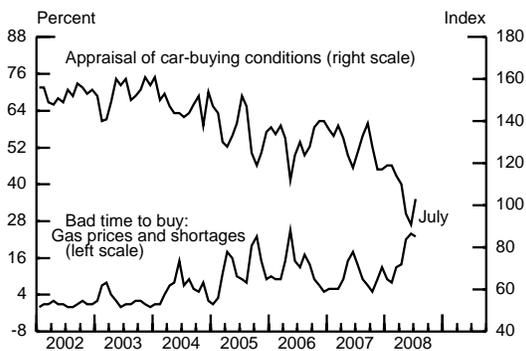
**Sales of Light Vehicles**  
(Millions of units at an annual rate; FRB seasonals)

Category	2007	2008					
		Q4	Q1	Q2	Apr.	May	June
Total	16.1	16.1	15.2	14.1	14.4	14.3	13.6
Autos	7.6	7.8	7.4	7.7	7.5	8.0	7.6
Light trucks	8.5	8.3	7.8	6.4	6.9	6.2	6.0
North American <sup>1</sup>	12.3	12.3	11.5	10.3	10.6	10.4	9.9
Autos	5.3	5.5	5.0	5.0	4.9	5.3	4.9
Light trucks	7.1	6.9	6.5	5.3	5.7	5.1	5.0
Foreign-produced	3.8	3.8	3.7	3.8	3.8	3.8	3.7
Autos	2.4	2.3	2.4	2.7	2.6	2.7	2.7
Light trucks	1.4	1.4	1.3	1.1	1.2	1.1	1.0
Memo: Detroit Three domestic market share (percent) <sup>2</sup>	51.3	50.6	50.2	45.6	47.4	44.3	45.1

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. Domestic market share excludes sales of foreign brands affiliated with the Detroit Three.

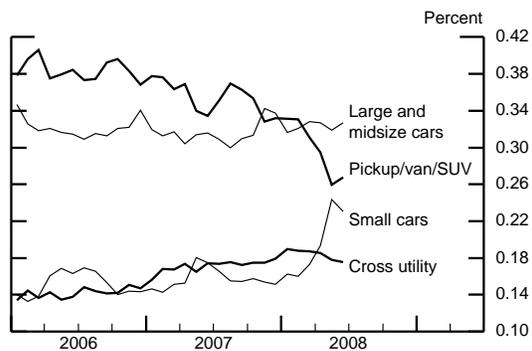


**Car-Buying Attitudes**



Source. Reuters/University of Michigan Survey.

**Market Share of Light Vehicles by Segment**



Note. Data through May. FRB seasonals.

**Motor Vehicle Sales**

Demand for light vehicles fell markedly in the second quarter. In June, sales plunged to an annual rate of 13.6 million units, the lowest level in 15 years, and sales for the quarter as a whole totaled only 14.1 million units. In addition, industry analysts report that sales have remained depressed in July. Most of the falloff in demand this year seems attributable to general factors such as income and employment. In addition, the drop in June sales likely was a reaction to the sharp rise in gasoline prices in recent months. The percentage of Reuters/Michigan survey respondents who cited high gasoline prices as the reason for their negative view of car-buying conditions stood at near-record levels from May through July.

Higher gasoline prices also appear to have accelerated the shift in motor vehicle sales toward small cars and cross-utility vehicles. The limited availability of some smaller, more fuel-efficient vehicles may also have played a role in the drop in June sales. The shift in demand has contributed to the continued downward movement in the domestic market share of the Detroit Three automakers, which rely heavily on sales of full-size pickups and sport-utility vehicles.

**Consumer Spending**

The latest data on retail sales and consumer prices suggest that real outlays for goods excluding motor vehicles (PCE control) dropped noticeably in June after three months of robust gains. Smoothing through the volatility over the first half of this year, increases in real PCE control averaged 0.2 percent per month. In contrast, real outlays for motor vehicles have declined sharply since the start of the year. Real spending on services posted a solid rise in May—the latest month for which data are available—with a boost from outlays for energy services and recreation. Taken together, these pieces imply that real PCE rose moderately in the second quarter after posting a weak gain in the first quarter.

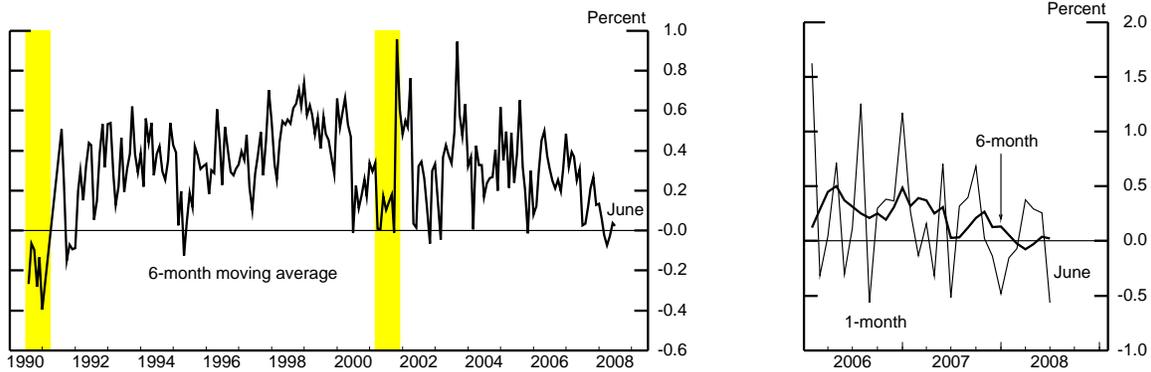
The resilience of consumer spending so far this year contrasts with the continued weakening of its fundamentals. The ratio of wealth to income declined in the fourth quarter of 2007 and the first quarter of this year, and household net worth has deteriorated further since then as equity prices have declined, on balance, and house prices have continued to fall. Weakness in the labor market has restrained nominal gains in compensation even as the run-up in food and energy prices has crimped the purchasing power of a dollar. Up to this point, households have been able to tap existing credit lines and other assets to maintain their spending. However, the most recent Senior Loan Officer Opinion Survey on Bank Lending Practices indicates a substantial increase in

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

Category	2007	2008		2008		
		Q1	Q2	Apr.	May	June
		Annual rate		Monthly rate		
<b>Total real PCE<sup>1</sup></b>	<b>2.9</b>	<b>1.1</b>	<b>n.a.</b>	<b>.2</b>	<b>.3</b>	<b>n.a.</b>
Motor vehicles	2.2	-13.4	-19.5	-2.5	-1.5	-1.6
Goods ex. motor vehicles	3.1	-.3	4.7	.6	.5	-.5
Ex. energy	3.6	.5	4.4	.7	.7	-.6
Services	2.8	3.1	n.a.	.1	.4	n.a.
Ex. energy	2.7	2.8	n.a.	.1	.3	n.a.
Memo: Nominal retail control <sup>2</sup>	5.2	4.6	10.2	.9	1.1	1.0

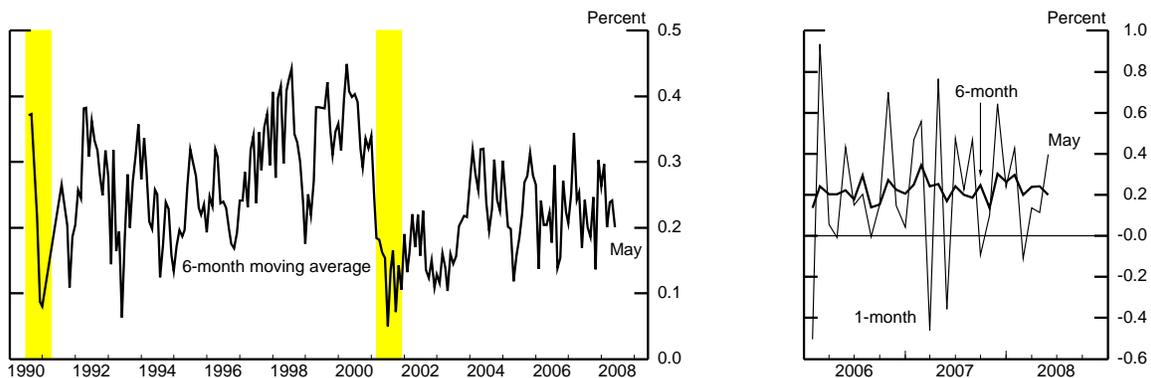
1. The values for Q2 and April, May, and June are staff estimates based on available data.  
 2. Total sales less outlays at building material and supply stores and automobile and other motor vehicle dealers.  
 n.a. Not available.

**Change in Real PCE Goods**



Note. The values for April, May, and June are staff estimates based on available data. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

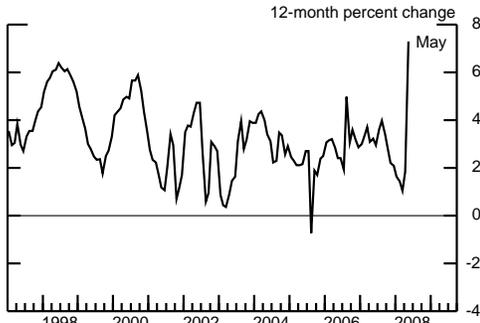
**Change in Real PCE Services**



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

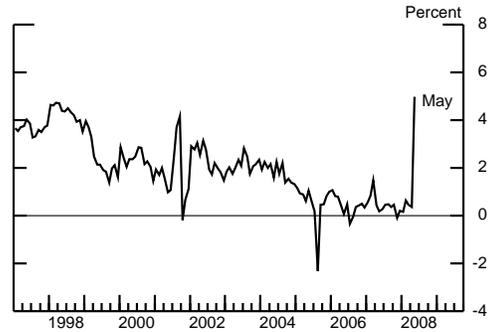
## Fundamentals of Household Spending

Change in Real DPI



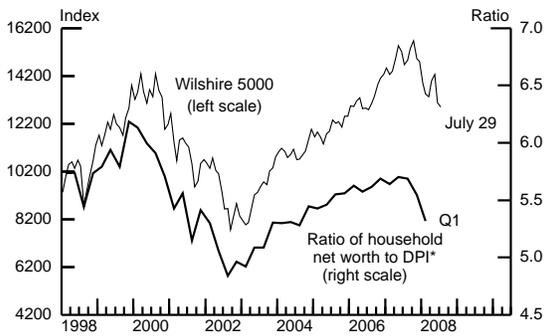
Note. Values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004.

Personal Saving Rate



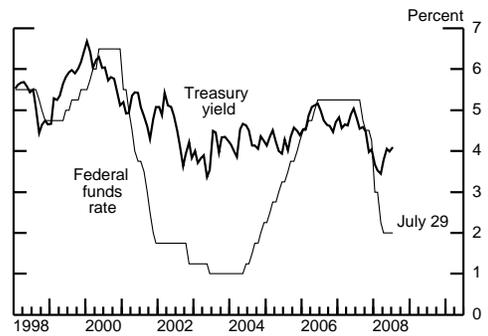
Note. The value for December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.

Household Net Worth and Wilshire 5000

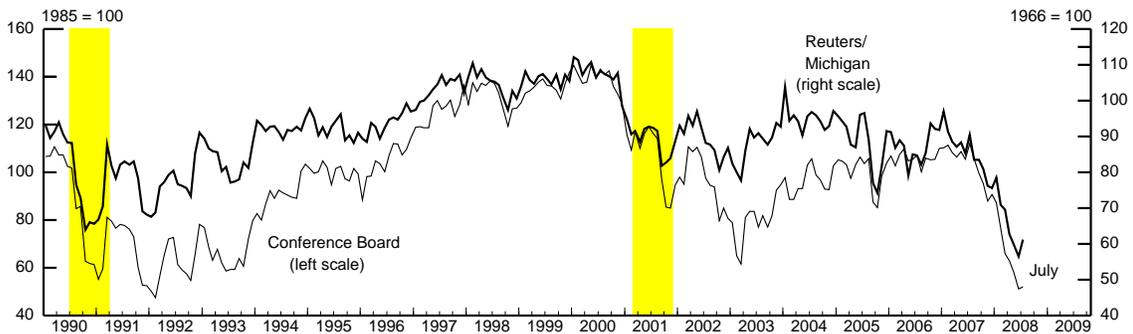


Note. The value for 2004:Q4 excludes the effect on income of the one-time Microsoft dividend in December 2004.

Target Federal Funds Rate and 10-Year Treasury Yield



Consumer Confidence



### Private Housing Activity

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

Sector	2007	2008				
		Q1	Q2	Apr.	May	June
<i>All units</i>						
Starts	1.36	1.05	1.02	1.00	.98	1.07
Permits	1.40	.99	1.03	.98	.98	1.14
<i>Single-family units</i>						
Starts	1.05	.73	.67	.68	.68	.65
Permits	.98	.65	.63	.65	.64	.62
Adjusted permits <sup>1</sup>	.99	.67	.65	.66	.65	.63
Permit backlog <sup>2</sup>	.109	.097	.087	.095	.093	.087
New homes						
Sales	.78	.56	.54	.54	.53	.53
Months' supply <sup>3</sup>	8.40	10.24	9.97	10.14	10.13	9.65
Existing homes						
Sales	4.94	4.39	4.34	4.34	4.41	4.27
Months' supply <sup>3</sup>	8.67	10.23	10.30	10.51	10.02	10.37
<i>Multifamily units</i>						
Starts	.309	.325	.346	.323	.294	.419
Permits	.419	.341	.400	.333	.343	.522
Permit backlog <sup>2</sup>	.075	.067	.066	.065	.064	.066
<i>Mobile homes</i>						
Shipments	.096	.092	n.a.	.092	.087	n.a.
<i>Condos and co-ops</i>						
Existing home sales	.713	.560	.573	.550	.580	.590

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

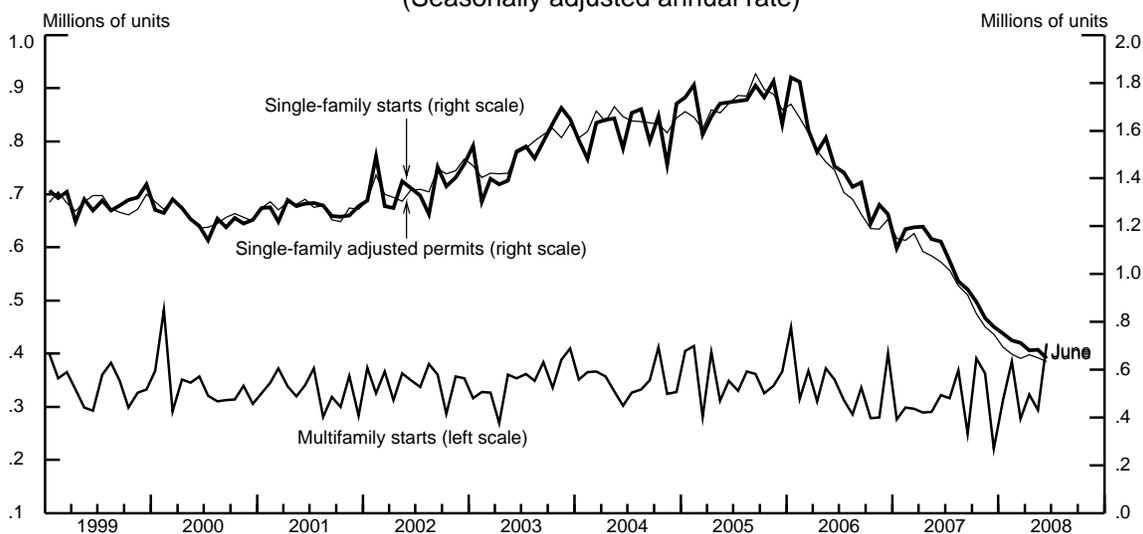
2. Number outstanding at end of period. Excludes permits that have expired or have been canceled, abandoned, or revoked. Not at an annual rate.

3. 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.

### Private Housing Starts and Permits

(Seasonally adjusted annual rate)



Note. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.

banks' reluctance to extend consumer credit (see the appendix to the "Domestic Financial Developments" section). In addition, consumer sentiment—despite the small increase in July—remains at a depressed level.

Fiscal stimulus, in contrast, is likely providing some support to consumer spending. Since the end of April, households have received more than \$90 billion in tax rebates. In fact, tax rebates account for the entire 5.3 percent jump (at a monthly rate) in real disposable income in May. With only a few months of spending data available since the rebate distribution began and considerable uncertainty about the underlying strength of spending, the timing and the ultimate magnitude of the response of households to the fiscal stimulus remain difficult to assess. The available indicators provide mixed signals. Consumer surveys report that only a minority of households expects to use the rebates mostly to increase their spending—strikingly similar to the plans reported during the 2001 tax rebates. Yet some retailers are using special promotions in an attempt to encourage rebate spending, and they attribute some types of purchases to tax rebates.

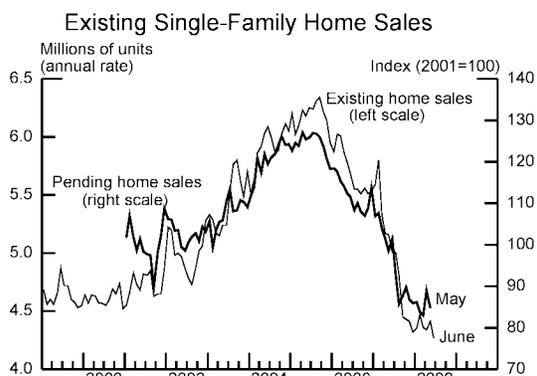
### **Housing**

Residential construction activity has continued to descend rapidly this year, albeit at a somewhat slower pace than during the second half of last year. In June, single-family housing starts dropped to an annual rate of 647,000 units, and adjusted permit issuance—a useful month-ahead indicator of starts—slid to an annual rate of 630,000 units. Both of these figures were about 15 percent below their December readings, compared with declines of about 30 percent in the preceding six-month period. In the multifamily sector, housing starts jumped nearly 45 percent in June to an annual rate of 419,000 units—well above the range of readings seen over the past two years. Available information suggests that this increase can be traced to more-stringent building codes that took effect in New York City on July 1, which apparently led developers to move up some planned apartment projects.

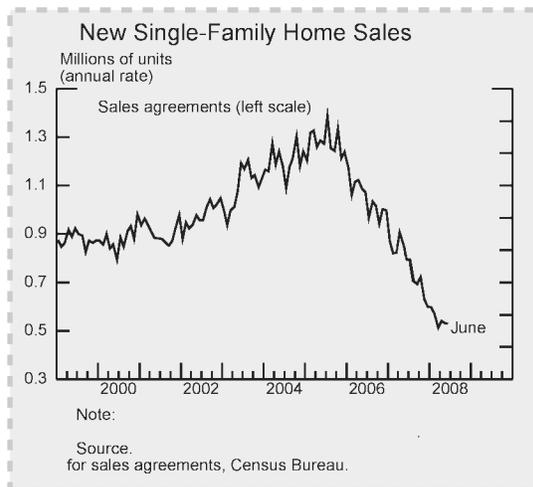
Even though cuts in new construction continue to trim the level of new-home inventories, the months' supply of new homes remains severely bloated because of the ongoing reductions in demand for new houses. The Census Bureau's measure of sales agreements for new homes edged down to an annual rate of 530,000 units in June, a decrease of 12 percent from six months earlier after a drop of 24 percent in the final six months of 2007.

. Sales of existing single-family homes fell to an

## Indicators of Single-Family Housing

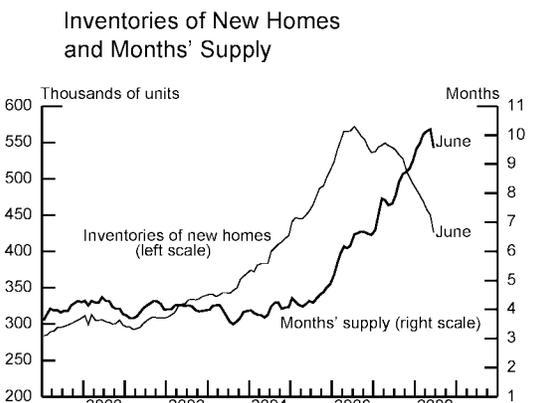


Source: National Association of Realtors.

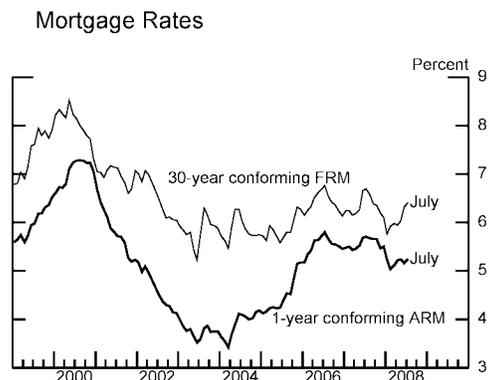


Note:  
Source: for sales agreements, Census Bureau.

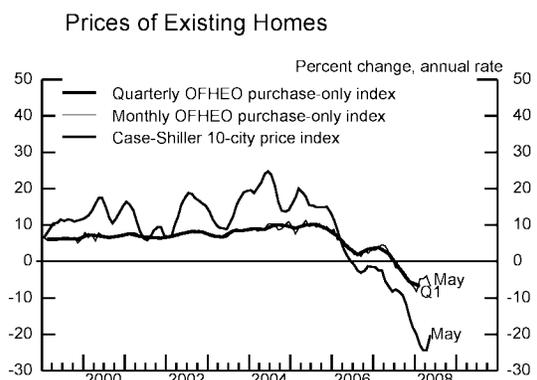
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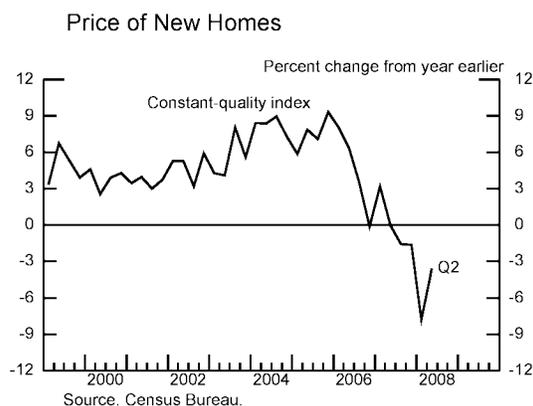
Note. Months supply is calculated using the 3-month moving average of sales.  
Source: Census Bureau.



Note. The July reading is a monthly average of data available through July 23, 2008.



Note. The Case-Shiller and monthly OFHEO indexes are 3-month percent changes.  
Source: For purchase-only indexes, OFHEO; for Case-Shiller, Chicago Mercantile Exchange.



Source: Census Bureau.

annual rate of 4.27 million units in June. These sales inched lower over the first half of this year following a 14 percent drop in the second half of 2007. Meanwhile, the measure of homebuying sentiment from Reuters/Michigan and the NAHB index of homebuilder attitudes remain at levels consistent with a further deterioration in housing demand.

Tight conditions in the mortgage credit markets continue to restrain housing demand.<sup>7</sup> The deterioration has been particularly acute for nonprime and nonconforming jumbo mortgages that cannot be purchased by government-sponsored enterprises (GSEs); new issuance of such loans has virtually halted, and lending spreads remain very wide. Although recent legislation created a new class of conforming loans with higher loan limits in high-priced cities, originations of these new jumbo conforming loans have been very sluggish, and offer rates for these loans are still 25 to 50 basis points above those for standard conforming loans.<sup>8</sup> Meanwhile, rates for standard 30-year fixed-rate conforming mortgages have risen about  $\frac{3}{4}$  percentage point since mid-April to 6.6 percent. In addition, these mortgages have become more difficult to obtain, as the GSEs have tightened lending standards and are charging higher guarantee fees on loans to borrowers with lower credit scores and smaller down payments. Moreover, down-payment requirements have become a more binding restriction on many potential buyers, because many private mortgage insurers have raised their fees and adopted more-stringent standards and because few lenders are willing to extend second mortgages that allow borrowers to sidestep these requirements.

House prices remain on a downward trajectory. The monthly version of the purchase-only repeat-sales price index calculated by the Office of Federal Housing Enterprise Oversight (OFHEO) decreased at an annual rate of  $6\frac{3}{4}$  percent over the three months ending in May. By comparison, the 10-city version of the Case-Shiller repeat-sales price index—which, unlike the OFHEO index, includes houses financed by nonconforming loans and is more heavily concentrated in urban areas that had seen a more substantial run-up of house prices—tumbled at an annual rate of almost 20 percent over the same period. As for new homes, the constant-quality price index—which attempts to control for changes in the quality and geographic composition of new homes sold—was down  $3\frac{1}{2}$  percent in the second quarter relative to its level four quarters earlier. Though these

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<sup>7</sup> Recent anecdotes from builders also suggest that tightening standards for acquisition, development, and construction loans are putting downward pressure on housing production, even in markets that have not experienced appreciable declines in demand.

<sup>8</sup> Even before the mortgage-market turmoil, offer rates for prime jumbo loans were about  $\frac{1}{4}$  percentage point above conforming rates, likely because the risk of prepayment is higher and because private-label mortgage-backed securities are less liquid.

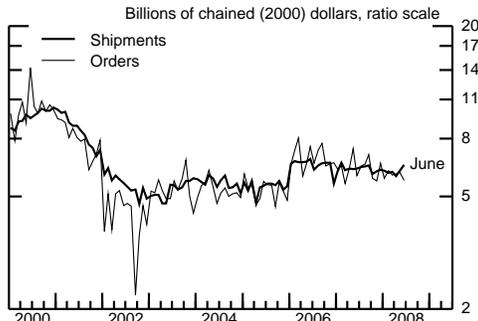
**Orders and Shipments of Nondefense Capital Goods**

(Percent change; seasonally adjusted current dollars)

Category	2008				
	Q1	Q2	Apr.	May	June
	Annual rate		Monthly rate		
Shipments	-.1	3.0	1.8	-.3	.5
Excluding aircraft	-.4	5.9	1.0	.2	.7
Computers and peripherals	-5.8	-17.7	-4.5	2.8	-1.1
Communications equipment	2.6	4.1	-3.9	4.9	4.5
All other categories	-.1	8.9	2.1	-.5	.5
Orders	-5.6	-7.5	-2.4	.2	-3.2
Excluding aircraft	4.7	10.4	3.1	-.1	1.4
Computers and peripherals	-1.7	-7.2	-10.5	9.3	-1.1
Communications equipment	.6	-3.8	.3	1.5	-6.8
All other categories	5.7	13.7	4.8	-1.1	2.4
Memo:					
Shipments of complete aircraft <sup>1</sup>	44.3	n.a.	40.2	44.2	n.a.

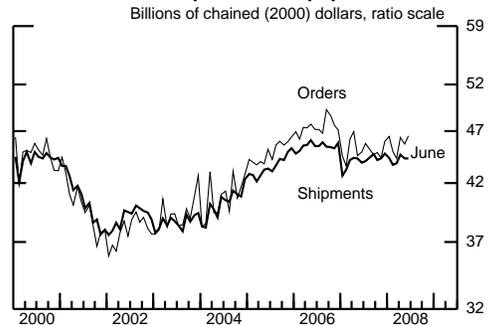
1. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate.  
n.a. Not available.

**Communications Equipment**



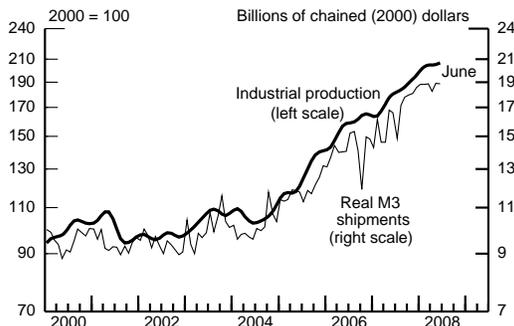
Note. Shipments and orders are deflated by a price index that is derived from the BEA's quality-adjusted price indexes and uses the PPI for communications equipment for monthly interpolation.

**Non-High-Tech, Nontransportation Equipment**



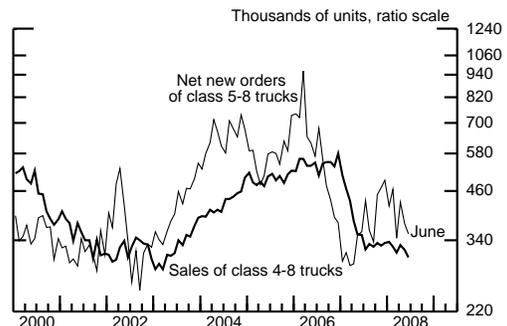
Note. Shipments and orders are deflated by the staff price indexes for the individual equipment types included in this category. Indexes are derived from the BEA's quality-adjusted price indexes.

**Computers and Peripherals**



Note. Ratio scales. Shipments are deflated by the staff price index for computers and peripheral equipment, which is derived from the BEA's quality-adjusted price indexes.

**Medium and Heavy Trucks**



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

lower prices may eventually help bolster sales, survey evidence and anecdotal reports suggest that expectations of further house price declines are quite prevalent, a consideration that may make potential buyers reluctant to purchase homes until prices show signs of stabilizing.

### **Equipment and Software**

Real spending on equipment and software (E&S) appears to have been little changed in the second quarter, as a large decline in business outlays for motor vehicles more than offset a modest gain in E&S excluding transportation. Nontransportation investment held up reasonably well through midyear despite a subpar rate of increase in business output and an apparent increase in the user cost of capital, reflecting higher borrowing rates and an acceleration in the relative price of capital goods.

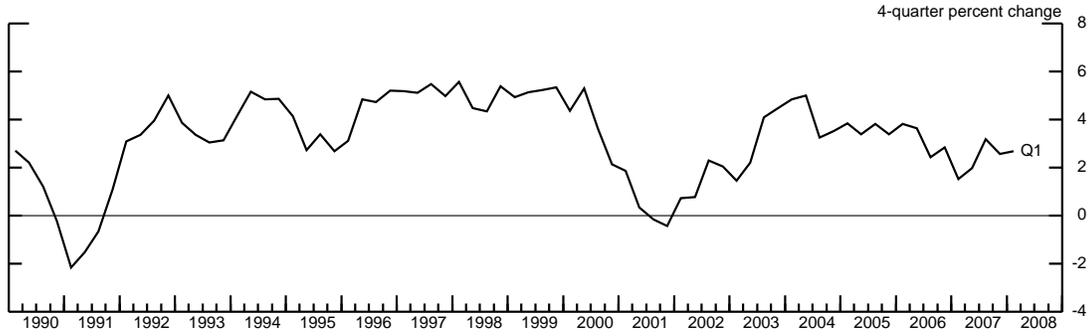
While monthly indicators of business sentiment—both national and regional—have edged back up over the past few months, they remain downbeat for the most part. Moreover, financial conditions have deteriorated further since the June Greenbook. In particular, corporate bond yields have increased somewhat in recent weeks, leaving spreads on investment-grade corporate bonds over Treasury yields near their recent peaks in March. In addition, according to the July Senior Loan Officer Opinion Survey, a large fraction of banks reported that they further tightened lending standards and terms on commercial and industrial loans.

Business outlays on transportation equipment fell sharply in the second quarter. Automakers continued to scale back deliveries to daily rental companies; demand from other businesses weakened as well. In June, sales of medium and heavy trucks edged down further from the already-weak pace observed in preceding months. New orders also moved down, a sign that truck sales are unlikely to improve in the near term. Data on aircraft shipments through May suggest that domestic outlays in this category may have retreated a little in the second quarter.

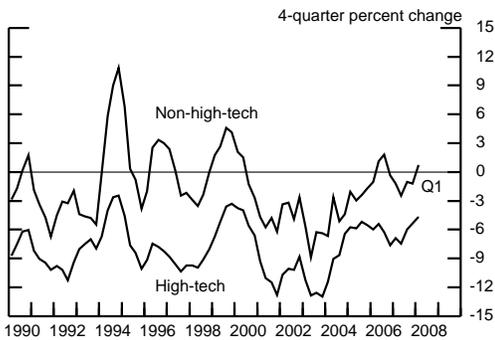
Spending on computers and software appears to have risen at a moderate rate in the first half of the year. The Bureau of Economic Analysis reported that software spending rose at a healthy pace in the first quarter, and Microsoft reported a strong increase in second-quarter revenues. Although nominal shipments of computers and peripheral equipment from domestic producers declined at a more rapid pace in the second quarter, imports of such items jumped in May. Investment in communications equipment has been soft recently, with shipments increasing only modestly and new orders declining in the second quarter.

## Fundamentals of Equipment and Software Investment

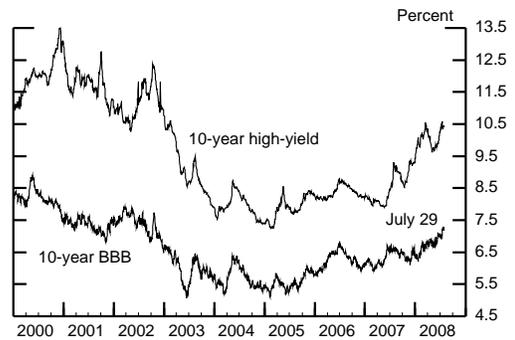
Real Business Output



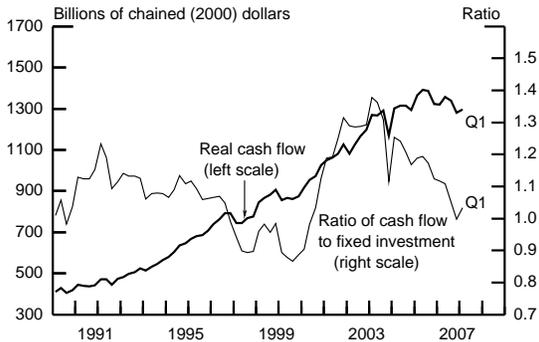
User Cost of Capital



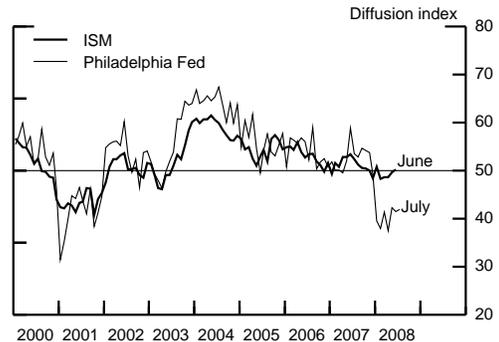
Corporate Bond Yields



Corporate Cash Flow



Surveys of Business Conditions



Real spending on equipment other than high-tech and transportation looks to have improved a bit last quarter after having declined in the preceding two quarters. Orders and shipments for this broad category of equipment posted noticeable increases in the second quarter. Orders for mining and oilfield machinery as well as for HVAC (heating, ventilation, and air conditioning) equipment were particularly strong. Moreover, the second-quarter increase in spending on capital goods seems have been considerably greater than one would infer from domestic shipments alone, as imports of such items surged in April and May.

Some—but not all—of the apparent increase in nominal spending during the second quarter likely reflects large price increases for these capital goods. Prices have accelerated for both domestic and imported equipment: The producer price index (PPI) for capital goods excluding high-tech and transportation rose at an annual rate of 4¾ percent over the first half of 2008, up from 2½ percent in 2007. Prices for imported capital goods excluding computers and semiconductors, which rose 3¼ percent last year, increased at annual rates of 4 percent in the first quarter and 8½ percent in the second quarter.

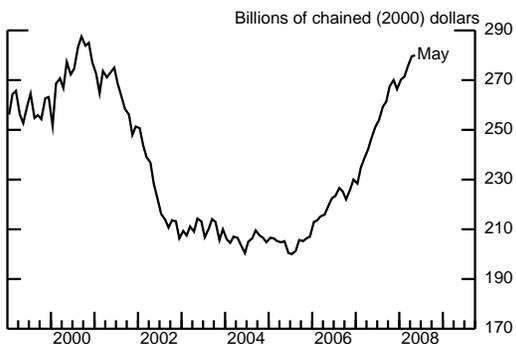
### **Nonresidential Construction**

Data through May continue to show a robust increase in nonresidential construction activity. However, recent market fundamentals and forward-looking indicators for this sector have deteriorated. Vacancy rates in the office and industrial sectors reversed course in the first quarter following several years of declines, and rates for retail space continued on an upward trajectory. In the resale market, sales of existing commercial properties have plunged so far this year after 2007's record pace, and prices are showing signs of softening. On the financing side, issuance of commercial mortgage-backed securities has fallen dramatically this year, corporate bond spreads remain wide, and recent (SLOOS) point to rapidly tightening standards for commercial real estate loans. Costs are also surging: The PPI for materials and components for construction rose at an annual rate of nearly 20 percent over the three months ending in June, and anecdotes from general contractors suggest that price increases for key construction inputs (like asphalt, steel, and plastic materials) are squeezing profit margins. The negatives for nonresidential activity appear to be depressing plans for new projects; the three-month average of the architectural billings index has registered a string of weak readings since February that are consistent with outright declines in nonresidential building outlays in the second half of this year.

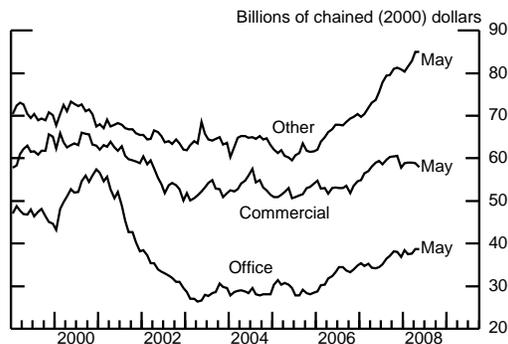
### Nonresidential Construction and Indicators

(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q1 and by staff projection thereafter)

Total Structures

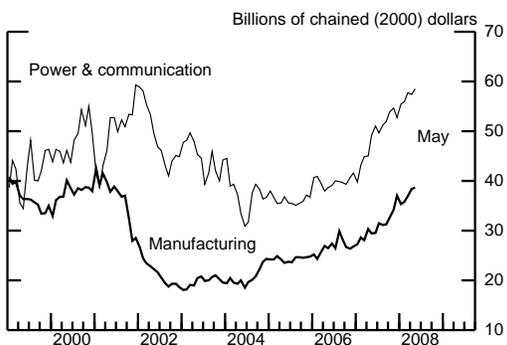


Office, Commercial, and Other

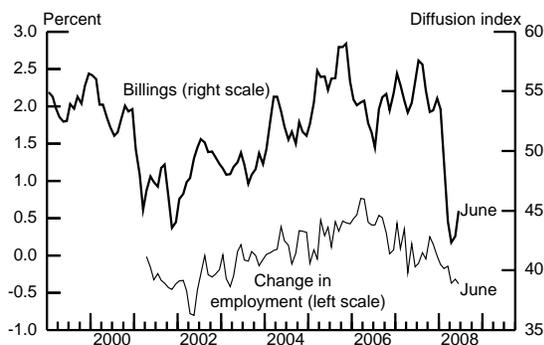


Note. Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care.

Manufacturing and Power & Communication

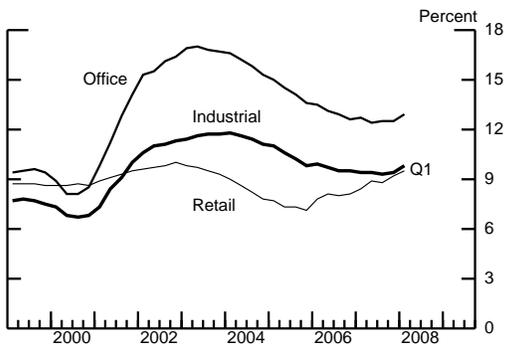


Architectural Billings and Nonresidential Construction Employment



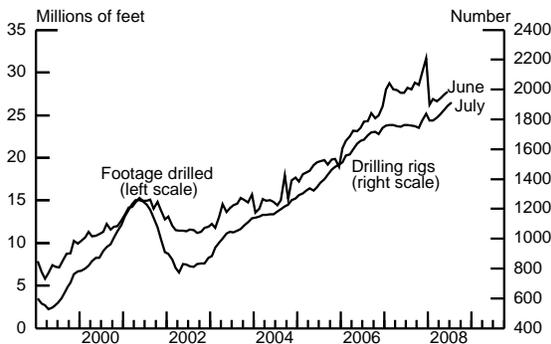
Note. Both series are 3-month moving averages. Employment consists of industrial, commercial, and specialty trade construction. Source. For billings, American Institute of Architects; for employment, Bureau of Labor Statistics.

Vacancy Rates



Note. Industrial space includes both manufacturing structures and warehouses. Source. Torto Wheaton Research.

Drilling and Mining Indicators



Note. The July readings for drilling rigs are based on data through July 25, 2008. Both series are seasonally adjusted by FRB staff. Source. DOE/Baker Hughes.

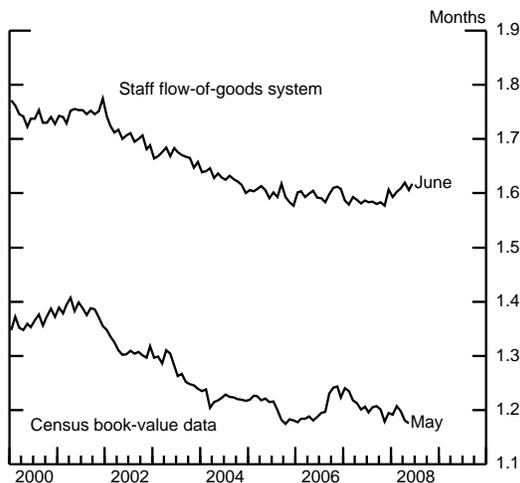
**Nonfarm Inventory Investment**  
(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2007		2008			
	Q3	Q4	Q1	Mar.	Apr.	May
<i>Real inventory investment</i> (chained 2000 dollars)						
<b>Total nonfarm business</b>	<b>26.0</b>	<b>-21.7</b>	<b>-18.9</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
Motor vehicles	13.3	-25.7	-18.8	n.a.	n.a.	n.a.
Nonfarm ex. motor vehicles	12.7	4.0	-.1	n.a.	n.a.	n.a.
<b>Manufacturing and trade ex. wholesale and retail motor vehicles and parts</b>						
Manufacturing	3.1	8.5	16.5	7.6	-47.1 <sup>e</sup>	n.a.
Wholesale trade ex. motor vehicles & parts	13.9	-8.8	.0	-24.2	10.0 <sup>e</sup>	n.a.
Retail trade ex. motor vehicles & parts	1.1	7.9	-7.2	-23.3	12.8 <sup>e</sup>	n.a.
<i>Book-value inventory investment</i> (current dollars)						
<b>Manufacturing and trade ex. wholesale and retail motor vehicles and parts</b>	<b>41.4</b>	<b>70.4</b>	<b>95.8</b>	<b>56.9</b>	<b>78.1</b>	<b>71.7</b>
Manufacturing	16.2	34.7	60.5	61.4	-1.9	33.7
Wholesale trade ex. motor vehicles & parts	22.0	23.0	39.0	12.8	56.8	40.2
Retail trade ex. motor vehicles & parts	3.2	12.7	-3.7	-17.3	23.2	-2.3

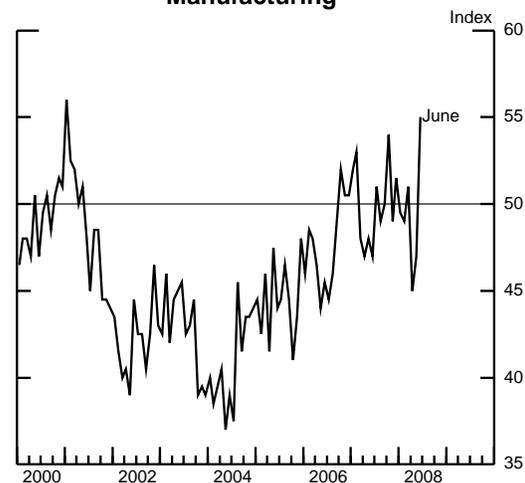
n.a. Not available.

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

Source. For real inventory investment, BEA; for book-value data, Census Bureau.

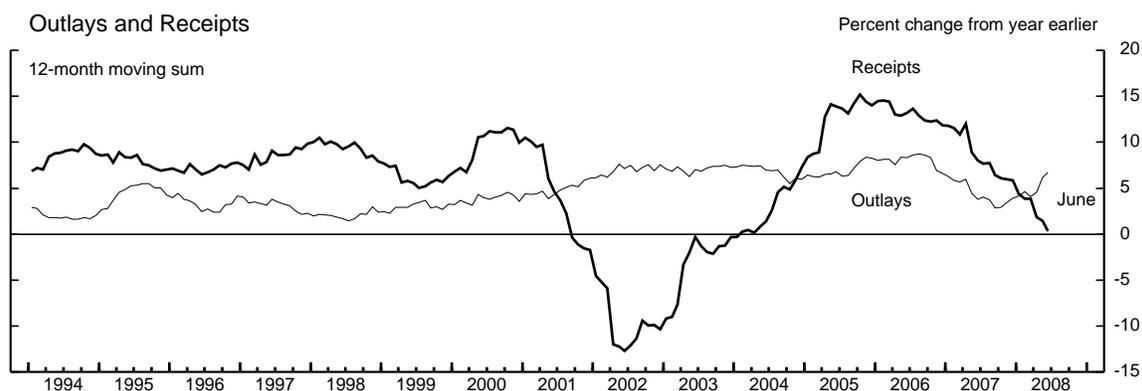
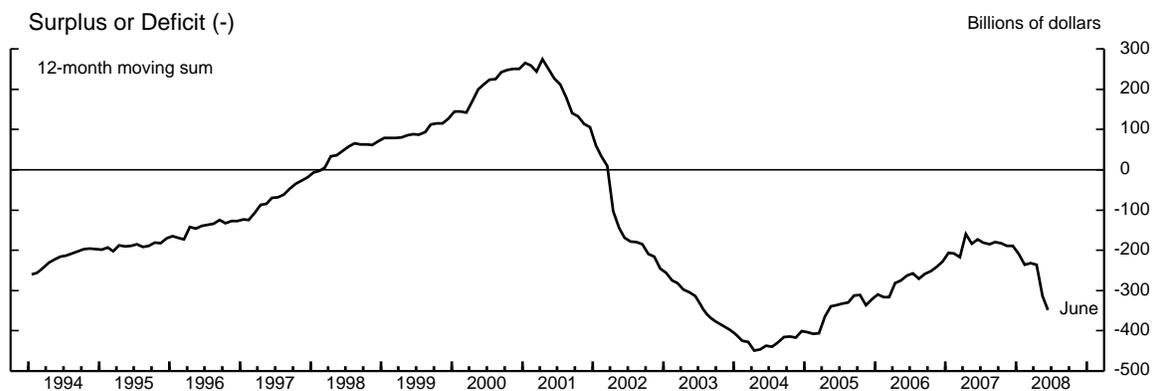
**Inventory Ratios ex. Motor Vehicles**

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.

**ISM Customer Inventories: Manufacturing**

Note. A number above 50 indicates inventories are "too high."

**Federal Government Budget**  
(Unified basis; adjusted for payment-timing shifts and financial transactions; data from Monthly Treasury Statement)



**Recent Federal Outlays and Receipts**

(Billions of dollars except as noted)

Function or source	April-June			12 months ending in June		
	2007	2008	Percent change	2007	2008	Percent change
<b>Outlays</b>						
Net interest	682.8	762.4	11.7	2,721.0	2,904.8	6.8
National defense	65.2	58.6	-10.1	234.4	245.6	4.8
Major transfers <sup>1</sup>	139.5	155.9	11.8	551.3	603.6	9.5
Other	377.7	437.7	15.9	1,495.8	1,610.0	7.6
	100.3	110.2	9.8	439.5	445.6	1.4
<b>Receipts</b>						
Individual income and payroll taxes	824.4	787.9	-4.4	2,548.3	2,556.2	.3
Corporate income taxes	633.0	611.9	-3.3	1,956.2	2,002.8	2.4
Other	125.6	107.0	-14.8	382.3	327.2	-14.4
	65.9	68.9	4.7	209.8	226.3	7.8
<b>Surplus or deficit (-)</b>	141.6	25.5	...	-172.7	-348.5	...
<b>Memo:</b>						
Unadjusted surplus or deficit (-)	137.5	44.1	...	-162.7	-309.2	...

1. Includes Social Security, Medicare, Medicaid, and income security programs.

... Not applicable.

In the drilling and mining sector, rising energy prices have been stimulating activity for some time now, though the quarterly pattern has been uneven. Recent readings for footage drilled and the number of drilling rigs in operation suggest that activity resumed its upward climb in the second quarter after having paused early this year.

### **Business Inventories**

The indicators we track continue to send mixed messages regarding whether firms are holding excess inventories. On the one hand, the ratio of book-value inventories to sales (excluding motor vehicles) ticked down again in May and does not appear particularly elevated. On the other hand, information from the staff's flow-of-goods inventory system suggests that months' supply of goods excluding motor vehicles and parts has moved up, on balance, since November 2007; the recent increase is similar in magnitude to that witnessed during the 1995 inventory cycle and in the period before the 2001 recession. The details from the flow-of-goods system point to some deterioration in manufacturers' inventory positions in areas such as equipment, construction supplies, and materials.

### **Federal Government Sector**

The deficit in the unified federal budget deteriorated markedly in the second quarter as the rise in tax receipts slowed further, outlays increased briskly, and the bulk of the stimulus rebates were mailed out.<sup>9</sup> Adjusted for payment-timing shifts and financial transactions, the unified budget surplus recorded in the three tax-heavy months ending in June was \$116 billion less than the adjusted surplus in the same period last year; the stimulus rebates accounted for about two-thirds of this erosion. Over the 12 months ending in June, the adjusted deficit was \$349 billion, or approximately 2½ percent of nominal GDP.<sup>10</sup>

Excluding the effects of stimulus rebates, tax receipts in the April to June period posted a meager gain of 2 percent over their level in the comparable period last year. The slowing in federal tax payments has been most pronounced in corporate tax receipts, probably reflecting the decline in corporate book profits relative to a year ago. Net corporate receipts in the second quarter—which included firms' first and second quarterly estimated payments on 2008 liabilities—were 15 percent below their level in the same

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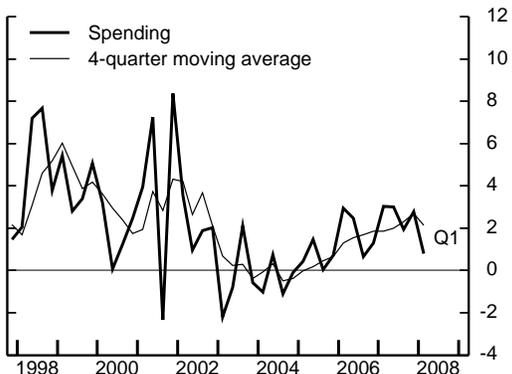
<sup>9</sup> The Economic Stimulus Act of 2008 authorized an expected total of about \$115 billion in stimulus rebates, with \$94 billion going out by the end of July, another \$5 billion being disbursed over the remainder of calendar year 2008, and around \$16 billion being distributed during the tax-filing season in 2009.

<sup>10</sup> The Administration's Mid-Session Review of the Budget (MSR), which was released on July 28, projects the deficit for fiscal 2008 to be \$389 billion, narrower than the Administration's estimate of \$410 billion in February but wider than suggested by the trend for the deficit over the first nine months of the fiscal year. Historically, the MSR has tended to be too pessimistic on the current-year deficit.

### State and Local Indicators

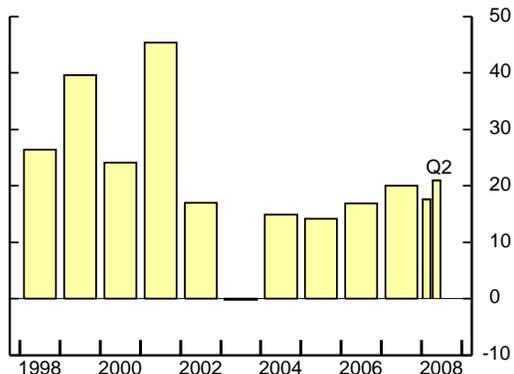
Real Spending on Consumption & Investment

Percent change, annual rate



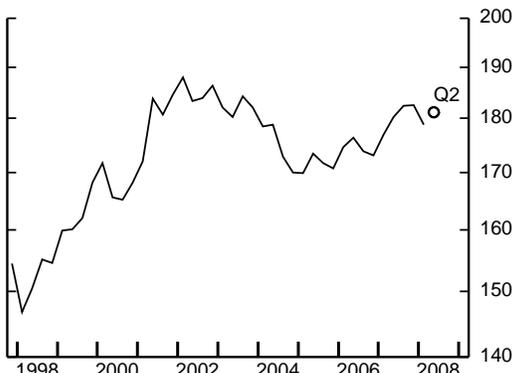
Net Change in Employment

Thousands of jobs, monthly average



Real Construction

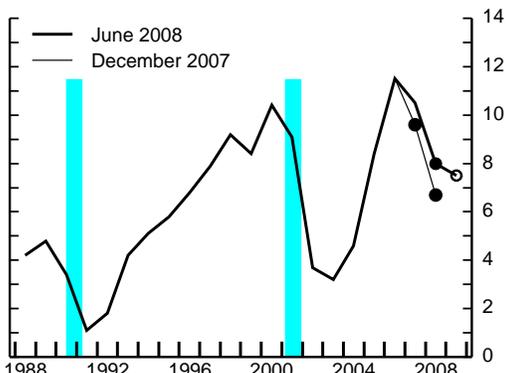
Annual rate Billions of chained (2000) dollars



Note. Nominal CPIP deflated by BEA prices through Q1 and by a staff projection thereafter. Observation for Q2 is the average for April and May.

State Fiscal Reserve Balances at Year-End

Percent of expenditures

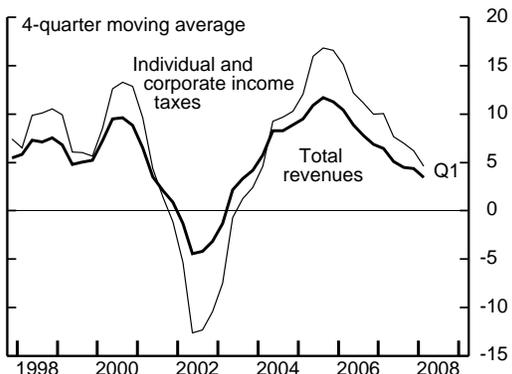


Note. Dots indicate estimated fiscal reserve balances; value for FY2009 is based on recommended budgets. The shaded bars are periods of business recession as defined by the Natl. Bureau of Economic Research.

Source. Natl. Governors Assn. and Natl. Assn. of State Budget Officers, *The Fiscal Survey of States*.

State Revenues

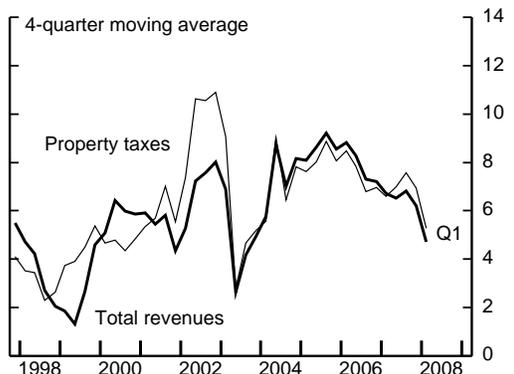
Percent change from year earlier



Source. Census Bureau.

Local Revenues

Percent change from year earlier



Source. Census Bureau.

year-earlier period. Individual income and payroll taxes, excluding stimulus rebates, posted a modest gain of 5 percent, down from more than 8¾ percent in the year-earlier period, likely consistent with the deceleration in personal income.

Adjusted federal outlays in the second quarter rose 11¾ percent above the level in the year-earlier period. Defense spending increased almost 12 percent over this period, which points to a robust increase in real defense purchases in the second quarter as measured in the national income and product accounts. Transfer payments also moved up briskly relative to a year ago, boosted in part by the portion of the stimulus rebates sent to households with little or no tax liability; such rebates are counted as transfer payments in the budget.

At the end of June, the Supplemental Appropriations Act of 2008 was passed, providing \$163 billion in funding for military activities in Iraq and Afghanistan. This funding is expected to be spent through the rest of 2008 and into the middle of 2009. This legislation also included a temporary 13-week extension of unemployment insurance benefits to workers who have exhausted their regular 26 weeks of unemployment benefits. The extension is expected to provide a total of about \$12 billion in additional benefits to covered workers still unemployed in the second half of 2008 and the first quarter of 2009.

The Congress passed, and the President has signed, legislation making a number of changes to federal housing policy. This legislation would provide temporary authority to the Treasury to purchase an unspecified amount of debt and equity issued by Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. The Congressional Budget Office (CBO) estimated that there is a greater than 50 percent chance that this Treasury authority will not be used before it expires at the end of December 2009. Nonetheless, reflecting the large estimated expense in the event the authority is acted upon, the CBO put the expected cost of this authority to the federal budget at \$25 billion, spread over fiscal 2009 and 2010. The other provisions in this legislation are estimated by the CBO to increase the federal deficit by around \$20 billion through fiscal 2010. These provisions include a temporary program allowing the Federal Housing Administration to refinance mortgages that have been written down to 90 percent or less of their current assessed value, a temporary tax credit for first-time homebuyers, and some additional funds for state governments to purchase and rehabilitate foreclosed and abandoned homes.

**Price Measures**  
(Percent change)

Measures	12-month change		3-month change		1-month change	
	June 2007	June 2008	Annual rate		Monthly rate	
			Mar. 2008	June 2008	May 2008	June 2008
<i>CPI</i>						
<b>Total</b>	<b>2.7</b>	<b>5.0</b>	<b>3.1</b>	<b>7.9</b>	<b>.6</b>	<b>1.1</b>
Food	4.1	5.3	5.3	8.5	.3	.8
Energy	4.6	24.7	8.6	53.6	4.4	6.6
<b>Ex. food and energy</b>	<b>2.2</b>	<b>2.4</b>	<b>2.0</b>	<b>2.5</b>	<b>.2</b>	<b>.3</b>
Core goods	-.8	.2	-.1	-.1	-.1	.1
Core services	3.4	3.3	2.9	3.6	.3	.4
Shelter	3.8	2.5	2.2	2.2	.2	.3
Other services	2.8	4.3	3.9	5.4	.5	.5
Chained CPI (n.s.a.) <sup>1</sup>	2.4	4.2	...	...	...	...
Ex. food and energy <sup>1</sup>	1.8	2.1	...	...	...	...
<i>PCE prices</i> <sup>2</sup>						
<b>Total</b>	<b>2.3</b>	<b>3.8</b>	<b>3.0</b>	<b>5.7</b>	<b>.4</b>	<b>.8</b>
Food and beverages	3.8	5.0	5.4	7.2	.2	.6
Energy	4.4	20.3	8.3	53.1	4.3	6.8
<b>Ex. food and energy</b>	<b>1.9</b>	<b>2.3</b>	<b>2.2</b>	<b>2.1</b>	<b>.1</b>	<b>.3</b>
Core goods	-.9	.0	.5	-.3	-.2	.1
Core services	3.1	3.1	2.9	3.0	.2	.3
Shelter	3.7	2.7	2.4	2.4	.2	.3
Other services	2.8	3.3	3.0	3.2	.3	.3
Core market-based	1.7	2.1	1.9	2.2	.1	.3
Core non-market-based	2.7	3.2	3.7	1.6	.0	.3
<i>PPI</i>						
<b>Total finished goods</b>	<b>3.3</b>	<b>9.2</b>	<b>10.7</b>	<b>14.1</b>	<b>1.4</b>	<b>1.8</b>
Food	6.5	8.3	9.9	9.6	.8	1.5
Energy	5.1	27.0	25.5	51.9	4.9	6.0
<b>Ex. food and energy</b>	<b>1.7</b>	<b>3.0</b>	<b>5.3</b>	<b>3.7</b>	<b>.2</b>	<b>.2</b>
Core consumer goods	1.8	3.4	5.7	4.2	.3	.3
Capital equipment	1.6	2.5	4.3	3.2	.1	.3
Intermediate materials	3.6	14.5	18.3	26.8	2.9	2.1
Ex. food and energy	2.6	8.4	10.4	19.3	2.0	1.3
Crude materials	15.5	45.5	78.0	70.1	6.7	3.7
Ex. food and energy	10.2	33.0	59.2	63.4	5.0	-.2

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted.

2. PCE prices in June 2008 are staff estimates.

... Not applicable.

**State and Local Government Sector**

Incoming data suggest that real purchases by state and local governments rose moderately in the second quarter. Following a sharp drop-off in the first quarter, nominal construction spending rebounded in April and May, increasing at an annual rate of about 8 percent relative to the first-quarter average. Hiring by state and local governments also appears to be holding up. Employment gains in the second quarter averaged 21,000 per month, a bit above the average level of hiring over the past four years. According to the Census Bureau, state and local tax revenues continued to decelerate in the first quarter, posting an average increase of about 5 percent relative to a year earlier.

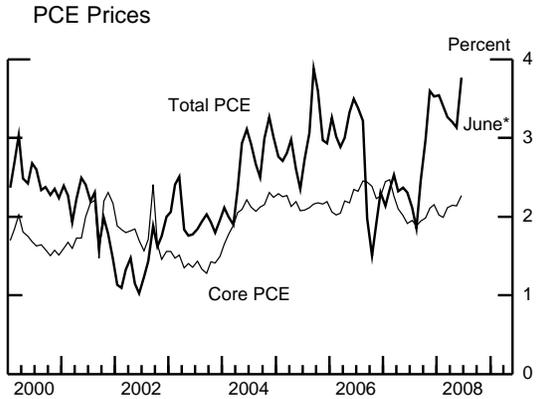
Despite the slowing of state revenues, aggregate state budget balances still appear to be in generally good shape. Recent data from the National Association of State Budget Officers (NASBO) indicate that states will end the current fiscal year with balances in the range of 8 percent of expenditures on average—well above the threshold of 5 percent that is generally thought to provide an adequate fiscal cushion. The situation varies across the states, however. Several states, such as California and Florida, are already under significant strain, while others, particularly the agricultural and energy-producing states, remain in solid fiscal health. The NASBO report indicates that states expect to face increasing budget pressures over the next few years from decelerating revenues and further increases in Medicaid. In anticipation of these future pressures, state governors have proposed increasing nominal expenditures only about 1 percent in fiscal 2009. Under the assumption that these proposed budgets are enacted and that spending and revenues come in as the governors expect, year-end balances in fiscal 2009 would be roughly the same share of expenditures as in fiscal 2008.

**Prices**

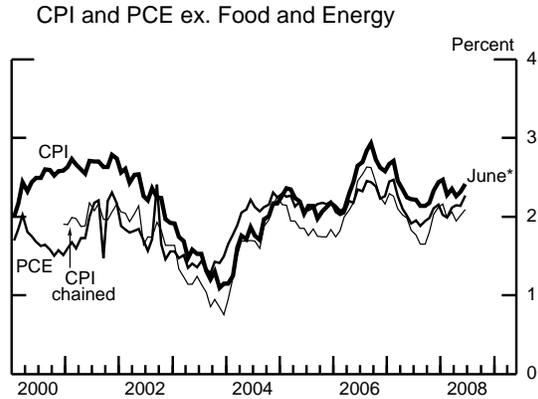
Headline consumer price inflation has stepped up in recent months, spurred by sizable increases in food and energy prices. On the basis of the June data for the consumer price index (CPI) and PPI, we estimate that overall PCE prices increased 0.8 percent last month after having risen 0.4 percent in May. These increases would push the average annual rate of inflation over the first half of this year to 4½ percent, up from 3½ percent over the 12 months of 2007. Excluding food and energy, PCE price inflation also is estimated to have been elevated in June, but, on balance, core prices have increased this year at about the same rate as last year.

We estimate that PCE energy prices climbed nearly 7 percent last month after having moved up more than 4 percent in May. The recent run-up in energy prices has brought the change over the first half of this year to an annual rate of nearly 30 percent, up from

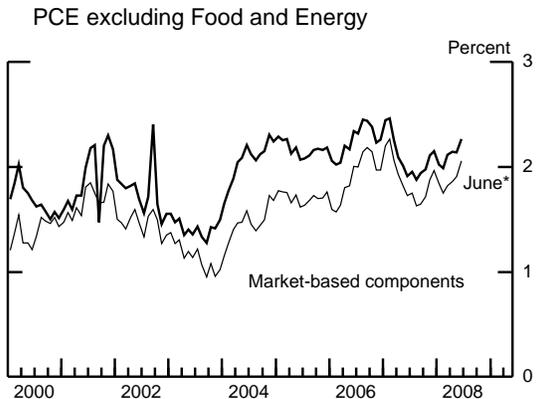
**Consumer Prices**  
(12-month change except as noted)



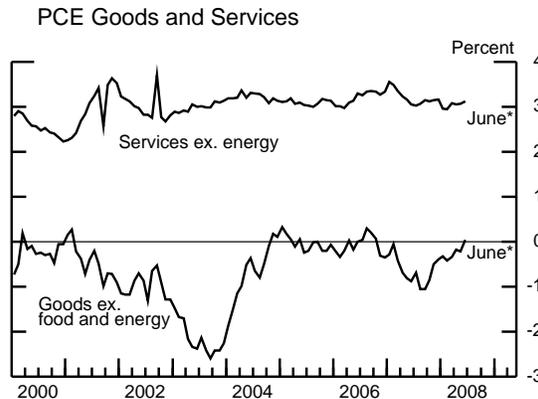
\* Staff estimate.



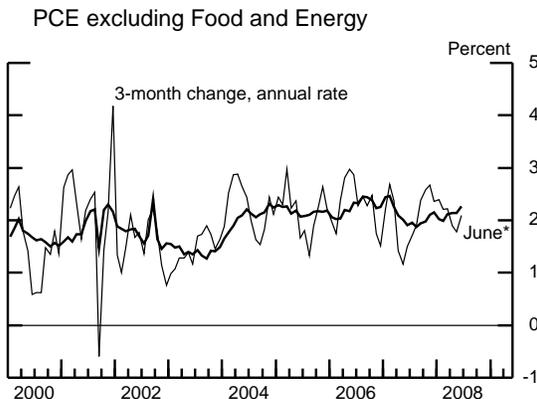
\* PCE for June is a staff estimate.



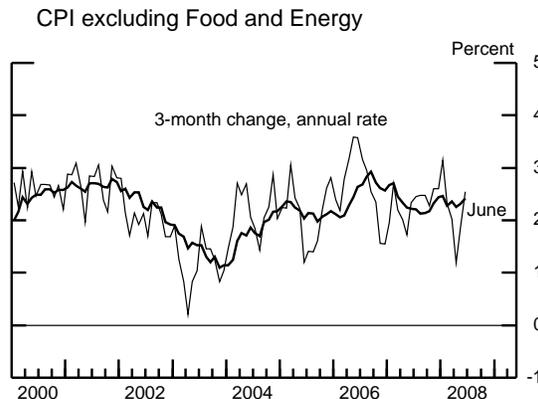
\* Staff estimate.



\* Staff estimate.



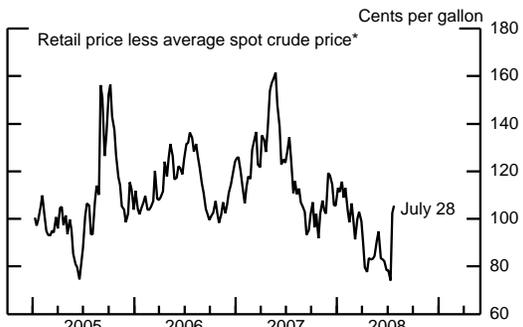
\* Staff estimate.



### Energy and Food Price Indicators

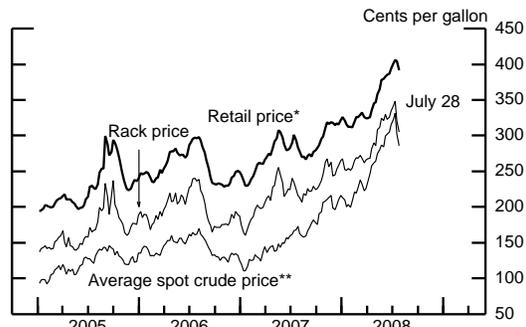
(Data from Energy Information Administration except as noted)

Total Gasoline Margin



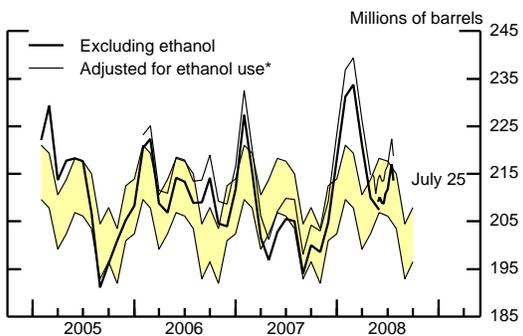
\* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% WTI, 40% Maya heavy crude. Includes gasoline taxes.

Gasoline Price Decomposition



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

Gasoline Inventories



Note. Shaded region is average historical range as calculated by DOE. Monthly data through May 2008, weekly data thereafter.

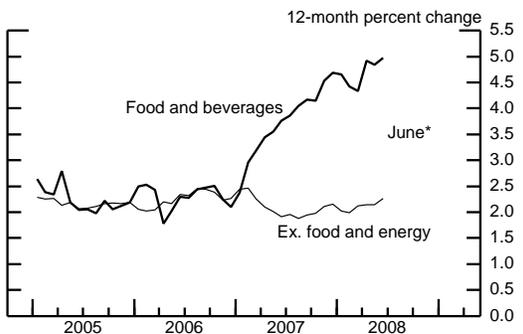
\* Adjustment for approximate amount of fuel ethanol to be blended with RBOB component of inventories; estimated by FRB staff.

Ethanol Prices



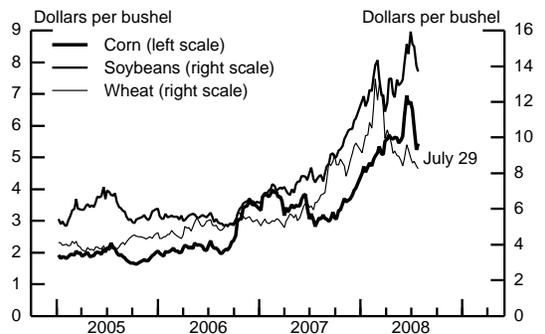
Source. Chicago Board of Trade.

PCE Food Prices



\*Staff estimate.  
Source. Bureau of Economic Analysis.

Spot Agricultural Commodity Prices



Source. Commodity Research Bureau.

**Broad Measures of Inflation**  
(Percent change, Q1 to Q1)

Measure	2005	2006	2007	2008
<i>Product prices</i>				
GDP price index	3.3	3.2	2.9	2.2
Less food and energy	3.3	3.1	2.9	1.9
Nonfarm business chain price index	3.3	3.3	2.3	1.5
<i>Expenditure prices</i>				
Gross domestic purchases price index	3.5	3.6	2.6	3.2
Less food and energy	3.2	2.9	2.8	2.0
PCE price index	2.8	3.1	2.3	3.4
Less food and energy	2.3	2.0	2.4	2.0
PCE price index, market-based components	2.4	2.9	2.2	3.5
Less food and energy	1.8	1.6	2.2	1.8
CPI	3.0	3.7	2.4	4.2
Less food and energy	2.3	2.1	2.6	2.4
Chained CPI	2.6	3.2	2.2	3.7
Less food and energy	2.1	1.9	2.2	2.1
Median CPI	2.5	2.7	3.2	3.1
Trimmed mean CPI	2.4	2.6	2.7	2.9
Trimmed mean PCE	2.5	2.4	2.7	2.3

**Surveys of Inflation Expectations**  
(Percent)

Period	Actual CPI inflation <sup>1</sup>	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		
2006:Q3	3.3	4.0	3.4	3.3	3.0	2.5	...
Q4	1.9	3.5	3.0	3.5	3.0	2.5	...
2007:Q1	2.4	3.6	3.0	3.4	2.9	2.4	2.0
Q2	2.7	4.2	3.3	3.5	3.0	2.4	2.0
Q3	2.4	4.1	3.2	3.5	3.0	2.4	2.1
Q4	4.0	4.1	3.3	3.3	2.9	2.4	2.1
2008:Q1	4.1	4.2	3.8	3.3	3.0	2.5	2.2
Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
2008:Mar.	4.0	4.6	4.3	3.2	2.9	...	...
Apr.	3.9	5.7	4.8	3.5	3.2	...	...
May	4.2	7.0	5.2	4.0	3.4	2.5	2.2
June	5.0	6.5	5.1	4.0	3.4	...	...
July	n.a.	6.3	5.1	3.5	3.2	...	...

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 compiled by the Federal Reserve Bank of Philadelphia.

... Not applicable.

n.a. Not available.

20 percent last year. In the wake of the surge in the cost of crude oil this year, retail gasoline prices jumped in May and June after having declined slightly, on balance, in the first four months of this year. Survey data point to another large increase in gasoline prices in July.<sup>11</sup> However, the recent drop in crude oil prices should greatly reduce the upward pressure on retail gasoline prices in coming months.

We estimate that the PCE price index for food and beverages jumped 0.6 percent in June, and over the first six months of this year, these prices are estimated to have risen at an annual rate of 6¼ percent, up from 4¾ percent over 2007. Rising prices of agricultural commodities have continued to put significant upward pressure on food prices this year. However, significant price increases have not been limited to food commodities; the index for food away from home, which tends to reflect broader inflationary trends in the economy, has also accelerated this year. Changes in spot prices for farm commodities are mixed since the June Greenbook: Wheat prices are down noticeably in response to a good harvest that is well under way; prices for corn and soybeans have also declined on reports of more-favorable weather in major growing regions. However, livestock prices have risen further, reflecting strong demand and high feed costs. Futures prices for farm products are consistent with a significant deceleration in crude food costs later this year.

We estimate that core PCE prices rose 0.3 percent in June after increases of 0.1 percent in both April and May. Over the first six months of this year, core PCE prices are estimated to have risen at an annual rate of 2.2 percent, the same as in 2007. The change in the market-based component of core PCE prices so far this year is also about the same as in 2007. In the first half of this year, prices for a wide variety of goods and services have accelerated. Price increases for some, such as airfares and transportation services, have no doubt been boosted by rising energy costs, while those for a number of household goods likely reflect higher import prices. At the same time, the indexes for motor vehicles and housing—weak areas of the economy—have decelerated.

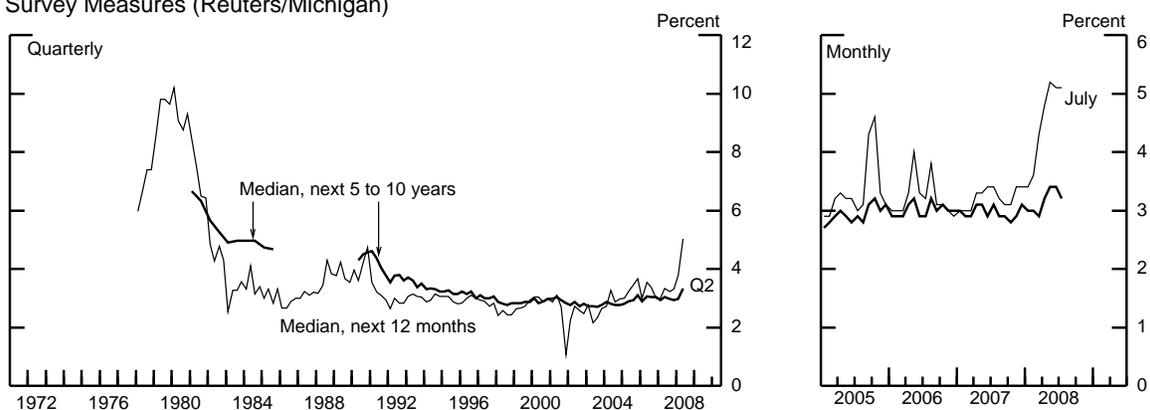
Some measures of year-ahead expectations have moved up sharply in recent months; longer-run expectations have been little changed recently but remain above their levels at the end of 2007. According to the Reuters/Michigan survey, median expectations for inflation over the next 12 months moved up sharply over the first half of this year and held at 5.1 percent in July, up noticeably from about 3½ percent at the turn of the year. Median expectations for inflation over the next 5 to 10 years edged down in July to 3.2 percent from their recent peak in May and June, but they remained a bit higher than

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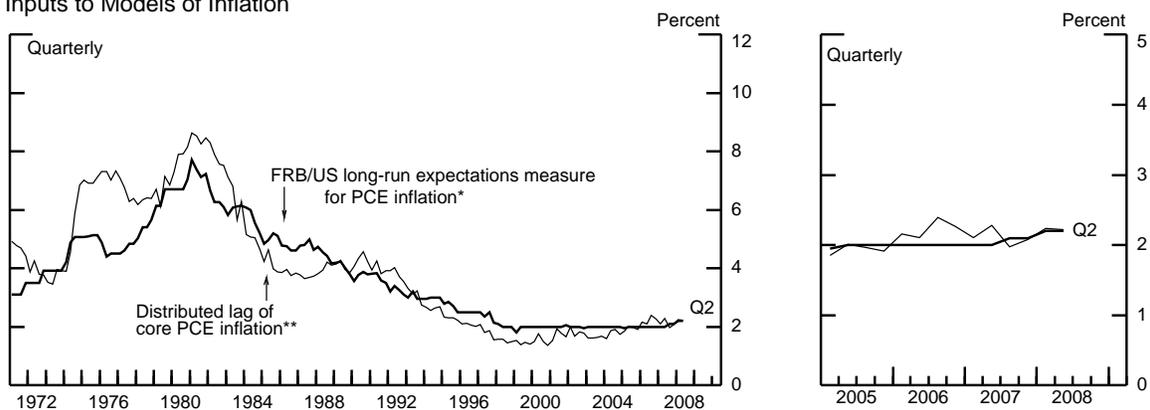
<sup>11</sup> Sharply higher prices at the pump have weighed on the demand for gasoline, and gasoline inventories have increased to the upper end of their seasonal range this summer.

## Measures of Expected Inflation

Survey Measures (Reuters/Michigan)



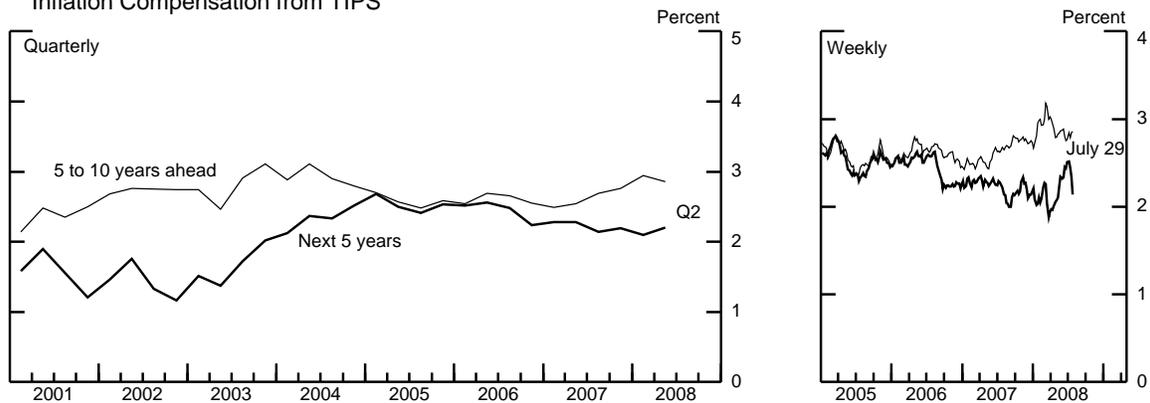
Inputs to Models of Inflation



\*For 2007 forward, the median projection for PCE inflation over the next 10 years from the Survey of Professional Forecasters (SPF); for 1991 to 2006, the equivalent SPF projection for the CPI; for 1981 to 1991, 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.

\*\*Derived from one of the reduced-form Phillips curves used by Board staff.

Inflation Compensation from TIPS



Note. Based on a comparison of an estimated TIPS yield curve with an estimated nominal off-the-run Treasury yield curve, with an adjustment for the indexation-lag effect.

the average of 3 percent posted in 2007 and the first quarter of this year. Five-year inflation compensation derived from Treasury inflation-protected securities (TIPS) has declined 0.3 percentage point since the June Greenbook but is about unchanged since the end of last year. The measure of inflation compensation 5 to 10 years ahead—at 2.9 percent—has risen some since the June Greenbook and is up 0.2 percentage point, on balance, this year. These measures have exhibited greater variability this year, likely because of swings in the risk premiums that investors demand to induce them to hold relatively illiquid TIPS rather than nominal securities.

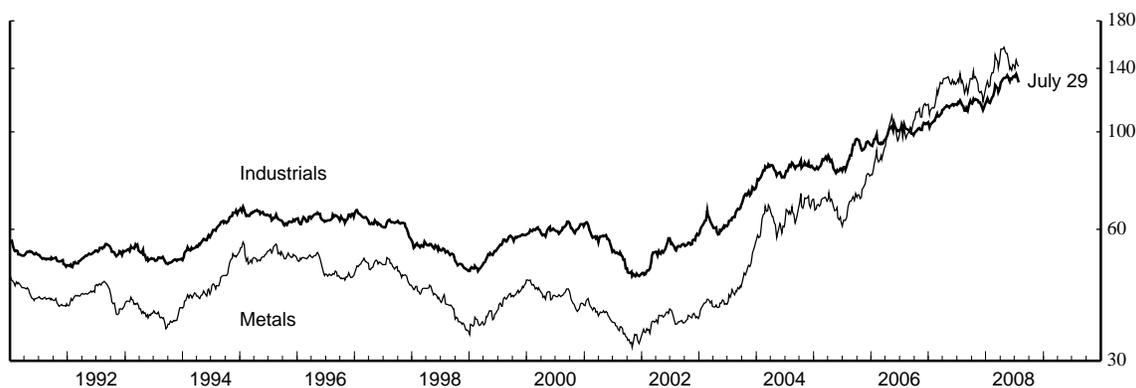
Excluding food and energy, sharp increases in the prices of products and services at earlier stages of processing continue to put upward pressures on business costs and consumer prices. The PPI for core intermediate materials moved up 1.3 percent in June, on top of a string of earlier large monthly increases. The rise in June brought the increase in the first half of the year to an annual rate of about 15 percent, up sharply from the pace of roughly 3 percent recorded last year. Price increases have been particularly large for chemicals, plastics, and metal products. The PPIs for trucking, rail transport, and delivery services also posted sizable increases again in June and have moved up rapidly over the past year.

In recent weeks, industrial materials prices have declined somewhat following large increases earlier this year: Since the June Greenbook, both the Commodity Research Bureau spot industrials index and the *Journal of Commerce* industrial commodities index have declined between 1 percent and 2 percent.

## Commodity Price Indexes

Journal of Commerce

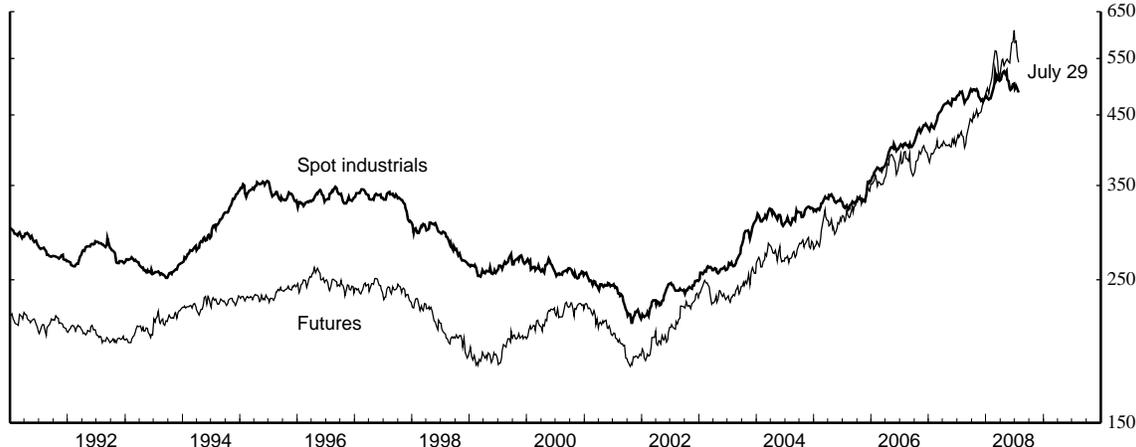
Ratio scale, 2006 = 100



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 *Journal of Commerce* 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	2007 <sup>1</sup>	12/18/07 to 6/17/08 <sup>2</sup>	6/17/08 <sup>2</sup> to 7/29/08	52-week change to 7/29/08
JOC industrials	7.6	17.9	-1.9	11.4
JOC metals	2.1	17.9	2.2	8.7
CRB spot industrials	8.2	4.6	-1.2	.2
CRB spot foodstuffs	25.5	25.8	-1.9	29.8
CRB futures	18.2	24.4	-6.7	27.8

1. From the last week of the preceding year to the last week of the year indicated.

2. June 17, 2008, is the Tuesday preceding publication of the June Greenbook.

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## **Domestic Financial Developments**

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III-T-1  
**Selected Financial Market Quotations**  
(One-day quotes in percent except as noted)

Instrument	2007	2008			Change to July 29 from selected dates (percentage points)		
	Aug. 6	Jan. 31	June 24	July 29	2007 Aug. 6	2008 Jan. 31	2008 June 24
<i>Short-term</i>							
FOMC intended federal funds rate	5.25	3.00	2.00	2.00	-3.25	-1.00	.00
Treasury bills <sup>1</sup>							
3-month	4.74	1.92	1.80	1.69	-3.05	-.23	-.11
6-month	4.72	2.02	2.20	1.91	-2.81	-.11	-.29
Commercial paper (A1/P1 rates) <sup>2</sup>							
1-month	5.26	2.95	2.36	2.35	-2.91	-.60	-.01
3-month	5.29	2.98	2.78	2.76	-2.53	-.22	-.02
Large negotiable CDs <sup>1</sup>							
3-month	5.34	3.01	2.80	2.82	-2.52	-.19	.02
6-month	5.27	2.93	3.17	3.17	-2.10	.24	.00
Eurodollar deposits <sup>3</sup>							
1-month	5.33	3.15	2.70	2.65	-2.68	-.50	-.05
3-month	5.35	3.15	3.00	3.00	-2.35	-.15	.00
Bank prime rate	8.25	6.00	5.00	5.00	-3.25	-1.00	.00
<i>Intermediate- and long-term</i>							
U.S. Treasury <sup>4</sup>							
2-year	4.49	2.16	2.80	2.61	-1.88	.45	-.19
5-year	4.52	2.83	3.55	3.41	-1.11	.58	-.14
10-year	4.82	3.86	4.29	4.27	-.55	.41	-.02
U.S. Treasury indexed notes <sup>5</sup>							
5-year	2.43	.68	1.10	1.28	-1.15	.60	.18
10-year	2.48	1.35	1.76	1.81	-.67	.46	.05
Municipal general obligations (Bond Buyer) <sup>6</sup>	4.51	4.39	4.76	4.77	.26	.38	.01
Private instruments							
10-year swap	5.44	4.23	4.84	4.78	-.66	.55	-.06
10-year FNMA <sup>7</sup>	5.34	4.28	4.98	4.81	-.53	.53	-.17
10-year AA <sup>8</sup>	6.12	5.62	6.54	6.82	.70	1.20	.28
10-year BBB <sup>8</sup>	6.57	6.39	7.00	7.21	.64	.82	.21
10-year high yield <sup>8</sup>	9.21	9.80	10.13	10.46	1.25	.66	.33
Home mortgages (FHLMC survey rate) <sup>9</sup>							
30-year fixed	6.59	5.68	6.45	6.63	.04	.95	.18
1-year adjustable	5.65	5.05	5.27	5.49	-.16	.44	.22

Stock exchange index	Record high		2008			Change to July 29 from selected dates (percent)		
	Level	Date	Jan. 31	June 24	July 29	Record high	2008 Jan. 31	2008 June 24
Dow Jones Industrial	14,165	10-9-07	12,650	11,807	11,398	-19.53	-9.90	-3.47
S&P 500 Composite	1,565	10-9-07	1,379	1,314	1,263	-19.29	-8.37	-3.89
Nasdaq	5,049	3-10-00	2,390	2,368	2,320	-54.05	-2.94	-2.05
Russell 2000	856	7-13-07	713	708	715	-16.50	.18	.94
Wilshire 5000	15,807	10-9-07	13,897	13,421	12,900	-18.39	-7.17	-3.88

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.
9. Home mortgage rates for July 29, 2008, are for the week ending July 24, 2008.

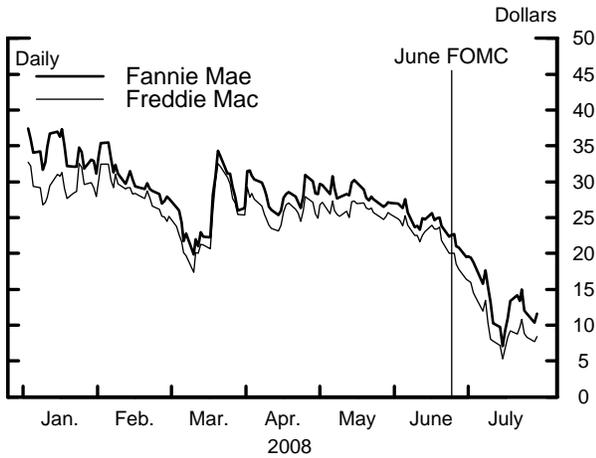
NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.  
January 31, 2008, is the day after the January 2008 FOMC meeting.  
June 24, 2008, is the day before the most recent FOMC monetary policy announcement.

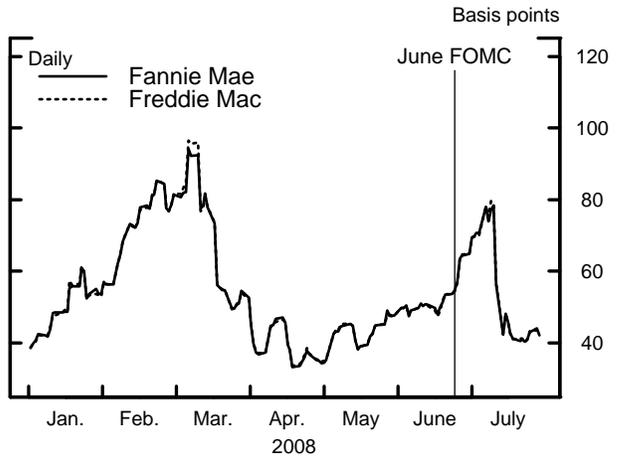
# Financial Institutions and Market Functioning

(Data extend through July 29, 2008)

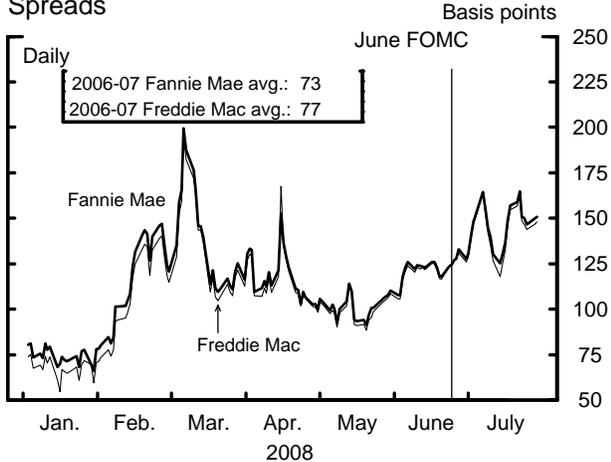
GSE Stock Prices



CDS Spreads for GSEs

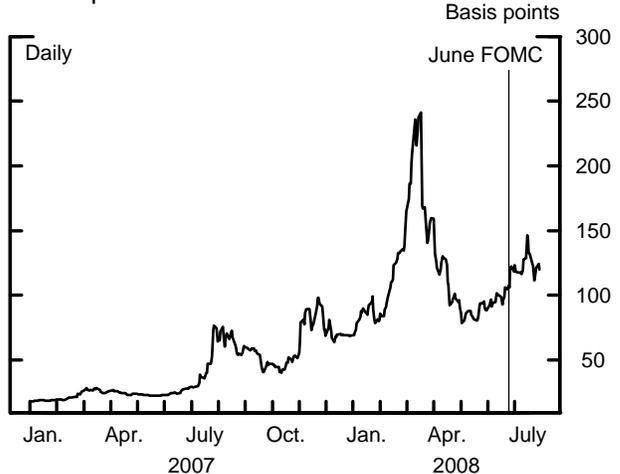


30-Year Option-Adjusted Current MBS Coupon Spreads



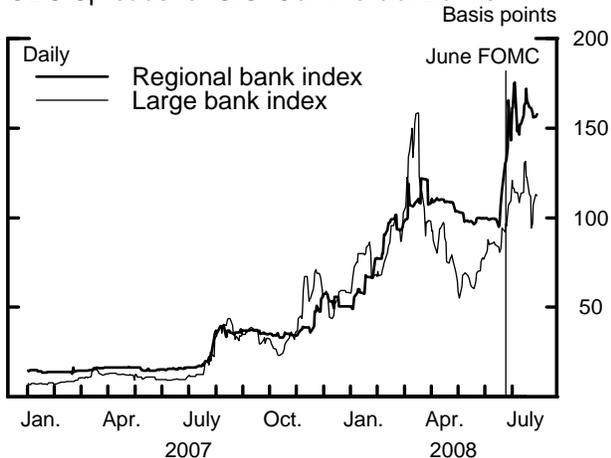
Note. Spread of the option-adjusted yield on newly issued 30-year MBS over comparable duration Treasury securities using Bloomberg's prepayment model.  
Source. Bloomberg.

CDS Spreads for Investment Banks



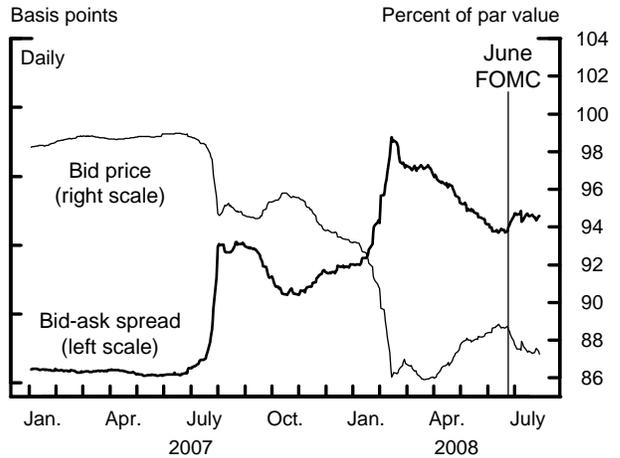
Note. Median spread for 10 investment banks.  
Source. Markit.

CDS Spreads for U.S. Commercial Banks



Note. Median spreads for 8 regional and 5 large commercial banks.  
Source. Markit.

Pricing in the Secondary Market for Leveraged Loans



Source. LSTA/LPC Mark-to-Market Pricing.

## Domestic Financial Developments

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### Overview

Sentiment in financial markets deteriorated markedly early in the intermeeting period, largely because of heightened concerns about the solvency of Fannie Mae and Freddie Mac, the health of financial institutions in general, and rising oil prices. Those concerns eased somewhat in response to the federal government's explicit support for Fannie Mae and Freddie Mac, some bank earnings reports that were better than expected, and declines in oil prices. Nonetheless, equity prices decreased, on net, over the intermeeting period, corporate bond spreads widened, mortgage rates rose, and investors marked down the expected path of monetary policy. Market participants now place high odds on the Federal Open Market Committee (FOMC) making no change in the target federal funds rate at the upcoming meeting. The yield on the two-year Treasury note decreased moderately over the intermeeting period, while yields on longer-term Treasury securities were about unchanged. Near-term inflation compensation declined, likely owing to the drop in oil prices, whereas five-year forward inflation compensation increased. Interbank funding and commercial paper markets remained strained.

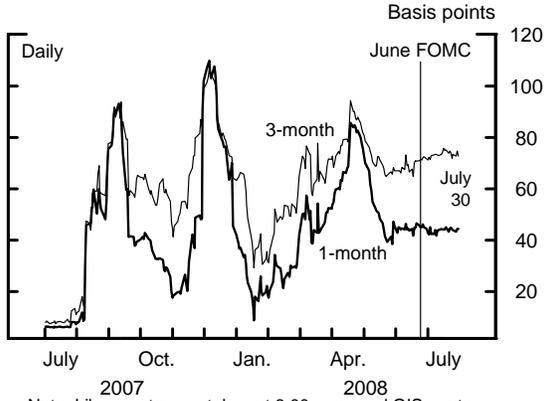
Net borrowing by businesses slowed somewhat in July. Credit quality of the nonfinancial corporate sector slipped a bit in the first and second quarters. House prices continued to fall in May, and delinquency rates on residential mortgages moved up further. Growth of consumer credit remained subdued in May. According to the July Senior Loan Officer Opinion Survey on Bank Lending Practices, large majorities of domestic commercial banks further tightened their lending standards and terms on most categories of loans to businesses and households (see the appendix to this section). In addition, second quarter earnings reports for a number of large banks indicated widespread increases in delinquency rates.

### Financial Institutions and Market Functioning

Financial markets were buffeted over the intermeeting period by developments affecting Fannie Mae and Freddie Mac as well as by renewed investor concerns about a further deterioration in the credit quality of other financial institutions, fueled in part by the failure of a large thrift. As pressures intensified on Fannie Mae and Freddie Mac amid reports that they might need to raise a substantial amount of capital, their stock prices tumbled through mid-July, and their credit default swap (CDS) premiums shot up. For a time, investors reportedly pulled back from auctions of agency discount notes, and trading conditions in agency-sponsored mortgage-backed securities (MBS) were said to be very poor.

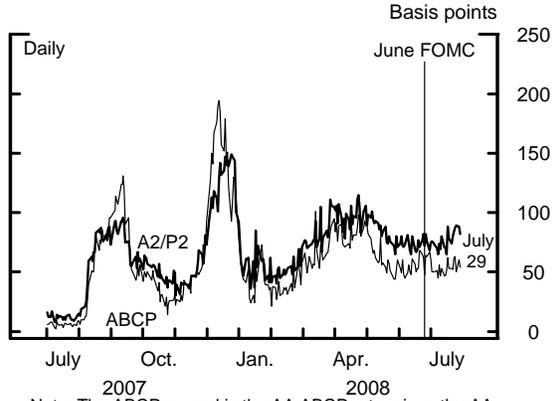
### Short-Term Funding and Interbank Markets

Spread between Libor and OIS Rates



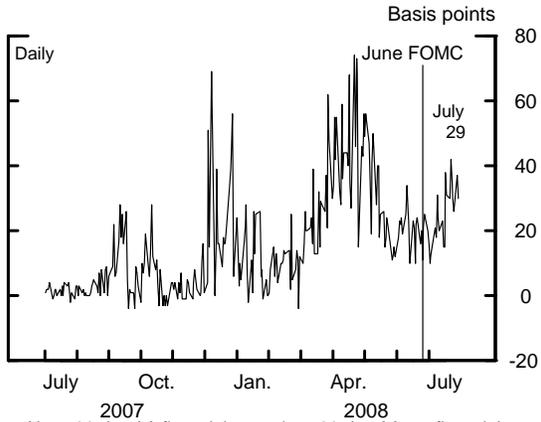
Note. Libor quotes are taken at 6:00 a.m., and OIS quotes are observed at the close of business of the previous trading day.

Spreads on 30-Day Commercial Paper



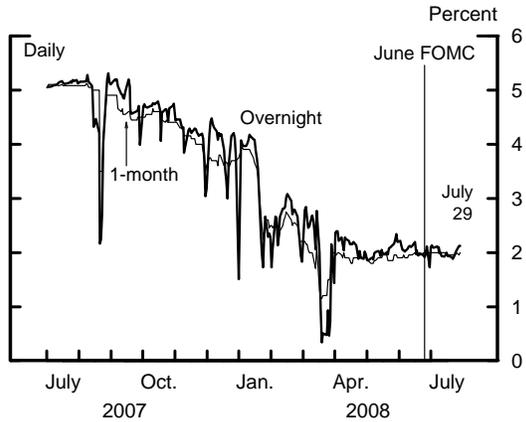
Note. The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.

Commercial Paper Spread for Financial Firms

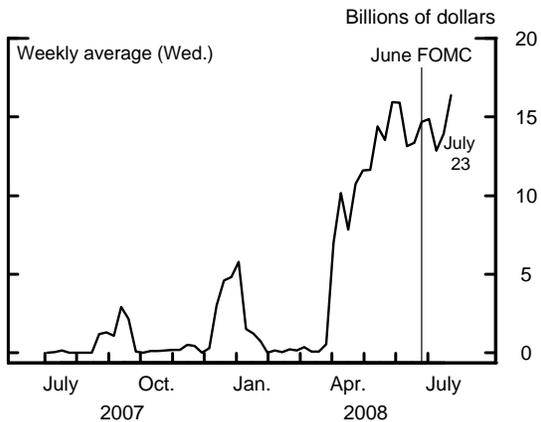


Note. 30-day AA financial rate minus 30-day AA nonfinancial rate. Source: Markit.

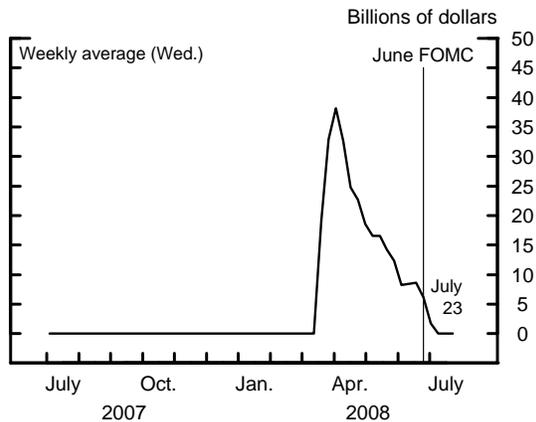
Repo Rates on Treasury General Collateral



Primary Credit Borrowing



Primary Dealer Credit Facility



On July 13, the Treasury Department announced a proposal to support the two ailing government-sponsored enterprises (GSEs), and the Board of Governors authorized the Federal Reserve Bank of New York to provide liquidity support at the discount window if necessary. Subsequently, Fannie Mae's and Freddie Mac's stock prices reversed a portion of their earlier declines, premiums on CDS referencing their senior debt fell sharply, and both GSEs held auctions of short-term debt securities that were well received.<sup>1</sup> However, option-adjusted spreads on MBS guaranteed by the GSEs were high and volatile over the intermeeting period.<sup>2</sup> On July 30, legislation was enacted that largely incorporated the Treasury's plan to support the GSEs and included additional measures intended to help the housing market.

Overall, second-quarter earnings in the financial sector were significantly below year-ago levels as banking organizations ratcheted up loan-loss provisions and continued to write down the values of mortgage-related assets. A number of financial institutions reported negative earnings, while several institutions raised significant amounts of new capital. CDS premiums for U.S. investment banks and for large commercial banks rose moderately, on net, over the intermeeting period, but are up somewhat more, on net, for regional banks. CDS premiums on subordinated debt issued by bank holding companies also rose substantially over the intermeeting period.

The intensification of concerns about the health of financial institutions left an imprint on the functioning of some financial markets. CDS market functioning remained under stress over the intermeeting period, particularly for the CDS of financial firms. Measures of liquidity for speculative-grade corporate bonds deteriorated markedly early on but have mostly recovered. The average bid-asked spread in the secondary market for leveraged loans widened slightly, and the average bid price on these loans moved down somewhat, which put additional pressures on banks attempting to reduce their backlog of previously underwritten deals.

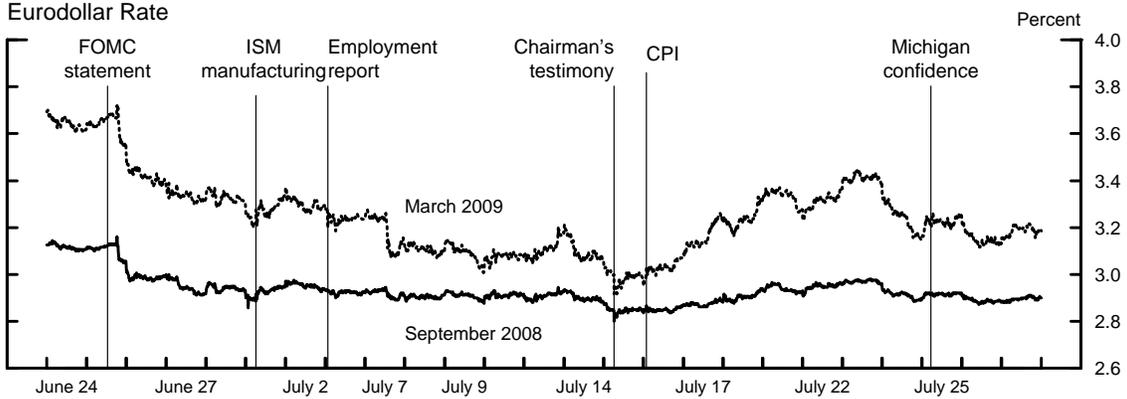
In short-term funding markets, strains persisted over the intermeeting period. Amid continued bank funding pressures, spreads of Libor over comparable-maturity OIS rates

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<sup>1</sup> Freddie Mac completed registration of an equity offering with the Securities and Exchange Commission on July 18, facilitating its plans to raise additional capital.

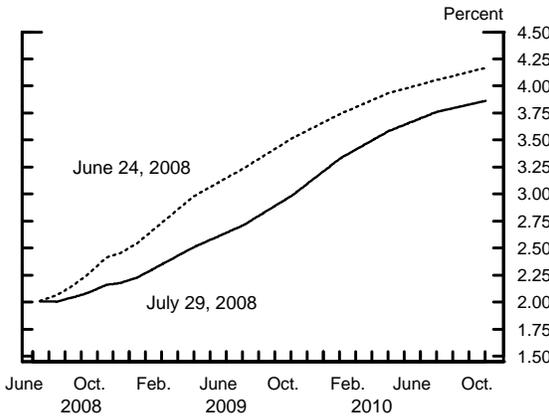
<sup>2</sup> Developments at Fannie Mae and Freddie Mac spurred investor concerns about the financial condition of the Federal Home Loan Banks (FHLBs), and secondary-market spreads on their senior debt rose in late June and early July but are little changed, on net, over the intermeeting period. In addition, many dealers have not been reporting quotes for CDS on FHLB debt for the past two weeks, suggesting that liquidity in this market is impaired.

### Policy Expectations and Treasury Yields



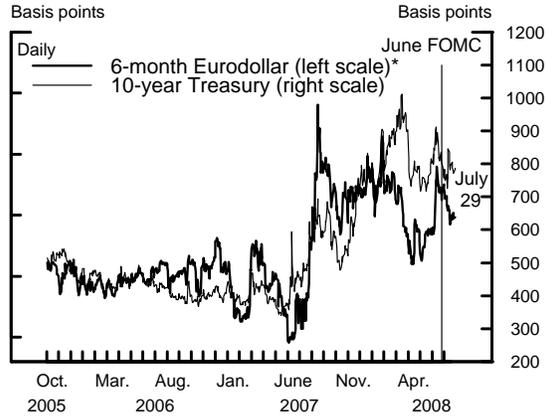
Note. 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.

Implied Federal Funds Rate



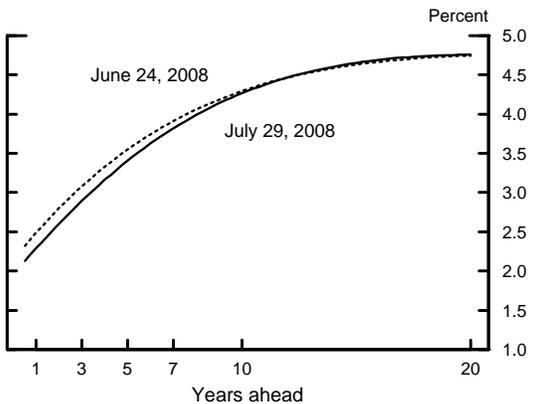
Note. Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments.

Implied Volatility of Interest Rates



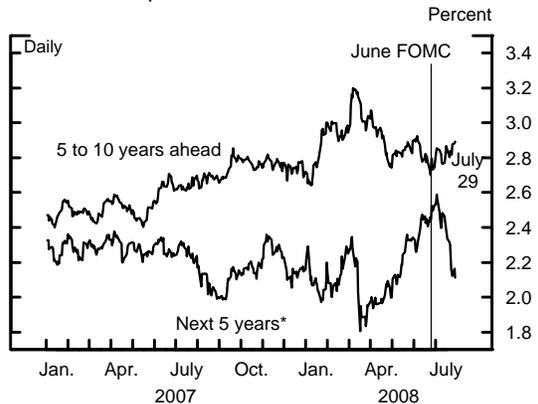
\*Width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility.

Treasury Yield Curve



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

Inflation Compensation



Note. Estimates based on smoothed nominal and inflation-indexed Treasury yields.  
\*Adjusted for lagged indexation of TIPS.

remained elevated, especially beyond the one-month horizon. In the commercial paper market, 30-day spreads for both A2/P2 nonfinancial paper and asset-backed commercial paper were about unchanged at elevated levels, and spreads for financial firms' commercial paper trended higher. Bid-asked spreads on repos of GSE debt and, to a lesser extent, agency MBS, increased, and "haircuts" on GSE debt collateral rose moderately. Conditions were little changed in repo markets for Treasury and non-agency collateral.

Operations under the Term Auction Facility (TAF) were again well subscribed over the intermeeting period, with stop-out rates above the primary credit rate, an indication of sustained funding pressures. Primary credit borrowing continued to be strong, reaching a record high on June 30, which likely reflected in part the response of banks to quarter-end funding pressures. In contrast, most Term Security Lending Facility (TSLF) auctions during the intermeeting period were undersubscribed, and extensions of credit through the Primary Dealer Credit Facility (PDCF) were small and infrequent over the past several weeks.

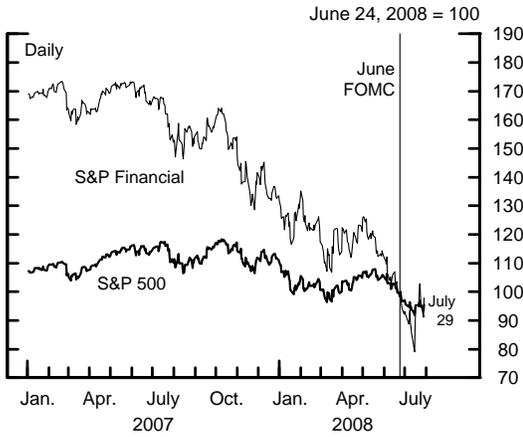
The Federal Reserve announced this week the extension of the TSLF and PDCF beyond the year-end, along with an increase in the maturity of TAF loans to 84 days and a new program of options on draws on the TSLF around key calendar dates. The spread between rates on 2008 Eurodollar futures contracts and those on comparable maturity federal funds contracts declined following the announcement; reactions in other markets were limited.

### **Policy Expectations and Treasury Yields**

Investors marked down the expected path of the federal funds rate, on balance, over the intermeeting period. Market participants apparently anticipated the Committee's decision to leave the federal funds rate unchanged at the June meeting. However, they reportedly read the accompanying statement as fairly balanced in its discussion of the risks to growth and inflation rather than suggesting greater concern about inflation as had been expected. Money market futures rates for early 2009 moved down roughly 10 basis points on the June FOMC announcement. In subsequent weeks, futures rates decreased further on financial jitters and in response to the Chairman's testimony on July 15, which was viewed as suggesting greater-than-anticipated concern about downside risks to growth. In recent weeks, rates have reversed part of these declines, bolstered by the federal government's explicit support for the GSEs, some better-than-expected earnings

### Corporate Yields, Risk Spreads, and Stock Prices

Selected Stock Price Indexes

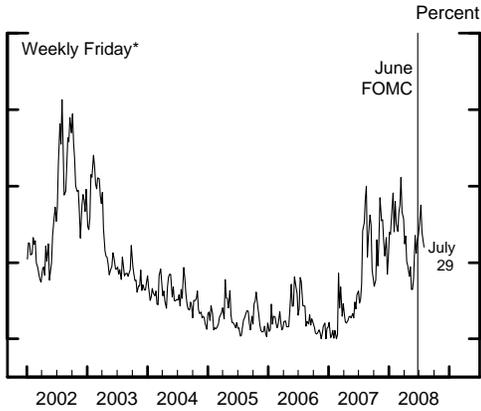


Ratio of Trend Earnings to Price for S&P 500 and Long-Run Treasury Yield



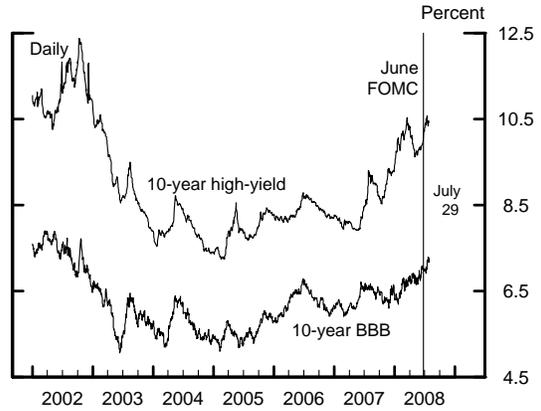
\* Trend earnings are estimated using analysts' forecasts of year-ahead earnings from I/B/E/S.  
+ Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Implied Volatility on S&P 500 (VIX)



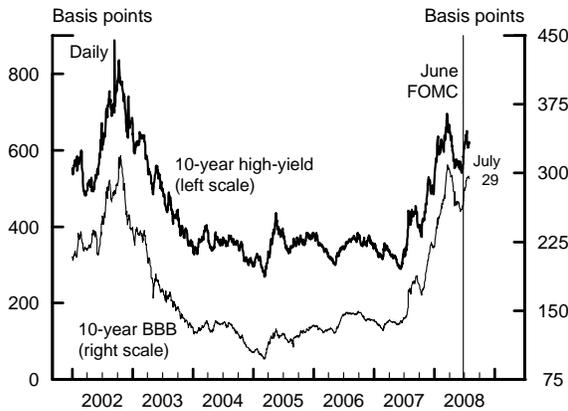
\* Latest observation is for most recent business day.

Corporate Bond Yields



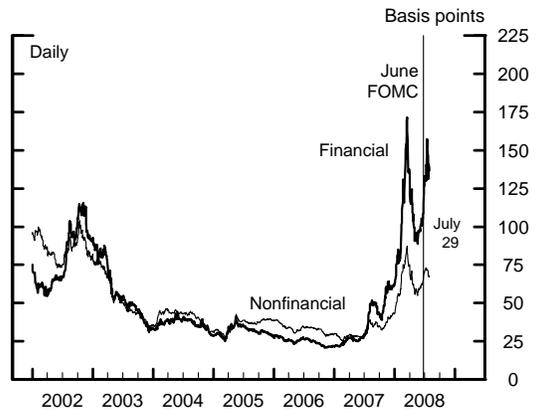
Note: Yields from smoothed yield curves based on Merrill Lynch bond data.

Corporate Bond Spreads



Note: Measured relative to comparable-maturity Treasury securities.

Investment-Grade CDS Indexes



reports from commercial banks, and the decline in oil prices. Economic data released over the intermeeting period had little net effect on policy expectations.

On net, investors revised down the expected policy rate at the end of this year about 30 basis points. Judging from options on federal funds futures, market participants assign very high odds on the target rate remaining at 2 percent at the August meeting. Futures rates also indicate that investors now expect the target rate to be left unchanged at the September meeting as well, consistent with the average forecast in the July survey of primary dealers. Further ahead, futures prices suggest a cumulative increase in the federal funds rate of more than 175 basis points by the end of 2010, about 30 basis points less than the rise anticipated at the time of the last FOMC meeting. The option-implied distribution of the federal funds rate six months ahead narrowed a bit, but it retained a moderate skew toward higher rates.

Short-term Treasury yields declined, on balance, in line with policy expectations. Two-year nominal Treasury yields were down 19 basis points. Meanwhile, 10-year yields were about unchanged. Five-year inflation compensation derived from yields on Treasury inflation-protected securities closely tracked oil prices, ending the period down 33 basis points on net. Inflation compensation 5 to 10 years ahead rose 19 basis points, with much of the increase occurring around the release of the June FOMC statement, the Chairman's testimony, and higher-than-expected CPI inflation data.

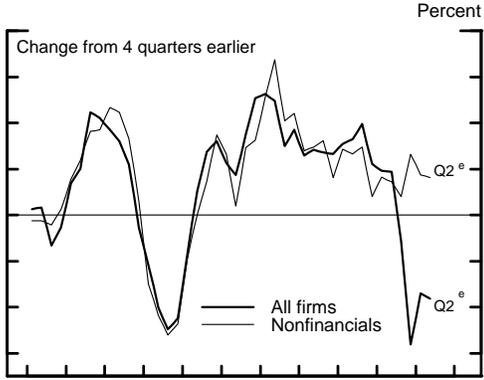
### **Stock Prices, Corporate Yields, and Risk Spreads**

Broad equity-price indexes declined about 4 percent, on net, over the intermeeting period, as the energy sector substantially underperformed. Stock prices of financial firms were volatile and ended the period down about 2 percent. The spread between the 12-month-forward trend earnings-to-price ratio for S&P 500 firms and a real long-run Treasury yield—a rough gauge of the equity premium—climbed to the top of its range over the past 25 years. Option-implied volatility on the S&P 500 index increased significantly in late June and early July but was about unchanged, on net, over the intermeeting period.

Yields on investment- and speculative-grade corporate bonds rose, on net, over the intermeeting period, even as yields on comparable-maturity Treasury securities were little changed, pushing spreads back toward their March peaks. Indexes of premiums on investment-grade CDS for nonfinancial firms changed little over the intermeeting period, while those for financial firms increased notably, on net.

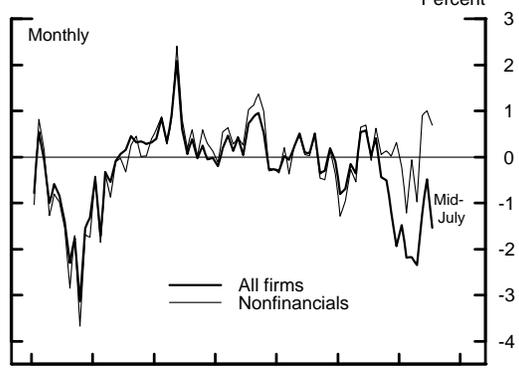
### Corporate Earnings and Credit Quality

S&P 500 Earnings Per Share



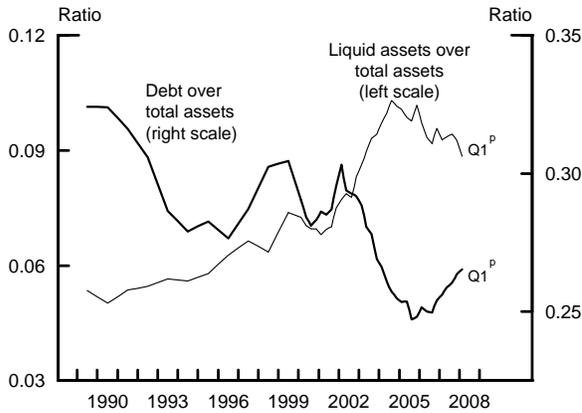
Bottom-up forecasts by equity analysts for firms that have not reported.  
 Source: For S&P 500 earnings per share, Thomson Financial.

Revisions to Expected S&P 500 Earnings



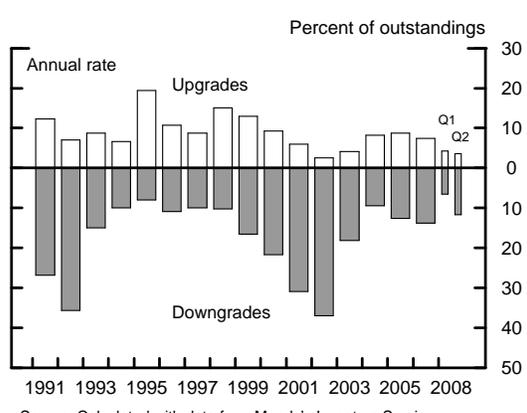
Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year EPS for a fixed sample.

Financial Ratios for Nonfinancial Corporations



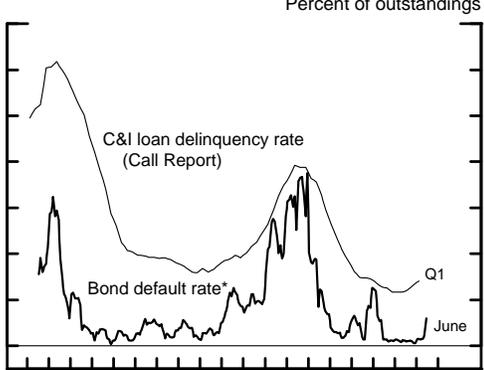
Note: Data are annual through 1999 and quarterly starting in 2000:Q1.  
 p Preliminary.  
 Source: Calculated with Compustat data.

Bond Ratings Changes of Nonfinancial Companies



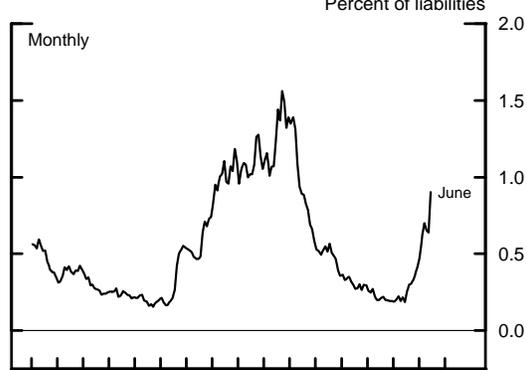
Source: Calculated with data from Moody's Investors Service.

Selected Default and Delinquency Rates



\* 6-month moving average, from Moody's Investors Service.

Expected Year-Ahead Defaults



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

**Corporate Earnings and Credit Quality**

According to the approximately 300 second-quarter earnings reports in hand and analysts' forecasts for the rest, earnings per share for S&P 500 firms are expected to come in about 18 percent below year-ago levels, mainly because of a sharp drop in profits in the financial sector. In contrast, earnings per share for nonfinancial firms are estimated to have risen about 8 percent over year-ago levels, with roughly half the gains accounted for by firms in the oil and gas industry. Among firms that have reported, about three-fourths posted earnings-per-share above analyst forecasts. Regarding the outlook, an index of analysts' expectations of year-ahead earnings for S&P 500 firms was negative through mid-July.

The credit quality of nonfinancial firms deteriorated a little in the first and second quarters. The aggregate leverage ratio of nonfinancial firms increased in the first quarter, and the aggregate ratio of liquid assets to total assets ticked down. Rating downgrades on nonfinancial corporate bonds remained modest but outpaced upgrades in the second quarter, and the number of nonfinancial firms on watch for a downgrade continued to exceed the number on watch for an upgrade. The default of a large mortgage-related firm pushed up the six-month trailing bond default rate in June, and the KMV-based aggregate year-ahead expected default rate jumped to its highest level since early 2003.

**Business Finance**

Overall, net debt financing by businesses has declined in July. Bond issuance by investment-grade nonfinancial corporations slowed from its rapid second-quarter pace, and speculative-grade issuance ticked down. At the same time, outstanding nonfinancial commercial paper posted a solid gain, while commercial and industrial (C&I) loans apparently grew moderately. According to the July Senior Loan Officer Opinion Survey, substantial majorities of banks tightened lending standards and terms on C&I loans over the past three months. Public issuance of bonds and equity by financial corporations sank in July, likely reflecting in part increased volatility in those securities.

Both seasoned and initial equity offerings remained weak in July, with almost no issuance outside the energy sector. Equity retirements from cash-financed mergers continued to fall in the second quarter, but announcements of new deals picked up. Retirements from share repurchases are also estimated to have continued to decline. Even so, net equity issuance by nonfinancial firms remained negative.

## Business Finance

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

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

Type of security	2004	2005	2006	2007		2008		
				H1	H2	Q1	Q2	July <sup>P</sup>
<i>Nonfinancial corporations</i>								
Stocks <sup>1</sup>	5.4	4.6	4.7	5.5	5.4	2.3	4.8	4.8
Initial public offerings	1.6	1.7	1.8	1.7	1.6	.3	.9	.3
Seasoned offerings	3.8	2.8	2.9	3.9	3.8	2.0	3.9	4.5
Bonds <sup>2</sup>	22.4	18.7	29.3	37.6	32.5	29.5	39.5	19.0
Investment grade	8.3	8.7	13.1	14.9	20.2	24.1	25.6	12.0
Speculative grade	8.2	5.2	6.2	11.8	3.3	1.3	4.8	3.0
Other (sold abroad/unrated)	5.9	4.8	10.1	10.9	9.0	4.1	9.0	4.0
<i>Memo</i>								
Net issuance of commercial paper <sup>3</sup>	1.7	-.2	2.4	1.1	-2.0	4.5	-5.5	6.0
Change in C&I loans at commercial banks <sup>3,4</sup>	2.4	9.6	11.6	14.0	28.8	16.1	9.2	6.4
<i>Financial corporations</i>								
Stocks <sup>1</sup>	6.9	5.0	5.3	9.3	7.9	13.2	21.3	1.0
Bonds <sup>2</sup>	134.1	170.4	180.6	200.5	102.8	54.9	77.9	15.0

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

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

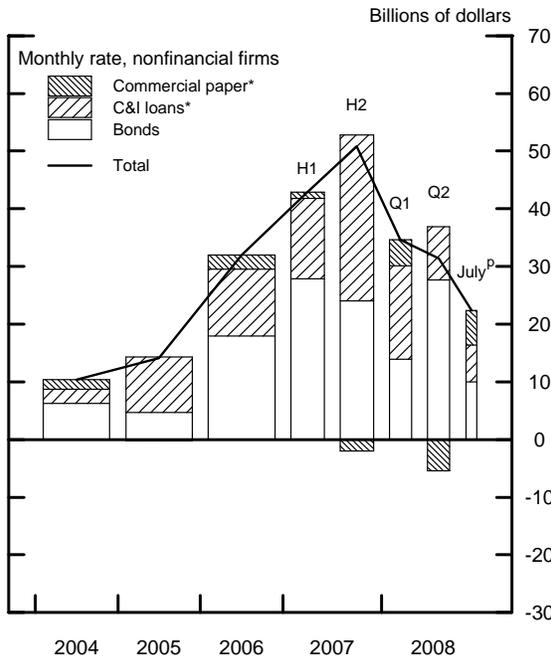
2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's.

3. End-of-period basis, seasonally adjusted.

4. Based on adjusted commercial bank credit data through July 16.

p Preliminary.

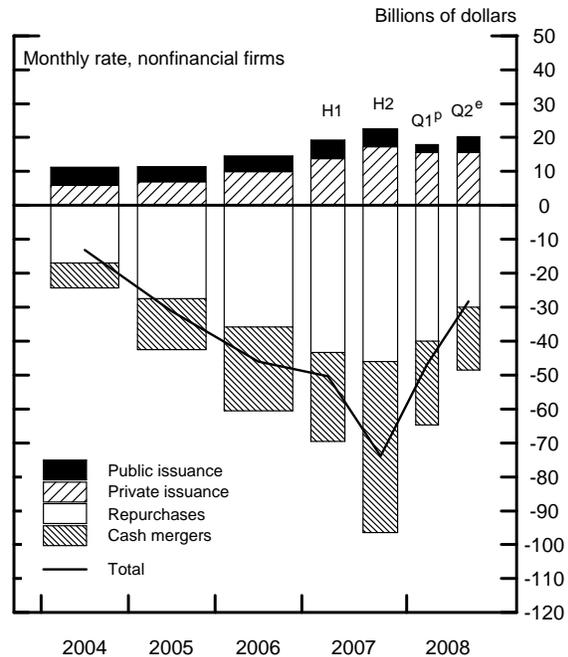
### Selected Components of Net Debt Financing



\* Seasonally adjusted, period-end basis.

p Preliminary.

### Components of Net Equity Issuance

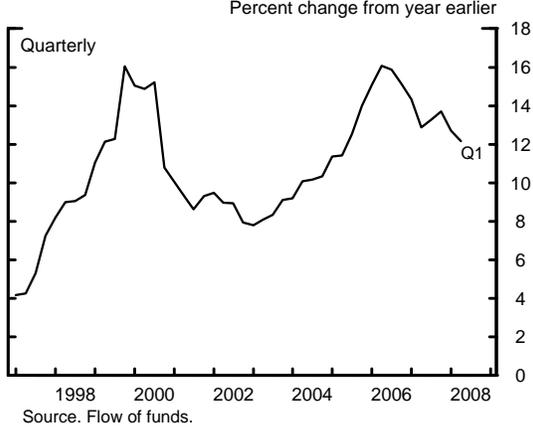


e Staff estimate.

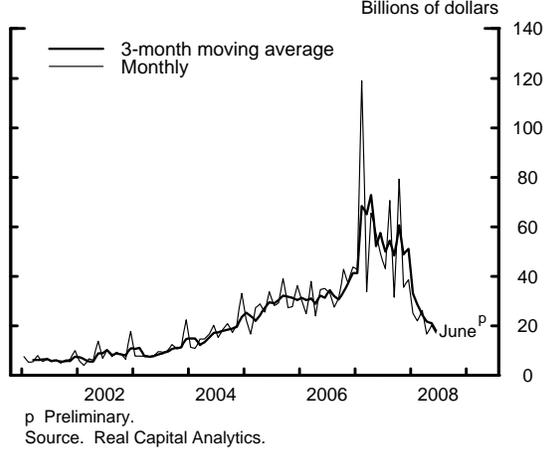
p Preliminary.

### Commercial Real Estate

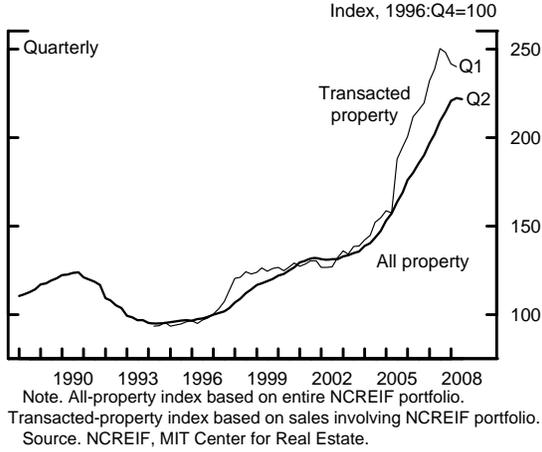
Commercial Mortgage Debt



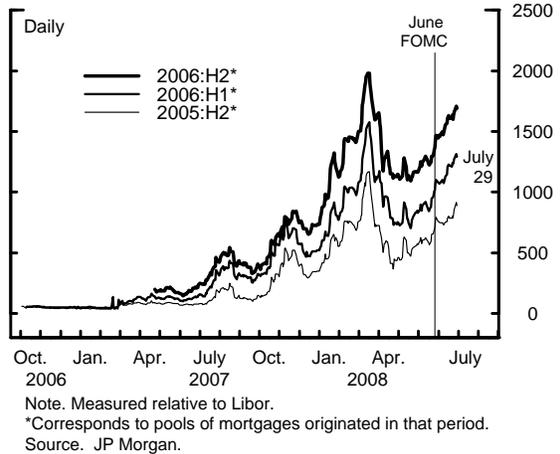
Sales of Commercial Real Estate



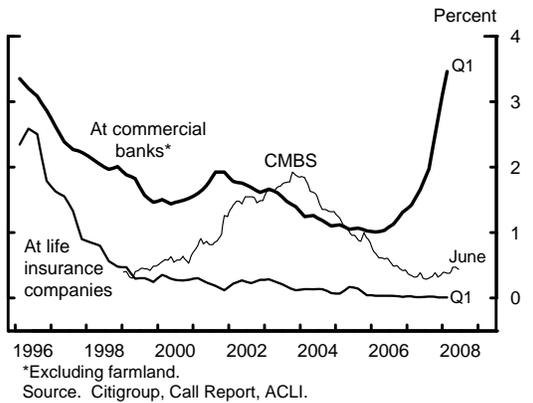
Prices



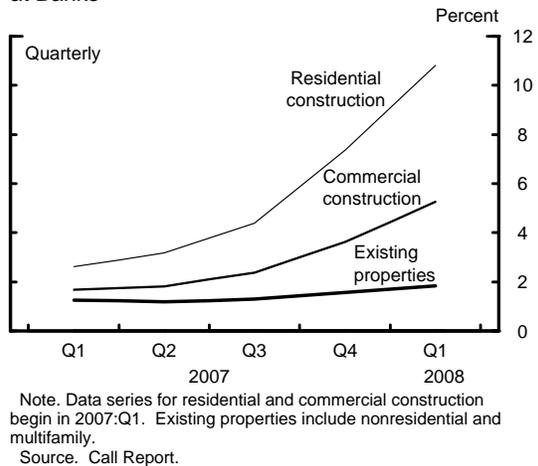
BBB Commercial Mortgage CDS Index Spreads



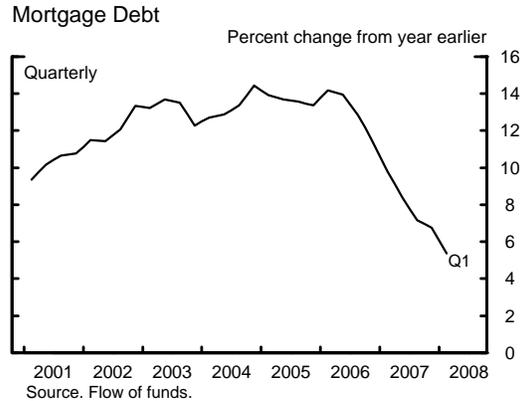
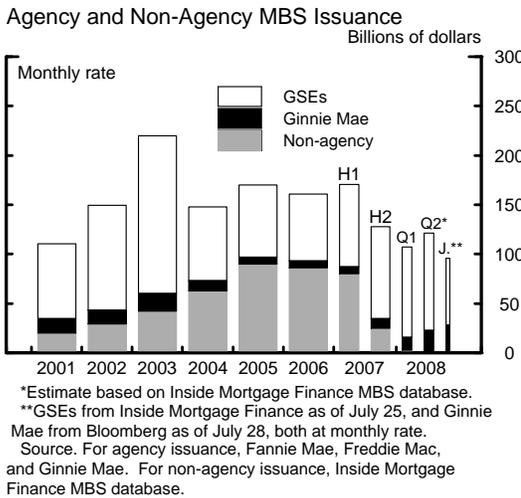
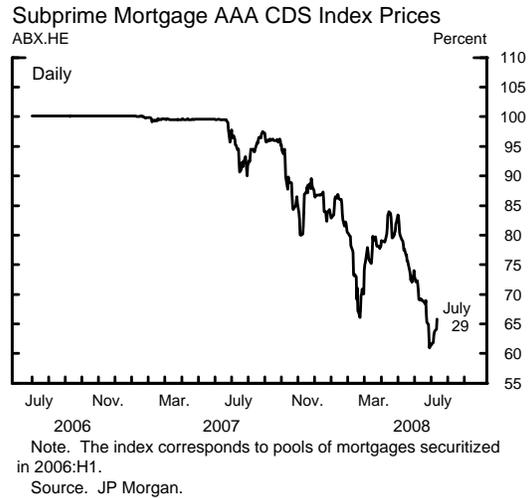
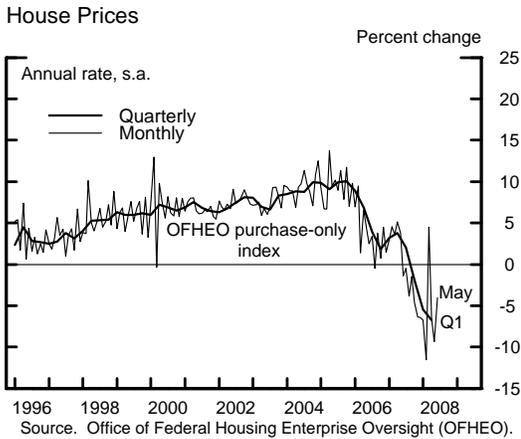
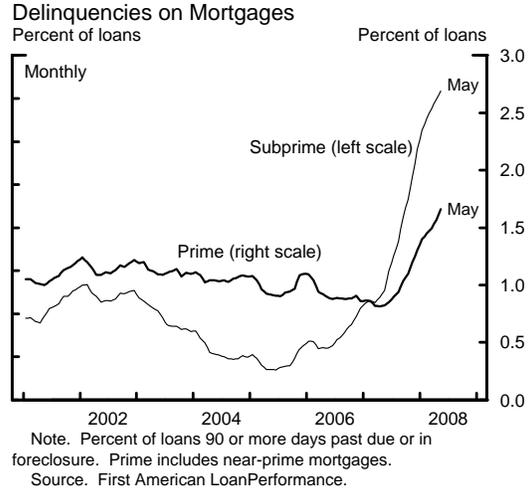
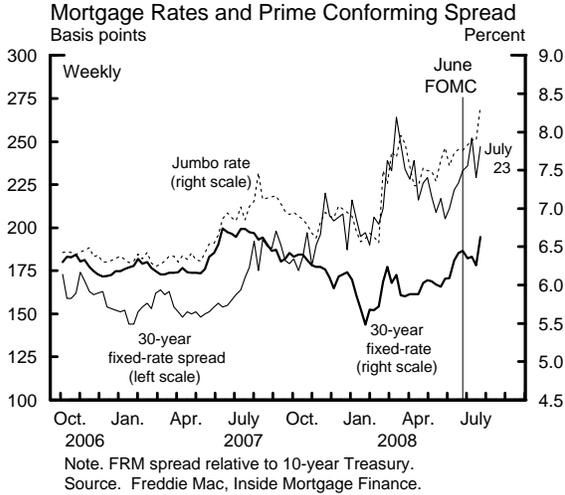
Delinquency Rates on Commercial Mortgages



Delinquency Rates on Commercial Mortgages at Banks



## Residential Mortgages



**Commercial Real Estate Finance**

The volume of sales transactions in the commercial real estate sector remained weak in June, and a broad index of prices for commercial real estate edged down in the second quarter. There has been no issuance of commercial mortgage-backed-securities (CMBS) in July, and premiums on CDS written on CMBS rose over the intermeeting period, reversing more than half the declines from their rally earlier this year. CMBS delinquencies remained low in June, but some of the new CMBS delinquencies reflected the inability of borrowers to refinance large balloon payments as their initial loans came due. Many large banking organizations noted in their second-quarter earnings reports that delinquencies on commercial mortgages—particularly loans to residential developers—increased.

**Household Finance**

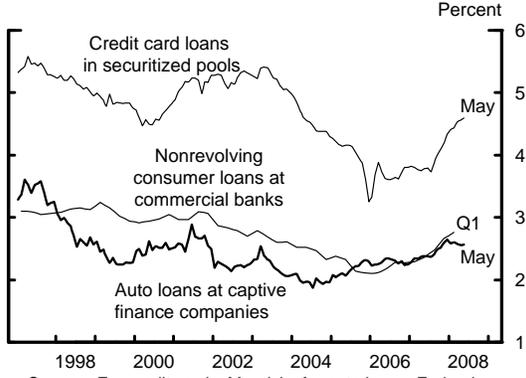
Incoming data point to a further deterioration in residential mortgage markets. In the July Senior Loan Officer Opinion Survey, most banks reported having tightened lending standards further over the past three months for all classes of mortgage borrowers. In addition, interest rates on conforming mortgages rose, on net, over the intermeeting period, a move consistent with higher spreads in the agency MBS market. Interest rates on jumbo mortgages also increased. In May, the delinquency rates on both subprime and prime loans moved higher, and the monthly purchase-only house price index calculated by the Office of Federal Housing Enterprise Oversight declined further, dropping to a level about 5 percent below its peak in April 2007. The prices of indexes of CDS on AAA-rated tranches of subprime mortgage-backed securities declined sharply early in the intermeeting period to record lows, but reversed a portion of these declines in recent weeks.

MBS issuance by the GSEs was strong in the second quarter but is estimated to have slowed from that rapid pace in July. Some conforming MBS issued in the second quarter reportedly were backed by seasoned loans from bank portfolios rather than new originations. Residential mortgages held by banks have dropped steeply in recent weeks. Ginnie Mae issuance has increased over the past several months, as FHA originations continued to grow. The market for private-label residential mortgage-backed securities remained closed.

In May, the delinquency rate on auto loans at captive finance companies stayed above its long-term average, and the delinquency rates on credit card loans in securitized pools increased. Growth in consumer credit in May remained near the middle of its range over

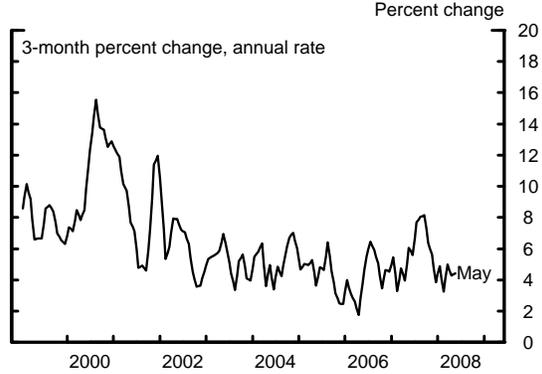
## Consumer Credit and Household Wealth

**Delinquencies on Consumer Loans**

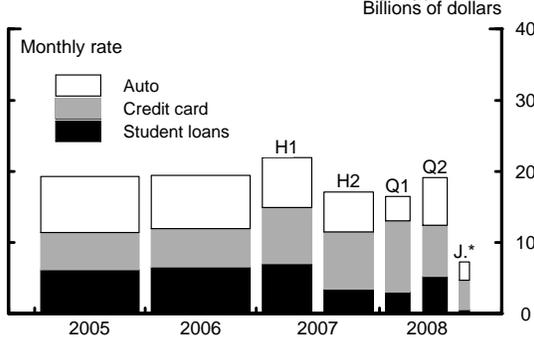


Source. For credit cards, Moody's; for auto loans, Federal Reserve.

**Consumer Credit**



**Gross Issuance of Consumer ABS by Type**

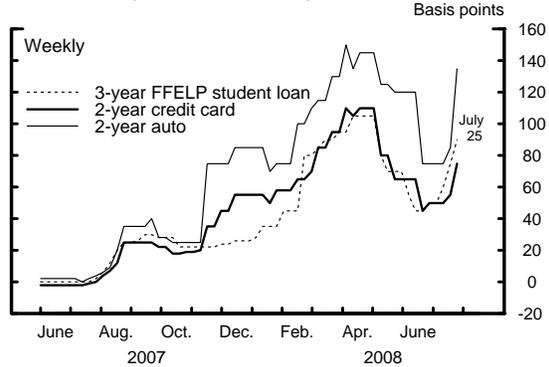


Note. Auto includes car loans, leases, and financing for buyers of motorcycles, trucks, and other vehicles.

\*Through July 25.

Source. Inside Mortgage Finance MBS database, Merrill Lynch.

**AAA ABS Spreads over Swaps**



Source. For credit cards and auto, Citigroup Global Markets; for student loans, Merrill Lynch.

### Net Flows into Mutual Funds

(Billions of dollars, monthly rate)

Fund type	2006	2007		2008		Assets May
		H1	H2	Q1	Q2 <sup>e</sup>	
<b>Total long-term funds</b>	<b>18.9</b>	<b>31.6</b>	<b>5.8</b>	<b>1.7</b>	<b>21.2</b>	<b>8,814</b>
<b>Equity funds</b>	<b>13.3</b>	<b>14.4</b>	<b>1.2</b>	<b>-14.9</b>	<b>6.4</b>	<b>6,344</b>
Domestic	0.9	0.9	-8.4	-13.4	1.7	4,704
International	12.4	13.5	9.6	-1.5	4.7	1,639
<b>Hybrid funds</b>	<b>0.6</b>	<b>2.6</b>	<b>1.1</b>	<b>0.7</b>	<b>1.9</b>	<b>710</b>
<b>Bond funds</b>	<b>5.0</b>	<b>14.6</b>	<b>3.5</b>	<b>16.0</b>	<b>12.9</b>	<b>1,761</b>
High-yield	-0.2	0.2	-0.7	-1.3	1.1	155
Other taxable	4.0	12.0	4.8	15.2	8.1	1,219
Municipals	1.3	2.4	-0.6	2.1	3.7	387
<b>Money market funds</b>	<b>27.8</b>	<b>26.3</b>	<b>98.8</b>	<b>119.6</b>	<b>-15.9</b>	<b>3,509</b>

Note. Excludes reinvested dividends.

e Staff estimate based on confidential weekly data.

Source. Investment Company Institute.

the past few years. Issuance of asset-backed securities (ABS) collateralized by auto loans and credit cards slowed somewhat in July, and spreads widened for AAA-rated consumer ABS in response to increased concerns about credit quality and ongoing financial market turmoil. Although conditions in the student loan market have improved significantly from earlier this year, some lenders reported that the new Department of Education procedures to support the market are difficult to implement.

Long-term mutual funds attracted small net inflows in June, but preliminary data show sizeable net redemptions in early July amid falling equity prices. Money market funds ran off in June, largely reflecting seasonal factors. Net inflows to money market funds appear to have resumed in July.

### **Treasury Finance**

The Treasury Department conducted several auctions of nominal and inflation-indexed securities over the intermeeting period, most of which were well received. Dealer participation at the 20-year TIPS reopening was, however, weaker than expected. The 6-month moving average of indirect bidding by foreign participants continued to trend down. In its mid-quarter refunding announcement, the Treasury Department announced that it is considering moving to a quarterly issuance schedule for 30-year bonds and that the Congress had approved an increase in the statutory debt limit.

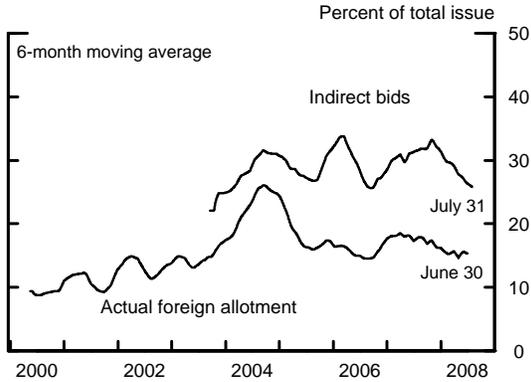
Liquidity in Treasury markets remained below normal during the intermeeting period. Traders reported notably strained conditions in the bill market approaching quarter-end and in early July as concerns about the GSEs increased. Bid-asked spreads on coupon securities continued to be higher than historical norms. However, yield-curve fitting errors stayed high as investors apparently remain reluctant to arbitrage price differences across similar securities. The spread between on- and off-the-run ten-year notes also remained elevated, and the comparable spread for two-year notes rose a little on net, indications of strong demand for relatively liquid securities.

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

Gross issuance of long-term municipal bonds remained robust in July, partly reflecting additional restructurings of auction rate securities. A substantial share of new capital issuance was for education and transportation projects. Meanwhile, short-term issuance was also strong through July, consistent with reports of budget shortfalls of state and local governments.

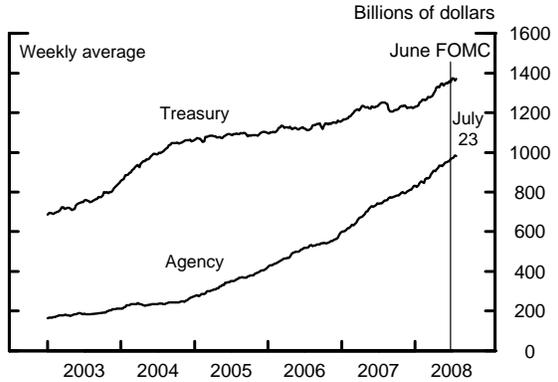
### Treasury Finance

Foreign Participation in Treasury Auctions



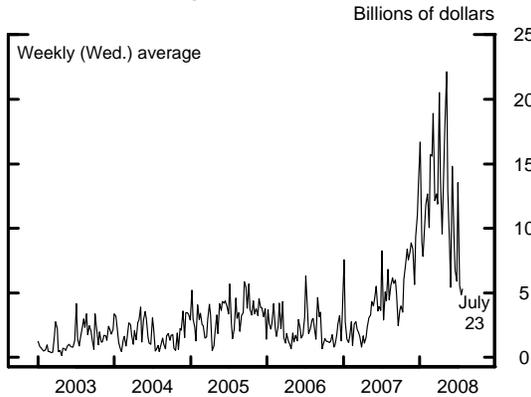
Note. Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2-, 5-, and 10-year original auctions and reopenings.

Foreign Custody Holdings



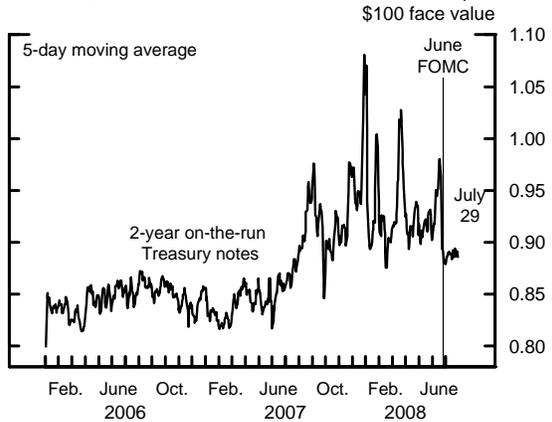
Note. Securities held in custody at the Federal Reserve Bank of New York on behalf of foreign official institutions.

Securities Lending



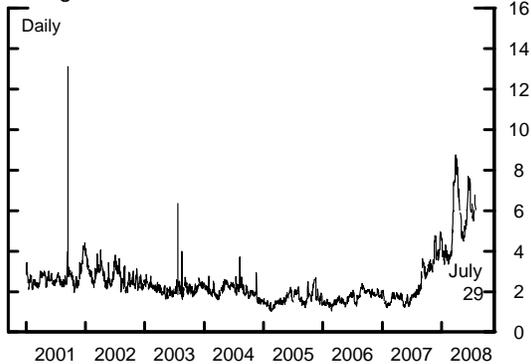
Note. Volume of securities lent to market participants from the System Open Market Account portfolio through the overnight facility.

Treasury Bid-Ask Spread



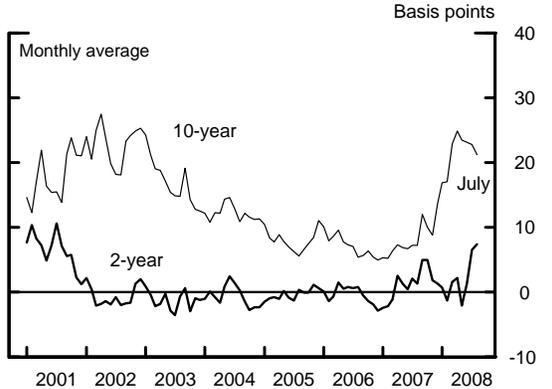
Source. BrokerTec Interdealer Market Data.

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.

Treasury On-the-Run Premiums



Note. Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. July observation is the month-to-date average.

**State and Local Government Finance**

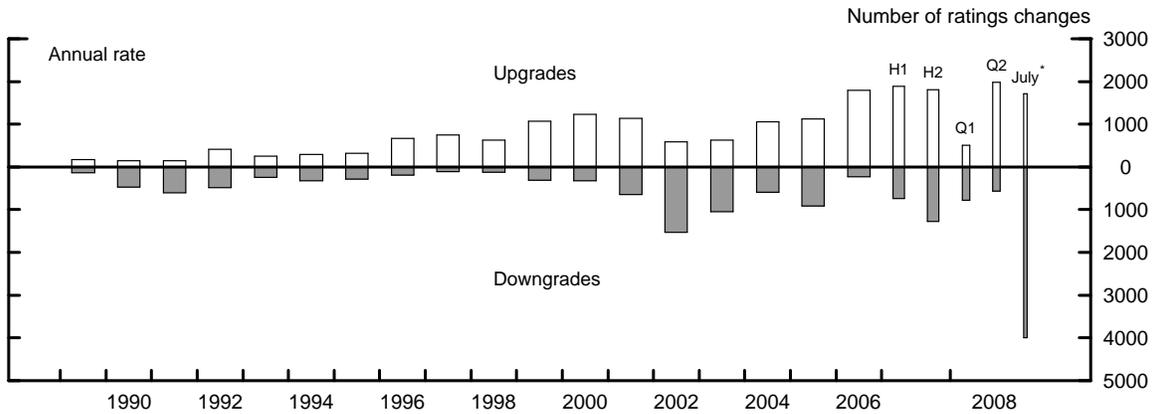
**Gross Offerings of Municipal Securities**

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

Type of security	2004	2005	2006	2007		2008		
				H1	H2	Q1	Q2	July <sup>p</sup>
Total	34.7	38.4	36.1	41.8	38.9	29.1	52.9	40.5
Long-term <sup>1</sup>	29.8	34.2	32.5	38.5	32.6	27.6	47.4	34.0
Refundings <sup>2</sup>	10.8	15.6	10.6	16.5	8.7	11.0	24.5	16.0
New capital	19.0	18.6	21.9	22.0	23.9	16.6	22.9	18.0
Short-term	4.9	4.2	3.7	3.4	6.3	1.5	5.5	6.5
Memo: Long-term taxable	2.0	2.1	2.5	2.2	2.6	1.8	3.1	1.0

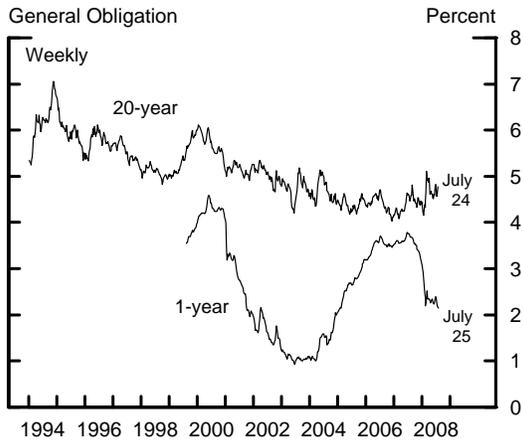
- 1. Includes issues for public and private purposes.
- 2. All issues that include any refunding bonds.
- p Based on preliminary data through July 24, 2008.

**Ratings Changes**



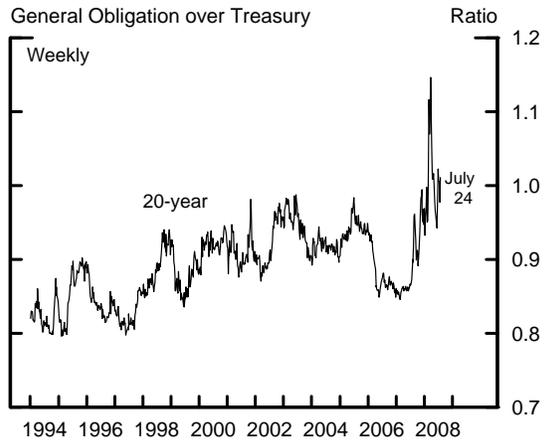
\* Staff estimate based on data through July 16, 2008.  
Source: S&P's Credit Week Municipal and Ratings Direct.

**Municipal Bond Yields**



Source: Municipal Market Advisors and Bond Buyer.

**Municipal Bond Yield Ratio**



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), July (e)
	2006	2007	2008				
			Q1	Q2	June	July (e)	
M2	4.9	5.8	9.5	5.7	-.2	7.5	7,735
Components <sup>2</sup>							
Currency	3.5	2.0	-.5	2.4	10.2	9.2	775
Liquid deposits <sup>3</sup>	.7	4.5	7.0	7.5	3.0	7.5	4,692
Small time deposits	18.6	4.3	2.4	-6.2	-3.6	7.5	1,207
Retail money market funds	13.0	19.2	38.9	14.6	-17.2	6.2	1,056
Memo:							
Institutional money market funds	15.7	39.4	46.8	33.1	13.9	-.6	2,246
Monetary base	3.1	2.0	-.4	2.0	8.9	7.6	838

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.
- e Estimated.

The credit quality of the municipal bond sector remained solid. The number of rating upgrades continued to outpace the number of downgrades in the second quarter. Downgrades picked up in July, reflecting deterioration in the credit quality of a few banks that provide liquidity support to tender option bonds, which are short-term securities backed by municipal bonds. Yields on long-term municipal bonds were little changed over the intermeeting period, as were ratios of long-term municipal bond yields to those on comparable-maturity Treasuries.

### **Money and Bank Credit**

M2 grew at an annual rate of 7½ percent in July after having been about flat in June. The pickup in money growth was broad based, and it may have been partly attributable to safe-haven flows from equity mutual funds and other nonmonetary assets into liquid deposits and retail money market funds. The expansion in small time deposits is largely attributable to a single institution offering high rates. The growth of currency likely reflected greater domestic demand, but some indicators suggest that foreign demand for dollars may have picked up from its recent sluggish pace.

Commercial bank credit is estimated to have increased only slightly in July, after having been about flat in June.<sup>3</sup> C&I loans continued to rise moderately in July, while commercial real estate loans declined. On the household side, residential mortgage loans on banks' books contracted in July, on the heels of a steeper runoff in June that reflected heavy sales and securitizations with the GSEs. In contrast, revolving home equity lines of credit expanded briskly in July, and consumer loans originated by banks grew modestly. The weak growth in bank credit over the past two months is consistent with the July Senior Loan Officer Opinion Survey, in which large fractions of banks reported having tightened lending standards and terms on all major loan categories.

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<sup>3</sup> Recent fluctuations in bank credit and its components reflect larger-than-usual movements in the estimated seasonal factors. The seasonal factors for June and July are difficult to estimate—particularly for commercial real estate loans—owing to the timing of changes in the panel of respondent banks.

**Commercial Bank Credit**

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

Type of credit	2007	H2 2007	Q1 2008	Q2 2008	June 2008	July 2008 <sup>e</sup>	Level <sup>1</sup> July 2008 <sup>e</sup>
Total	10.6	11.3	6.2	3.3	-.2	2.7	9,023
<i>Loans<sup>2</sup></i>							
Total	11.4	11.5	9.5	4.4	-3.2	1.8	6,823
To businesses							
Commercial and industrial	19.6	26.1	15.6	12.0	5.7	7.9	1,510
Commercial real estate	10.2	10.2	9.8	10.3	11.9	-10.4	1,649
To households							
Residential real estate	5.8	-1.1	3.4	3.3	-16.2	-6.3	1,841
Revolving home equity	5.7	6.5	11.5	16.1	14.7	10.3	518
Other	5.9	-3.6	.7	-1.3	-27.7	-12.7	1,323
Consumer	7.9	10.8	8.8	6.0	6.8	9.4	835
Originated <sup>3</sup>	7.2	9.4	8.7	6.9	6.6	4.4	1,249
Other <sup>4</sup>	16.7	19.9	12.2	-14.9	-25.6	22.2	988
<i>Securities</i>							
Total	8.1	10.7	-3.5	.0	9.4	5.6	2,200
Treasury and agency	-5.7	-4.4	-10.5	8.3	26.2	5.0	1,137
Other <sup>5</sup>	27.6	29.1	3.7	-8.4	-8.1	6.4	1,063

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 (FIN 39 and FAS 115), the initial consolidation of certain variable interest entities (FIN 46), the initial adoption of fair value accounting (FAS 159), and the effects of sizable thrift-to-bank and bank-to-thrift structure activity in October 2006, March 2007, and October 2007. Data also account for breaks caused by reclassifications.

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.

4. Includes security loans and loans to farmers, state and local governments, and all others not elsewhere classified. Also includes lease financing receivables.

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

e Estimated.

## Appendix

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

The July 2008 Senior Loan Officer Opinion Survey on Bank Lending Practices addressed changes in the supply of, and demand for, bank loans to businesses and households over the past three months.<sup>1</sup> The survey included two sets of special questions: The first set queried domestic banks about securitizations with, or sales to, Fannie Mae and Freddie Mac of conforming-jumbo mortgage loans; the second set asked respondents how they expected credit standards on loans to businesses and households at their bank to change in the second half of 2008 and in the first half of 2009, assuming that economic activity progresses in line with consensus forecasts. This appendix is based on responses from 52 domestic banks and 21 U.S. branches and agencies of foreign banks.

In the current survey, large net fractions of domestic institutions reported having tightened their lending standards and terms on all major loan categories over the previous three months. In particular, the net fractions of banks that had tightened credit standards on consumer loans increased notably relative to the April survey. Considerable fractions of foreign institutions also had tightened their credit standards and terms on loans to businesses over the past three months, although these fractions were smaller, on net, than those reported in the April survey. Large net fractions of domestic and foreign respondents expected their banks to tighten credit standards on all major loan categories in the second half of this year, and smaller, though substantial, net fractions expected their banks to tighten standards in the first half of 2009. Finally, demand for loans from both businesses and households at domestic and foreign institutions reportedly weakened, on net, over the past three months.

#### **Business Lending**

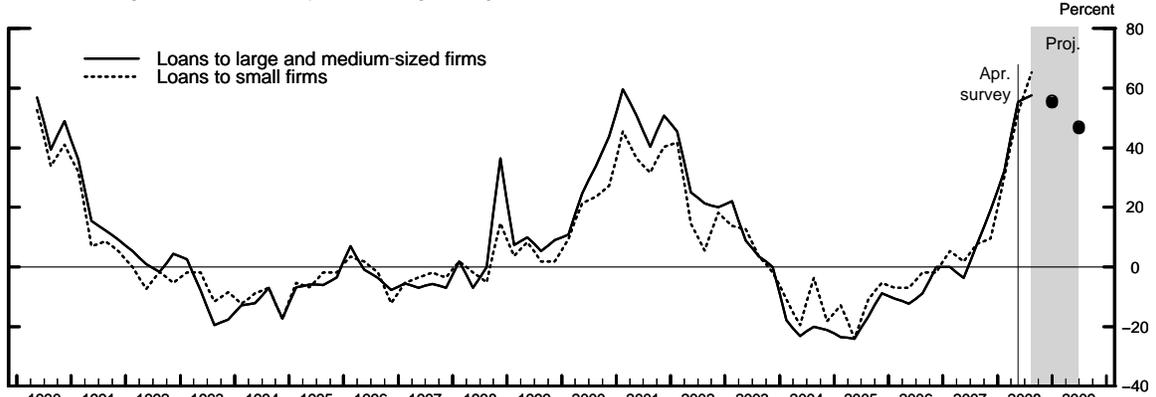
**Questions on commercial and industrial lending.** About 60 percent of domestic banks—a slightly larger fraction than in the April survey—reported having tightened lending standards on commercial and industrial (C&I) loans to large and middle-market firms over the past three months. About 65 percent of those institutions—up notably from roughly 50 percent in the April survey—also indicated that they had tightened their lending standards on C&I loans to small firms over the same period. Significant majorities of domestic respondents indicated that they had tightened selected price terms on C&I loans to firms of all sizes: About 80 percent of banks—up from roughly 70 percent in the April survey—noted that they had increased spreads of loan rates over their cost of funds on C&I loans to large and middle-market firms, whereas about 70 percent of respondents—a somewhat higher fraction than in the April survey—reported having widened spreads on loans to small firms. In addition, significant fractions of domestic respondents reported having tightened non-price-related lending terms on C&I loans to firms of

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<sup>1</sup> Banks received the survey on or after July 10, and their responses were due on July 24.

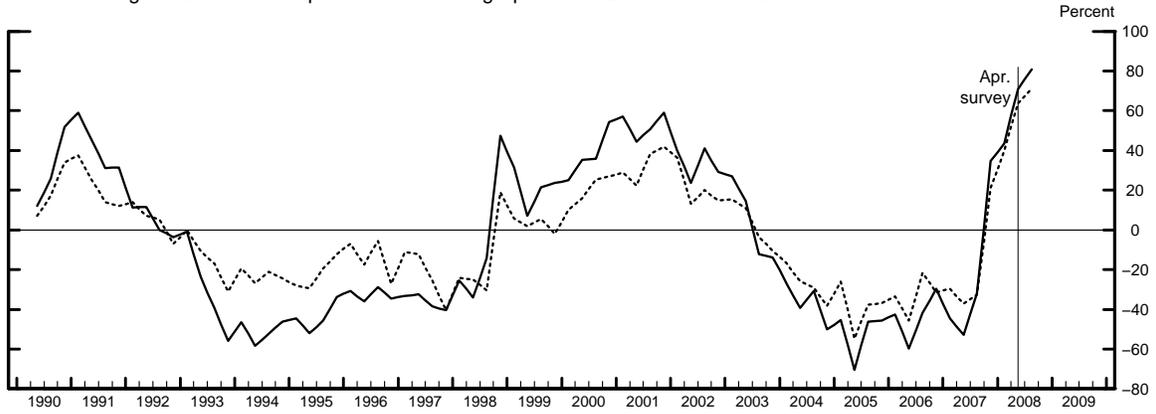
### Measures of Supply and Demand for C&I Loans, by Size of Firm Seeking Loan

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



Note. Projections based on responses to questions on the outlook for credit standards in the July 2008 survey.

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



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



all sizes over the survey period, and the fraction of banks that tightened such terms on loans to small firms increased considerably relative to the April survey.

About 35 percent of U.S. branches and agencies of foreign banks—down from about 60 percent in the April survey—indicated that they had tightened their lending standards on C&I loans over the past three months. A majority of foreign respondents reported that they had tightened selected price terms on such loans, although the fractions of foreign banks that reported having tightened such terms over the previous three months were, on net, significantly smaller than in the April survey. For example, about 60 percent of foreign banks—down from about 80 percent in the April survey—reported having raised spreads of loan rates over their cost of funds over the past three months.

Very large majorities of domestic and foreign respondents pointed to a less favorable or more uncertain economic outlook, their bank's reduced tolerance for risk, and the worsening of industry-specific problems as reasons for tightening their lending standards and terms on C&I loans over the past three months. Roughly 65 percent of foreign respondents—up from about 45 percent in the April survey—also noted that concerns about their bank's current or expected capital position had contributed to the more-stringent lending policies over the past three months. In contrast, only about 25 percent of domestic respondents—down from about 35 percent in the April survey—reported having tightened their lending standards because of concerns about their bank's current or expected capital position.

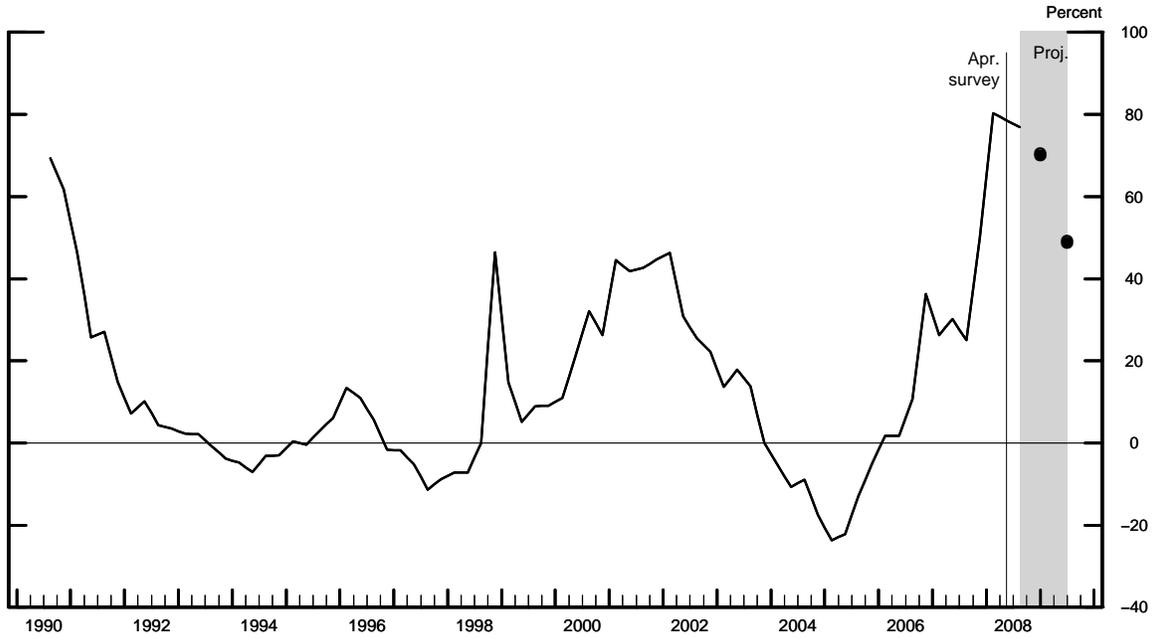
On balance, the July survey points to a further weakening of C&I loan demand over the past three months. On net, about 15 percent of small domestic and 25 percent of foreign banks reported weaker demand for C&I loans from firms of all sizes over the survey period. Regarding large domestic banks, about 10 percent of these institutions, on net, noted weaker demand from small firms, although about 5 percent of these banks, on balance, reported that demand for C&I loans from large and middle-market firms had increased over the past three months.

Substantial majorities of domestic institutions that experienced weaker loan demand over the past three months pointed to a decrease in customers' needs to finance investment in plant and equipment as well as their needs to finance inventories. In addition, about 75 percent of domestic and 70 percent of foreign respondents pointed to a decrease in customers' needs for merger and acquisition financing as a reason for the lower demand for C&I loans. Regarding future business, small domestic and foreign institutions, on balance, reported that inquiries from potential business borrowers were about unchanged during the survey period. In contrast, about 15 percent of large domestic banks, on net, reported an increase in the number of inquiries from potential business borrowers over the past three months.

**Questions on commercial real estate lending.** On balance, about 75 percent of domestic banks—a fraction similar to that in the April survey—reported having tightened their lending

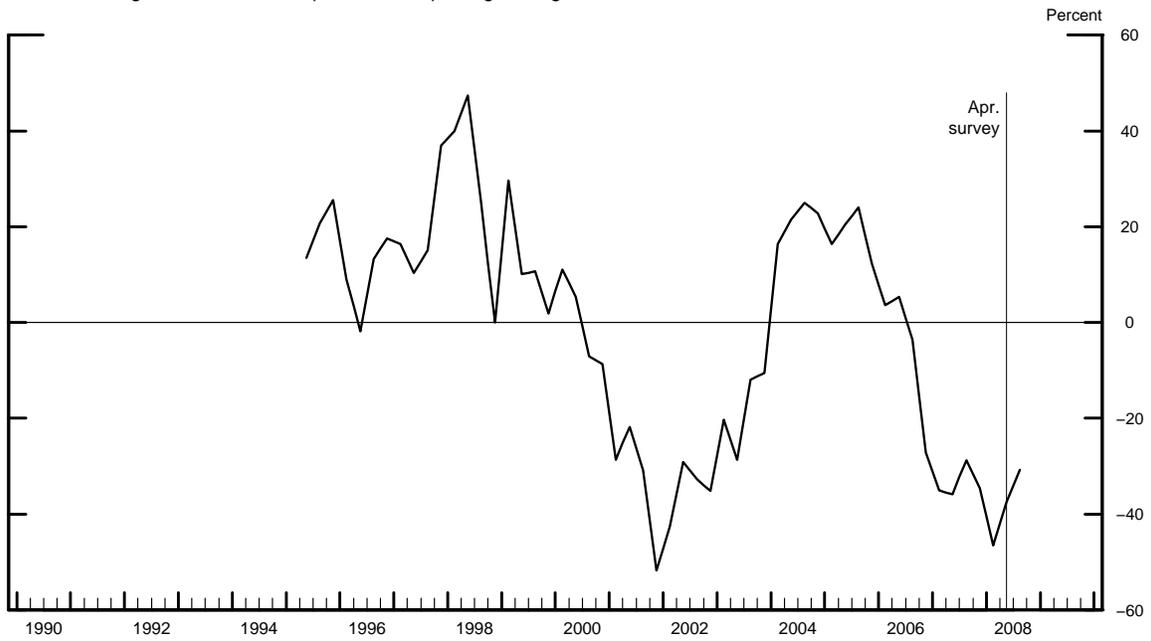
### Measures of Supply and Demand for Commercial Real Estate Loans

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



Note. Projections based on responses to questions on the outlook for credit standards in the July 2008 survey.

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



standards on commercial real estate loans over the past three months. About 35 percent of foreign banks—down from about 55 percent in the April survey—also indicated that they had tightened their lending standards on commercial real estate loans. Regarding demand for these types of loans, about 30 percent of domestic banks and 45 percent of foreign institutions—fractions slightly smaller than those in the April survey—reported weaker demand for commercial real estate loans over the survey period on net.

### **Lending to Households**

**Questions on residential real estate lending.** Large majorities of domestic respondents reported having tightened their lending standards on prime, nontraditional, and subprime residential mortgages over the previous three months. About 75 percent of domestic respondents—up from about 60 percent in the previous survey—indicated that they had tightened their lending standards on prime mortgages.<sup>2</sup> Of the 32 banks that originated nontraditional residential mortgage loans, about 85 percent—up from about 75 percent in the April survey—reported having tightened their lending standards on such loans.<sup>3</sup> Finally, 6 of the 7 banks that originated subprime mortgage loans—a somewhat higher proportion than in the April survey—indicated that they had tightened their lending standards on those loans over the past three months.<sup>4</sup>

On net, about 35 percent of domestic respondents—a slightly higher fraction than in the April survey—experienced weaker demand for prime residential mortgage loans over the past three months, and about 45 percent—up from roughly 30 percent in the April survey—indicated weaker demand for nontraditional mortgage loans over the same period. On balance, 2 of the 7 domestic banks that originated subprime mortgage loans—a proportion significantly smaller than in the April survey—reported weaker demand for subprime loans over the survey period.

About 80 percent of domestic respondents—up from about 70 percent in the April survey—noted that they had tightened their lending standards for approving applications for revolving home equity lines of credit (HELOCs) over the past three months. Concerning demand for this product, about 10 percent of domestic banks, on net, reported weaker demand for HELOCs over the past three months, down from about 20 percent in the April survey.

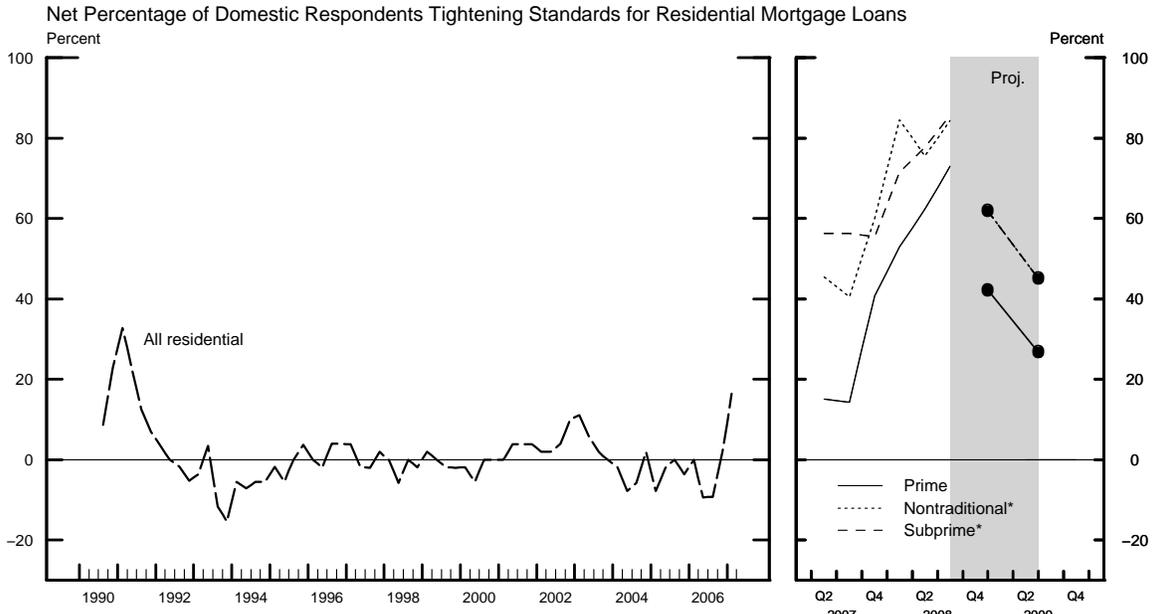
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<sup>2</sup> A total of 48 institutions reported that they had originated prime residential mortgages. According to the Call Reports, these 48 banks accounted for about 75 percent of residential real estate loans on the books of all commercial banks as of March 31, 2008.

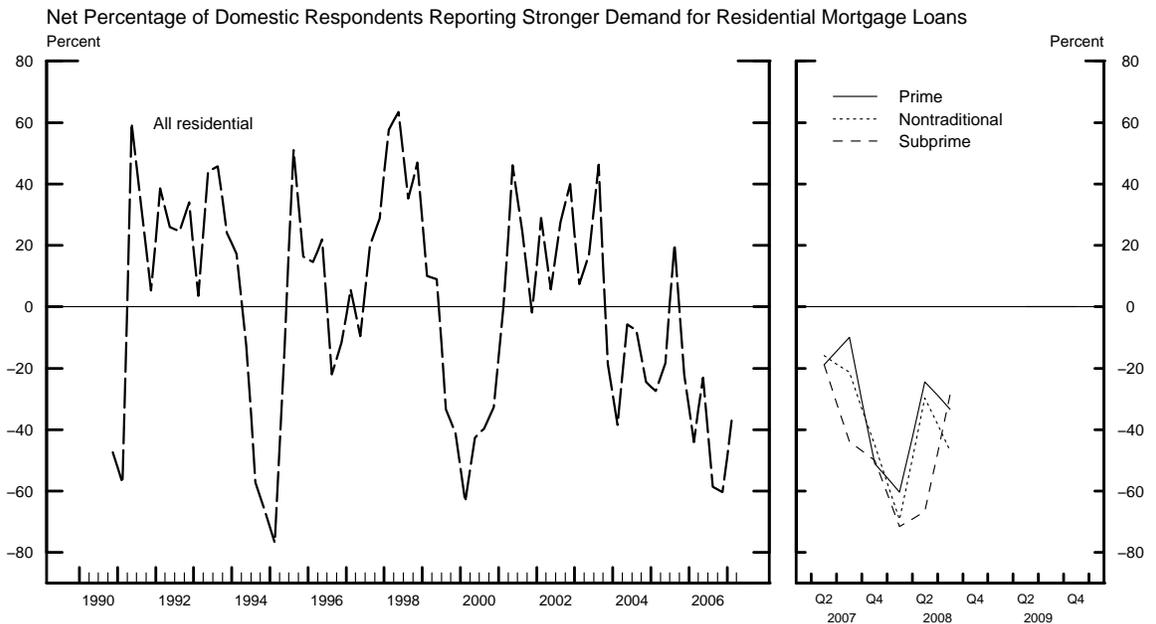
<sup>3</sup> According to the Call Reports, these 32 institutions accounted for about 70 percent of residential real estate loans on the books of all commercial banks as of March 31, 2008.

<sup>4</sup> According to the Call Reports, these 7 institutions accounted for about 40 percent of residential real estate loans on the books of all commercial banks as of March 31, 2008.

### Measures of Supply and Demand for Residential Mortgage Loans



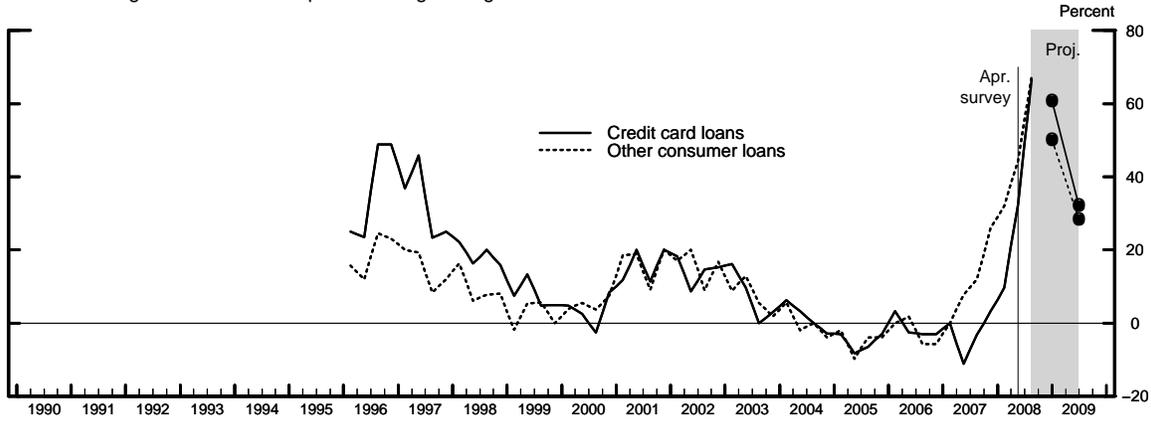
Note. For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately. Projections based on responses to questions on the outlook for credit standards in the July 2008 survey.  
 \* The forward-looking questions asked about nontraditional and subprime mortgage loans combined.



Note. For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately.

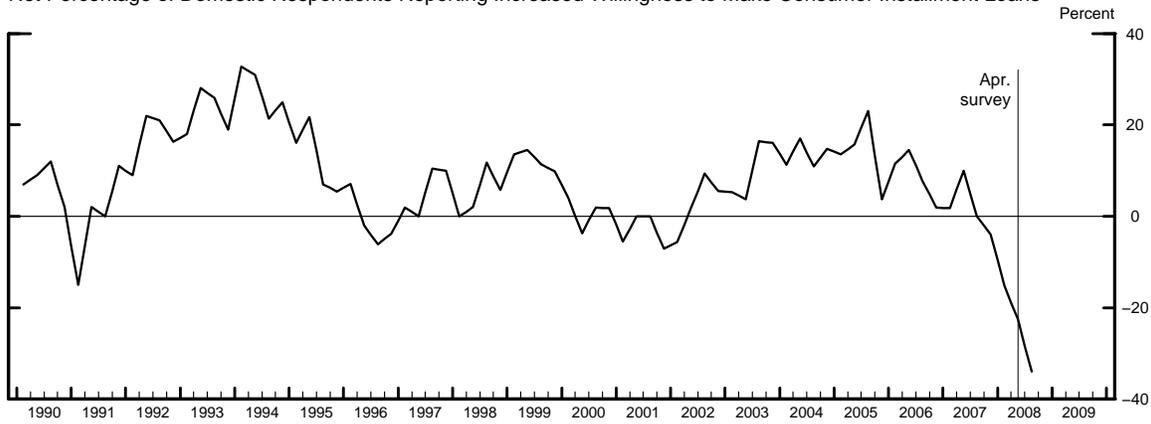
## Measures of Supply and Demand for Consumer Loans

Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans

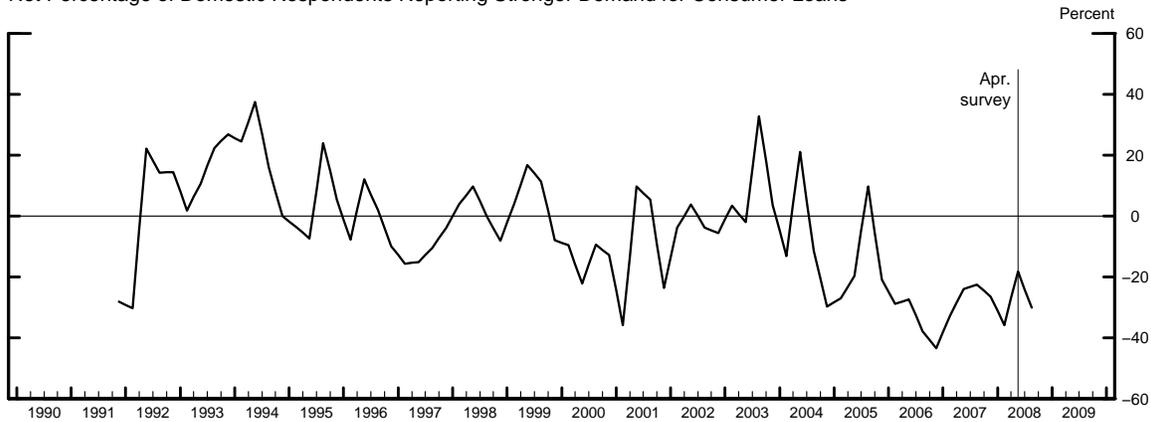


Note. Projections based on responses to questions on the outlook for credit standards in the July 2008 survey.

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



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



**Special questions on securitizations and sales of conforming-jumbo mortgage loans.**<sup>5</sup> About 35 percent of domestic respondents indicated that their bank had securitized with, or sold to, Fannie Mae and Freddie Mac (the government-sponsored enterprises, or GSEs) conforming-jumbo mortgage loans over the past three months, and about 45 percent of respondents expected their bank to do so over the next six months.<sup>6</sup> As reasons for not securitizing or selling conforming-jumbo loans over the past three months or in the next six months, about 50 percent of respondents cited the cost of the GSEs' guarantee fees or other pricing terms, and a similar fraction pointed to a lack of demand for conforming-jumbo loans. Finally, about 40 percent of respondents pointed to the limited number of mortgage applicants at their banks who meet the GSEs' underwriting criteria.

**Questions on consumer lending.** About 65 percent of domestic banks—up notably from about 30 percent in the April survey—indicated that they had tightened their lending standards on credit card loans over the past three months, and about the same fraction of respondents—up from about 45 percent in the April survey—reported having tightened standards on consumer loans other than credit card loans. In addition, about 55 percent of banks reported raising minimum required credit scores on credit card loans, and 60 percent of respondents reported raising such scores on other consumer loans over the past three months, up from about 30 percent and 35 percent, respectively, in the April survey. In addition, 50 percent of respondents also reported reducing the extent to which both credit card and other consumer loans were granted to customers who did not meet their bank's credit-scoring thresholds. Also, significant net fractions of respondents reported that they had reduced credit limits on credit card loans and raised minimum required down payments as well as spreads of loan rates on consumer loans other than credit card loans. On balance, about 35 percent of domestic banks—up from about 25 percent in the April survey—expressed a diminished willingness to make consumer installment loans relative to three months earlier. Regarding loan demand, about 30 percent of respondents, on net, indicated that they had experienced weaker demand for consumer loans of all types over the past three months, up from about 20 percent in the April survey.

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<sup>5</sup> The Economic Stimulus Act of 2008 raised the conforming loan limit through the end of 2008 for a first mortgage on a single-family home in the contiguous United States from \$417,000 to 125 percent of the median house price in certain high-cost areas, with an overall cap of \$729,750. In the survey, conforming-jumbo mortgage loans were defined as those that do not conform under the previous loan-size limits but do under the new limits.

<sup>6</sup> A total of 16 banks reported having securitized with, or sold to, the GSEs conforming-jumbo loans over the past three months. According to the Call Reports, these 16 banks accounted for about 60 percent of residential real estate loans on the books of all commercial banks as of March 31, 2008. A total of 22 respondents expect their banks to securitize with, or sell to, the GSEs conforming-jumbo mortgage loans in the next six months. According to the Call Reports, these 22 banks accounted for about 70 percent of residential real estate loans on the books of all commercial banks as of March 31, 2008.

**Special questions on the outlook for credit standards.** A final set of special questions in the July survey queried respondents about their outlook for changes in credit standards at their banks on loans to businesses and households in the second half of 2008 and in the first half of 2009, under the assumption that economic activity progresses in line with consensus forecasts. Responses to these questions suggested a gradual decline in the fractions of banks tightening lending standards over the next year, with very few banks expecting to ease standards over that period.

Regarding loans to businesses, about 55 percent of domestic and 45 percent of foreign respondents indicated that they expected their banks to tighten credit standards on C&I loans in the second half of this year, and about 45 percent of domestic and 30 percent of foreign institutions, on net, anticipated tightening their lending standards on these loans in the first half of next year. Regarding commercial real estate loans, about 70 percent of domestic and 45 percent of foreign respondents believed that their institutions would tighten their lending standards on these loans in the second half of 2008, and about 50 percent of both domestic and foreign banks anticipated doing so in the first half of 2009.

On the household side, about 45 percent of domestic respondents noted that they expected their banks to tighten lending standards on prime residential mortgage loans in the second half of 2008, and about 30 percent, on balance, thought that they would tighten standards on those loans in the first half of 2009. Concerning nonprime mortgage loans—a category that includes both nontraditional and subprime mortgage loans—about 65 percent of the respondents that reported having originated such loans indicated that they anticipated tightening their lending standards in the second half of the year, and about 50 percent believed that they would do so in the first half of 2009. About 60 percent of domestic respondents, on net, reported that they expected to tighten their credit standards for approving applications for revolving HELOCs through the end of 2008, and 40 percent of banks anticipated a tightening on these products in the first half of 2009. Regarding credit card loans, about 60 percent of domestic respondents indicated that they expected their banks to tighten standards on these loans in the second half of 2008, and about 35 percent, on balance, thought that their banks would tighten such standards on these loans in the first half of 2009. Finally, about 50 percent of respondents reported that they expected to tighten their lending standards on consumer loans other than credit cards through the end of 2008, and 30 percent, on net, indicated that they anticipated doing so in the first half of next year.

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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 narrowed to \$59.8 billion in May, as a large increase in exports of goods and services more than offset a moderate increase in imports.

#### Trade in Goods and Services

	2007	Annual rate			Monthly rate		
		2007	2008		2008		
		Q4	Q1	Q2 <sup>e</sup>	Mar.	Apr.	May
<b>Percent change</b>							
<i>Nominal BOP</i>							
Exports	14.5	10.4	18.4	15.1	-1.9	3.7	.9
Imports	9.7	11.4	13.8	14.6	-3.3	4.6	.3
<i>Real NIPA</i>							
Exports	8.4	6.5	5.4	n.a.	...	...	...
Imports	1.0	-1.4	-.7	n.a.	...	...	...
<b>Billions of dollars</b>							
<i>Nominal BOP</i>							
Net exports	-700.3	-695.1	-699.7	-721.7	-56.5	-60.5	-59.8
Goods, net	-819.4	-835.7	-844.1	-872.6	-68.4	-73.0	-72.5
Services, net	119.1	140.5	144.5	150.8	11.9	12.5	12.7

e. BOP data are two months at an annual rate.

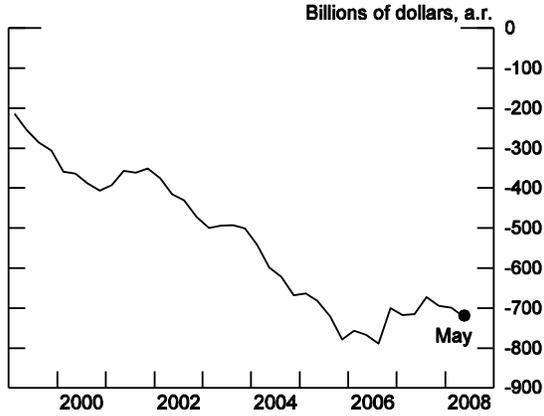
Source. U.S. Department of Commerce, Bureaus of Economic Analysis and Census.  
n.a. Not available. ... Not applicable.

In May, exports rose 0.9 percent, supported by strong exports of industrial supplies, particularly of petroleum products, and services. Increased exports of passenger cars pushed up automotive exports, while exports of consumer goods were flat after jumping up in April. Exports of agricultural products fell back a bit in May but remained at an elevated level. Exports of capital goods recorded a substantial decline following a large increase in April.

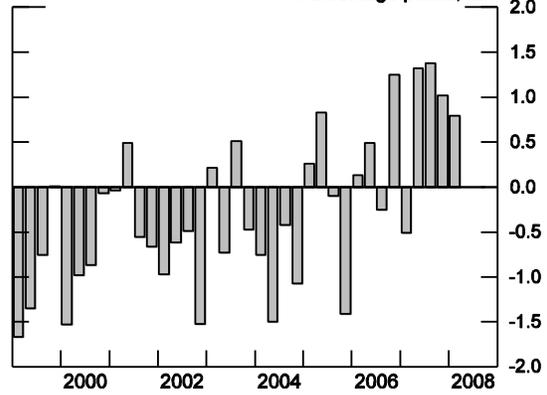
The average value of exports in April and May increased 15.1 percent (a.r.) from the first quarter, with a large portion of the increase reflecting higher exports of industrial supplies. Exports of agricultural goods, consumer goods, capital goods, and services also recorded strong growth. Exports of automotive products were a weak spot, recording a slight decline.

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

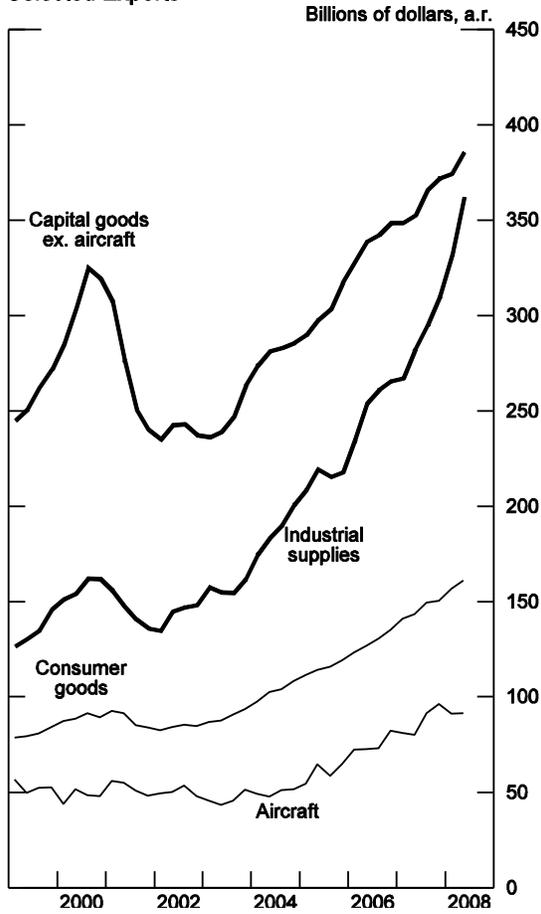
**Trade Balance**



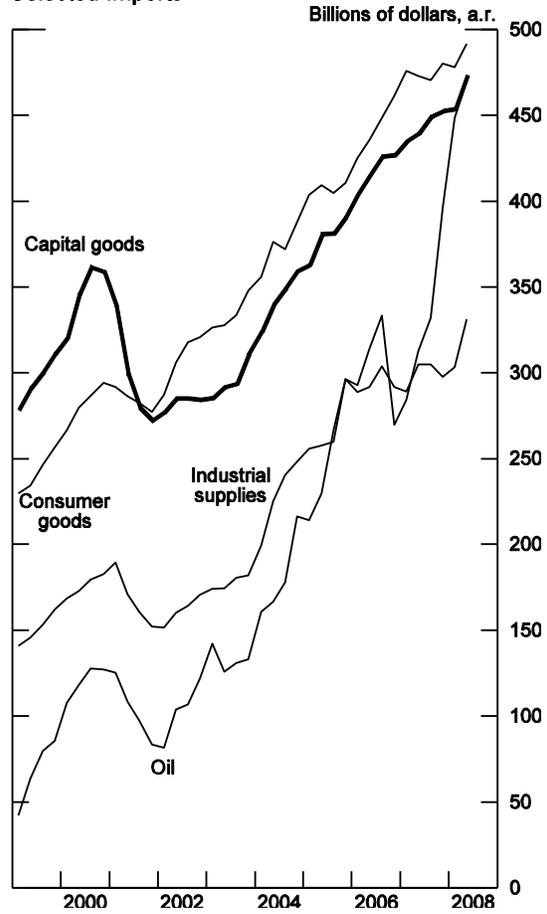
**Contribution of Net Exports to Real GDP Growth**



**Selected Exports**



**Selected Imports**



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

	Levels				Change <sup>1</sup>			
	2008		2008		2008		2008	
	Q1	Q2 <sup>e</sup>	Apr.	May	Q1	Q2 <sup>e</sup>	Apr.	May
<b>Exports of G&amp;S</b>	<b>1817.1</b>	<b>1882.2</b>	<b>1873.9</b>	<b>1890.6</b>	<b>75.2</b>	<b>65.1</b>	<b>66.9</b>	<b>16.7</b>
Goods exports	1271.3	1325.4	1320.7	1330.0	58.5	54.1	60.4	9.3
Gold	24.6	21.9	24.6	19.3	12.6	-2.7	-4.8	-5.4
Other goods	1246.6	1303.4	1296.1	1310.8	45.9	56.8	65.2	14.7
Capital goods	466.2	477.5	481.3	473.7	-2.7	11.4	27.4	-7.6
Aircraft & parts	91.3	91.4	91.2	91.6	-5.0	.1	11.0	.4
Computers & accessories	43.2	47.4	47.7	47.1	-1.3	4.2	4.6	-.6
Semiconductors	52.3	50.3	50.3	50.3	-.9	-2.0	-.9	.0
Other capital goods	279.3	288.5	292.2	284.8	4.5	9.2	12.6	-7.5
Automotive	122.4	121.6	120.4	122.8	-3.4	-.8	7.1	2.4
Ind. supplies (ex. ag., gold)	332.5	362.2	351.7	372.7	22.1	29.7	18.3	21.0
Consumer goods	156.9	161.2	161.1	161.2	6.4	4.2	10.1	.1
Agricultural	117.8	127.2	128.8	125.5	15.0	9.3	4.7	-3.3
All other goods	50.8	53.8	52.8	54.8	8.4	3.0	16.6	2.0
Services exports	545.8	556.9	553.2	560.6	16.7	11.0	6.6	7.4
<b>Imports of G&amp;S</b>	<b>2516.8</b>	<b>2604.0</b>	<b>2599.8</b>	<b>2608.1</b>	<b>79.8</b>	<b>87.2</b>	<b>115.0</b>	<b>8.2</b>
Goods imports	2115.4	2197.9	2196.1	2199.7	67.0	82.5	114.9	3.6
Oil	448.7	470.6	474.5	466.6	52.6	21.9	54.2	-7.9
Gold	17.9	14.3	18.8	9.8	10.9	-3.6	-2.6	-9.0
Other goods	1648.8	1713.0	1702.8	1723.3	3.6	64.2	63.3	20.6
Capital goods	454.4	473.6	469.3	478.0	1.3	19.2	14.8	8.6
Aircraft & parts	37.0	37.5	39.2	35.8	1.9	.5	1.1	-3.4
Computers & accessories	104.2	110.9	108.1	113.7	-1.2	6.7	.4	5.6
Semiconductors	26.3	27.4	27.4	27.4	-.7	1.1	1.1	-.0
Other capital goods	286.9	297.8	294.6	301.0	1.4	10.9	12.2	6.5
Automotive	257.3	252.6	257.7	247.6	-2.7	-4.6	14.1	-10.1
Ind. supplies (ex. oil, gold)	303.6	331.0	328.9	333.0	6.1	27.4	19.3	4.1
Consumer goods	478.2	491.5	482.3	500.6	-1.9	13.2	8.0	18.2
Foods, feeds, bev.	85.4	90.1	88.5	91.7	1.7	4.7	3.5	3.2
All other goods	69.9	74.2	75.9	72.5	-1.1	4.3	3.6	-3.5
Services imports	401.4	406.0	403.7	408.3	12.8	4.7	.1	4.6
<i>Memo:</i>								
Oil quantity (mb/d)	14.06	12.47	13.14	11.79	.59	-1.60	.57	-1.35
Oil import price (\$/bbl)	87.59	103.62	98.89	108.34	7.17	16.07	7.32	9.45

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

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

The value of imports of goods and services rose 0.3 percent in May, boosted in part by a strong increase in imports of consumer goods, with televisions recording a particularly large jump. Imports of capital goods moved up, supported by a surge in computer imports. Imports of industrial supplies and services imports also showed solid growth. In contrast, the value of petroleum imports fell back despite higher prices, as the volume of imports declined steeply. Imports of automotive products also fell in May.

The average value of imports in April and May increased 14.6 percent (a.r.) from the first quarter, with imports of industrial supplies exhibiting particular strength. Capital goods and consumer goods also recorded robust gains. The value of oil imports rose, as an increase in the price of imported oil more than offset a decline in volumes. In contrast, imports of automotive products declined.

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

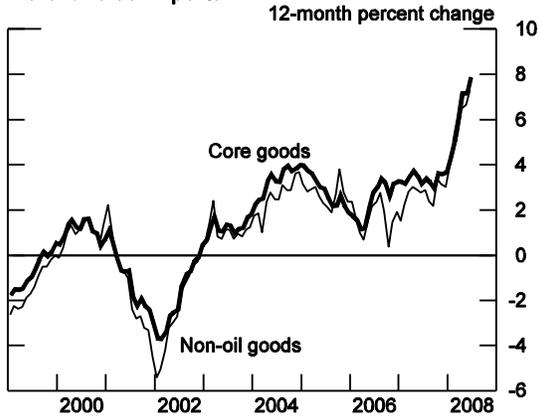
**Non-oil imports.** In June, prices of core imports rose 1 percent. This increase mostly reflected higher prices for material-intensive goods, which rose 2.5 percent after rising 1.3 percent in May. Prices for products made with steel and iron rose sharply in June. Prices for imported finished goods rose a moderate 0.2 percent in June, the same pace as in May.

The average level of core import prices in the second quarter was 13¾ percent (a.r.) above the first-quarter average, as prices increased in all major subcategories. Prices for material-intensive goods rose 32 percent. Prices for finished goods increased 5¾ percent, a pace 1¾ percentage points above that in the first quarter. Prices of consumer goods contributed to the acceleration of finished goods prices, increasing 5¾ percent in the second quarter. Prices of capital goods excluding computers and semiconductors also accelerated, rising at a pace of 8½ percent, twice as fast as in the first quarter. Much of the price increase for capital goods is due to higher prices for oilfield equipment, but prices for many other capital goods are also higher.

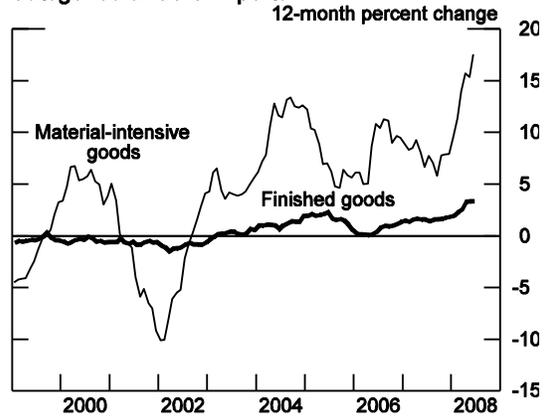
**Oil.** The BLS price index of imported oil rose 7.4 percent in June. Similarly, the spot price of West Texas intermediate (WTI) crude oil averaged \$133.93 per barrel in June, up 6.8 percent from the May average. In early July, the spot price of WTI climbed to above \$145 per barrel but has since fallen back to \$122.19 per barrel as of July 29. The price of futures for delivery at the end of 2016 moved in a similar fashion, closing on July 29 at \$118.18 per barrel. Increasing geopolitical risk likely provided support for oil prices during June and early July, as tensions escalated in the Middle East and violence

**Prices of U.S. Imports and Exports**

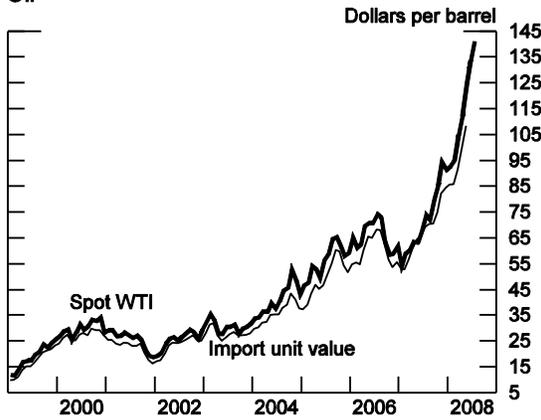
**Merchandise Imports**



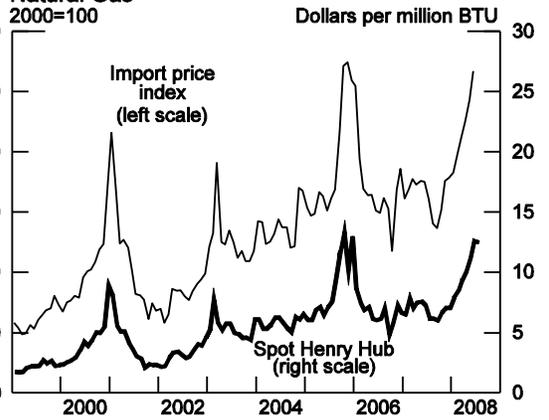
**Categories of Core Imports**



**Oil**



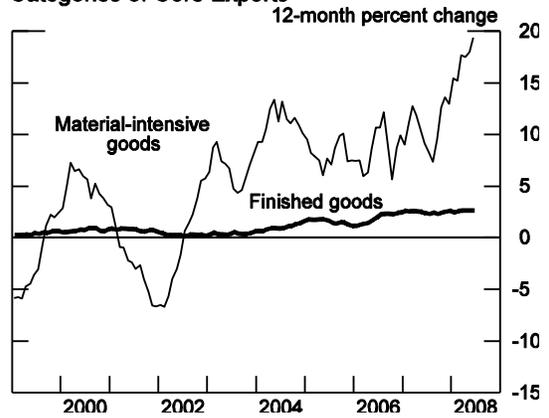
**Natural Gas**



**Merchandise Exports**



**Categories of Core Exports**



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

	Annual rate			Monthly rate		
	2007	2008		2008		
	Q4	Q1	Q2	Apr.	May	June
	----- BLS prices -----					
<b>Merchandise imports</b>	16.3	15.4	35.1	2.8	2.6	2.6
Oil	73.6	44.3	139.3	7.9	8.9	7.4
Non-oil	4.6	8.4	12.9	1.3	.7	.9
Core goods <sup>1</sup>	3.7	9.5	13.8	1.5	.6	1.0
Finished goods	2.0	3.9	5.7	.8	.2	.2
Cap. goods ex. comp. & semi.	2.5	4.1	8.4	1.4	.3	.3
Automotive products	4.7	3.9	2.3	.4	.0	.1
Consumer goods	1.8	4.5	5.8	.8	.2	.2
Material-intensive goods	7.6	22.1	32.0	2.8	1.3	2.5
Foods, feeds, beverages	10.3	17.7	19.8	1.3	1.1	1.9
Industrial supplies ex. fuels	6.8	23.1	35.3	3.2	1.3	2.6
Computers	-2.7	-10.6	-3.7	-.3	.0	-.7
Semiconductors	1.6	-7.3	-5.4	-.9	1.0	-1.4
Natural gas	78.5	88.2	137.9	6.7	7.6	9.9
<b>Merchandise exports</b>	7.7	12.6	10.0	.4	.4	1.0
Core goods <sup>2</sup>	9.1	15.4	11.9	.5	.4	1.0
Finished goods	2.6	3.7	2.6	.3	.2	.1
Cap. goods ex. comp. & semi.	3.1	5.8	3.6	.3	.3	.1
Automotive products	1.3	1.6	2.0	.4	.0	.1
Consumer goods	2.4	2.8	2.1	.1	.0	.1
Material-intensive goods	17.5	30.1	22.5	.6	.7	2.0
Agricultural products	40.9	58.1	14.4	-2.0	.2	2.2
Industrial supplies ex. ag.	11.2	21.9	26.0	1.6	.9	2.1
Computers	-3.9	-10.3	-4.8	-.1	.0	.1
Semiconductors	1.0	.6	-1.7	-.3	-.7	2.5
	----- NIPA prices -----					
<b>Chain price index</b>						
Imports of goods & services	13.2	12.6	n.a.	...	...	...
Non-oil merchandise	4.3	7.6	n.a.	...	...	...
Core goods <sup>1</sup>	3.9	8.3	n.a.	...	...	...
Exports of goods & services	6.0	8.9	n.a.	...	...	...
Total merchandise	6.3	10.2	n.a.	...	...	...
Core goods <sup>2</sup>	7.6	12.2	n.a.	...	...	...

1. Excludes computers, semiconductors, and natural gas.

2. Excludes computers and semiconductors.

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

continued in Nigeria. Prices have fallen back rapidly, however, amid rising concerns over the strength of economic activity and the resulting implications for global oil demand. In addition, the most recent data from the International Energy Agency indicate that Saudi Arabia increased production in June, and market participants expect further production increases in July.

**Exports.** Core export prices rose 1 percent in June. Almost all of the increase was due to higher prices for material-intensive goods. Prices for agricultural products and nonagricultural industrial supplies both increased over 2 percent. The increase in agricultural prices was driven by higher prices for soybeans, corn, meat, and fruit, which more than offset declines in wheat and vegetable prices. For nonagricultural industrial supplies, the June increase was primarily driven by rising fuel prices, although higher prices for inorganic chemicals and plastics also contributed to the rise. Prices for finished goods were little changed.

The average level of core export prices in the second quarter was 12 percent (a.r.) above the first quarter average. Much of the rise can be attributed to a 26 percent increase in prices of nonagricultural industrial supplies. Agricultural prices, having increased at a 58 percent pace in the first quarter, were up only 14½ percent in the second quarter. Prices of exported finished goods were up 2½ percent, a rate comparable to that in 2007.

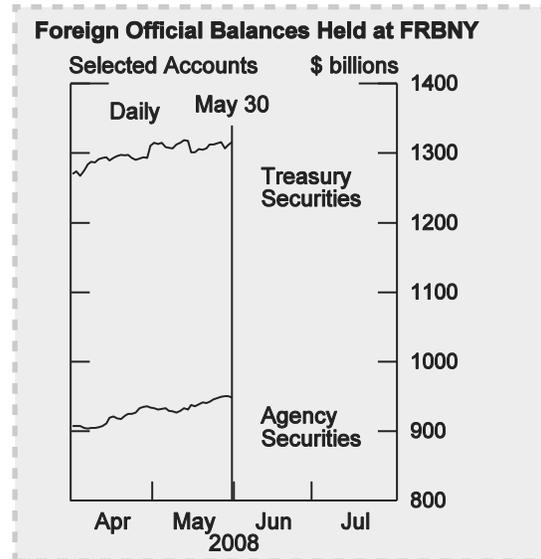
### **U.S. International Financial Transactions**

Since the June Greenbook, we have received data on U.S. international financial transactions for May, along with partial and confidential data on custody accounts at FRBNY through July 29. Foreign official flows into the United States were \$46 billion in May, on par with April's figure and near their six-month average (line 1 of the Summary of U.S. International Financial Transactions table and the chart on Foreign Official Financial Flows).

Among foreign officials, the G-10 and the ECB reduced their holdings of U.S. securities by nearly \$11 billion in May, the largest outflow since 2006 (line 1a);

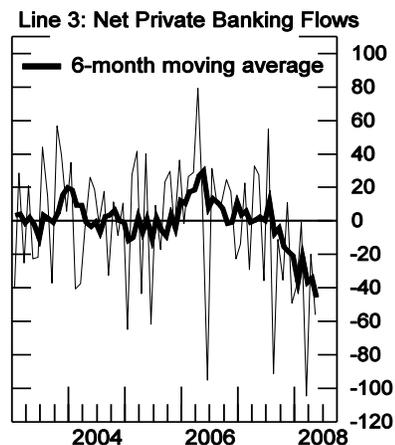
. Inflows from OPEC (line 1b) and from other countries (line 1c) remained strong. On net, foreign official inflows in May were concentrated in agency bonds. Data on custody accounts at FRBNY indicate that official net purchases of agency bonds and Treasury securities likely remained strong during June but eased somewhat in July (see inset chart).

Foreign private purchases of U.S. securities totalled \$31 billion in May, exceeding the pace of the first quarter but well below the pace of the fourth quarter of 2007 (line 4 of the Summary of U.S. International Financial Transactions table; see also the chart on Private Securities Flows). In contrast to foreign officials, foreign private investors continued selling agency bonds in May (line 4b) at the near record pace that began in March (top right panel of the chart); foreign private investors on net purchased Treasury securities, but these purchases were modest (line 4a). Outside agency bonds and Treasury securities, foreign private investors on net purchased corporate bonds; these purchases were well above the pace of the past six months (line 4c). Net purchases of corporate stocks (line 4d) were about in line with their six-month trend.



After recording small net sales in April, U.S. net acquisitions of foreign securities in May amounted to \$27 billion (line 5), exceeding their six-month trend; these purchases were concentrated on foreign stocks (line 5b). The bottom left panel of the chart shows that, despite their month-to-month volatility, private acquisitions of foreign securities have been declining, on average, since 2007. This decline has been concentrated in purchases of foreign bonds. Such purchases were especially weak early this year, in line with low issuance of foreign bonds.

The volatile banking sector (line 3) posted a further net outflow in May. Since the turmoil began in August 2007, net lending abroad by banks has increased with unusual consistency (see inset chart). These outflows, primarily from foreign-owned banks lending to European affiliates, likely reflect tensions in interbank funding markets and cumulate to a sizeable \$336 billion between August 2007 and May 2008.



Finally, U.S. official assets (line 2) showed a \$27 billion outflow in May, reflecting primarily an increase in the amounts drawn from the temporary swap arrangements with the European Central Bank and Swiss National Bank. These swap arrangements were also the primary contribution to the \$24 billion outflow for this line in the fourth quarter.

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

	2006	2007	2007			2008		
			Q2	Q3	Q4	Q1	Apr.	May
<b>Official financial flows</b>	<b>490.3</b>	<b>386.9</b>	<b>88.8</b>	<b>13.4</b>	<b>121.5</b>	<b>176.4</b>	<b>31.2</b>	<b>19.1</b>
1. Change in foreign official assets in the U.S. (increase, +)	487.9	411.1	88.8	13.5	145.5	173.7	46.4	46.1
a. G-10 countries + ECB	26.1	36.8	9.3	3.3	11.8	-1.5	3.3	-10.6
b. OPEC	45.2	30.9	0.4	2.8	16.3	18.1	0.8	9.6
c. All other countries	416.6	343.4	83.1	7.4	117.4	157.2	42.3	47.0
2. Change in U.S. official assets (decrease, +) <sup>1</sup>	2.4	-24.1	0.0	-0.1	-24.0	2.7	-15.1	-27.0
<b>Private financial flows</b>	<b>348.8</b>	<b>387.4</b>	<b>104.7</b>	<b>88.5</b>	<b>91.9</b>	<b>-52.1</b>	<b>...</b>	<b>...</b>
<b>Banks</b>								
3. Change in net foreign positions of banking offices in the U.S. <sup>2</sup>	122.7	-115.8	24.7	-47.3	-73.0	-143.6	-19.9	-56.0
<b>Securities<sup>3</sup></b>								
4. Foreign net purchases (+) of U.S. securities	634.2	750.5	298.9	32.5	190.9	46.2	28.5	30.9
a. Treasury securities	-58.2	156.6	-13.5	60.5	66.7	64.7	47.0	10.2
b. Agency bonds	25.8	19.4	36.3	-2.6	16.4	-18.4	-22.9	-22.8
c. Corporate and municipal bonds	517.8	383.5	169.5	-7.3	49.4	-10.7	11.9	38.5
d. Corporate stocks <sup>4</sup>	148.9	191.1	106.5	-18.1	58.4	10.6	-7.6	5.1
5. U.S. net acquisitions (-) of foreign securities	-362.4	-287.2	-84.1	-99.2	-4.7	-35.3	8.7	-27.1
a. Bonds	-224.5	-168.0	-57.0	-42.6	-13.6	-7.8	10.1	-9.9
b. Stock purchases	-119.1	-107.9	-27.2	-52.1	11.5	-26.7	-1.3	-17.2
c. Stock swaps <sup>4</sup>	-18.8	-11.3	0.0	-4.5	-2.6	-0.8	0.0	0.0
<b>Other flows (quarterly data, s.a.)</b>								
6. U.S. direct investment (-) abroad	-241.2	-333.3	-93.6	-62.0	-110.9	-85.6	...	...
7. Foreign direct investment in the U.S.	242.0	237.5	61.9	105.9	55.7	46.6	...	...
8. Net derivatives (inflow, +)	29.7	6.5	-1.0	5.9	-13.5	-8.0	...	...
9. Foreign acquisitions of U.S. currency	2.2	-10.7	-1.6	0.7	-3.5	-0.9	...	...
10. Other (inflow, +) <sup>5</sup>	-78.4	139.8	-100.4	152.0	50.9	128.5	...	...
<b>U.S. current account balance (s.a.)</b>	<b>-788.1</b>	<b>-731.2</b>	<b>-194.1</b>	<b>-173.0</b>	<b>-167.2</b>	<b>-176.4</b>	<b>...</b>	<b>...</b>
<b>Capital account balance (s.a.)<sup>6</sup></b>	<b>-3.9</b>	<b>-1.8</b>	<b>-0.1</b>	<b>-0.6</b>	<b>-0.6</b>	<b>-0.6</b>	<b>...</b>	<b>...</b>
<b>Statistical discrepancy (s.a.)</b>	<b>-47.1</b>	<b>-41.3</b>	<b>0.7</b>	<b>71.6</b>	<b>-45.6</b>	<b>52.6</b>	<b>...</b>	<b>...</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 changes in U.S. official reserve assets and in outstanding reciprocal currency swaps with certain foreign central banks.

2. 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.

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

4. Includes (4d) or represents (5c) stocks acquired through non-market means such as mergers and reincorporations.

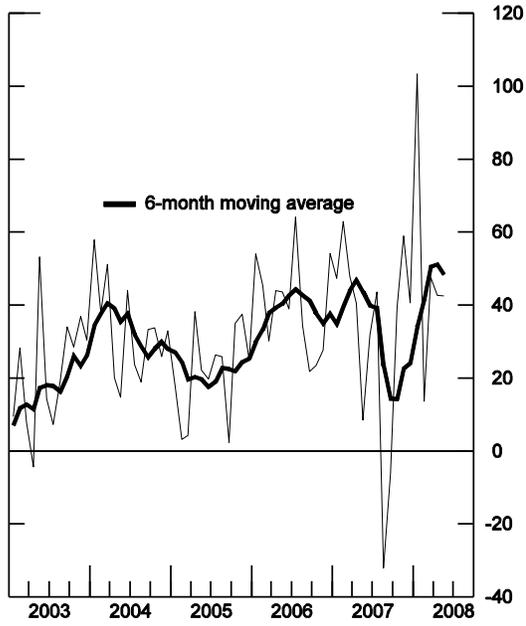
5. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions (in lines 1 through 5 and 8) since publication of the quarterly data in the Survey of Current Business.

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

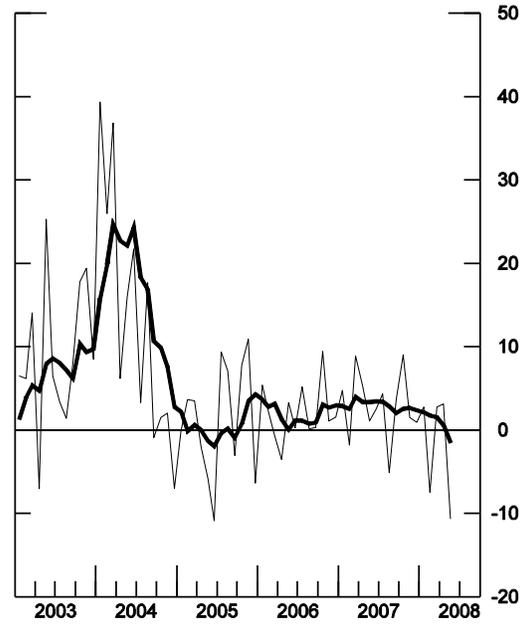
... Not applicable.

**Foreign Official Financial Inflows (+) Through May 2008**  
 (\$ Billions, monthly, not seasonally adjusted)

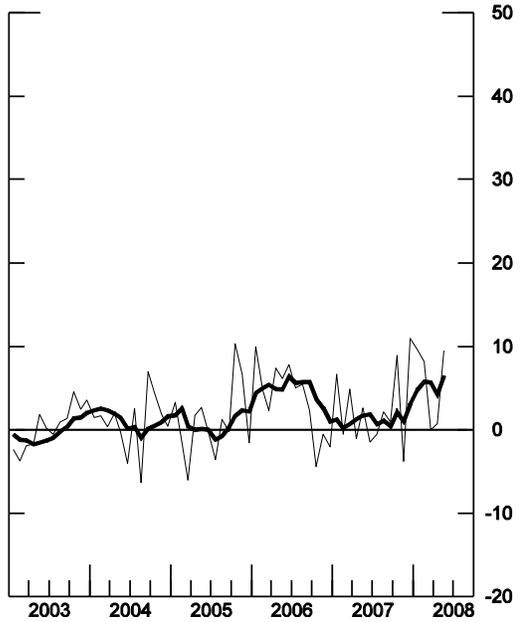
**Total**



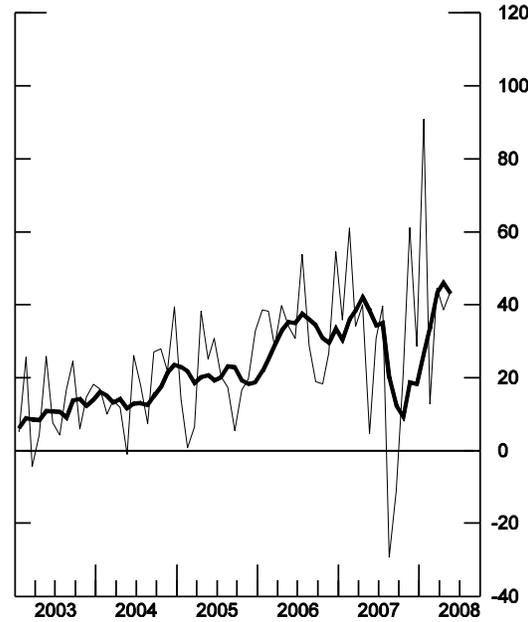
**G-10 + ECB**



**OPEC**

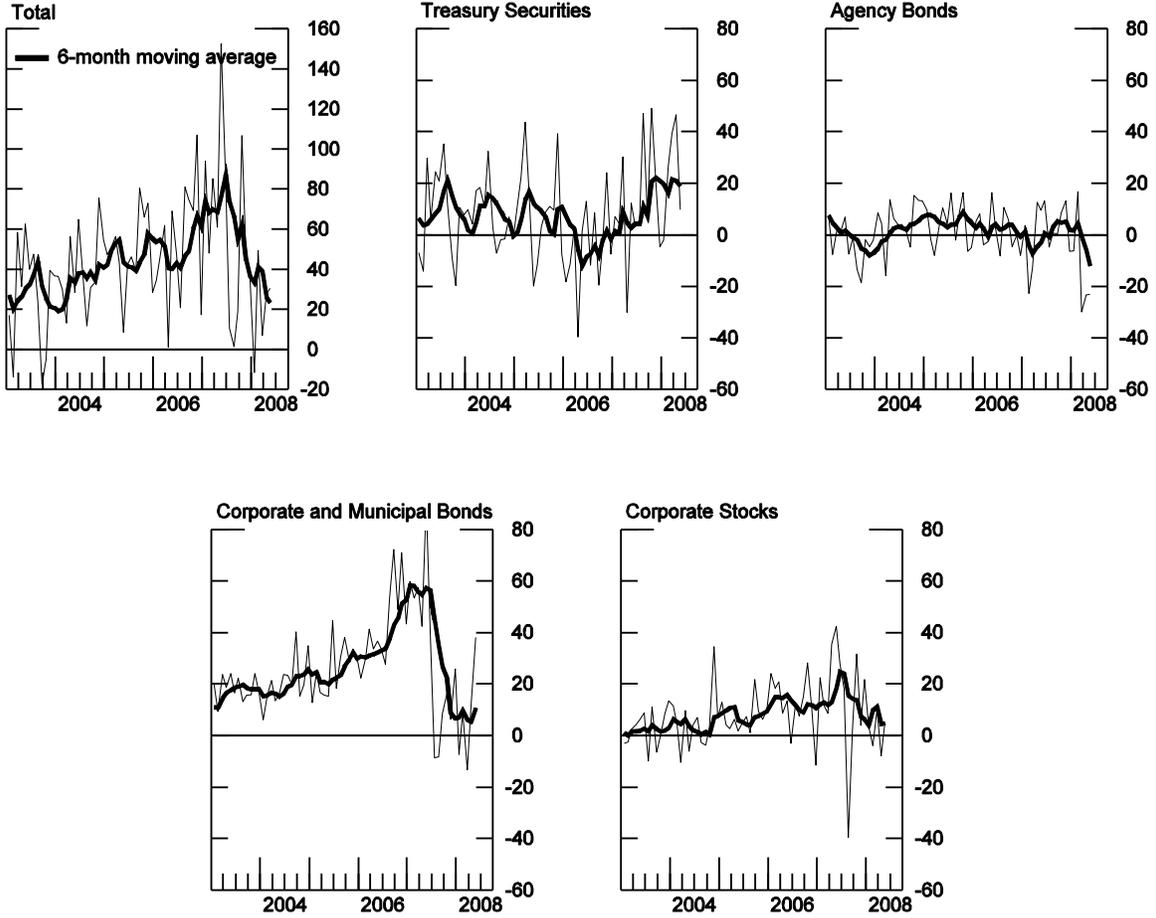


**All other countries**

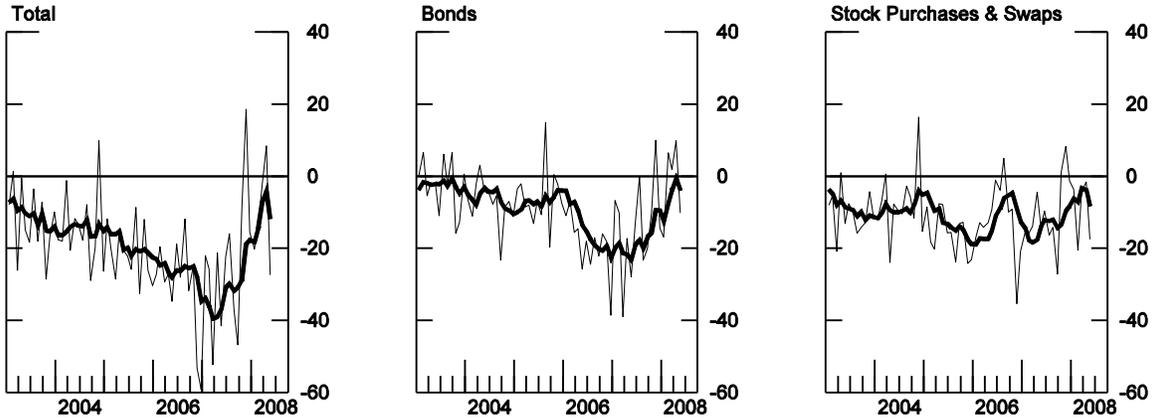


**Private Securities Flows Through May 2008**  
 (\$ Billions, monthly, not seasonally adjusted)

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



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



## **Foreign Financial Markets**

Concerns about the GSEs weighed on the dollar and foreign stock markets, but both rebounded as U.S. earnings reports and macro data generally exceeded market expectations. The major currencies index depreciated almost 2 percent between July 7 and July 15, the period when worries about the GSEs were at their height, but it subsequently appreciated as investor sentiment improved and is now only unchanged from its level at the time of the June Greenbook. Despite this market volatility, concerns about the GSEs seemed to have had little impact on foreign official demand for agency debt. Although the major foreign stock markets erased most of the losses that they suffered in mid-July, they have still declined 6 to 8 percent on net since the June Greenbook amid signs that growth in the foreign advanced economies is slowing.

As expected, the European Central Bank (ECB) raised its policy rate 25 basis points to 4.25 percent on July 3. In the following press conference, President Trichet indicated that he considered policy to be neutral. Expectations of further policy tightening in the advanced foreign economies have diminished as growth has appeared to slow and as the recent decline in oil prices has eased inflation fears. Ten-year benchmark sovereign yields have declined 15 to 30 basis points in the euro area, United Kingdom, and Japan since the June Greenbook, while ten-year inflation compensation has declined roughly 10 basis points in the euro area and Japan and 45 basis points in the United Kingdom.

Pressures in interbank funding markets have eased modestly since the June Greenbook. Quarter-end pressures were high by historical standards but comparable to experience over the past year, as overnight euro and sterling Libor rates declined about 25 basis points at the start of the third quarter. Spreads between euro Libor and OIS rates declined about 10 basis points as European banks appeared to successfully lock in funding in the days prior to the quarter end, and spreads between sterling Libor and OIS rates declined by a similar amount in mid-July. British banks appear to be securitizing assets for use as collateral at the Bank of England's special liquidity scheme, and their ability to make use of the scheme may be partly responsible for the modest easing of funding pressures in sterling. Implied rates from foreign exchange and currency basis swaps indicate that the interest rates paid by European financial institutions for dollar funding also eased somewhat. However, demand at the dollar term-funding auctions held by the ECB and Swiss National Bank (SNB) remained strong, with the ECB's auctions drawing record amounts of bids. On July 30, The ECB and SNB announced that they would extend the maturity of a portion of their auctions of dollar funding from one-month to three months

in collaboration with the Federal Reserve, but it is too soon to gauge market reaction to this decision.

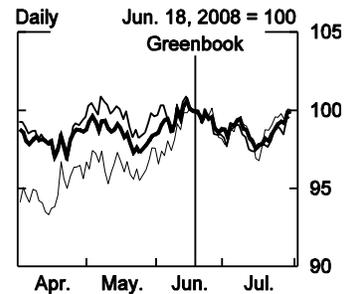
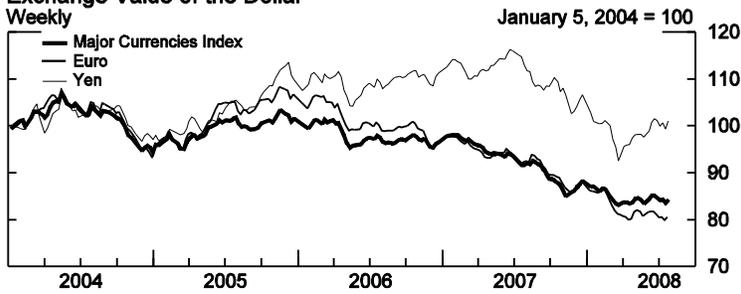
The renminbi appreciated a further  $\frac{3}{4}$  percent against the dollar and the Mexican peso and Brazilian real both appreciated  $\frac{2}{4}$  percent as the central banks of those two countries have continued to tighten policy. Several Asian countries struggled to cope with falling stock markets, spending billions of dollars in an effort to prop up share prices. In Taiwan, government officials requested that the government pension and insurance funds buy more domestic shares and hold their investments for a longer period. In Vietnam, the stock exchange and securities regulator erected a stabilization fund to support the country's stock market. Pakistan also announced that it would establish an equity market stabilization fund in the wake of rioting over falling stock prices.

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

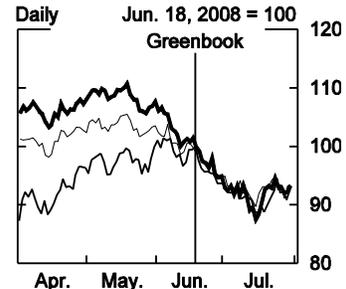
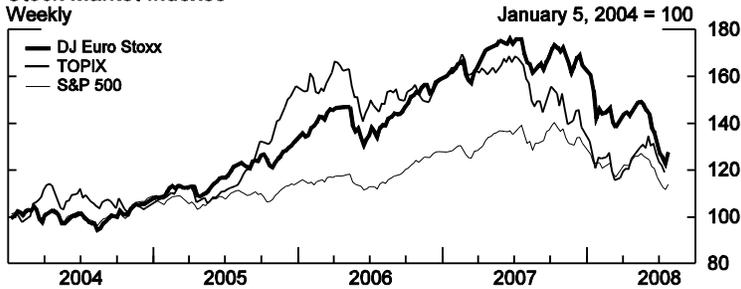
	Latest	Percent change since June Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.5566	-0.4
Yen (¥/\$)	108.2	0.1
Sterling (\$/£)	1.9783	-1.1
Canadian dollar (C\$/\\$)	1.0244	0.6
<i>Nominal dollar indexes*</i>		
Broad index	95.8	-0.4
Major currencies index	71.7	-0.0
OITP index	121.5	-0.8
<i>Stock market indexes</i>		
DJ Euro Stoxx	316.1	-6.5
TOPIX	1303.0	-7.6
FTSE 100	5406.4	-6.1
S&P 500	1264.5	-6.4

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

**Exchange Value of the Dollar**  
Weekly



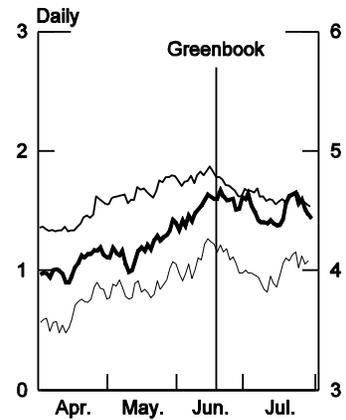
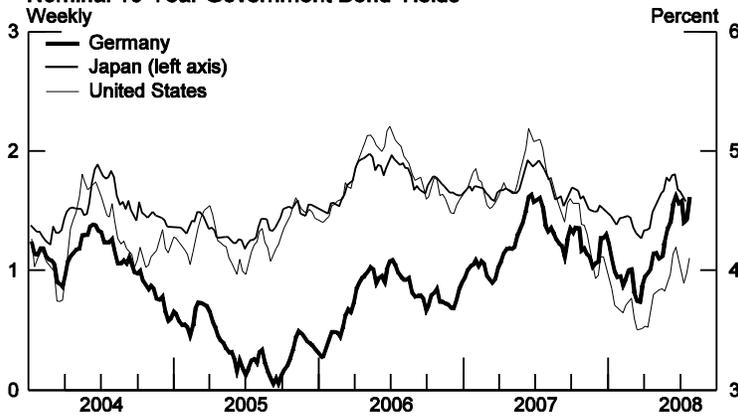
**Stock Market Indexes**  
Weekly



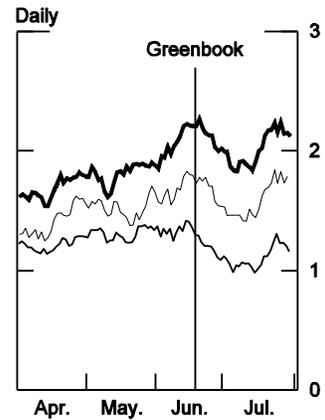
**Industrial Countries: Nominal and Real Interest Rates**

	3-month LIBOR		10-year nominal		10-year indexed		Percent
	Latest	Change since June Greenbook	Latest	Change since June Greenbook	Latest	Change since June Greenbook	
Germany	4.96	0.00	4.45	-0.17	2.14	-0.07	
Japan	0.90	-0.02	1.54	-0.25	1.16	-0.14	
United Kingdom	5.78	-0.16	4.87	-0.28	1.51	0.20	
Canada	3.34	-0.06	3.82	-0.03	...	...	
United States	2.80	-0.01	4.09	-0.14	1.79	-0.01	

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



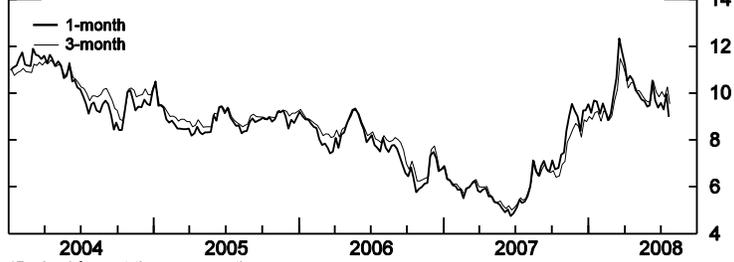
**Inflation-Indexed 10-Year Government Bond Yields**  
Weekly



\*Japan first issued inflation-indexed debt in March 2004.

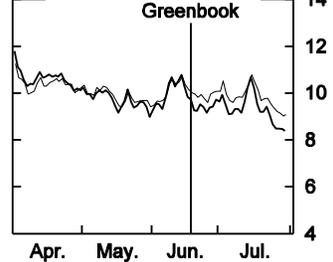
**Measures of Market Volatility**

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

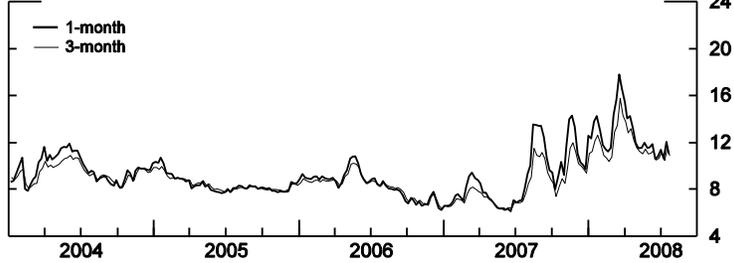


\*Derived from at-the-money options.

Daily

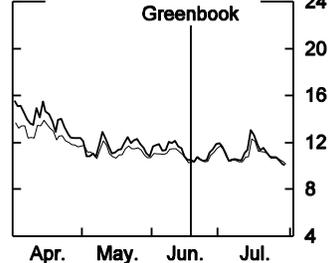


**Yen-Dollar Options-Implied Volatility\***  
Weekly

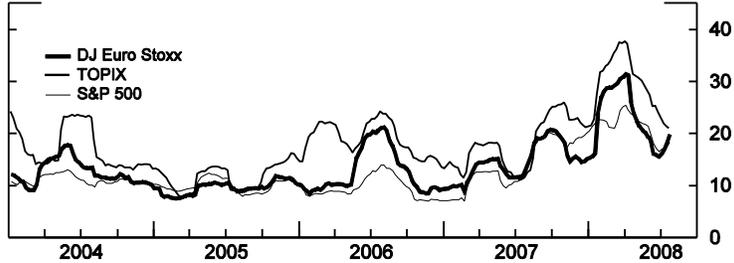


\*Derived from at-the-money options.

Daily

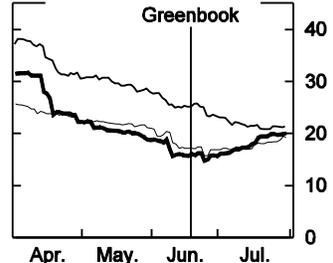


**Realized Stock Market Volatility\***  
Weekly

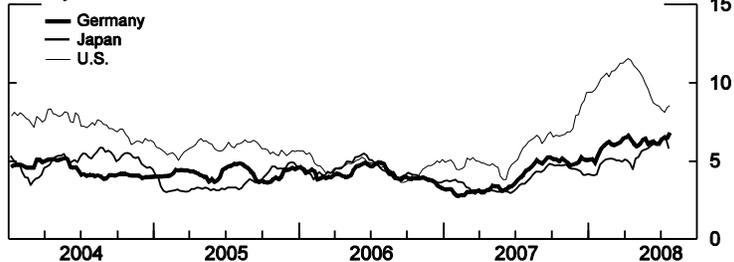


\*Annualized standard deviation of 60-day window of daily returns.

Daily

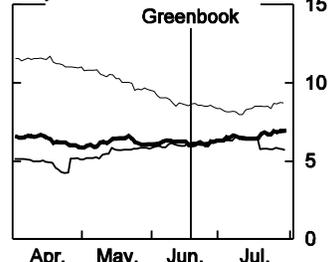


**Realized 10-Year Bond Volatility\***  
Weekly



\*Annualized standard deviation of 60-day window of daily returns.

Daily

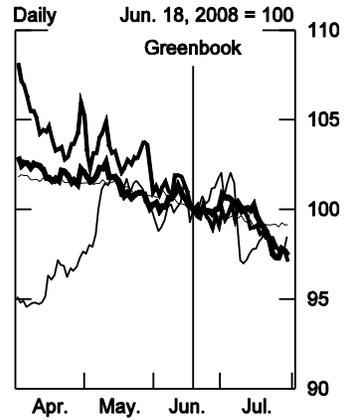
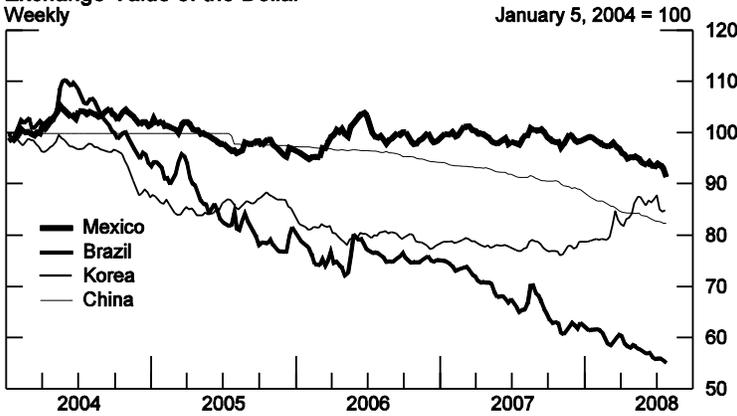


**Emerging Markets: Exchange Rates and Stock Market Indexes**

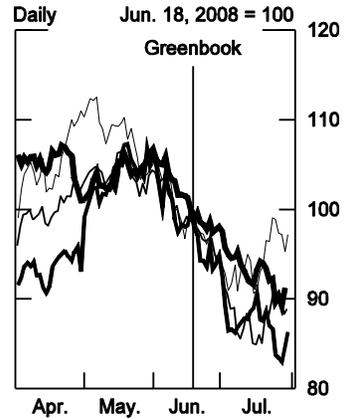
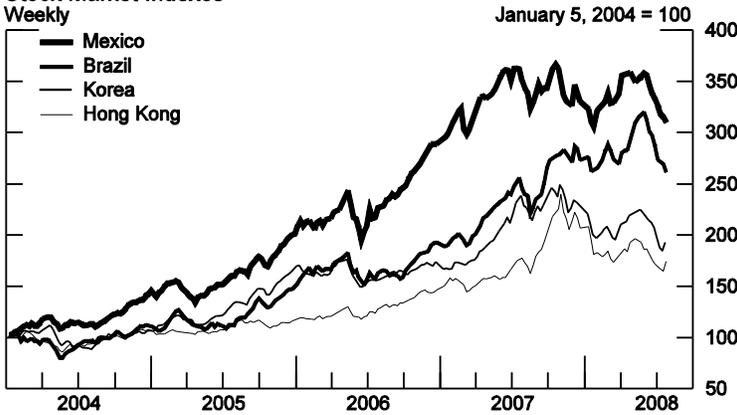
	Exchange value of the dollar		Stock market index	
	Latest	Percent change since June Greenbook*	Latest	Percent change since June Greenbook
Mexico	10.0362	-2.5	27319	-8.7
Brazil	1.5630	-2.8	59156	-13.6
Venezuela	2.14	-0.1	39500	7.7
China	6.8271	-0.8	2837	-3.6
Hong Kong	7.8035	-0.0	22691	-2.7
Korea	1013.5	-1.5	1578	-11.1
Taiwan	30.51	0.4	7070	-14.0
Singapore	1.3691	-0.1	940	0.0
Thailand	33.45	0.6	670	-12.5

\* 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**

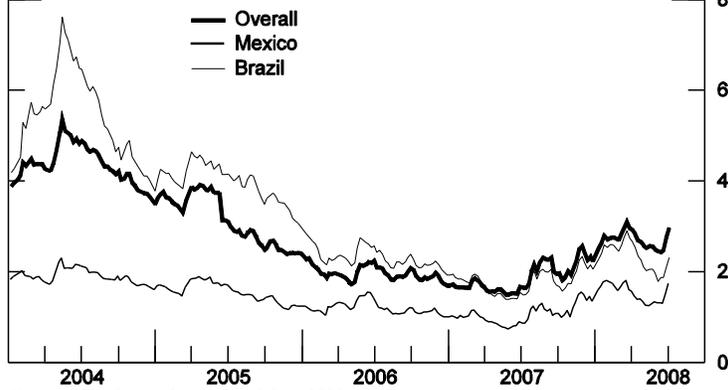
	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since June Greenbook	July 7, 2008	Change since June Greenbook
Mexico	7.34	0.00	1.86	0.55
Brazil	12.80	0.70	2.39	0.52
Argentina	13.13	-2.44	6.16	0.44
China	...	...	1.48	0.11
Korea	5.10	0.00	...	...
Taiwan	2.59	0.05	...	...
Singapore	3.50	0.00	...	...
Hong Kong	1.92	0.01	...	...

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

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

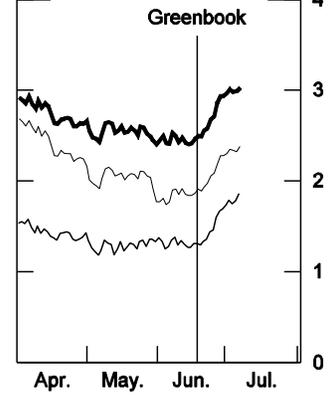
... Korea, Taiwan, Singapore, and Hong Kong have no outstanding dollar-denominated sovereign bonds.

**EMBI+ Spreads\***  
Weekly

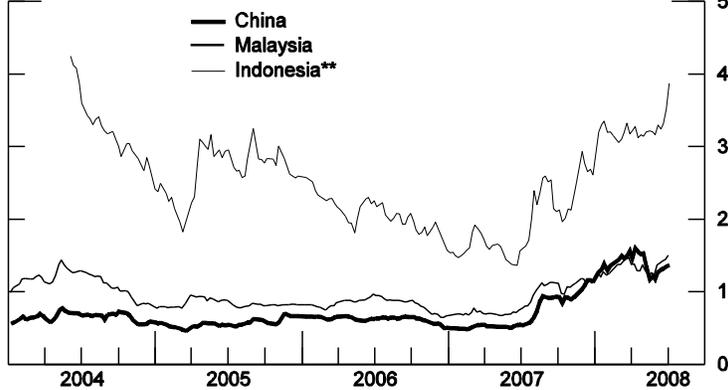


\*Last weekly observations fall on July 4, 2008.  
Last daily observations fall on July 7, 2008.

Daily

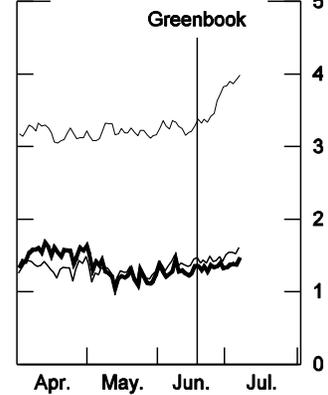


**EMBI Global Spreads\***  
Weekly



\*Last observations fall on July 4, 2008.  
Last daily observations fall on July 7, 2008.  
\*\*Begins May 2004.

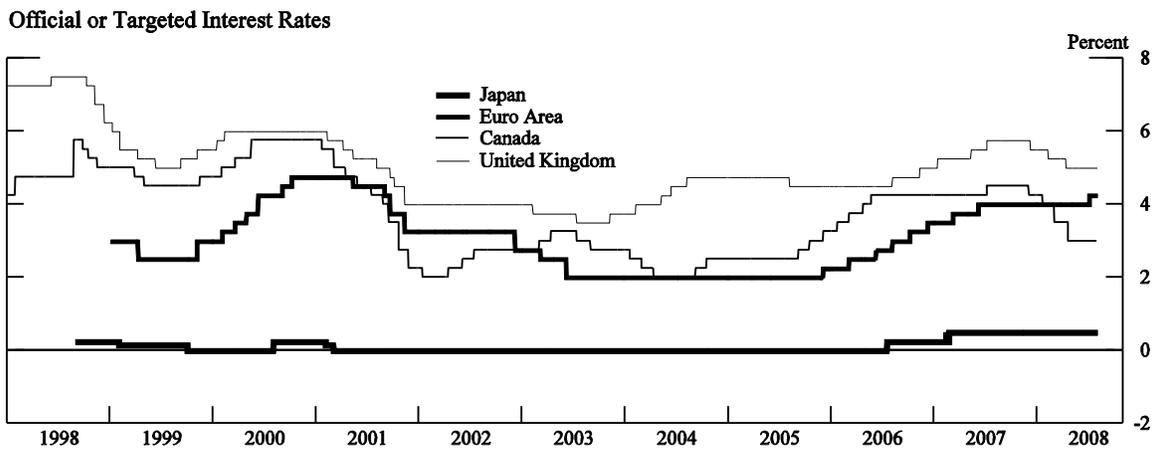
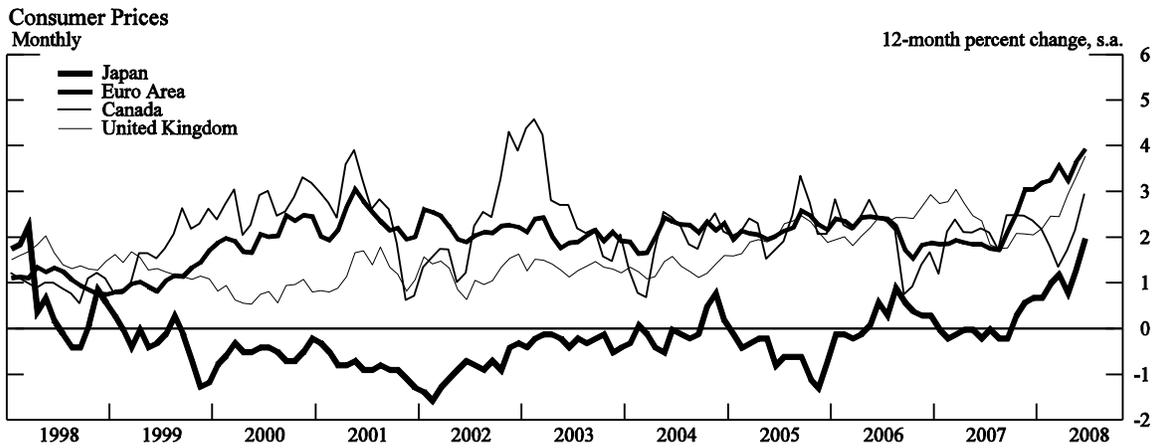
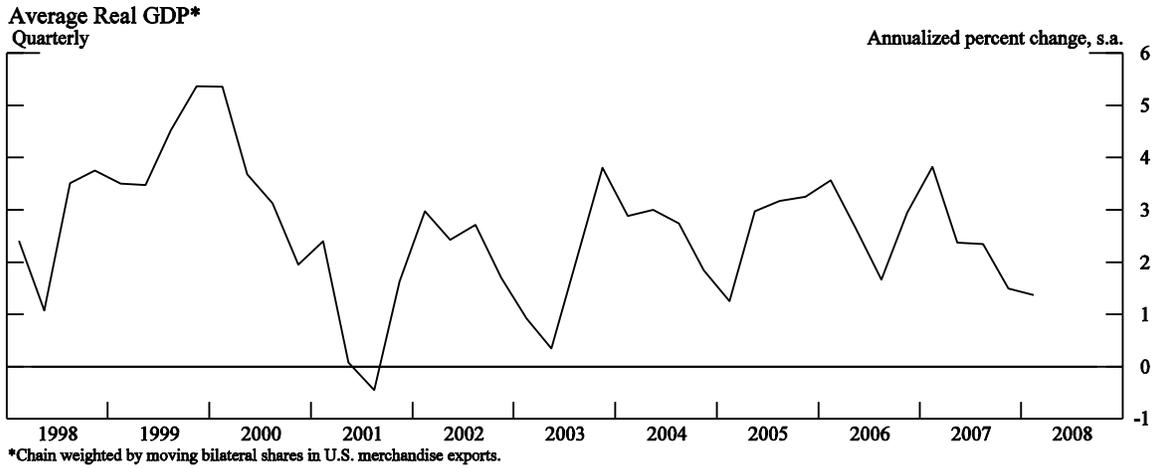
Daily



**Developments in Advanced Foreign Economies**

Across the advanced foreign economies, information received since the last Greenbook points to subdued growth in the second quarter and increasing inflation pressures. Weak second-quarter data on industrial production and sentiment in the euro area and on consumer expenditures and exports in Japan suggest the first-quarter pop-up in output growth was not sustained. In Canada, where output declined in the first quarter, indications are for a mild rebound on improvements in the manufacturing sector. In contrast, conditions have worsened considerably in the United Kingdom, with the housing sector looking particularly grim. In all the major advanced foreign economies, rising food and fuel prices continue to drive inflation to recent highs, although core measures of inflation have generally remained contained. The European Central Bank tightened policy in July, but other major central banks held rates constant. Currently, market participants are expecting the major foreign central banks to keep monetary policy on hold through the rest of the year.

### Advanced Foreign Economies



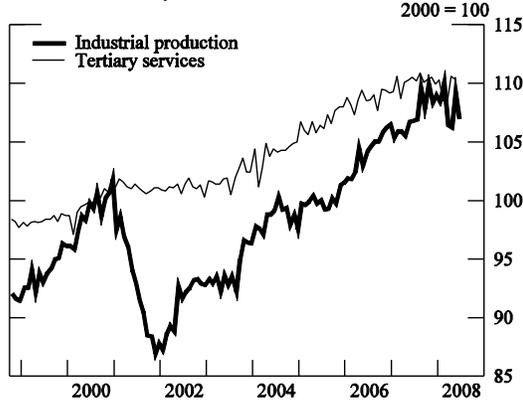
Recent indicators point to a sizable step-down in **Japanese** output growth in the second quarter, after the first-quarter's 4 percent (a.r.) jump. Survey measures of household spending contracted, consumer and business sentiment declined sharply, and industrial production fell last quarter. Real growth of merchandise exports has also slowed considerably since the beginning of the year, with export volume falling 3.2 percent over the three months ending in June, reversing the previous quarter's gain.

The labor market is weakening. The unemployment rate rose to 4.1 percent in June, and the job openings-to-applicants ratio (the number of officially posted job openings relative to the number of officially registered job seekers) fell to 0.91 in June, its lowest level since February 2005. In addition, total cash earnings (which include bonuses) rose just 0.8 percent over the twelve months ending in May.

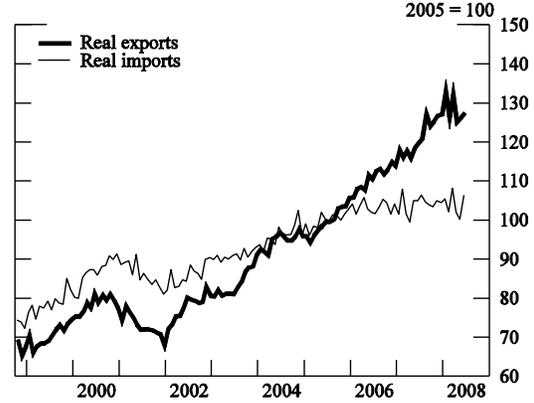
Rising energy and food prices have been the primary reason for the 2 percent increase in Japanese consumer prices over the twelve months ending in June. Consumer prices excluding fresh food rose nearly as much, but excluding food and energy, prices were roughly unchanged from last year. The timelier core CPI for Tokyo rose 1.6 percent in July from a year earlier. At its mid-July meeting, the Bank of Japan unanimously voted to keep its main policy rate unchanged.

**Japan**

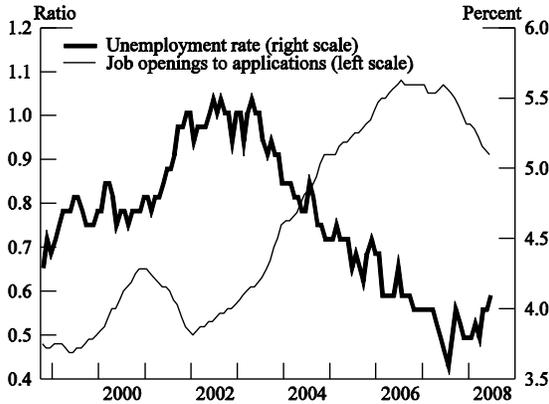
**Economic Activity**



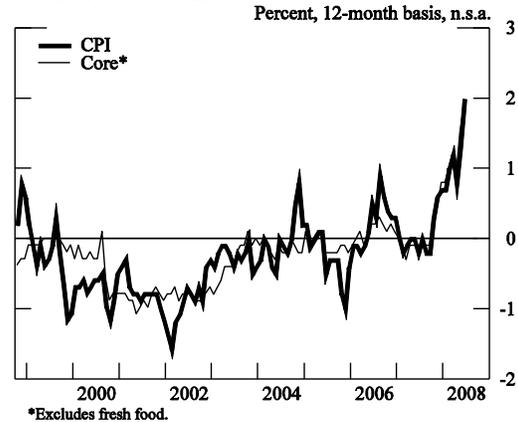
**Real Trade**



**Labor Market**



**Consumer Price Inflation**



\*Excludes fresh food.

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

Indicator	2007	2008		2008			
	Q4	Q1	Q2	Mar.	Apr.	May	June
Housing starts	18.1	19.6	n.a.	-5.4	5.8	-6.8	n.a.
Machinery orders <sup>1</sup>	0.6	2.2	n.a.	-8.3	5.5	10.4	n.a.
Household expenditures	0.6	0.7	-3.3	-2.2	-0.7	-0.9	1.5
New car registrations	4.2	-1.6	-2.4	-5.0	10.0	-11.1	0.3
Business sentiment <sup>2</sup>	2.0	-4.0	-7.0	...	...	...	...
Wholesale prices <sup>3</sup>	2.4	3.5	4.8	3.9	3.9	4.8	5.6

1. Private sector, excluding ships and electric power.

2. Tankan survey, diffusion index. Level.

3. Percent change from year earlier, n.s.a.

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

Incoming data for the **euro area** point to a stalling of economic activity in the second quarter, consistent with payback from the first-quarter GDP surge as well as underlying softness. The earlier bounce was strongly influenced by unusually warm weather that brought forward German construction. In May, euro-area industrial production decreased markedly, while German new orders for manufacturing goods declined further. Both manufacturing and services PMIs for the euro area indicate contraction, and business and consumer confidence continue to deteriorate. After months of declines, retail sales posted positive growth in May, but the average April-May level of retail sales was still down 0.7 percent from the first quarter. Lending to the private sector continued to grow at a robust though somewhat moderating pace with most of the slowing concentrated in loans to households, especially mortgages.

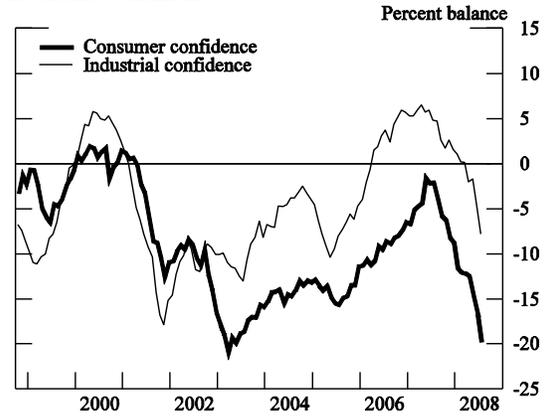
Twelve-month HICP inflation rose to 3.9 percent in June, on the back of a 16 percent spike in energy price inflation. Excluding energy and unprocessed food prices, inflation was around 2½ percent. Following its July meeting, the ECB Council increased its main policy rate ¼ percentage point to 4.25 percent, and President Trichet indicated that he considered monetary policy to now be neutral.

**Euro Area**

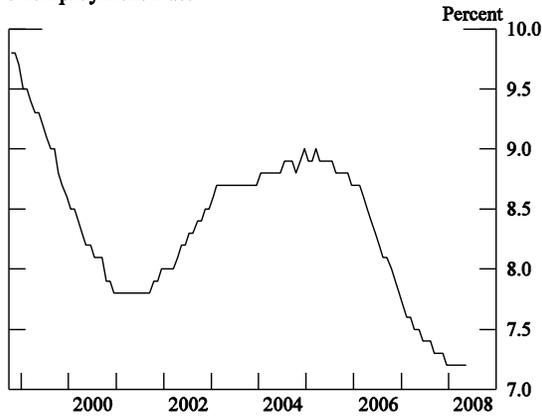
**Nominal Exports and Imports**



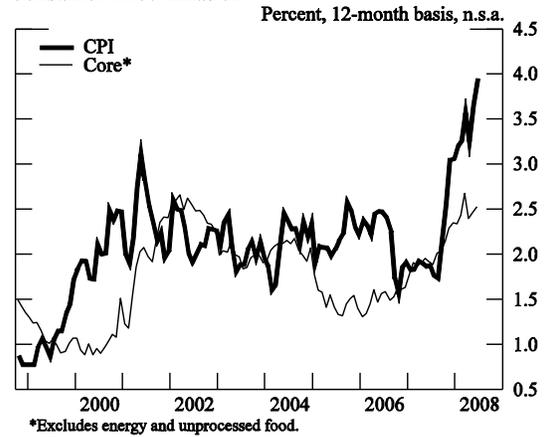
**Economic Sentiment**



**Unemployment Rate**



**Consumer Price Inflation**



\*Excludes energy and unprocessed food.

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

Indicator	2007		2008	2008			
	Q3	Q4	Q1	Feb.	Mar.	Apr.	May
Industrial production <sup>1</sup>	1.4	-0.1	0.4	0.2	-0.6	1.0	-1.9
Retail sales volume <sup>2</sup>	0.3	-0.8	0.1	-0.2	-0.9	-0.5	1.0
New car registrations	0.5	0.7	-2.6	5.1	-8.7	8.0	-5.0
Employment	0.4	0.2	n.a.	...	...	...	...
Producer prices <sup>3</sup>	2.1	4.0	5.4	5.4	5.8	6.2	7.1
M3 <sup>3</sup>	11.3	11.5	10.1	11.3	10.1	10.6	n.a.

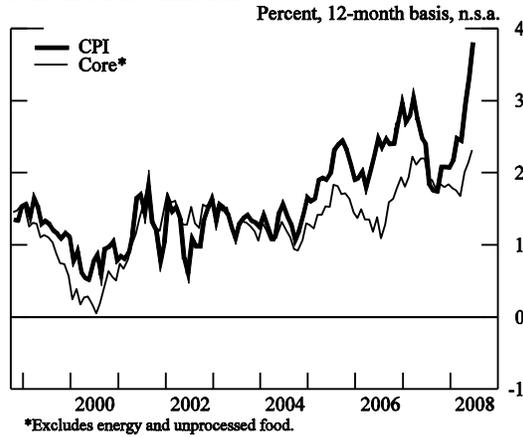
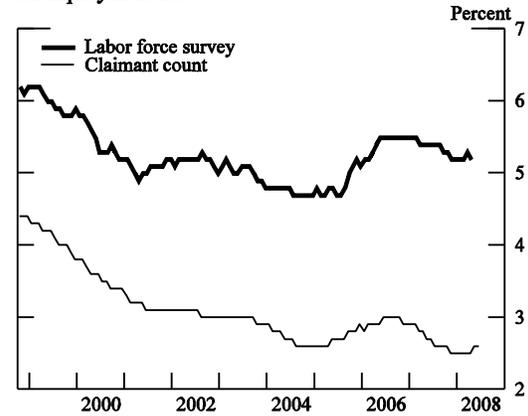
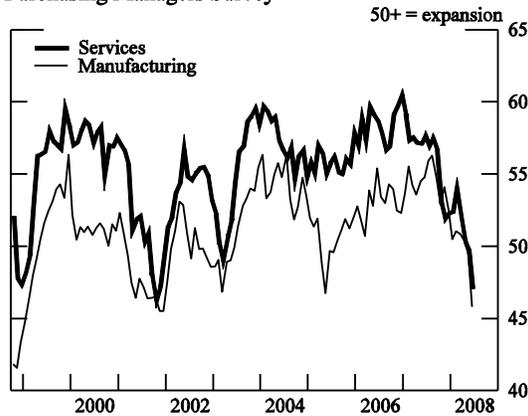
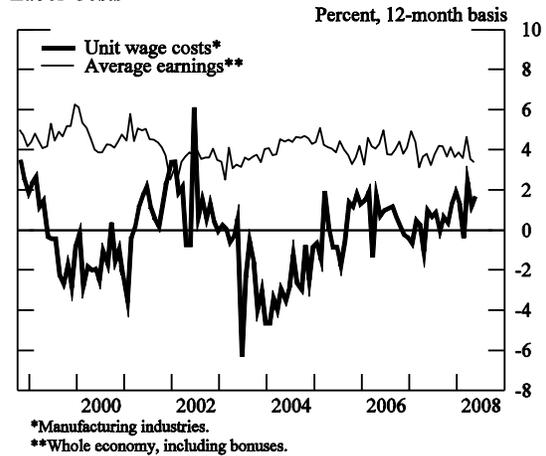
1. Excludes construction.  
 2. Excludes motor vehicles.  
 3. Eurostat harmonized definition. Percent change from year earlier, s.a.  
 n.a. Not available. ... Not applicable.

In the **United Kingdom**, real GDP rose a tepid 0.7 percent (a.r.) in the second quarter, after a downward-revised 1.1 percent in the first quarter. Declines in the manufacturing, construction, and financial-related services sectors weighed on second-quarter growth. Most recently, business confidence dropped sharply in July, consumer confidence slid to a near fifteen-year low in June, and second-quarter surveys of investment intentions showed further softening. The number of individuals claiming unemployment benefits rose 4 percent in the second quarter, the largest increase since the early 1990s.

The slump in the housing sector has also deepened further since last Greenbook. In June, house price indexes flirted with double-digit declines relative to their peak last fall and mortgage lending for house purchases dropped by two thirds over the past twelve months. The anticipation of further price declines, along with higher mortgage rates, tighter lending standards, and the uncertain economic situation, has kept potential home buyers at bay.

The twelve-month rate of headline inflation jumped to 3.8 percent in June, reflecting one of the largest monthly increases since 1991. The main contributors to the rise were energy and food products, especially gasoline, fruits, and meat. Core inflation, which excludes energy and unprocessed food, firmed to a decade-high of 2.3 percent. Earnings growth remained contained, however, with the indexes including and excluding bonuses in May standing about 3½ percent higher than twelve months earlier, slightly below the five-year average. The Bank of England kept its policy rate unchanged in July.

## United Kingdom

**Consumer Price Inflation**

**Unemployment Rates**

**Purchasing Managers Survey**

**Labor Costs**


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

Indicator	2007	2008		2008			
	Q4	Q1	Q2	Apr.	May	June	July
Real GDP	2.2	1.1	0.7	...	...	...	...
PMI Services <sup>1</sup>	52.5	52.9	49.1	50.4	49.8	47.1	n.a.
Industrial production	0.2	-0.2	n.a.	0.1	-0.8	n.a.	n.a.
Business confidence <sup>2</sup>	7.3	12.7	0.7	0.0	0.0	2.0	-7.0
Consumer confidence <sup>2</sup>	-3.8	-8.6	-16.0	-13.2	-14.6	-20.2	-26.0
Trade balance <sup>3</sup>	-29.7	-26.7	n.a.	-8.0	-8.3	n.a.	n.a.

1. 50+ indicates expansion.

2. Percent balance. 3. Level in billions of US Dollars.

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

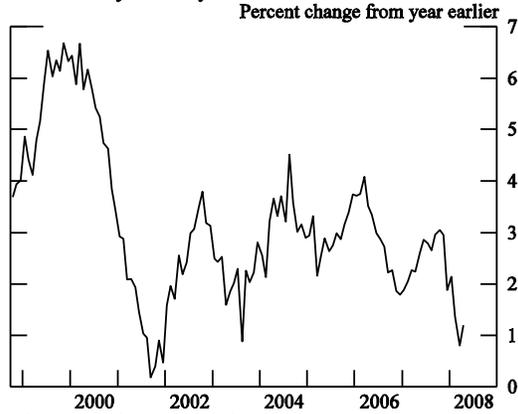
In **Canada**, indicators suggest GDP growth returned to positive, albeit subdued, territory in the second quarter. Real GDP by industry advanced 0.4 percent in April from the previous month; manufacturing activity, especially in motor vehicles, rebounded following a downturn in the first quarter, and wholesale and retail trade were up sharply. Volumes of manufacturing shipments and new orders rose in April and May. Second-quarter housing starts were down about 4 percent from the first quarter, but remain in line with their five-year average. Consumer spending also continued to expand, although more slowly than in the previous two quarters, with the average level of real retail sales in April and May 2.3 percent (a.r.) higher than in the first quarter. In April and May, real exports outpaced real imports.

Total employment expanded at a slower pace in the second quarter. Continuing the trend of the past several months, full-time employment declined, while part-time employment expanded. At 6.2 percent in June, the unemployment rate was at its highest level since early 2007, though still near a thirty-year low.

The twelve-month rate of consumer price inflation jumped to 3.1 percent in June, from 2.2 percent in May, on the back of escalating energy prices and an end to the extremely low rates of food-price inflation over the past year. However, the Bank of Canada's preferred measure of core inflation, which excludes the eight most volatile components of the consumer price index as well as the effects of indirect taxes, remained muted, ticking up to 1.6 percent in June, from 1.5 percent in May. The Bank of Canada held rates constant at its July meeting.

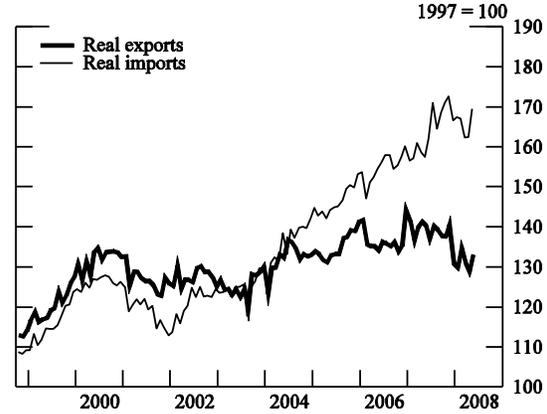
**Canada**

**Real GDP by Industry\***

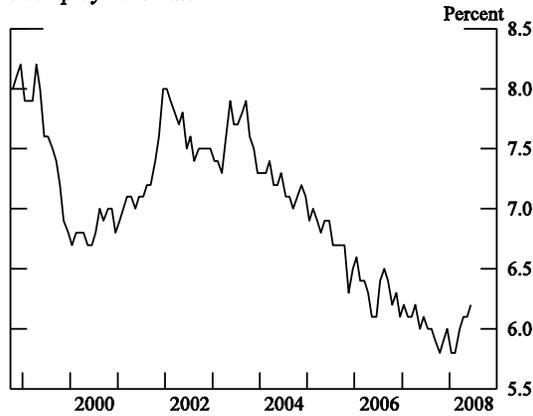


\*Constructed from various Statistics Canada surveys and supplements the quarterly income and expenditure-based estimates.

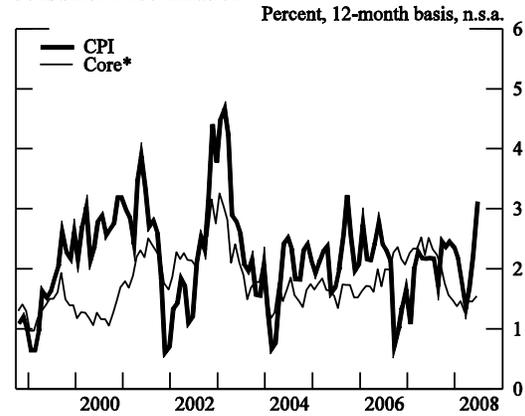
**Real Trade**



**Unemployment Rate**



**Consumer Price Inflation**



\*Excludes 8 most volatile components and the effects of changes in indirect taxes.

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

Indicator	2007	2008		2008			
	Q4	Q1	Q2	Mar.	Apr.	May	June
Industrial production	-1.4	-2.1	n.a.	-1.5	0.7	n.a.	n.a.
New manufacturing orders	-0.5	-4.0	n.a.	4.0	-3.7	0.4	n.a.
Retail sales	1.8	1.0	n.a.	0.5	0.4	0.1	n.a.
Employment	0.7	0.5	0.3	0.1	0.1	0.0	-0.0
Consumer attitudes <sup>1</sup>	97.3	93.4	n.a.	...	...	...	...
Business confidence <sup>1</sup>	101.0	96.4	n.a.	...	...	...	...

1. 2002=100.  
n.a. Not available. ... Not applicable.

## **Economic Situation in Other Countries**

Recent indicators for emerging market economies point to some slowing of growth in the second quarter. Real GDP growth in China moderated but remained strong, supported by domestic demand. Elsewhere in emerging Asia, incoming data suggest further slowing, including in India, Singapore, and Thailand, while second-quarter activity remained sluggish in Mexico.

Headline inflation rose further in much of the developing world, largely owing to higher food and energy prices, and several countries continued to face upward pressure on core inflation as well. In contrast, in China, twelve-month headline consumer inflation continued to decline owing to a drop in food prices. The rising cost of energy subsidies led several Asian countries to raise state-controlled fuel prices in June and July. Since the time of the June Greenbook, monetary authorities in emerging market economies have generally continued to tighten monetary conditions.

In **China**, the staff estimates that real GDP increased 9.9 percent (s.a.a.r.) in the second quarter, with China's official release showing an increase of 10.1 percent (n.s.a.) on a four-quarter basis. Growth has edged lower in the past year as external demand has weakened. In contrast, domestic demand appears to have picked up steam in the second quarter. Retail sales increased 23 percent in June from a year earlier. Nominal import growth was robust in the second quarter, although some of this increase likely reflects higher prices of imported oil. Nominal export growth in the second quarter picked up a bit from the slow pace of the first quarter, but the four-quarter growth rate remains below that observed through most of last year. The trade surplus in the second quarter fell to \$217 billion (s.a.a.r.) from more than \$250 billion in the previous two quarters.

Twelve-month consumer price inflation declined to 7.1 percent in June from a peak of 8.7 percent in February, as food price inflation continued to wane. In contrast, twelve-month non-food price inflation edged up from 1.6 percent in February to 1.9 percent. In June, bank lending decelerated to its slowest pace since mid-2006, helping to cool inflationary pressures. Foreign reserve accumulation also slowed; reserves increased \$12 billion in June, down from an average of \$50 billion per month over the first five months of 2008.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	10.6	11.3	11.7	9.9	...	...	...
Industrial production <sup>2</sup>	14.6	18.6	5.0	3.3	-2.7	4.5	.2
Consumer prices <sup>3</sup>	2.8	6.5	8.0	7.8	8.5	7.7	7.1
Merch. trade balance <sup>4</sup>	177.5	262.1	253.6	217.0	204.7	282.6	163.7

1. Annual rate. Quarterly data estimated by staff from reported four-quarter growth rates. Annual data are Q4/Q4.

2. China no longer reports a January IP number, which means that period/period changes cannot be computed for Jan. and Feb.

3. Percent change from year-earlier period, except annual data, which are Dec./Dec.

4. Billions of U.S. dollars, annual rate. Imports are c.i.f.

... Not applicable.

**India's** industrial production declined slightly on average over the first two months of the second quarter. The trade deficit widened further through May, reflecting increases in prices of oil and other commodities. Inflation, measured by the widely followed wholesale price index, jumped to 11.4 percent in June, largely due to hikes in fuel prices. In response, the central bank raised the repo rate 50 basis points in late July. The United Progressive Alliance (UPA) government narrowly won a confidence vote on July 22 that was held in response to its decision to meet commitments under the U.S.-India nuclear agreement. The UPA victory may help pave the way for needed structural reforms.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	9.3	8.8	9.1	n.a.	...	...	...
Industrial production	10.5	9.9	2.0	n.a.	.3	-8	n.a.
Consumer prices <sup>2</sup>	6.5	5.5	6.3	n.a.	6.9	6.8	n.a.
Wholesale prices <sup>2</sup>	5.7	3.8	5.8	9.4	8.0	8.6	11.4
Merch. trade balance <sup>3</sup>	-53.1	-69.8	-96.4	n.a.	-115.0	-111.4	n.a.
Current account <sup>4</sup>	-9.5	-12.1	-4.2	n.a.	...	...	...

1. Annual rate. Annual data are Q4/Q4.

2. Percent change from year-earlier period, except annual data, which are Dec./Dec.

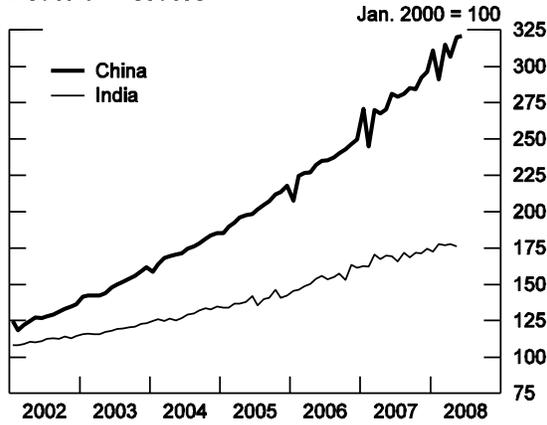
3. Billions of U.S. dollars, annual rate.

4. Billions of U.S. dollars, n.s.a., annual rate.

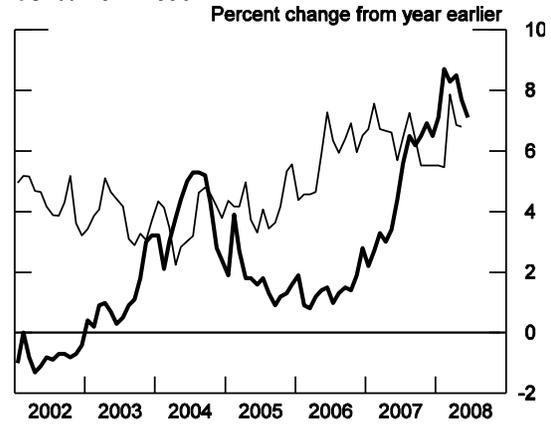
n.a. Not available. ... Not applicable.

## China and India

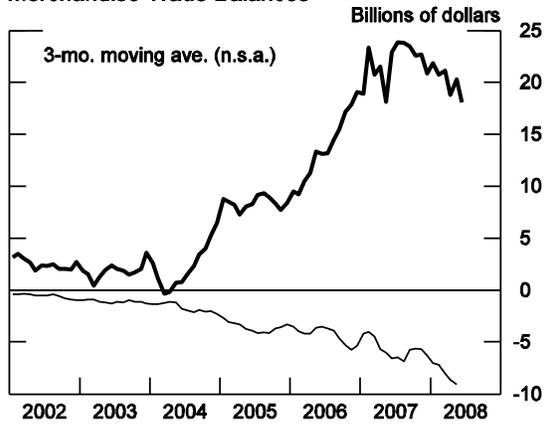
**Industrial Production**



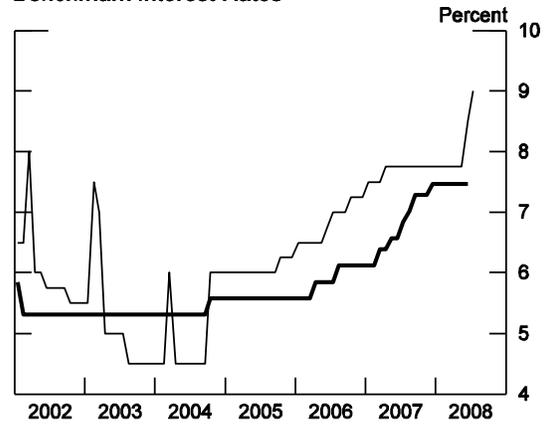
**Consumer Prices**



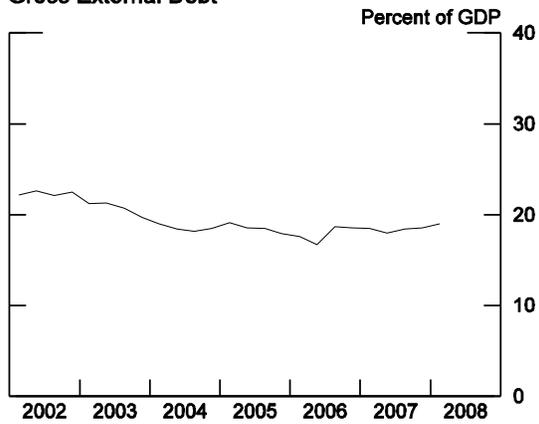
**Merchandise Trade Balances**



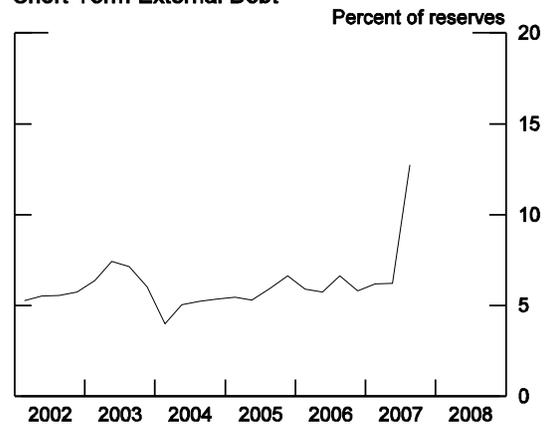
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In the NIEs<sup>1</sup>, on balance, data point to slower GDP growth in the second quarter. Korean real GDP growth remained steady at 3.4 percent in the second quarter, with growth supported by the external sector, as domestic demand was weak. In Singapore, the advance (unofficial) estimate suggests that real GDP contracted sharply in the second quarter as a result of a fall in output of the volatile biomedical sector, weak electronics production, and slow exports. In Taiwan, industrial production slowed. The merchandise trade balance improved in Hong Kong and in Taiwan; the latter's balance swung from a small deficit to a surplus as the value of imports declined.

Twelve-month consumer price inflation moved higher in the NIEs, largely reflecting higher food and energy prices, although there have been some upward pressures on core inflation as well. In Taiwan, twelve-month inflation increased more than one percentage point in June after administered fuel prices were raised. In late June, Taiwan's central bank raised its policy rate an eighth of a percentage point, its sixteenth consecutive increase.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
<i>Real GDP<sup>1</sup></i>							
Hong Kong	6.5	7.0	7.4	n.a.	...	...	...
Korea	4.2	5.9	3.3	3.4	...	...	...
Singapore	7.0	5.5	14.6	n.a.	...	...	...
Taiwan	4.0	6.5	1.6	n.a.	...	...	...
<i>Industrial production</i>							
Hong Kong	2.4	-1.6	-3.6	n.a.	...	...	...
Korea	8.8	7.0	2.0	n.a.	.9	-6	n.a.
Singapore	11.9	5.9	11.3	-14.8	-15.7	-5.2	1.1
Taiwan	4.7	7.8	.9	.2	.6	-5	.7

1. Annual rate. Annual data are Q4/Q4.  
n.a. Not available. ... Not applicable.

<sup>1</sup> Newly-industrialized economies: Hong Kong, South Korea, Singapore, and Taiwan

**NIEs Economic Indicators: Merchandise Trade Balance**  
(Billions of U.S. dollars, s.a.a.r.)

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Hong Kong	-17.9	-23.5	-34.1	-31.4	-13.5	-38.5	-42.1
Korea	27.9	29.4	2.4	24.6	32.6	10.4	30.6
Singapore	33.1	36.2	22.8	25.1	28.5	24.7	22.2
Taiwan	11.6	16.8	-4	18.6	20.9	18.0	16.9

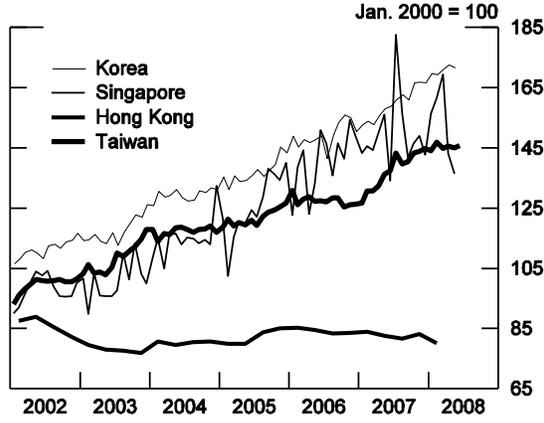
**NIEs Economic Indicators: CPI Inflation**  
(Percent change from year earlier, except as noted)

Indicator	2006 <sup>1</sup>	2007 <sup>1</sup>	2008				
			Q1	Q2	Apr.	May.	Jun.
Hong Kong	2.3	3.8	4.5	5.7	5.4	5.7	6.1
Korea	2.1	3.6	3.8	4.8	4.1	4.9	5.5
Singapore	.8	4.4	6.6	7.5	7.5	7.5	7.5
Taiwan	.7	3.3	3.6	4.2	3.9	3.7	5.0

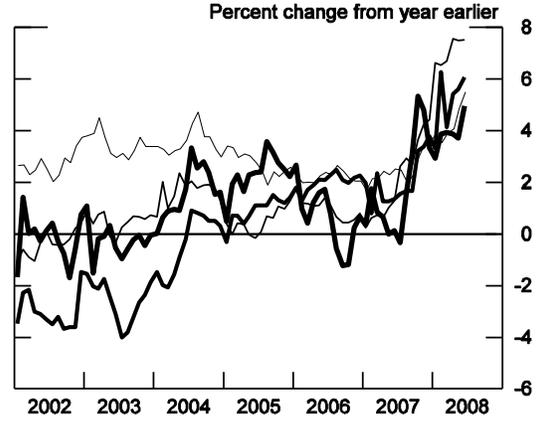
1. Percent change from year-earlier period, except annual data, which are Dec./Dec

**NIEs**

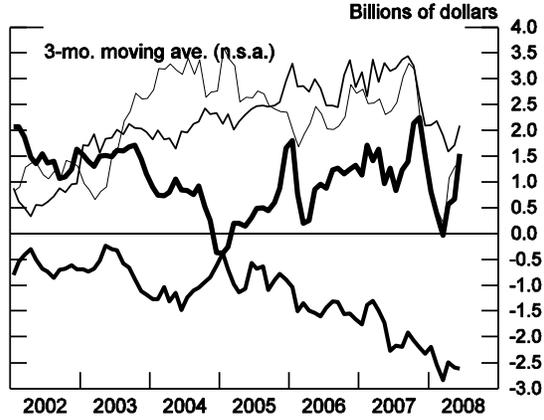
**Industrial Production**



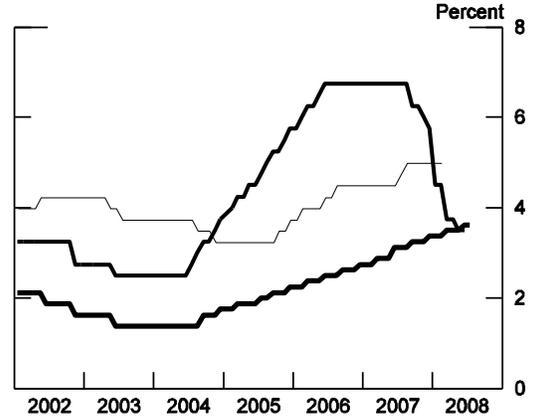
**Consumer Prices**



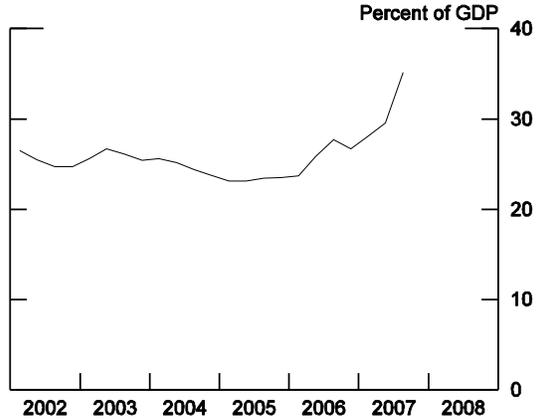
**Merchandise Trade Balances**



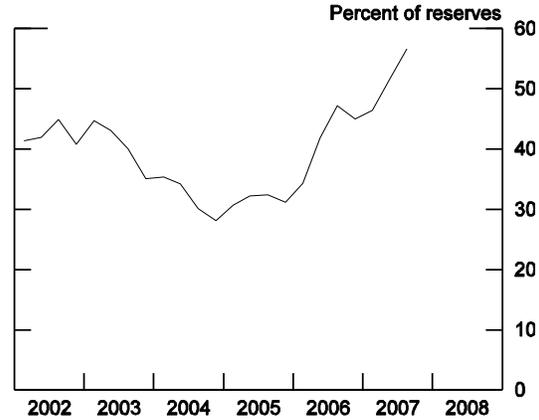
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In the ASEAN-4 area, incoming indicators generally point to a moderation in activity in the second quarter. In Indonesia, industrial production declined on average over April and May, while consumer confidence reached a two-year low in June. In Malaysia and Thailand, industrial production held up, but in Thailand, indicators of private investment and business sentiment deteriorated. In the Philippines, strong remittances have helped support domestic demand. In April and May, a fall in capital goods imports contributed to the improvement in the trade balance in the Philippines and Thailand.

Increasing food and energy prices continue to push consumer price inflation higher. In July, in response to the rising fiscal costs of fuel subsidies, the Indonesian and Malaysian governments raised administered prices of fuel and Malaysian authorities indicated that they will eliminate fuel subsidies by end-August. In contrast, domestic prices of fuel in Indonesia remain well below market prices. Thailand, which had eliminated its fuel subsidies in 2006, reenacted significant subsidies on some fuels in July. Inflation has become the major concern of central banks in the region. The central banks of Indonesia, the Philippines, and Thailand raised interest rates further to combat inflation.

**ASEAN-4 Economic Indicators: Growth**  
(Percent change from previous period, s.a., except as noted)

Indicator	2006	2007	2007	2008			
			Q4	Q1	Mar.	Apr.	May.
<i>Real GDP<sup>1</sup></i>							
Indonesia	5.8	6.1	3.0	3.0	...	...	...
Malaysia	5.4	7.4	6.5	5.2	...	...	...
Philippines	5.6	6.5	5.1	3.0	...	...	...
Thailand	4.3	5.8	7.2	5.9	...	...	...
<i>Industrial production<sup>2</sup></i>							
Indonesia <sup>3</sup>	-1.6	5.6	.9	2.3	.4	.3	-.8
Malaysia	4.6	2.3	1.7	1.3	-4.4	2.8	.4
Philippines	-8.5	-2.6	3.7	-2.3	-1.3	2.9	-2.6
Thailand	7.4	8.2	3.9	2.0	-3.7	1.3	1.6

1. Annual rate. Annual data are Q4/Q4.

2. Annual data are annual averages.

3. Staff estimate.

... Not applicable.

**ASEAN-4 Economic Indicators: Merchandise Trade Balance**  
(Billions of U.S. dollars, s.a.a.r.)

Indicator	2006	2007	2007	2008			
			Q4	Q1	Mar.	Apr.	May.
Indonesia	39.7	39.6	36.9	44.7	53.5	24.0	36.4
Malaysia	29.5	29.2	28.1	33.9	28.1	53.5	64.0
Philippines	-4.4	-5.0	-9.4	-10.6	-12.3	-3.1	-6.3
Thailand	1.0	11.6	12.6	.3	1.4	-6.1	25.7

**ASEAN-4 Economic Indicators: CPI Inflation**  
(Percent change from year earlier, except as noted)

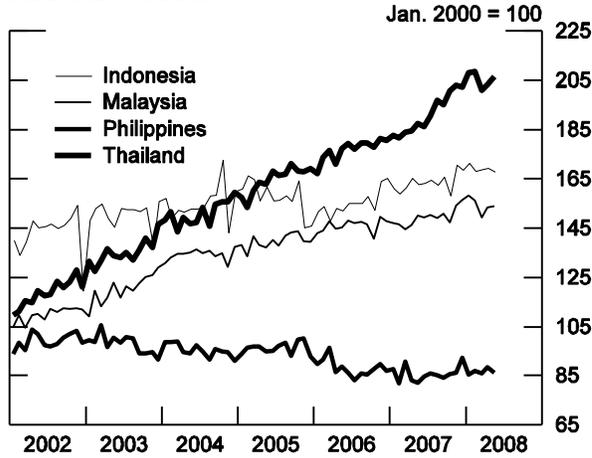
Indicator	2006 <sup>1</sup>	2007 <sup>1</sup>	2008				
			Q1	Q2	Apr.	May.	Jun.
Indonesia	6.5	6.5	7.6	n.a.	9.0	10.4	n.a.
Malaysia	3.1	2.4	2.6	4.9	3.0	3.8	7.7
Philippines	4.3	3.9	5.5	9.7	8.3	9.5	11.4
Thailand	3.5	3.2	5.0	7.5	6.2	7.6	8.9

1. Dec./Dec.

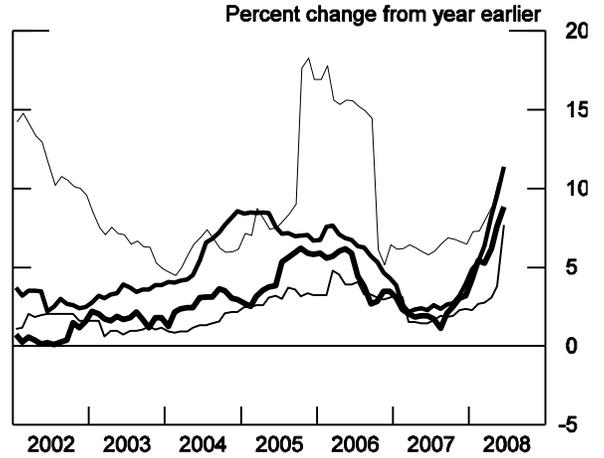
n.a. Not available.

**ASEAN-4**

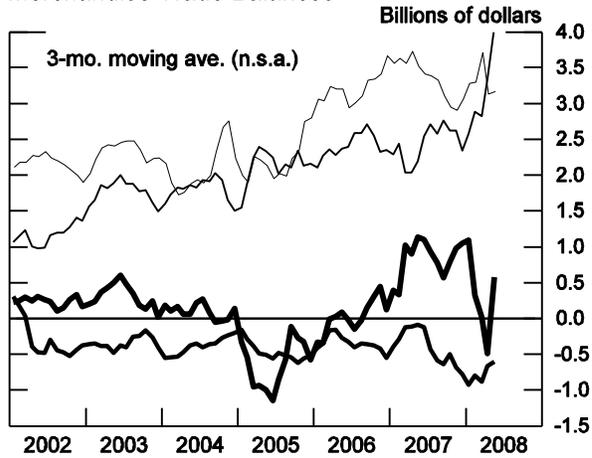
**Industrial Production**



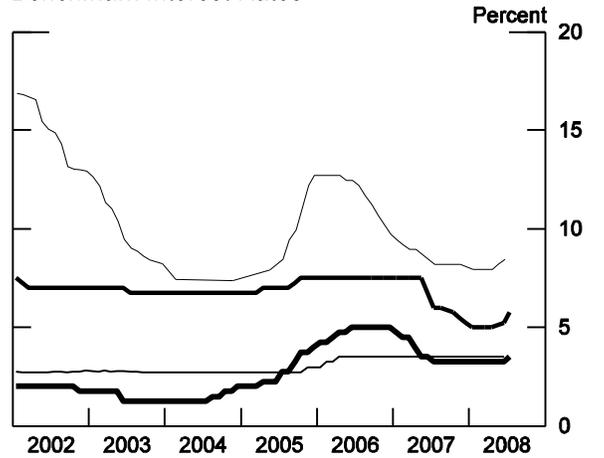
**Consumer Prices**



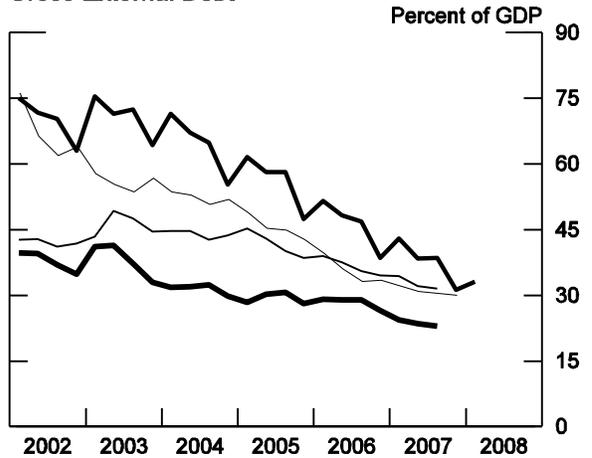
**Merchandise Trade Balances**



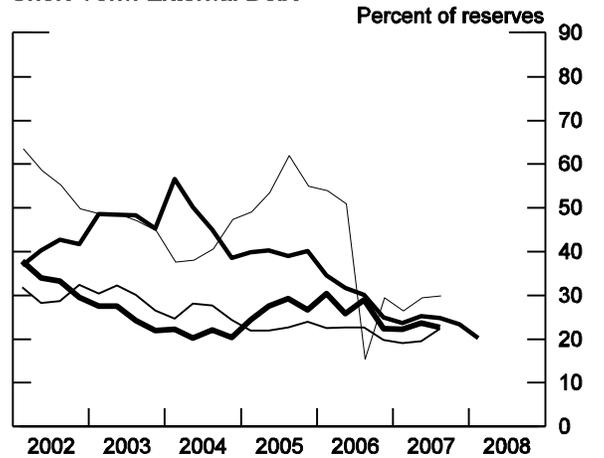
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



Financial conditions facing **Vietnam** deteriorated sharply over the past few months, but have improved in July. Headline consumer price inflation has risen sharply in recent months and in June surpassed 25 percent on a twelve-month basis, boosted by food prices, which comprise more than 40 percent of the CPI. Concerns about rising inflation and the large and widening current account and fiscal deficits put the dong under strong downward pressures in late June. Pressures appeared to abate after the central bank raised its policy rate 200 basis points to 14 percent in June and after the government outlined steps that it would take to tighten fiscal policy. In late July, authorities announced a surprise 30 percent increase in the retail price of gasoline, which brought the retail price to market levels.

Data from **Mexico** present a mixed picture on activity in the second quarter. Industrial production continued to edge down, as growth in the mining, utilities and construction sectors was more than offset by a contraction in manufacturing. Retail sales increased on average over the April-May period relative to the first quarter. The trade deficit narrowed somewhat, as exports inched down and imports declined more substantially.

Headline and core inflation continued to increase in June. Both readings exceeded 5 percent on a twelve-month basis, above the 4 percent upper bound of the central bank's target range. In response, the Bank of Mexico raised its policy rate by  $\frac{1}{4}$  percentage point in each of the last two policy meetings, bringing the rate to 8 percent. In addition, the Mexican government secured an agreement with food suppliers to freeze the prices of certain food items. In late July, the central bank suspended dollar sales to the market in an effort to contain upward pressures on the peso, which has appreciated 7 percent so far this year.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	3.7	4.0	2.1	n.a.	...	...	...
Overall economic activity	5.1	3.1	-4	n.a.	-1	.3	n.a.
Industrial production	5.4	1.8	-2	n.a.	-9	.1	n.a.
Unemployment rate <sup>2</sup>	3.6	3.7	3.7	3.8	3.7	3.7	3.8
Consumer prices <sup>3</sup>	4.1	3.8	3.9	4.9	4.5	5.0	5.3
Merch. trade balance <sup>4</sup>	-6.1	-10.1	-12.1	-6.9	-10.3	-4.1	-6.2
Merchandise imports <sup>4</sup>	256.1	281.9	309.7	314.0	315.5	309.7	316.7
Merchandise exports <sup>4</sup>	249.9	271.9	297.6	307.1	305.2	305.6	310.4
Current account <sup>5</sup>	-2.1	-5.4	-6.1	n.a.	...	...	...

1. Annual rate. Annual data are Q4/Q4.

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

3. Percent change from year-earlier period, except annual data, which are Dec./Dec.

4. Billions of U.S. dollars, annual rate.

5. Billions of U.S. dollars, n.s.a., annual rate.

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

In **Brazil**, data releases since the last Greenbook also provide a mixed picture on the second quarter. Industrial production over the April-May period was roughly unchanged from the first-quarter level. Nonetheless, performance was strong in the natural resource-intensive sectors (including mining, petroleum extraction and refining, and ethanol refining). Retail sales in April and May expanded, but at a slower pace than in the first quarter, supported in part by rapid growth in credit. Import growth continued to be very rapid, partly reflecting strong domestic demand. However, the nominal trade surplus rebounded from a weak first quarter, in part reflecting payback from strikes that depressed exports. Exports were also boosted by the rise in commodity prices.

Both headline and core inflation continued to be sources of concern, in June reaching 6 and 5½ percent, respectively. Inflation expectations have also been creeping up, according to survey data. In response, the central bank continued to tighten policy, raising the overnight rate 75 basis points to 13 percent in late July.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	4.9	6.1	2.9	n.a.	...	...	...
Industrial production	2.8	6.0	.5	n.a.	.2	-.5	n.a.
Unemployment rate <sup>2</sup>	10.0	9.3	8.4	7.8	8.0	7.6	7.7
Consumer prices <sup>3</sup>	3.3	4.5	4.6	5.5	5.0	5.5	6.0
Merch. trade balance <sup>4</sup>	46.5	40.0	22.3	33.5	18.5	52.7	29.3
Current account <sup>5</sup>	13.6	1.7	-43.0	-26.6	-40.4	-8.3	-31.1

1. Annual rate. Annual data are Q4/Q4.

2. Percent.

3. Percent change from year-earlier period, except annual data, which are Dec./Dec.

Price index is IPCA.

4. Billions of U.S. dollars, annual rate.

5. Billions of U.S. dollars, n.s.a., annual rate.

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

In **Argentina**, following a sharp slowdown in the first quarter, activity was weak in the second quarter, weighed down by disruptions from the four-month-long farmers' strike. Industrial production declined on average in April and May. The trade surplus narrowed in the second quarter through May, in part reflecting a strike-related fall in exports. The strikes ended in late July, when the government's proposed increases in export taxes on several agricultural products were narrowly rejected by the Congress. Tensions between the government and the farmers have also put considerable downward pressures on Argentine asset prices and have led to a decline in foreign reserves. Reported headline consumer price inflation continued to rise, surpassing 9 percent in June on a twelve-month basis, amid large increases in prices of services, such as housing, transportation and health. Questions about the reliability of official inflation data continue.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	8.5	9.2	2.6	n.a.	...	...	...
Industrial production	8.4	7.6	-1.9	1.3	5.8	-8	-3.9
Unemployment rate <sup>2</sup>	10.2	8.5	8.4	n.a.	...	...	...
Consumer prices <sup>3</sup>	9.6	8.4	8.4	9.1	8.9	9.1	9.3
Merch. trade balance <sup>4</sup>	12.3	11.1	11.8	8.8	4.6	5.5	6.0
Current account <sup>5</sup>	8.0	7.5	6.2	n.a.	...	...	...

1. Annual rate. Annual data are Q4/Q4.

2. Percent; n.s.a.

3. Percent change from year-earlier period, except annual data, which are Dec./Dec.

4. Billions of U.S. dollars, annual rate.

5. Billions of U.S. dollars, n.s.a., annual rate.

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

In **Venezuela**, real GDP fell by an estimated 9 percent in the first quarter, and we still expect a partial rebound in the second quarter. Credit growth slowed considerably in the first half of 2008, most likely depressed by the rise in interest rates in recent months and by the deterioration in the business climate. Vehicle sales in April were down by over 15 percent on a twelve-month basis. Inflation continues to rise; twelve-month headline consumer price inflation surpassed 30 percent in June, boosted by soaring food prices.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	11.4	8.5	-9.1	n.a.	...	...	...
Unemployment rate <sup>2</sup>	10.0	8.5	n.a.	n.a.	n.a.	n.a.	n.a.
Consumer prices <sup>3</sup>	17.0	22.5	25.4	29.7	28.2	30.0	30.8
Non-oil trade balance <sup>4</sup>	-23.0	-34.6	-34.3	n.a.	...	...	...
Merch. trade balance <sup>4</sup>	32.7	23.7	47.9	n.a.	...	...	...
Current account <sup>5</sup>	27.1	20.0	40.0	n.a.	...	...	...

1. Annual rate. Annual data are Q4/Q4.

2. Percent.

3. Percent change from year-earlier period, except annual data, which are Dec./Dec.

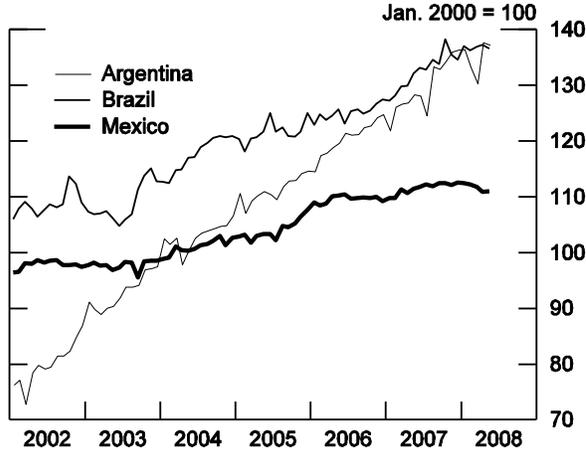
4. Billions of U.S. dollars, annual rate.

5. Billions of U.S. dollars, n.s.a., annual rate.

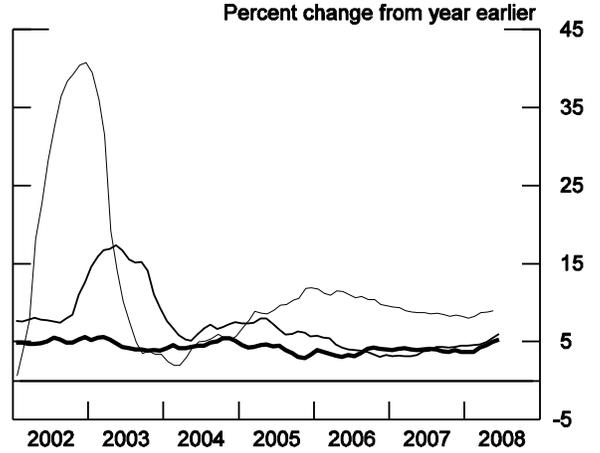
n.a. Not available. ... Not applicable.

## Latin America

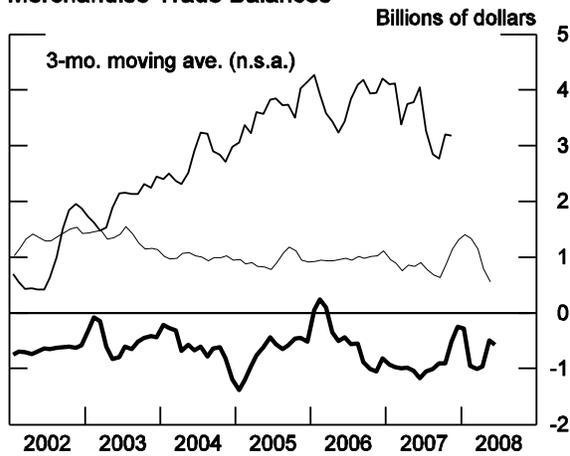
**Industrial Production**



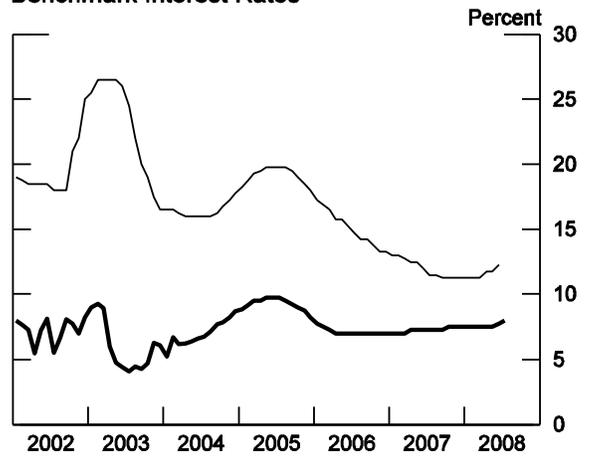
**Consumer Prices**



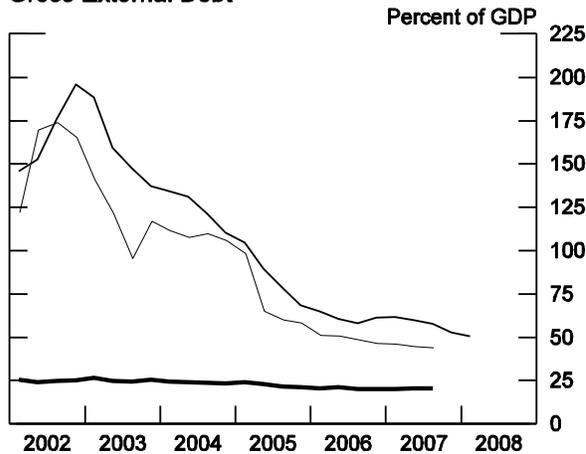
**Merchandise Trade Balances**



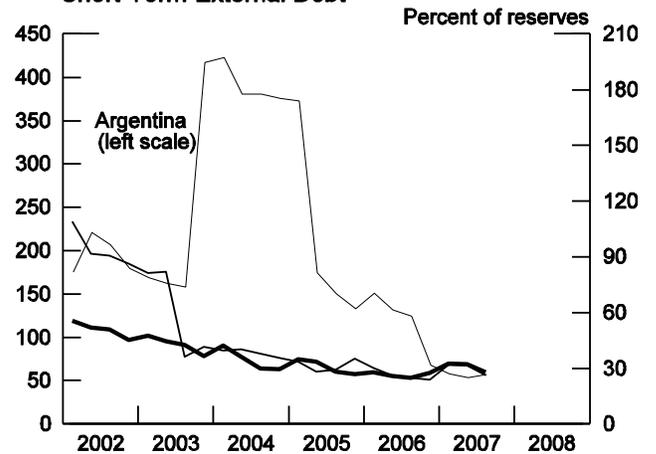
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In **Turkey**, recent indicators suggest that real GDP growth softened in the second quarter following rapid first-quarter growth. Industrial production growth slowed on average in April and May. Twelve-month consumer price inflation remained high, but monthly inflation declined in June, as food prices declined. At its July meeting, the Monetary Policy Committee raised the overnight borrowing rates 50 basis points to 16.75 percent. In June, the central bank raised the upper bound of its inflation target from 6 to 7.5 percent for 2009, but lowered the 2011 upper bound from 6 to 5.5 percent, noting that food and fuel price pressures will abate over the medium term.

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

Indicator	2006	2007	2008				
			Q1	Q2	Apr.	May.	Jun.
Real GDP <sup>1</sup>	5.7	3.4	24.2	n.a.	...	...	...
Industrial production	5.8	5.4	3.4	n.a.	2.6	-1.0	n.a.
Consumer prices <sup>2</sup>	9.7	8.4	8.8	10.3	9.7	10.7	10.6
Merch. trade balance <sup>3</sup>	-54.1	-62.9	-73.1	n.a.	-75.0	-70.3	n.a.
Current account <sup>4</sup>	-31.9	-37.8	-48.1	n.a.	-58.6	-55.6	n.a.
Unemployment rate <sup>5</sup>	9.9	9.9	9.9	n.a.	...	...	...

1. Annual rate. Annual data are Q4/Q4.

2. Percent change from year-earlier period, except annual data, which are Dec./Dec.

3. Billions of U.S. dollars, annual rate. Imports are c.i.f.

4. Billions of U.S. dollars, n.s.a., annual rate.

5. Percent

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