

## **Prefatory Note**

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

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## **Part 2**

December 10, 2008

# **CURRENT ECONOMIC AND FINANCIAL CONDITIONS**

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## **Recent Developments**

December 10, 2008

## **Recent Developments**

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## **Domestic Nonfinancial Developments**

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## Domestic Nonfinancial Developments

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Recent data on spending and production show deterioration in almost every sector of the economy. Conditions in the labor market have worsened markedly as job losses have accelerated and the unemployment rate has jumped. Consumer spending has recorded large and broad-based declines in recent months, and the ongoing deterioration in consumer fundamentals provides little evidence that demand will stabilize in the near term. At the same time, the housing market remains exceptionally weak, and residential construction activity has continued its steep decline. In the business sector, the contraction in real spending on equipment and software appears to have gathered momentum and broadened in scope, and nonresidential building construction has turned down. Excluding the effects of the September hurricanes and the Boeing strike, industrial production has registered large and widespread declines since July. Plummeting energy prices led to a drop in headline PCE prices in October, and core PCE prices also decelerated noticeably through October.

### Labor Market Developments

Conditions in the labor market took another turn for the worse in November after having deteriorated sharply earlier in the fall. Private nonfarm payroll employment plunged 540,000 last month after losses averaging about 370,000 in September and October and about 100,000 per month over the first eight months of the year.<sup>1</sup> The quickening pace of job losses over the past three months was widespread across industries, as each of the manufacturing, construction, retail, financial activities, and business services sectors experienced substantial declines in payrolls. The average workweek of production and nonsupervisory workers continued to move lower in November, and aggregate hours of production workers fell 0.9 percent last month to a level 1.4 percent (not at an annual rate) below their third-quarter average.

In the household survey, the unemployment rate jumped to 6.5 percent in October and rose further to 6.7 percent in November—its highest level since 1993. The fraction of workers who are working part time for economic reasons, another indicator of labor market slack, continued its steep ascent last month and now stands 2 percentage points above its level at the end of last year. In addition, the labor force participation rate fell

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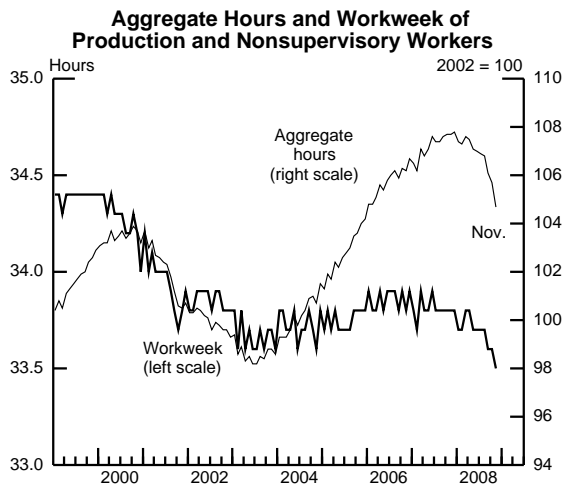
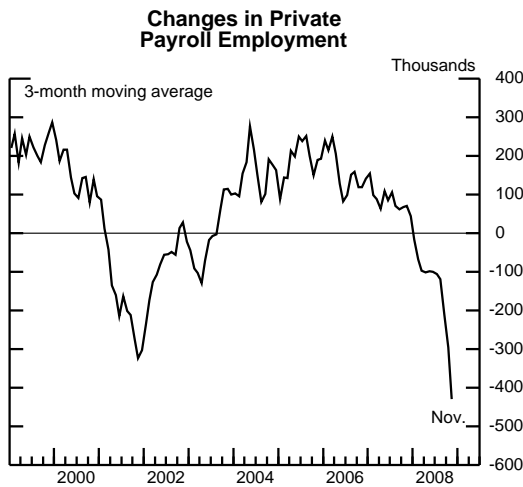
<sup>1</sup> Excluding the effects of the Boeing strike, payrolls fell 335,000 in October and 567,000 in November.

**Changes in Employment**

(Thousands of employees; seasonally adjusted)

Measure and sector	2007	2008					
		Q1	Q2	Q3	Sept.	Oct.	Nov.
		Average monthly change			Monthly change		
Nonfarm payroll employment (establishment survey)	91	-82	-71	-199	-403	-320	-533
Private	71	-97	-100	-210	-384	-362	-540
Natural resources and mining	3	4	6	9	7	1	4
Manufacturing	-22	-43	-39	-57	-69	-104	-85
Ex. motor vehicles	-15	-31	-31	-39	-53	-95	-72
Construction	-19	-41	-49	-33	-55	-64	-82
Residential	-20	-30	-30	-17	-18	-33	-36
Nonresidential	1	-11	-19	-15	-38	-32	-46
Wholesale trade	9	-6	-7	-12	-8	-24	-25
Retail trade	6	-29	-26	-42	-76	-62	-91
Financial activities	-9	-7	-6	-13	-23	-31	-32
Temporary help services	-7	-24	-30	-36	-45	-45	-78
Nonbusiness services <sup>1</sup>	76	66	63	5	-52	6	-43
Total government	21	15	29	11	-19	42	7
Total employment (household survey)	22	-81	-26	-212	-222	-297	-673
Memo:							
Aggregate hours of private production workers (percent change) <sup>2</sup>	1.3	-1.1	-.9	-2.2	-.7	-.4	-.9
Average workweek (hours) <sup>3</sup>	33.8	33.7	33.7	33.7	33.6	33.6	33.5
Manufacturing (hours)	41.2	41.1	41.0	40.8	40.5	40.5	40.3

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.

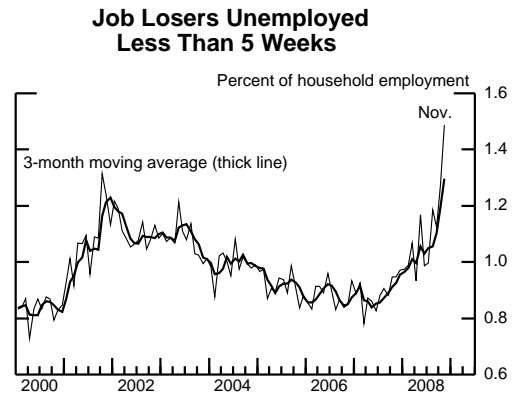
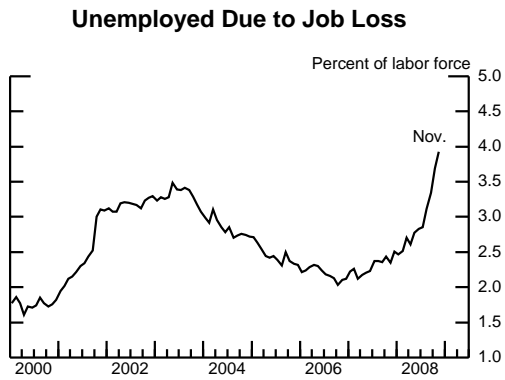
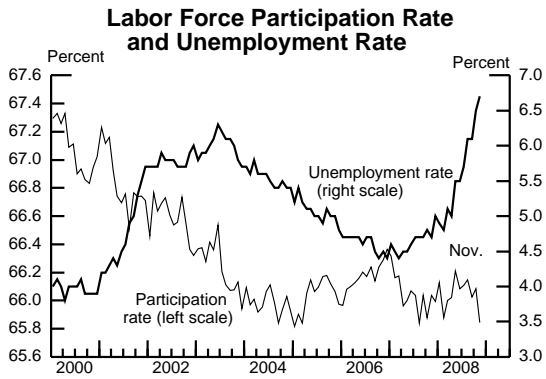


Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Selected Unemployment and Labor Force Participation Rates**

(Percent; seasonally adjusted)

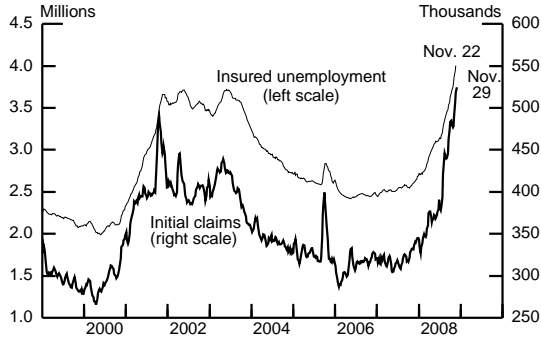
Rate and group	2007	2008					
		Q1	Q2	Q3	Sept.	Oct.	Nov.
<i>Civilian unemployment rate</i>							
Total	4.6	4.9	5.3	6.0	6.1	6.5	6.7
Teenagers	15.7	16.8	17.4	19.5	19.1	20.6	20.4
20-24 years old	8.2	9.0	9.8	10.4	10.5	10.6	10.9
Men, 25 years and older	3.6	3.8	4.2	5.0	5.5	5.5	5.9
Women, 25 years and older	3.6	3.9	4.1	4.5	4.4	5.1	5.2
<i>Labor force participation rate</i>							
Total	66.0	66.0	66.1	66.1	66.0	66.1	65.8
Teenagers	41.3	40.3	41.4	40.4	40.1	39.9	38.3
20-24 years old	74.4	73.9	74.6	74.8	74.5	74.0	73.8
Men, 25 years and older	75.6	75.5	75.2	75.6	75.5	75.5	75.3
Women, 25 years and older	59.7	59.9	60.0	60.0	60.0	60.1	60.1



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

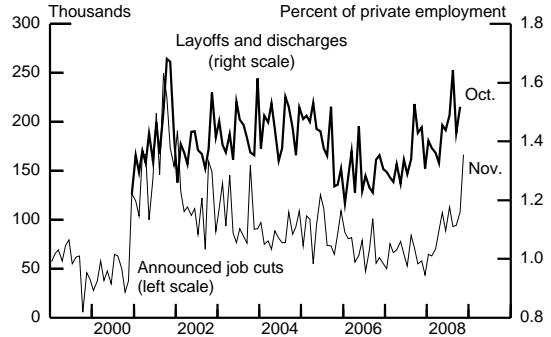
## Labor Market Indicators

**Unemployment Insurance**



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

**Layoffs and Job Cuts**



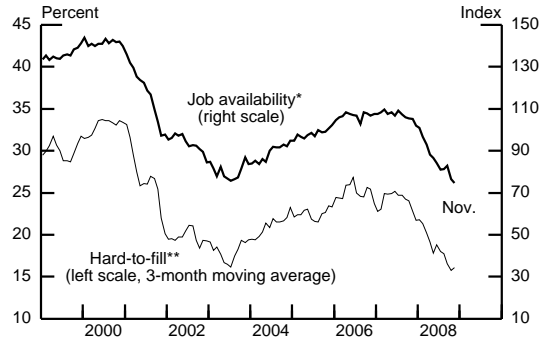
Note: Both series are seasonally adjusted by FRB staff.  
Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for job cuts, Challenger, Gray, and Christmas, Inc.

**Job Openings**



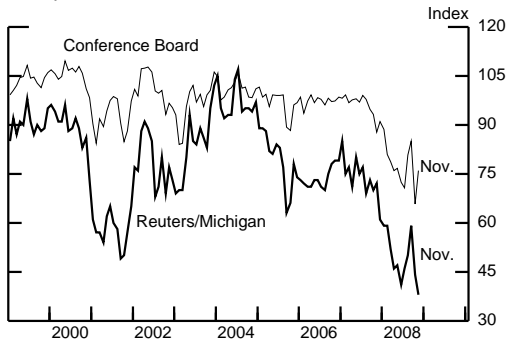
\*Index of staff composite help wanted advertising as a percent of private payroll employment.  
Source: For job openings, Job Openings and Labor Turnover Survey; for Help Wanted Index, Conference Board and staff calculations.

**Job Availability and Hard-to-Fill Positions**



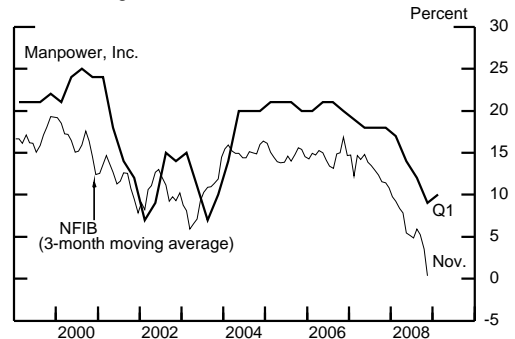
\*Proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100.  
\*\*Percent of small businesses surveyed with at least one "hard-to-fill" job opening. Seasonally adjusted by FRB staff.  
Source: For job availability, Conference Board; for hard-to-fill,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

**Expected Labor Market Conditions**



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

**Net Hiring Plans**



Note: Percent planning an increase in employment minus percent planning a reduction.  
Source: National Federation of Independent Business (NFIB); Manpower, Inc.



0.3 percentage point in November after having held up surprisingly well for much of the year.<sup>2</sup>

Initial claims for unemployment insurance under regular state programs shot up in November, with the four-week moving average reaching 525,000 for the week ending November 29. Continuing claims for regular state unemployment insurance also rose steeply last month, while continuing emergency unemployment compensation (EUC) claims leveled off at around 700,000 after having peaked at 1.4 million in September.<sup>3</sup>

An additional measure of job separations—the short-term job losers rate from the household survey—increased further in November. In addition, announcements of downsizing plans compiled by Challenger, Gray, and Christmas, Inc., rose steeply last month.

Other labor market indicators suggest that jobs are in short supply. The job openings rate as measured by the Job Openings and Labor Turnover Survey continued its downward trajectory in October, and help-wanted advertising fell again in November. Hiring plans from the National Federation of Independent Business (NFIB) dropped steeply in November, and the latest reading from Manpower, Inc., remained at a low level. NFIB's measure of hard-to-fill positions remained low, as did perceptions of current job availability in the Conference Board survey. Finally, household expectations for labor market conditions, as reported in the Reuters/University of Michigan and Conference Board surveys, have been volatile in recent months but remain near historic lows.

### **Industrial Production**

Industrial production (IP) rebounded 1.3 percent in October after plunging 3.7 percent in September, when activity was held down by the hurricanes and the machinists' strike at Boeing. Excluding these special factors, output is estimated to have decreased about  $\frac{2}{3}$  percent in both September and October, with declines widespread across industries. Indeed, the diffusion index of three-month changes in IP, which should not be greatly influenced by these special factors, fell in October to its lowest level since July 1980.

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<sup>2</sup> The extension of unemployment insurance benefits, which has induced workers to remain in the labor force, likely helped support the labor force participation rate in the face of diminished job opportunities. Reflecting this influence, we estimate that the Emergency Unemployment Compensation program boosted the level of the published unemployment rate about 0.3 percentage point in October and 0.2 percentage point in November.

<sup>3</sup> The pattern of continuing EUC claims reflects the large number of claimants who began receiving benefits when the EUC was enacted in July and who now have exhausted their 13 weeks of EUC benefits.

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

Component	Proportion 2007 (percent)	2007 <sup>1</sup>	2008		2008		
			Q2	Q3	Aug.	Sept.	Oct.
			Annual rate		Monthly rate		
<b>Total</b>	<b>100.0</b>	<b>2.1</b>	<b>-3.4</b>	<b>-7.6</b>	<b>-1.2</b>	<b>-3.7</b>	<b>1.3</b>
Previous	100.0	2.1	-3.1	-6.0	-1.0	-2.8	...
Manufacturing	78.7	2.3	-4.0	-7.8	-1.0	-3.7	.6
Ex. motor veh. and parts	73.6	2.6	-2.2	-7.9	-.4	-3.9	.8
Ex. high-tech industries	69.3	1.3	-3.7	-8.5	-.4	-4.2	.9
Mining	11.6	.2	2.0	-5.7	-.2	-8.5	6.1
Utilities	9.7	3.1	-4.5	-8.4	-4.1	2.4	.4
<i>Selected industries</i>							
Energy	24.7	2.3	-1.6	-9.0	-1.8	-5.1	5.0
High technology	4.3	22.3	20.7	2.2	-.5	-.7	-.9
Computers	1.0	16.7	13.3	-3.2	-.6	-.8	-1.1
Communications equipment	1.3	20.6	25.4	4.2	.2	.4	-.3
Semiconductors <sup>2</sup>	2.0	25.9	21.4	3.4	-1.0	-1.5	-1.2
Motor vehicles and parts	5.1	-2.2	-28.6	-6.8	-11.1	1.3	-3.5
Aircraft and parts	2.3	13.6	1.5	-25.9	-.1	-23.9	-5.6
<i>Total ex. selected industries</i>	63.6	.7	-3.8	-7.0	-.3	-3.0	.4
Consumer goods	19.9	.3	-1.7	-3.5	-.4	-.7	.1
Durables	3.6	-2.4	-6.2	-12.7	-2.2	-2.8	-.9
Nondurables	16.3	.9	-.7	-1.6	.0	-.2	.3
Business equipment	6.4	1.0	-7.5	-.8	.9	-1.8	-1.2
Defense and space equipment	1.2	7.2	-4.3	-6.8	.3	-3.2	1.4
Construction supplies	4.2	-1.9	-5.2	-2.8	-1.0	-2.0	-1.2
Business supplies	7.4	-.1	-5.5	-8.5	.2	-2.8	.4
Materials	24.5	1.2	-3.5	-11.4	-.6	-5.3	1.3
Durables	12.8	1.8	-3.1	-5.8	-.4	-2.1	-1.6
Nondurables	11.7	.6	-4.0	-17.1	-.8	-8.8	4.6

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

2. Includes related electronic components.

... Not applicable.

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

**Capacity Utilization**  
(Percent of capacity)

Sector	1972- 2007 average	1994- 95 high	2001- 02 low	2008				
				Q1	Q2	Q3	Sept.	Oct.
<b>Total industry</b>	<b>81.0</b>	<b>85.1</b>	<b>73.6</b>	<b>80.7</b>	<b>79.7</b>	<b>77.9</b>	<b>75.5</b>	<b>76.4</b>
Manufacturing	79.7	84.6	71.5	78.7	77.5	75.7	73.5	73.8
Mining	87.5	88.7	84.8	90.5	90.8	89.3	84.0	89.0
Utilities	86.8	93.9	84.6	87.1	85.6	83.3	83.3	83.5
<i>Stage-of-process groups</i>								
Crude	86.6	89.5	81.9	89.5	89.2	86.4	80.1	85.6
Primary and semifinished	82.2	88.2	74.6	80.9	79.8	77.7	75.9	76.5
Finished	77.7	80.4	69.9	77.2	76.0	74.8	73.3	72.7

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

The available data for November, such as manufacturing production worker hours and the physical product data available at the weekly frequency, suggest that, aside from the hurricane- and strike-related rebounds in output, the pace of production declines has intensified. For example, steel production has plummeted, and industry reports suggest that at least one-fourth of that industry's domestic capacity has been idled. Similarly, the output of organic chemicals, which are used for a variety of industrial purposes, also has contracted sharply.

The return to operation of oil and gas extraction capability that had been shut down by the hurricanes appears to have contributed nearly 0.4 percentage point to the rate of change in IP in November. As of December 3, 15 percent of the oil extraction capability in the Gulf of Mexico remained offline, while about 20 percent of natural gas extraction in the Gulf was still idled. Although capacity in most other hurricane-affected industries has come back online, production in a few of these industries, most notably petrochemicals, remains below pre-hurricane levels, likely because of weak demand.

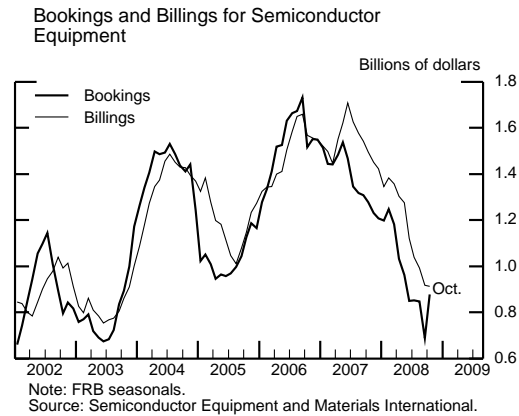
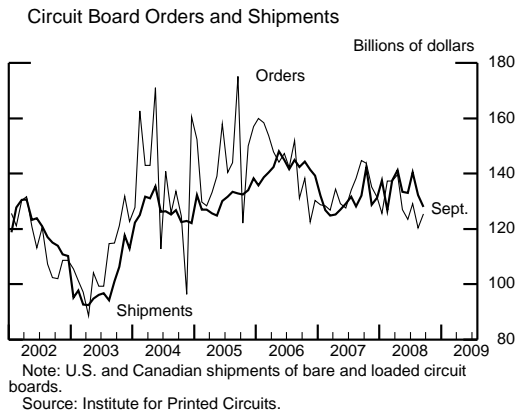
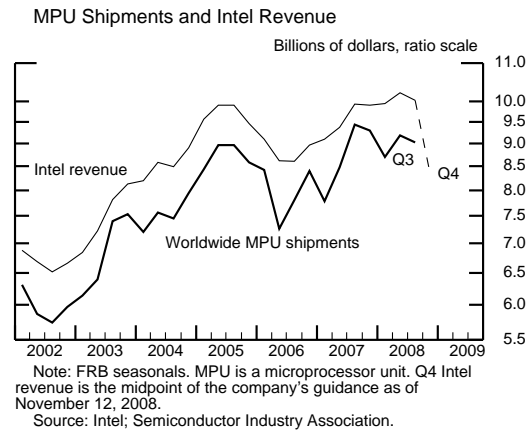
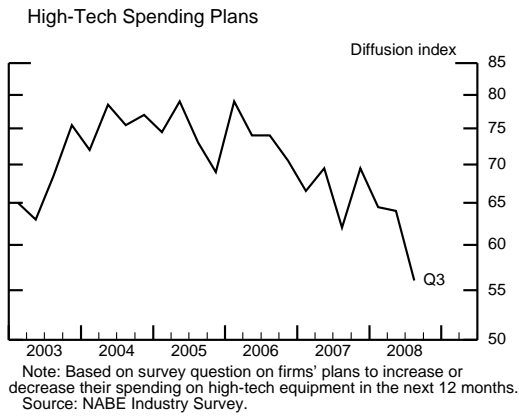
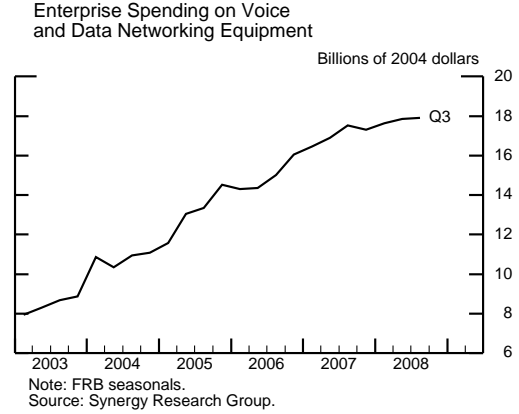
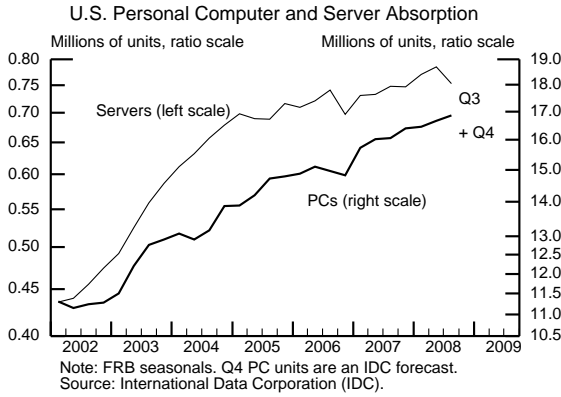
The restart of commercial aircraft production at Boeing in early November also boosted IP last month. While pre-strike assembly rates will not likely be fully achieved until December, the resumption of production last month likely boosted the rate of change in IP in November about 0.4 percentage point.<sup>4</sup>

The output of high-technology products declined in the third quarter and again in October. Although domestic unit sales of personal computers (PCs) rose modestly in the third quarter, a marked shift toward lower-end PCs yielded a decline in real output. Unit sales of servers fell last quarter, and nominal spending on voice and data networking equipment was about flat for this large category of communications equipment. Declines in semiconductor output averaged 1¼ percent per month over the three months ending in October, as weak demand and excessive inventories for some types of chips weighed on output. Although production declines have been fairly broad based across chip types, the output of both flash memory and microprocessors has been particularly weak. In addition, the production of circuit boards has declined in recent months, and orders continue to run below shipments.

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<sup>4</sup> Despite the resumption of production on November 2, Boeing delivered only four aircraft in November, as a faulty connector was discovered that required each aircraft under construction to be inspected and the faulty connectors to be replaced (previously delivered aircraft will have these connectors replaced during planned maintenance). Production rates in November, particularly of the 737, were reduced, although by significantly less than deliveries of completed aircraft.

## Indicators of High-Tech Manufacturing Activity



Looking ahead, several indicators point to a further weakening in high-tech output. For example, survey-based measures of high-tech capital spending plans (such as the industry survey by the National Association of Business Economists and the Empire State survey) were very soft; private-sector forecasts (such as IDC, Gartner, and the Semiconductor Industry Association) have been revised down; and high-tech company revenue guidance from Cisco, Advanced Micro Devices, and Intel has been very downbeat. In particular, Intel sharply revised downward its projections for fourth-quarter revenue to a level consistent with a substantial decline in real semiconductor output this quarter, and the company noted unexpectedly weak demand in all geographic areas and market segments, including the PC supply chain. A number of high-tech companies (including Sun Microsystems, National Semiconductor, and Nortel) have recently announced layoffs, and others (such as HP and Micron) have extended holiday shutdowns. Planned capital spending by semiconductor manufacturers also continues to be scaled back; orders and shipments of semiconductor fabricating equipment are down more than 30 percent from their year-earlier levels.

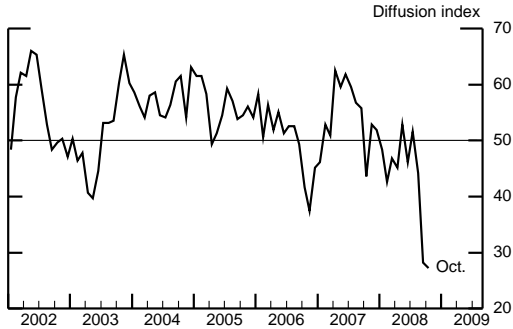
Excluding energy, motor vehicles, aircraft, and high-tech products, production in other market groups weakened considerably in September and October, although the monthly pattern has been affected by the hurricanes. The pace of declines steepened for a variety of consumer durables, such as appliances, furniture, and products related to home improvement. The output of construction supplies resumed falling after a brief pause in the middle of the year, and declines in the production of materials intensified, which likely reflected a widening of the weakness in demand for materials beyond the motor vehicle-related and construction-related sectors.

The available forward-looking indicators of manufacturing activity suggest significant contractions in manufacturing output in coming months. The three-month moving average of the staff's measure of real adjusted durable goods orders plummeted in October, and the new orders indexes from the Institute for Supply Management (ISM) and the regional surveys plunged to exceptionally low levels between September and November. In addition, recent data and indicators of trade, such as the ISM new export orders index and the JPMorgan Global new orders index, suggest that foreign demand, which had boosted domestic production considerably over the past year, is no longer providing much impetus to IP.

Regarding capacity in manufacturing, the ISM's semiannual diffusion index of capital spending plans by manufacturers, which correlates well historically with manufacturing investment, fell to 28.0 for 2009, its lowest level since the series' inception in 1961. This

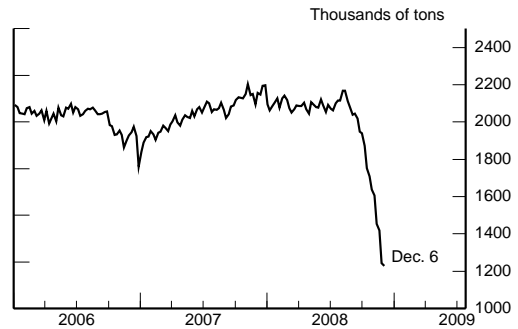
Indicators of Industrial Activity

Industrial Production Diffusion Index



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

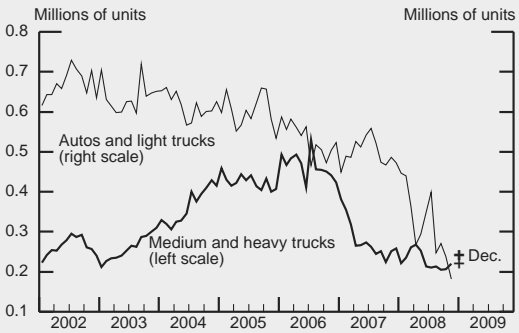
Weekly Steel Production



Note: FRB seasonals.  
 Source: American Iron and Steel Institute.

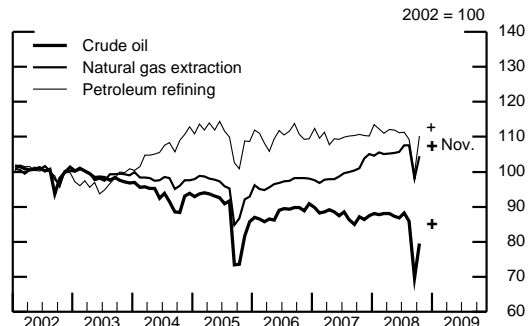
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Motor Vehicle Assemblies



Note: December values are based on latest industry schedules.  
 Source: Ward's Communications

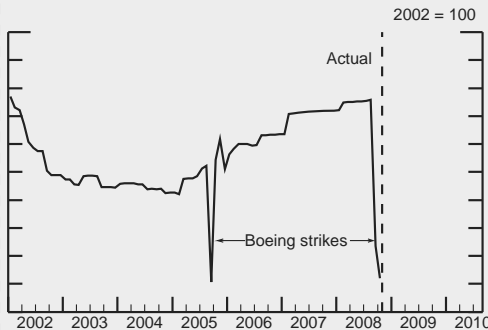
Energy Industrial Production



Note: November values based on available weekly data from the Dept. of Energy (DOE) and estimates of facilities that remain offline from DOE and Dept. of the Interior.  
 Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

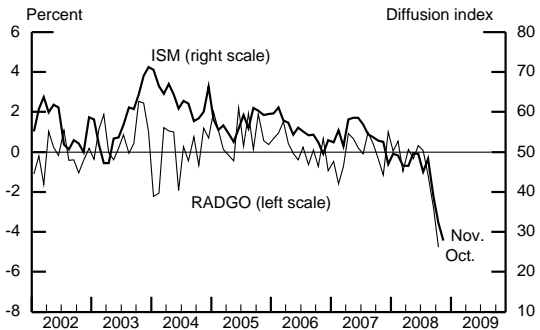
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Boeing Commercial Aircraft Completions: Actual



Note: 1998 price-weighted index. Actual completions equal deliveries plus the change in the stock of finished aircraft.  
 Source: Boeing.

ISM New Orders Diffusion Index and Change in Real Adjusted Durable Goods Orders

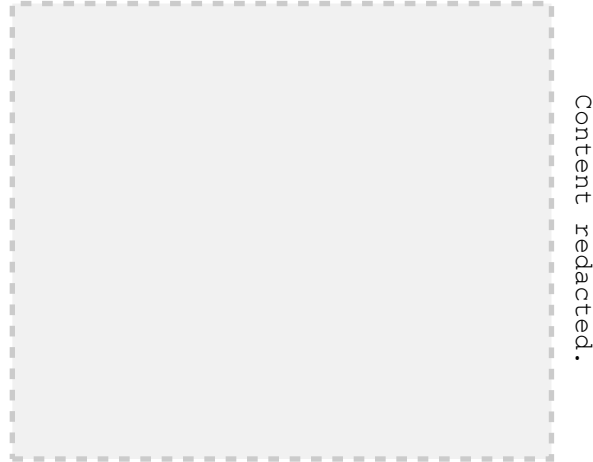
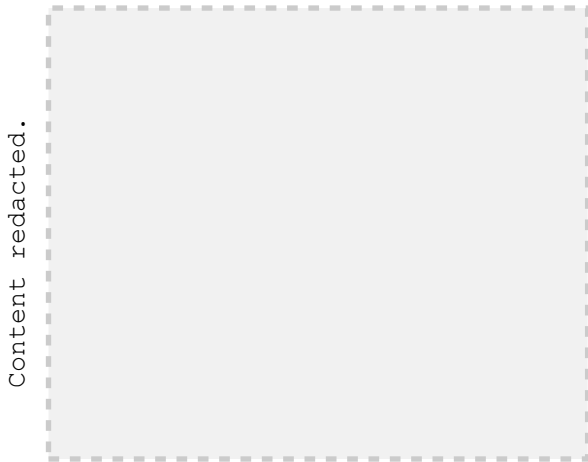


Note: The measure for real adjusted durable goods orders (RADGO) is a 3-month moving average.  
 Source: Institute for Supply Management (ISM). RADGO is compiled by FRB staff based on data from the Bureau of Labor Statistics and the U.S. Census Bureau.

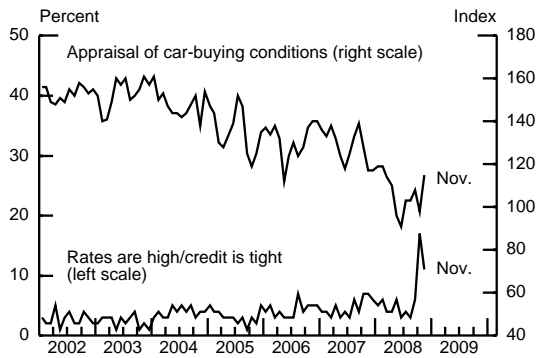
**Sales of Light Vehicles**  
(Millions of units at an annual rate; FRB seasonals)

Category	2007	2008					
		Q1	Q2	Q3	Sept.	Oct.	Nov.
Total	16.1	15.2	14.1	12.9	12.5	10.5	10.1
Autos	7.6	7.4	7.6	6.6	6.2	5.6	5.0
Light trucks	8.5	7.8	6.5	6.3	6.3	4.9	5.2
North American <sup>1</sup>	12.3	11.5	10.4	9.7	9.5	7.7	7.6
Autos	5.2	5.1	5.0	4.4	4.3	3.7	3.3
Light trucks	7.1	6.5	5.3	5.3	5.2	4.0	4.3
Foreign-produced	3.8	3.7	3.7	3.2	2.9	2.8	2.6
Autos	2.4	2.4	2.6	2.2	1.9	1.9	1.7
Light trucks	1.4	1.3	1.1	1.0	1.0	.9	.9
Memo: Detroit Three domestic market share (percent) <sup>2</sup>	51.4	50.2	45.9	46.7	51.8	46.0	47.7

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

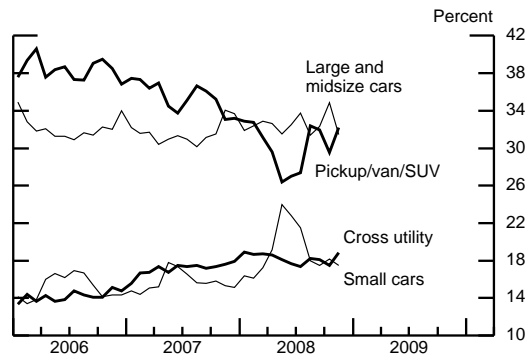


**Car-Buying Attitudes**



Source: Reuters/University of Michigan Survey.

**Market Share of Light Vehicles by Segment**



Note: Data through November. FRB seasonals.  
 Source: Ward's Communications. Adjusted using FRB seasonals.

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

Item	2008			2009	2008			
	Q2	Q3	Q4	Q1	Sept.	Oct.	Nov.	Dec.
U.S. production <sup>1</sup>	8.5	8.6	7.6	7.6	8.2	7.9	7.3	7.7
Autos	3.7	4.2	3.6	3.3	4.0	3.8	3.4	3.6
Light trucks	4.9	4.3	4.0	4.3	4.2	4.0	3.9	4.1
Days' supply <sup>2</sup>	72	76	n.a.	n.a.	77	97	100	n.a.
Autos	48	67	n.a.	n.a.	68	88	103	n.a.
Light trucks	94	84	n.a.	n.a.	85	105	98	n.a.
Inventories <sup>3</sup>	2.41	2.40	n.a.	n.a.	2.40	2.45	2.46	n.a.
Autos	0.78	0.96	n.a.	n.a.	0.96	1.06	1.11	n.a.
Light trucks	1.63	1.44	n.a.	n.a.	1.44	1.39	1.36	n.a.
Memo: U.S. production, total motor vehicles <sup>4</sup>	8.8	8.8	7.8	7.9	8.4	8.1	7.5	7.9

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

1. Production rates for December, the fourth quarter of 2008 and the first quarter of 2009 reflect the latest industry schedules.

2. Quarterly values are calculated with end-of-period stocks and average reported sales.

3. End-of-period stocks.

4. Includes medium and heavy trucks.

n.a. Not available.

Source: Ward's Communications

**Inventories of Light Vehicles**



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

**Days' Supply of Light Vehicles**



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



measure, together with the low current operating rates in manufacturing, points to a sizable drop in capital spending by manufacturers next year that would leave manufacturing capacity little changed in 2009 after it had increased 1¾ percent this year.

### **Motor Vehicles**

Sales of automobiles and light trucks collapsed to an annual rate of 10.5 million units in October and fell further in November to a 10.1 million unit rate, more than 2 million units below September's already anemic pace.

domestic nameplates, in particular, lost market share.

The sharp weakening in automobile demand likely reflects stagnant incomes, declining household wealth, and concerns about the overall economy. Credit conditions also have remained unfavorable, as some automakers have continued to restrict leasing activity and financing has remained very difficult to come by for borrowers with low credit ratings. Indeed, an unusually high percentage of respondents to the Reuters/Michigan Survey reported that tight credit conditions made it a bad time to buy a car in October and November. Overall, however, the Reuters/Michigan Survey's measure of car-buying attitudes improved slightly, reflecting lower gas prices and, with the most generous consumer incentives in years, a greater number of consumers who viewed prices as being low.

Light vehicle assemblies stepped down in November to an annual rate of 7¼ million units after having averaged a paltry 8.0 million units over the previous three months. Even with these cutbacks, the level of vehicle inventories has crept up in recent months. Although the level is still relatively low by historical standards, the anemic pace of sales pushed days' supply to around 100 days in October and November, well above the automakers' desired levels. In response, automakers have announced that they now expect to continue production at a very low annual rate of just under 7¾ million units for the next four months.

### **Consumer Spending**

Consumer spending has recorded large and broad-based declines in recent months. Real personal consumption expenditures (PCE) fell 0.5 percent in October, the fifth consecutive monthly decline, with weakness evident in nearly all broad spending categories. In addition to the aforementioned drop in light vehicle sales, real spending on goods other than motor vehicles plunged at an annual rate of more than 9 percent over the three months ending in October. The pace of spending on services also weakened through October with the three-month increase, at an annual rate of 0.6 percent, down

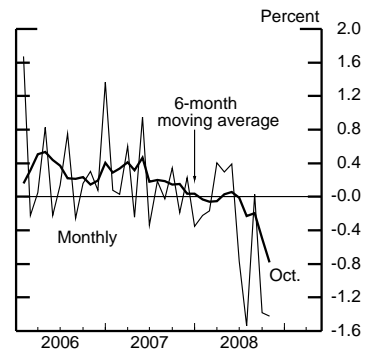
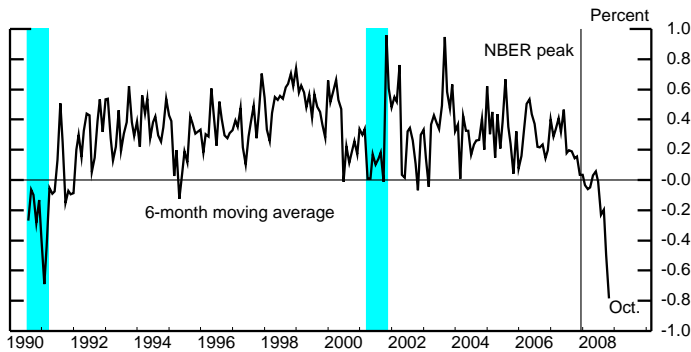
**Real Personal Consumption Expenditures**  
(Percent change from preceding comparable period)

Category	2007	2008		2008		
		Q2	Q3	Aug.	Sept.	Oct.
		Annual rate		Monthly rate		
<b>Total real PCE</b>	<b>2.8</b>	<b>1.2</b>	<b>-3.7</b>	<b>-1</b>	<b>-4</b>	<b>-5</b>
Motor vehicles	2.0	-19.7	-26.4	7.9	-6.5	-8.0
Goods ex. motor vehicles	3.2	4.8	-7.3	-.7	-.9	-.8
Ex. energy	3.5	6.4	-6.9	-1.1	-1.1	-.9
Services	2.6	.7	.0	-.2	.2	.2
Ex. energy	2.6	1.2	.7	-.2	.1	.0
Memo: Nominal retail control <sup>1</sup>	5.2	10.0	.5	-1.0	-.5	-2.3

1. Total sales less outlays at building material and supply stores and automobile and other motor vehicle dealers.

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

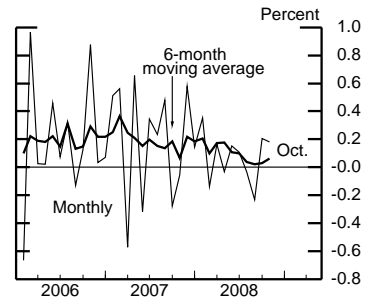
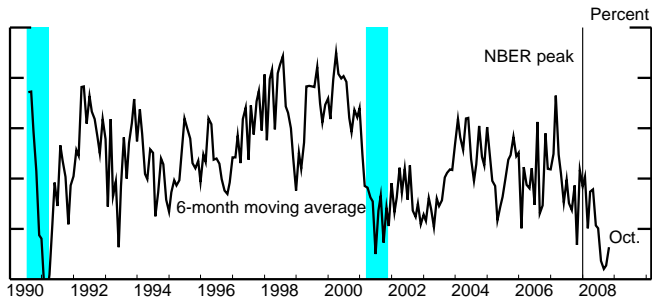
**Change in Real PCE Goods**



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

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

**Change in Real PCE Services**

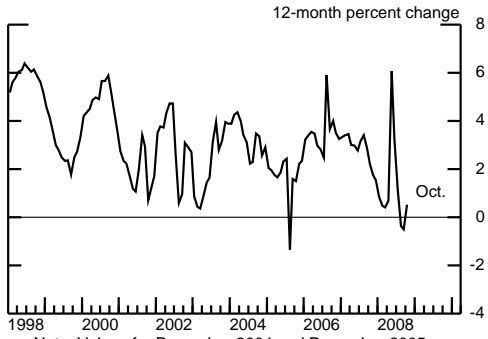


Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER.

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

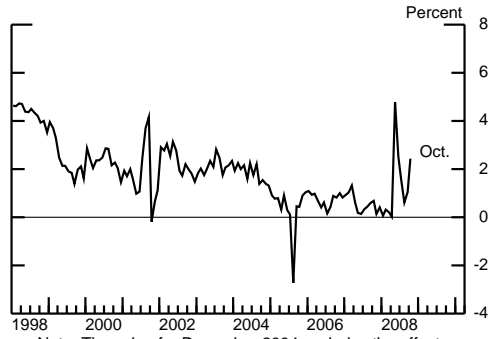
## Fundamentals of Household Spending

Change in Real Disposable Personal Income



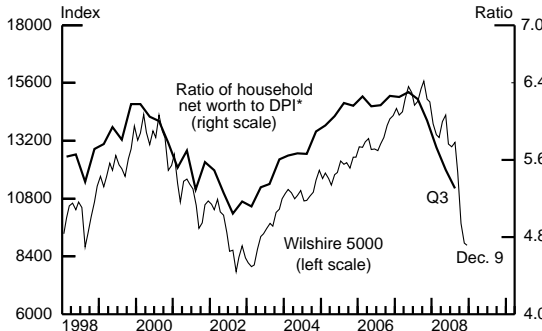
Note: Values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Personal Saving Rate



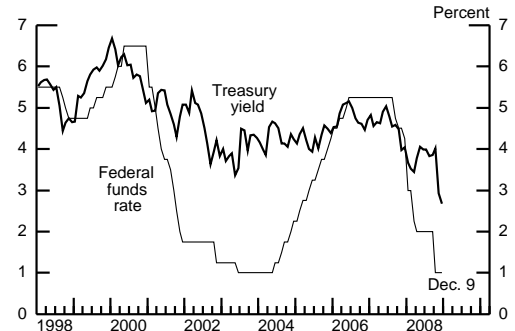
Note: The value for December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.  
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Household Net Worth and Wilshire 5000



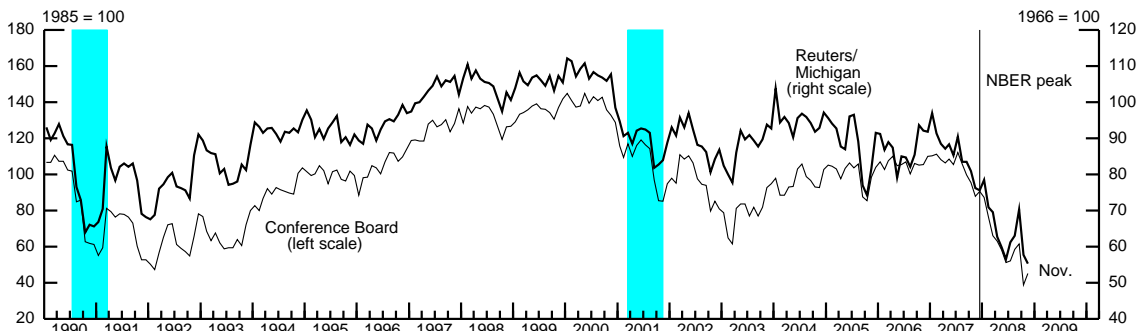
\* The value for 2004:Q4 excludes the effect on income of the one-time Microsoft dividend in December 2004.  
 Source: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; *Wall Street Journal*.

Target Federal Funds Rate and 10-Year Treasury Yield



Source: Federal Reserve Board.

Consumer Confidence



Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER.  
 Source: Reuters/University of Michigan Surveys of Consumers; Conference Board.

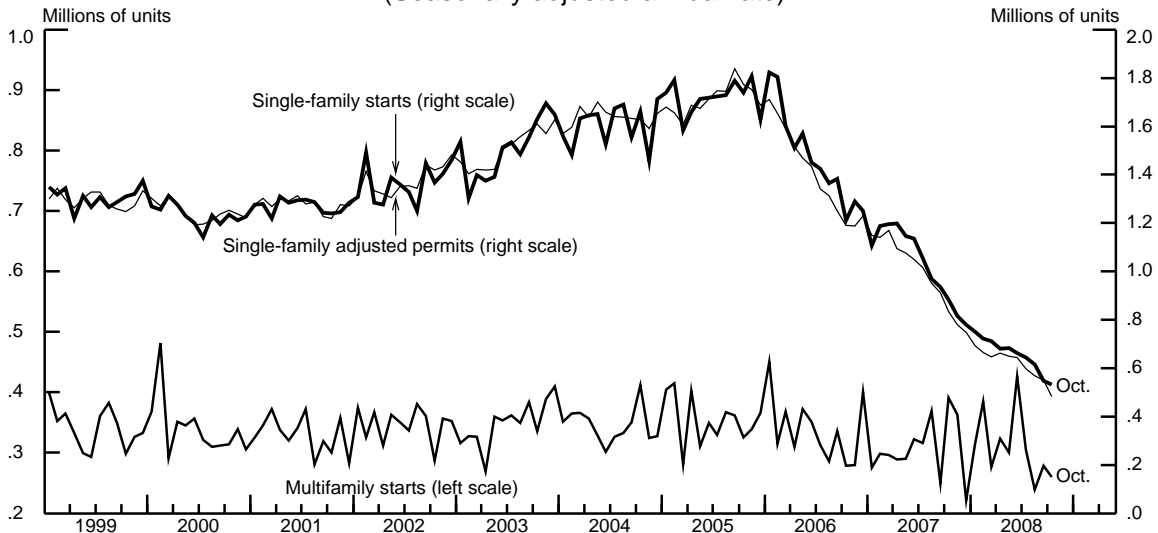
**Private Housing Activity**

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

Sector	2007	2008					
		Q1	Q2	Q3	Aug.	Sept.	Oct.
<i>All units</i>							
Starts	1.36	1.05	1.03	.88	.85	.83	.79
Permits	1.40	.99	1.03	.87	.86	.81	.73
<i>Single-family units</i>							
Starts	1.05	.73	.68	.60	.62	.55	.53
Permits	.98	.65	.63	.56	.55	.54	.47
Adjusted permits <sup>1</sup>	.99	.67	.65	.57	.57	.55	.48
Permit backlog <sup>2</sup>	.108	.096	.089	.083	.082	.083	.079
<i>New homes</i>							
Sales	.78	.56	.52	.47	.45	.46	.43
Months' supply <sup>3</sup>	8.40	10.24	10.55	10.82	11.29	10.87	10.56
<i>Existing homes</i>							
Sales	4.94	4.39	4.34	4.45	4.35	4.58	4.43
Months' supply <sup>3</sup>	8.67	10.24	10.28	9.54	9.59	9.27	9.49
<i>Multifamily units</i>							
Starts	.309	.325	.350	.274	.239	.279	.260
Permits	.419	.341	.400	.308	.304	.267	.260
Permit backlog <sup>2</sup>	.075	.067	.068	.062	.065	.062	.057
<i>Mobile homes</i>							
Shipments	.096	.092	.088	.081	.081	.077	.070
<i>Condos and co-ops</i>							
Existing home sales	.713	.560	.573	.577	.560	.560	.550

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.
- Source: Census Bureau.

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



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

considerably from the 1¼ percent increase in the first half of 2008. The latest readings on chain store sales suggest that spending on goods declined further in November. However, U.S. Department of Energy data for October and November suggest that overall fourth-quarter spending will receive a modest boost from a bounceback in real spending on gasoline, likely related to the recent price declines.

Consumer demand fundamentals have shown little improvement of late. The one bright note has been the boost to real income provided by the sharp reversal in energy prices; in October, despite the sizable employment declines, the Bureau of Economic Analysis reported that real disposable income increased \$86 billion. Continued declines in equity and house prices likely have pushed the ratio of wealth to income down further, and measures of consumer sentiment from the Reuters/University of Michigan and Conference Board surveys remained at recessionary levels in November. In addition, the available evidence suggests a considerable further tightening in consumer credit conditions in recent months.

### **Housing**

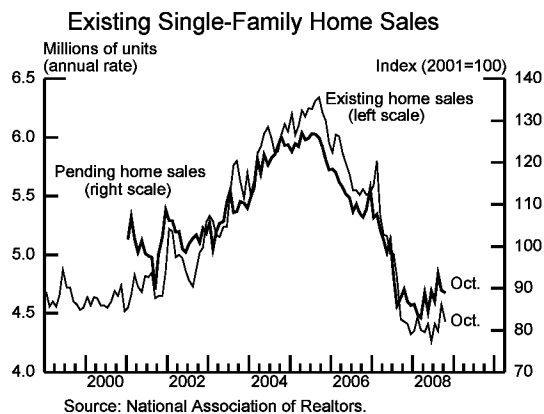
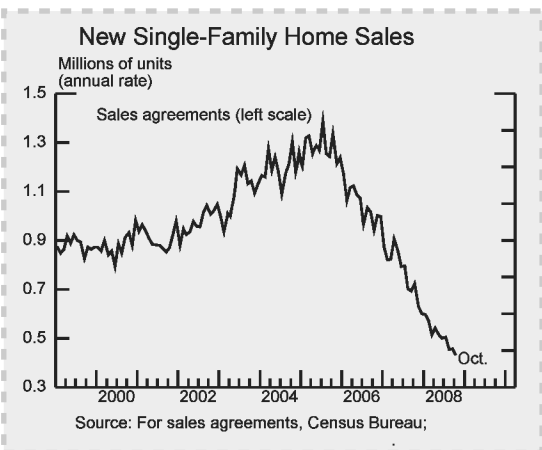
Housing activity continued its steep descent early in the fourth quarter. In October, single-family housing starts moved down 3 percent, and adjusted permit issuance—a useful month-ahead indicator of starts—plunged to a level more than 11 percent below starts. So far this year, single-family starts have fallen at an annual rate of 37 percent, the same rate of decline as in 2007. Multifamily starts fell to 260,000 units in October, a value near the lower end of the range occupied over the past two years.

Housing demand remains very weak. The Census Bureau's measure of new single-family home sales fell 5 percent in October and has declined at an annual rate of 32 percent so far this year. Although the number of unsold new single-family homes continued to move lower in October—indeed, the stock has declined by one-third since its peak in mid-2006—inventories remained extremely elevated relative to the current pace of sales.

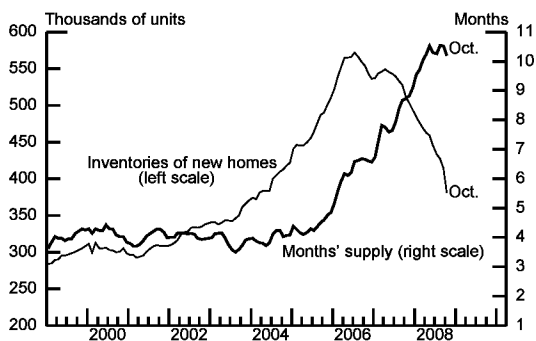
By contrast, sales of existing single-family homes changed little, on balance, for the year ending in October, although a step-down in pending home sales in October points to further declines in existing home sales in the near term. The comparative strength of

## Indicators of Single-Family Housing

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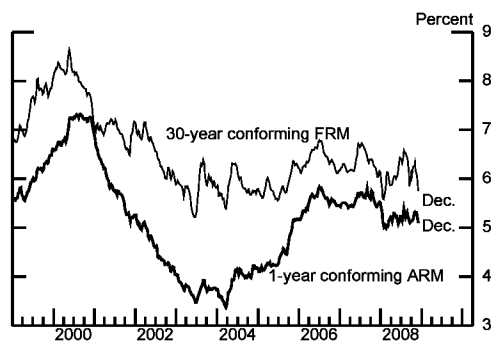


### Inventories of New Homes and Months' Supply



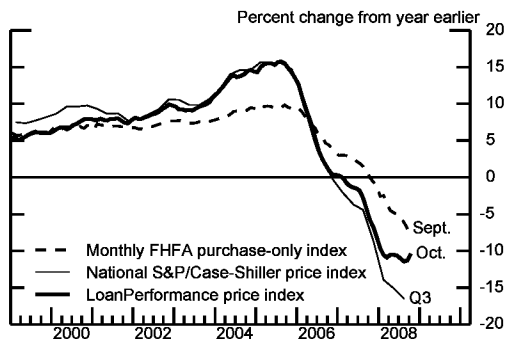
Note: Months' supply is calculated using the 3-month moving average of sales.

### Mortgage Rates

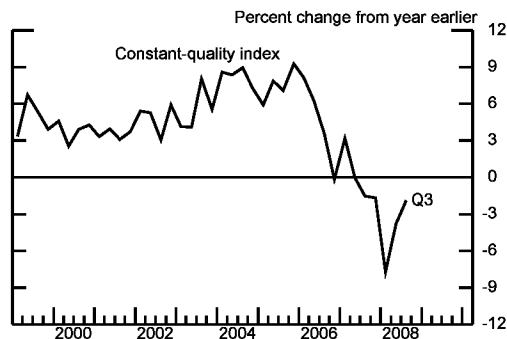


Note: The December reading is a 2-week moving average of data available through Dec. 3, 2008.

### Prices of Existing Homes



### Price of New Homes



existing home sales is partly attributable to increases in foreclosure-related and other distressed sales, which tend to be sold at much lower prices than owner-occupied homes.<sup>5</sup>

Financing conditions for prime borrowers have eased lately, as rates for conforming 30-year fixed-rate mortgages fell 50 basis points in late November after the Federal Reserve's announced decision to purchase agency debt to support mortgage financing. In early December, the nominal 30-year fixed mortgage rate was lower than it had been since 2005 (except for a short-lived dip in early 2008). Meanwhile, the market for nonconforming loans (that is, loans that cannot be purchased by Fannie Mae or Freddie Mac) remains severely impaired. Although the Federal Housing Administration (FHA) has offered an alternative source of mortgage finance for some nonprime and near-prime borrowers, FHA's relatively strict lending standards and higher costs suggest that such lending is likely to have replaced only a small part of the reduction in credit from other sources.

House prices remain on a downward trajectory. For existing homes, the repeat-sales price index calculated by LoanPerformance—a recently developed index that we think is more representative than either the Federal Housing Finance Agency (FHFA) or S&P/Case-Shiller indexes—decreased 10 percent over the 12 months ending in October.<sup>6</sup> Although these lower prices are making homes more affordable, survey evidence and anecdotal reports suggest that expectations of further house price declines remain quite prevalent, a consideration that may make many potential buyers reluctant to purchase homes until prices show signs of stabilizing.

### **Equipment and Software**

After having fallen at an annual rate of nearly 6 percent in the third quarter, real spending on equipment and software (E&S) appears to be contracting at an even faster rate so far in the fourth quarter. Moreover, while the downturn last quarter was concentrated in computers and transportation equipment, this quarter's decline in spending appears to be more widespread. Shipments of nondefense capital goods excluding aircraft tumbled in

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<sup>5</sup> Estimates of foreclosure-related sales (based on data on foreclosure starts and inventories) suggest that non-foreclosure-related sales declined about 10 percent (not at an annual rate) over the first three quarters of 2008. Although the data on existing home sales include only sales handled by real estate agents, most foreclosure-related sales are included in the existing home sales statistics because banks frequently hire real estate agents to sell a property after obtaining ownership through a public foreclosure auction.

<sup>6</sup> Unlike the FHFA index (formerly known as the OFHEO index), the LoanPerformance (LP) index includes both conforming and nonconforming loans. In addition, the LP index has better geographic coverage than the S&P/Case-Shiller (CS) index. The LP and CS indexes showed similar movements from 2002 to 2007, but more recently the LP index has declined by less than the CS index.

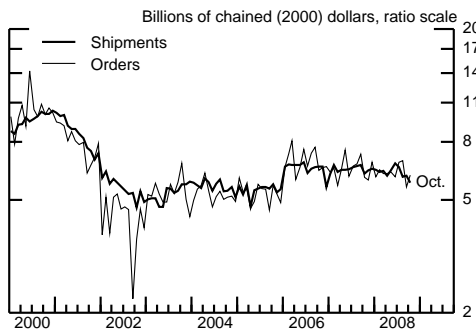
**Orders and Shipments of Nondefense Capital Goods**

(Percent change; seasonally adjusted current dollars)

Category	2008				
	Q2	Q3	Aug.	Sept.	Oct.
	Annual rate		Monthly rate		
Shipments	3.4	-8	-3.3	1.1	-4.3
Excluding aircraft	5.9	-3	-2.1	1.7	-3.5
Computers and peripherals	-19.0	-28.7	-3.7	-1.3	2.0
Communications equipment	5.8	-10.7	-7.5	.7	-5.7
All other categories	8.8	4.0	-1.4	2.1	-3.7
Orders	-6.8	-14.0	-7.8	-1.1	-4.5
Excluding aircraft	10.2	-5.2	-2.3	-3.4	-5.0
Computers and peripherals	-5.3	-36.6	.7	-2.5	-5.5
Communications equipment	.2	16.7	1.7	-19.4	9.6
All other categories	12.9	-3.5	-2.9	-1.9	-6.2
Memo: Shipments of complete aircraft <sup>1</sup>	43.1	38.1	47.9	24.6	16.8

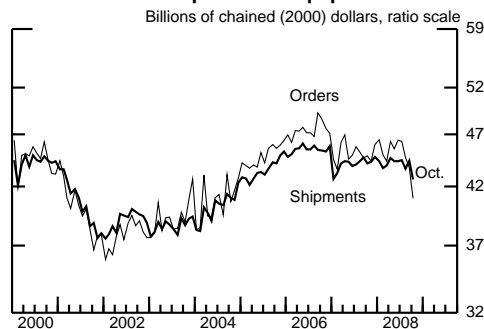
1. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate.  
Source: Census Bureau.

**Communications Equipment**



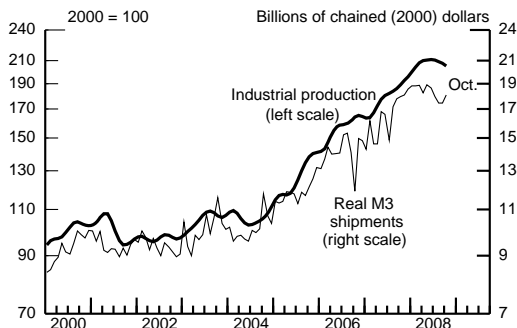
Note: Shipments and orders are deflated by a price index that is derived from the BEA's quality-adjusted price indexes and uses the PPI for communications equipment for monthly interpolation.  
Source: Census Bureau.

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



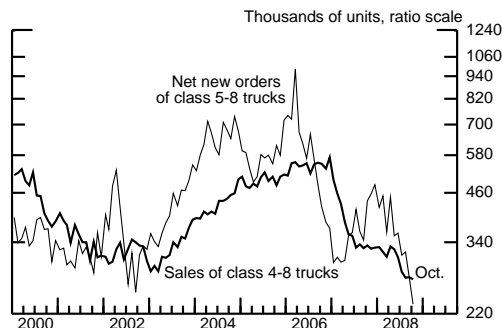
Note: Shipments and orders are deflated by the staff price indexes for the individual equipment types included in this category. Indexes are derived from the BEA's quality-adjusted price indexes.  
Source: Census Bureau.

**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.  
Source: Census Bureau; FRB Industrial Production.

**Medium and Heavy Trucks**

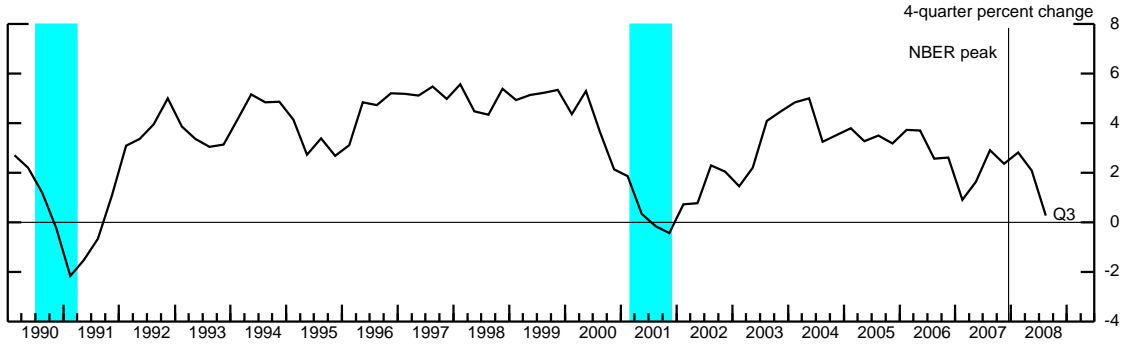


Note: Annual rate, FRB seasonals.  
Source: For sales, Ward's Communications; for orders, ACT Research.



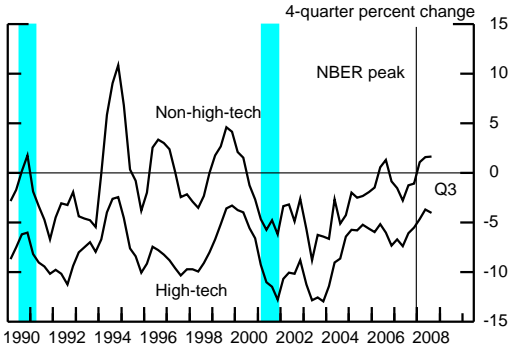
## Fundamentals of Equipment and Software Investment

Real Business Output



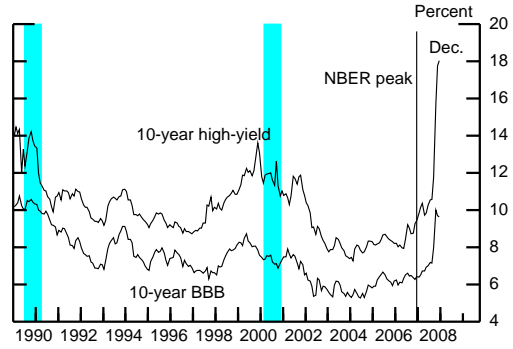
Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER.  
 Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

User Cost of Capital



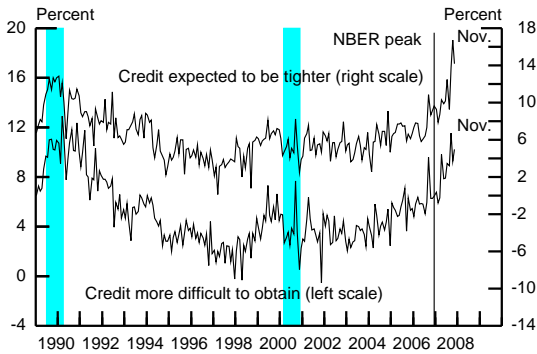
Source: Staff calculation.

Corporate Bond Yields



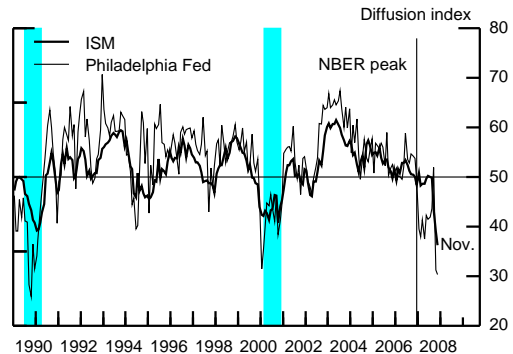
Note: End-of-month. December value as of Dec. 9.  
 Source: Merrill Lynch.

NFIB: Survey on Loan Availability



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

Surveys of Business Conditions

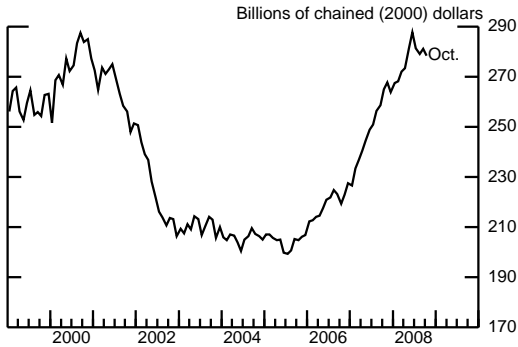


Source: Manufacturing ISM Report on Business; Philadelphia Fed Business Outlook Survey.

### Nonresidential Construction and Indicators

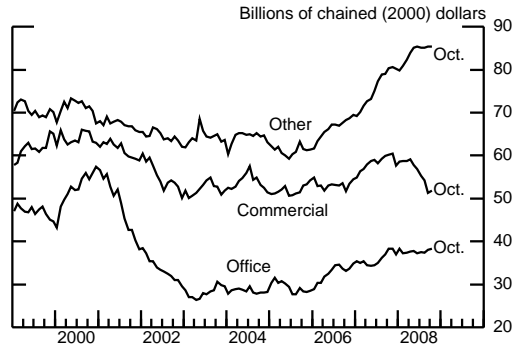
(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q2 and by staff projection thereafter)

Total Structures



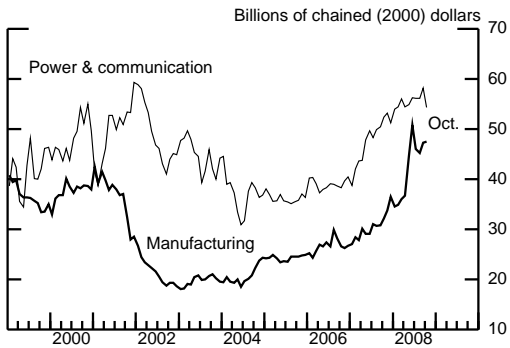
Source: Census Bureau.

Office, Commercial, and Other



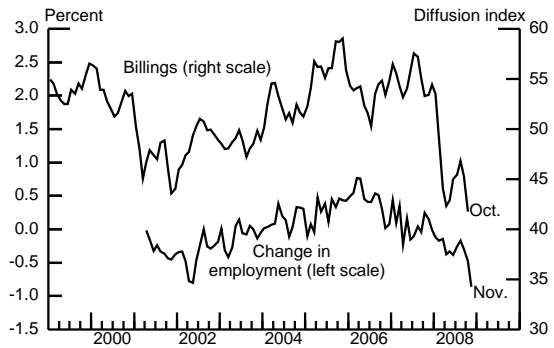
Note: Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care.  
Source: Census Bureau.

Manufacturing and Power & Communication



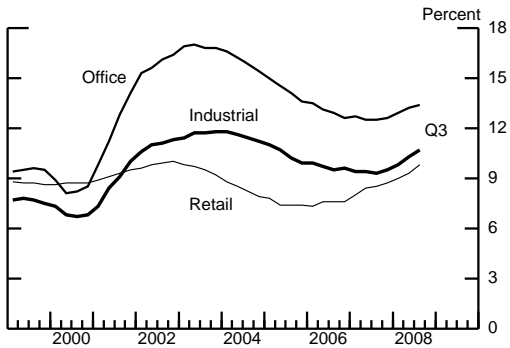
Source: Census Bureau.

Architectural Billings and Nonresidential Construction Employment



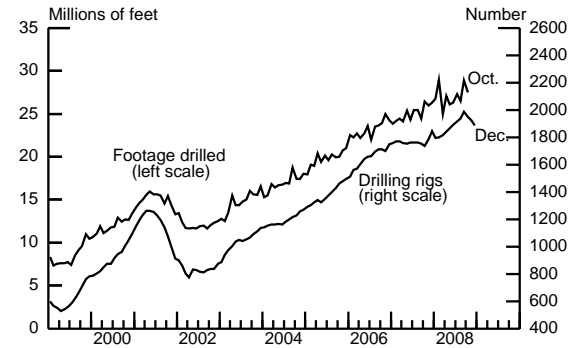
Note: Both series are 3-month moving averages. Employment consists of industrial, commercial, and specialty trade construction.  
Source: For billings, American Institute of Architects; for employment, Bureau of Labor Statistics.

Vacancy Rates



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

Drilling and Mining Indicators



Note: The December readings for drilling rigs are based on data through December 5, 2008. Both series are seasonally adjusted by FRB staff.  
Source: For footage drilled, U.S. Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

October, and orders continued to plunge. Orders have declined more than 10 percent since July and were well below shipments in October, pointing to further declines in shipments in coming months.

Investment demand appears to have been weighed down by weak fundamentals and heightened uncertainty about the future course of the economy. Business output turned down noticeably in the third quarter, and prospects for business activity, as reflected in surveys of business conditions and sentiment, have become considerably gloomier in recent months. In addition, credit conditions remain tight, with corporate bond yields high, essentially no speculative-grade issuance, and widespread anecdotal reports of firms facing a challenging credit environment. According to the ISM semiannual report and other recent surveys, these adverse developments have apparently led to aggressive cutbacks in businesses' capital spending plans.

Real outlays for transportation equipment continued to sink in the third quarter and so far in the fourth quarter. Real purchases of aircraft dropped sharply in the third quarter as the machinists' strike caused Boeing to make only a fraction of its planned deliveries in September. Aircraft purchases appear to have remained low so far this quarter; Boeing made no deliveries in October, and deliveries in November were severely limited by the aforementioned problem with a faulty connector. Meanwhile, business purchases of light vehicles fell sharply in October and November, and although sales of medium and heavy trucks were little changed in those two months, orders for these trucks tumbled in October, a sign that purchases will move lower in the period ahead.

Real spending on high-tech E&S dropped in the third quarter as a result of a sharp decline in outlays on computers and peripherals. Software companies also reported considerable revenue losses in the third quarter. High-tech spending appears to have entered the fourth quarter on a similarly weak note, as industrial production of computers and shipments of high-tech equipment fell again in October. These data are consistent with reports from several producers of high-tech equipment of a pullback in business demand for their products.

### **Nonresidential construction**

Real nonresidential investment (other than drilling and mining) declined in the third quarter after nearly three years of robust expansion, and nominal expenditures edged down further in October. The downturn in this sector is consistent with weakening fundamentals. Vacancy rates rose and property values fell in the first three quarters of the year. In addition, surveys of loan officers through October, and anecdotal reports

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

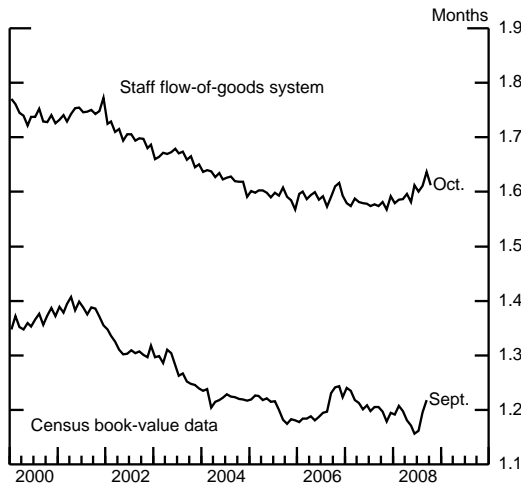
Measure and sector	2008					
	Q1	Q2	Q3	Aug.	Sept.	Oct.
<i>Real inventory investment</i> (chained 2000 dollars)						
<b>Total nonfarm business</b>	<b>-17.9</b>	<b>-55.1</b>	<b>-29.5</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
Motor vehicles	-15.3	-10.9	9.9	n.a.	n.a.	n.a.
Nonfarm ex. motor vehicles	-2.6	-44.2	-39.3	n.a.	n.a.	n.a.
<b>Manufacturing and trade ex. wholesale and retail motor vehicles and parts</b>						
Manufacturing	13.7	-26.0	-26.4	-5.1	-47.5 <sup>e</sup>	n.a.
Wholesale trade ex. motor vehicles & parts	.0	4.9	10.4	14.9	-.9 <sup>e</sup>	n.a.
Retail trade ex. motor vehicles & parts	-8.2	-3.1	-1.7	-15.6	5.9	n.a.
<i>Book-value inventory investment</i> (current dollars)						
<b>Manufacturing and trade ex. wholesale and retail motor vehicles and parts</b>	<b>95.8</b>	<b>97.5</b>	<b>46.6</b>	<b>65.0</b>	<b>-57.8</b>	<b>n.a.</b>
Manufacturing	60.5	39.3	10.7	44.5	-53.8	-37.9
Wholesale trade ex. motor vehicles & parts	39.0	48.5	24.8	27.6	-21.0	-54.9
Retail trade ex. motor vehicles & parts	-3.7	9.6	11.2	-7.1	17.0	n.a.

n.a. Not available.

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

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

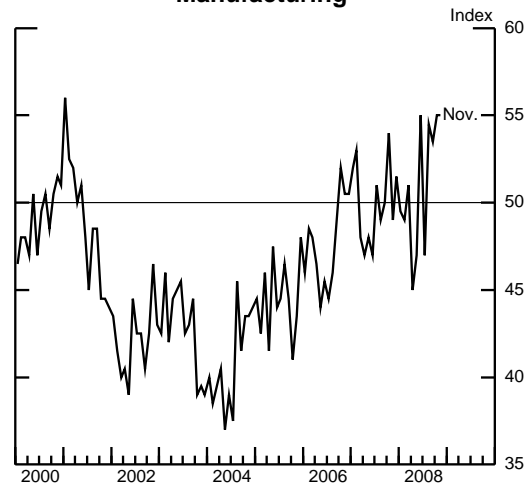
**Inventory Ratios ex. Motor Vehicles**



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

Source: Census Bureau; staff calculation.

**ISM Customers' Inventories: Manufacturing**



Note: A number above 50 indicates inventories are "too high."  
Source: Manufacturing ISM Report on Business.

more recently, suggest that financing for new construction projects has become extremely difficult to acquire. The architectural billings index dropped again in October, an indication of further deterioration in nonresidential investment in the future. Moreover, declines in nonresidential construction employment have accelerated considerably in recent months.

The latest readings on footage drilled and the number of drilling rigs in operation suggest that real expenditures on drilling and mining structures decelerated sharply in the fourth quarter. The recent deceleration likely reflects the sizable drop in oil and natural gas prices since July.

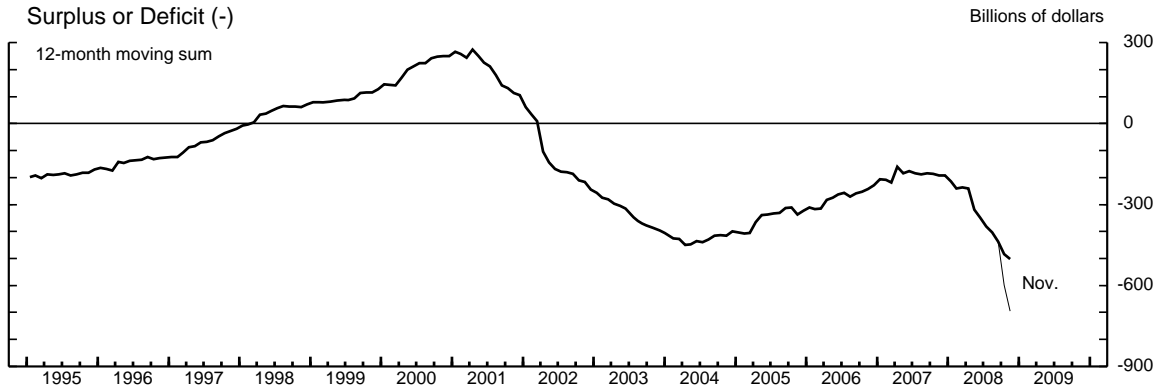
### **Business Inventories**

Firms continued to draw down their inventory stocks at a fast pace in the third quarter, and book-value data for manufacturing and wholesale trade (other than motor vehicles) point to further drawdowns in October. Despite firms' attempts to keep their inventories under control, stocks in some industries appear to have moved above desired levels. In particular, the ratio of book-value inventories to sales in the manufacturing and trade sectors, excluding motor vehicles, moved up in August and September, and this ratio continued to rise at the manufacturing and wholesale levels in October. Months' supply in the flow-of-goods system edged down in October after having risen in September, when shipments in some industries (such as aerospace and shipbuilding) were temporarily disrupted by the hurricanes and the strike at Boeing. That said, this measure of months' supply seems somewhat elevated for durable goods excluding transportation equipment and is clearly elevated for some nondurables industries, such as plastics and rubber products. Finally, the ISM index of customers' inventories remained above 50 for the fourth consecutive month in November, an indication that many purchasing managers see their customers' inventories as too high.

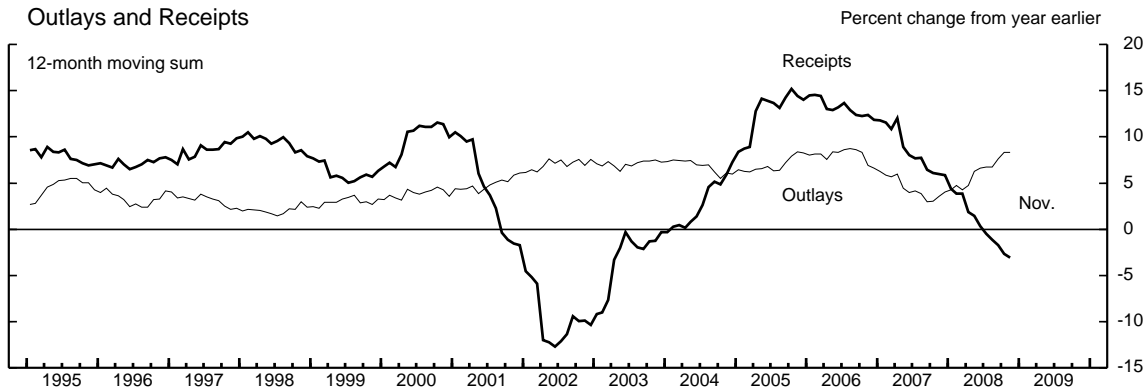
### **Federal Government Sector**

The deficit in the federal unified budget continued to widen markedly in October and November. Receipts in the past two months, adjusted for payment-timing shifts and financial transactions, fell 6 percent relative to the same period a year earlier, with declines recorded for both personal and corporate tax payments. The reduction in receipts likely reflects the slower rise in nominal personal incomes, reduced capital gains realizations, and declining profits for corporations. On the expenditure side, adjusted outlays in October and November increased 10 percent relative to the same period a year

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



Note: Thin line includes deficit effects of transactions related to TARP (Troubled Asset Relief Program) and government-sponsored enterprise equity purchase programs.



**Recent Federal Outlays and Receipts**  
 (Billions of dollars except as noted)

Function or source	October-November			12 months ending in November		
	2007	2008	Percent change	2007	2008	Percent change
<b>Outlays</b>						
Outlays	464.4	509.8	9.8	2,775.7	3,006.9	8.3
Net interest	39.8	41.7	4.8	241.7	250.8	3.8
National defense	109.3	117.0	7.1	569.8	632.2	10.9
Major transfers <sup>1</sup>	248.5	271.5	9.2	1,531.4	1,665.0	8.7
Other	66.8	79.6	19.2	432.8	459.0	6.1
<b>Receipts</b>						
Receipts	329.2	309.6	-6.0	2,583.3	2,504.0	-3.1
Individual income and payroll taxes	284.7	275.2	-3.3	2,005.2	1,987.0	-9
Corporate income taxes	8.7	2.1	-76.0	365.1	297.8	-18.4
Other	35.9	32.4	-9.7	213.0	219.3	2.9
Surplus or deficit (-)	-135.2	-200.2	...	-192.4	-502.9	...
<b>Memo:</b>						
Unadjusted surplus or deficit (-)	-155.1	-401.6	...	-194.2	-701.3	...

1. Includes Social Security, Medicare, Medicaid, and income security programs.  
 ... Not applicable.

earlier.<sup>7</sup> Spending rose for low-income support programs, which reflected the ramp-up of the Emergency Unemployment Compensation (EUC) program and, more generally, the weaker economic conditions relative to a year ago. Meanwhile, spending for defense, Social Security, and Medicare continued to post solid gains relative to a year earlier.

On November 21, new legislation expanded the EUC program for workers who have exhausted, or will exhaust, the previously available 13 weeks of EUC benefits.<sup>8</sup> The new law extends EUC benefits for an additional 7 weeks for all eligible individuals and a further 13 weeks for individuals in states with high unemployment rates—defined as a state unemployment rate of 6 percent or above.<sup>9</sup> This expansion of the EUC program is estimated to cost \$6 billion.

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

Although state and local governments are facing mounting fiscal pressures, the incoming data have not yet shown a dramatic reduction in outlays. On average, state and local employment rose 15,000 in October and November, about the same pace as was recorded over the first nine months of the year. Meanwhile, after factoring in the sizable upward revisions to the data for August and September in the latest monthly construction report, we estimate that real construction outlays rose at an annual rate of 3½ percent in the third quarter.<sup>10</sup> In October (the latest available data), nominal construction spending edged up to a level nearly 1 percent (not at an annual rate) above its third-quarter average; however, given the sizable increases in the state and local construction deflator in recent

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<sup>7</sup> These adjusted outlay figures exclude financial transactions and so do not include the equity purchases related to the Troubled Assets Relief Program (TARP) or the government-sponsored enterprise (GSE) equity purchase program for Fannie Mae and Freddie Mac. In October and November, TARP-related equity purchases totaled \$192 billion, while GSE-related equity purchases equaled \$14 billion. The Office of Management and Budget (OMB) scores both types of transactions as outlays in the unadjusted unified federal budget. Including these transactions in federal outlays significantly increases the budget deficit in the past two months (as shown by the thin line in the “Surplus or Deficit” chart and the unadjusted deficit figures in the memo line of the table). In contrast to OMB, the Congressional Budget Office believes that these asset purchases should be recorded on an accrual basis and calculates that the present value cost of these transactions equals about \$64 billion, or \$142 billion less than the cash disbursements recorded by the Treasury.

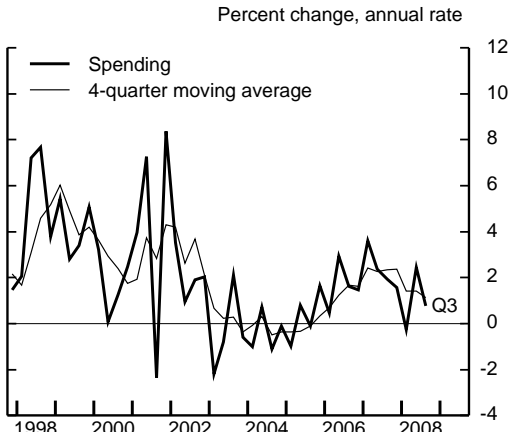
<sup>8</sup> The new expansion is scheduled to expire in March 2009, along with the original EUC benefit program.

<sup>9</sup> In October, 22 states plus the District of Columbia (about 58 percent of the total labor force) had unemployment rates at or above 6 percent.

<sup>10</sup> In the preliminary national income and product accounts (NIPA) release for the third quarter, the Bureau of Economic Analysis (BEA) had estimated that real construction outlays fell at an annual rate of 0.4 percent. Because of the stronger construction data, we expect the BEA to raise its estimate of the increase in total state and local purchases from 0.8 percent to 1.4 percent.

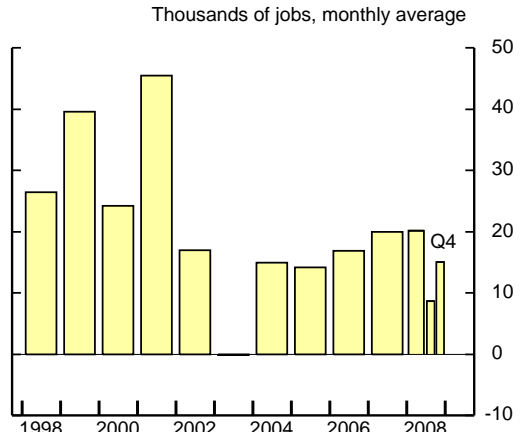
## State and Local Indicators

**Real Spending on Consumption & Investment**



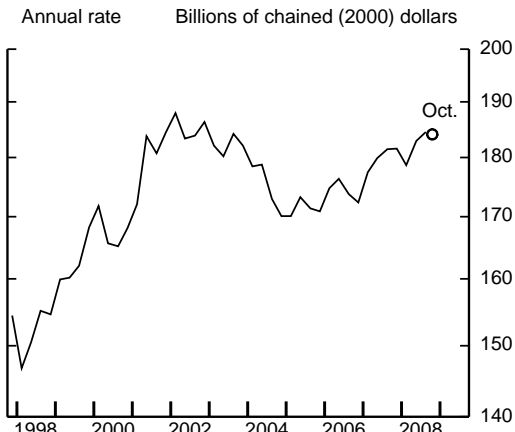
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; national income and product accounts.

**Net Change in Employment**



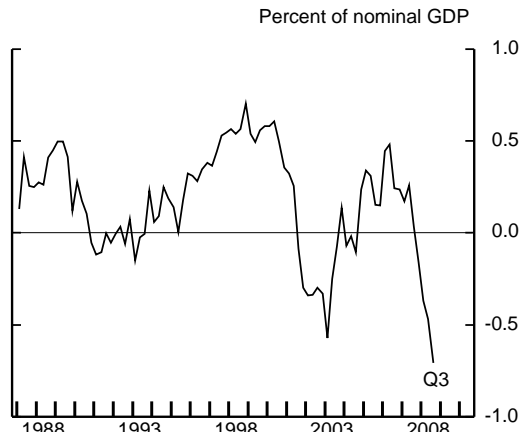
Note: Q4 is the average of October and November.  
Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Employment Situation.

**Real Construction**



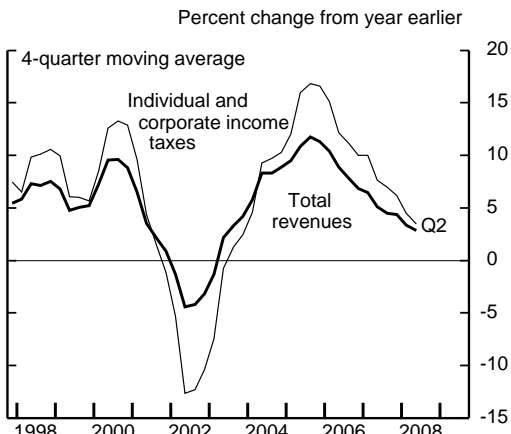
Note: Nominal CPIP deflated by BEA prices through Q3 and by a staff projection thereafter.  
Source: Census Bureau, Construction Spending.

**Net Saving**



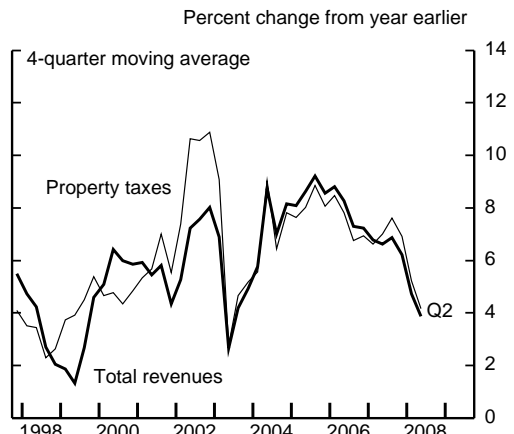
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; national income and product accounts.

**State Revenues**



Source: Census Bureau, Quarterly Summary of State and Local Government Tax Revenue.

**Local Revenues**



Source: Census Bureau, Quarterly Summary of State and Local Government Tax Revenue.



quarters, the increase in nominal spending in October probably implies little—if any—gain in real terms.

The state and local revenue picture remains grim. On the basis of information from 42 states, the Rockefeller Institute of Government estimated that state tax collections were flat in nominal terms on a year-over-year basis in the third quarter of 2008, compared with an increase of 3 percent for the preceding year. State personal income taxes rose just 1½ percent over the year ending in the third quarter, while sales taxes fell ¾ percent and corporate income taxes fell more than 8 percent. Since the end of the third quarter, the bad news has continued to pile up as revenues in many jurisdictions have fallen short of expectations and budget gaps have ballooned. Indeed, when surveyed by the National Conference of State Legislatures (NCSL) in November, many states reported that revenues in every major category were running below projections, and some states that had previously enjoyed strong revenue collections were scaling back their expectations because of the recent declines in oil and commodity prices. According to the NCSL, a number of states have already trimmed spending during the current fiscal year (which began on July 1 in most states), although more-significant budget-repair actions will likely be deferred until legislatures meet in early 2009. Actions to date have included across-the-board cuts in spending (10 states), cuts in education programs (8 states), and hiring freezes (19 states); 11 states have tapped rainy day and other funds to help close budget gaps.

### **Prices**

Both headline and core consumer price inflation slowed further in recent months. With energy prices falling sharply, overall PCE prices decreased 0.6 percent in October after being little changed in August and September; over the preceding three-month period, overall PCE prices increased at an annual rate of more than 7 percent. Excluding food and energy, PCE prices were unchanged in October, bringing their three-month change to an annual rate of 1.4 percent, down from the 2.7 percent rate of increase recorded over the preceding three months. The 12-month change in core PCE prices slowed to 2.1 percent, the same as in the year-earlier period. Meanwhile, prices of goods at earlier stages of production, both intermediate products and commodities, have continued to decline.

Consumer energy prices continued their recent slide, falling almost 9 percent in October after a cumulative 5 percent decline over August and September. Survey data suggest that retail gasoline prices, which dropped 13½ percent in October, fell even more sharply in November and the beginning of December. Crude oil prices have also moved down

**Price Measures**  
(Percent change)

Measures	12-month change		3-month change		1-month change	
	Oct. 2007	Oct. 2008	Annual rate		Monthly rate	
			July 2008	Oct. 2008	Sept. 2008	Oct. 2008
<i>CPI</i>						
<b>Total</b>	<b>3.5</b>	<b>3.7</b>	<b>10.6</b>	<b>-4.4</b>	<b>.0</b>	<b>-1.0</b>
Food	4.4	6.3	8.4	5.8	.6	.3
Energy	14.5	11.5	79.4	-43.1	-1.9	-8.6
<b>Ex. food and energy</b>	<b>2.2</b>	<b>2.2</b>	<b>3.5</b>	<b>1.1</b>	<b>.1</b>	<b>-1.1</b>
Core goods	-.5	.1	1.7	-1.9	-.2	-.4
Core services	3.2	3.0	4.1	2.2	.3	.0
Shelter	3.3	2.2	2.9	1.6	.3	.0
Other services	3.1	4.2	6.0	3.0	.2	.0
Chained CPI (n.s.a.) <sup>1</sup>	3.2	3.3	...	...	...	...
Ex. food and energy <sup>1</sup>	1.8	1.9	...	...	...	...
<i>PCE prices</i>						
<b>Total</b>	<b>3.1</b>	<b>3.2</b>	<b>7.4</b>	<b>-1.8</b>	<b>.1</b>	<b>-.6</b>
Food and beverages	4.2	6.2	7.5	6.5	.7	.4
Energy	15.6	11.8	80.7	-43.6	-1.8	-8.8
<b>Ex. food and energy</b>	<b>2.1</b>	<b>2.1</b>	<b>2.7</b>	<b>1.4</b>	<b>.2</b>	<b>.0</b>
Core goods	-.9	.2	.5	-.6	.0	-.2
Core services	3.3	2.8	3.6	2.1	.2	.1
Housing services	3.2	2.5	2.6	2.0	.3	.1
Other services	3.4	2.9	4.0	2.2	.2	.1
Core market-based	1.7	2.0	2.7	1.5	.2	.0
Core non-market-based	4.1	2.6	3.1	1.0	.1	-.1
<i>PPI</i>						
<b>Total finished goods</b>	<b>6.1</b>	<b>5.2</b>	<b>18.9</b>	<b>-15.1</b>	<b>-.4</b>	<b>-2.8</b>
Food	7.1	6.5	10.4	1.3	.2	-.2
Energy	16.3	5.5	71.8	-57.3	-2.9	-12.8
<b>Ex. food and energy</b>	<b>2.6</b>	<b>4.4</b>	<b>4.9</b>	<b>4.4</b>	<b>.4</b>	<b>.4</b>
Core consumer goods	2.9	4.7	5.4	4.1	.5	.3
Capital equipment	2.1	4.1	4.8	4.2	.5	.5
Intermediate materials	5.7	10.2	34.3	-21.6	-1.2	-3.9
Ex. food and energy	2.1	9.7	21.0	-1.7	-.3	-1.7
Crude materials	26.8	-1.4	75.7	-81.0	-7.9	-18.6
Ex. food and energy	18.1	-3.1	26.2	-70.3	-9.4	-17.0

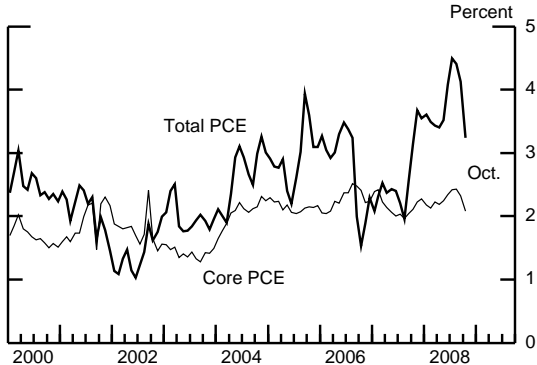
1. Higher-frequency figures are not applicable for data that are not seasonally adjusted.

... Not applicable.

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

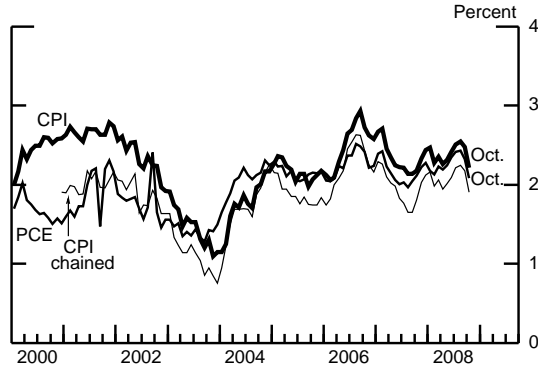
### Consumer Prices (12-month change except as noted)

PCE Prices



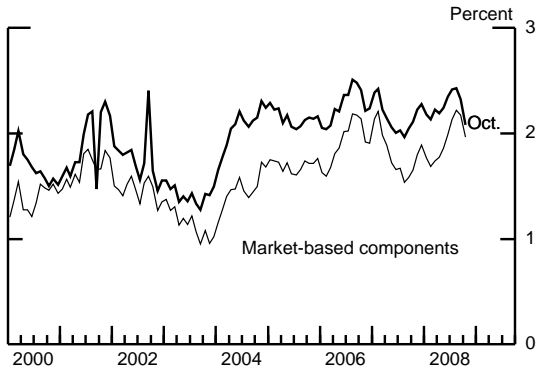
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

CPI and PCE ex. Food and Energy



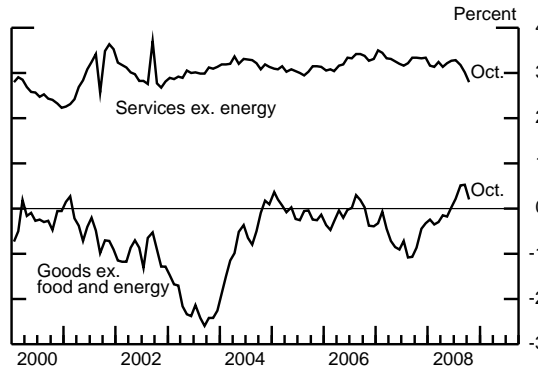
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for PCE, U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE excluding Food and Energy



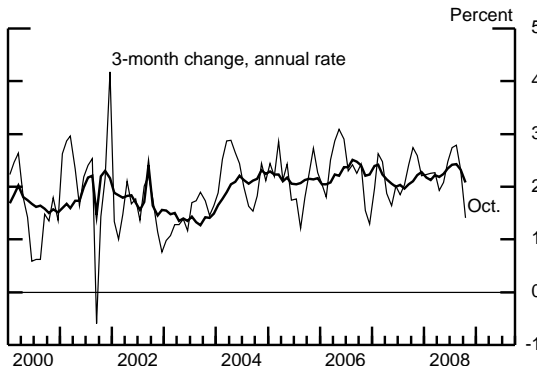
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Goods and Services



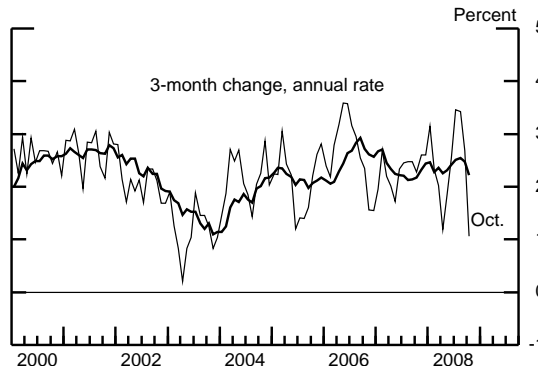
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE excluding Food and Energy



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

CPI excluding Food and Energy

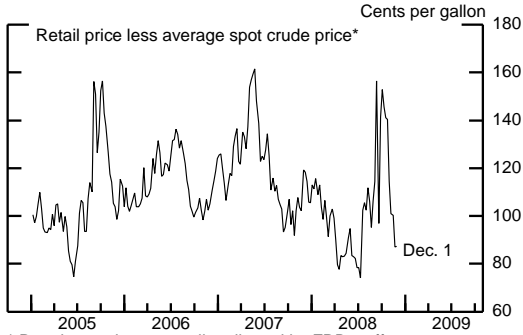


Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

### Energy and Food Price Indicators

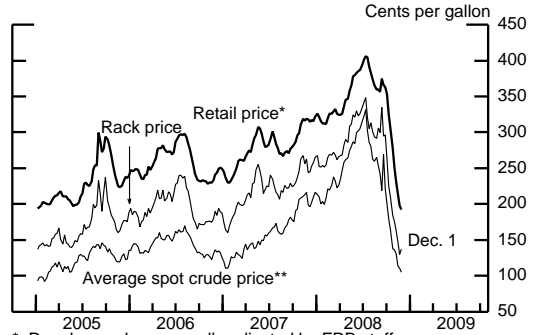
(Data from U.S. Department of Energy, Energy Information Administration except as noted)

Total Gasoline Margin



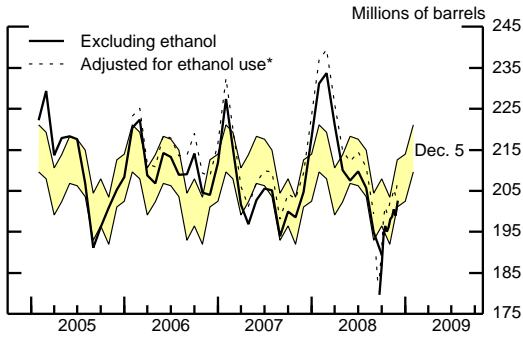
\* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas intermediate, 40% Maya heavy crude. Includes gasoline taxes.

Gasoline Price Decomposition



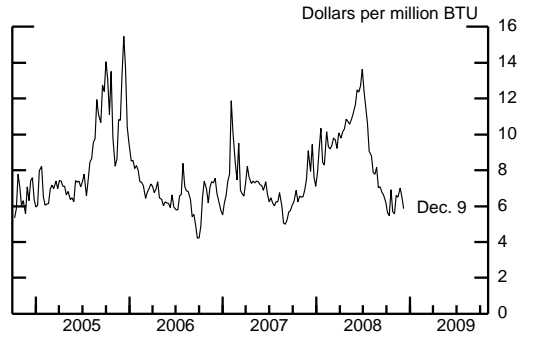
\* Regular grade seasonally adjusted by FRB staff.  
\*\* 60% West Texas intermediate, 40% Maya heavy crude.

Gasoline Inventories



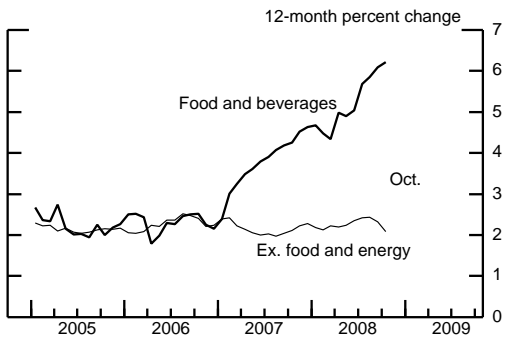
Note: Shaded region is average historical range as calculated by U.S. Dept. of Energy. Monthly data through September 2008, weekly data thereafter.  
\* Adjustment for approximate amount of fuel ethanol to be blended with RBOB component of inventories; estimated by FRB staff.

Natural Gas Prices



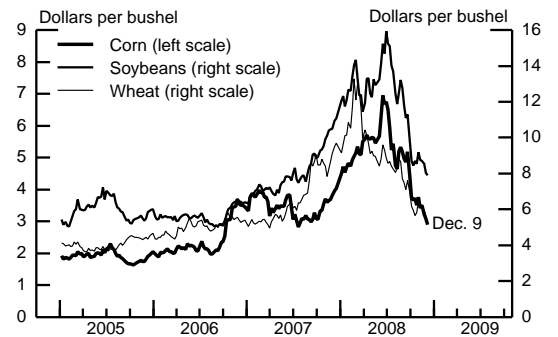
Note: National average spot price.  
Source: Bloomberg.

PCE Food Prices



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

Spot Agricultural Commodity Prices



Source: Commodity Research Bureau.

substantially since the October Greenbook, although not as sharply as gasoline prices: Gasoline margins have moved down toward normal levels as gasoline inventories have begun to recover from their low levels after the refinery outages due to Hurricanes Gustav and Ike.

In contrast, consumer food prices have continued to trend up. Although the increase of 0.4 percent in consumer food prices in October was less than in preceding months, the change was held down by price declines in the volatile category of fruits and vegetables. Prices of other foods at home and of restaurant meals posted further sizable increases. Over the 12 months ending in October, food prices increased 6¼ percent after having risen 4¼ percent over the previous 12 months. However, prices for most agricultural commodities have fallen further since the October Greenbook, and the Commodity Research Bureau (CRB) index of spot foodstuffs is down by more than one-third since early July.

As noted, core PCE prices have continued to increase at slower rates than they did in the summer, with an especially low reading in October. Some of the more erratic categories of prices (such as lodging away from home and used cars) experienced especially large price declines in October. But the recent slowing has generally been as widespread as was the acceleration of these prices back in the spring. That earlier pickup in core PCE inflation likely reflected an acceleration in import prices and the pass-through of the previous large increases in the costs of energy and materials. The recent reversal of these influences, as well as the weak pace of economic activity, likely has started to show through to core consumer prices, but given the long lags of pass-through, the full effects of the recent abatement of these cost pressures may take some time to fully materialize.

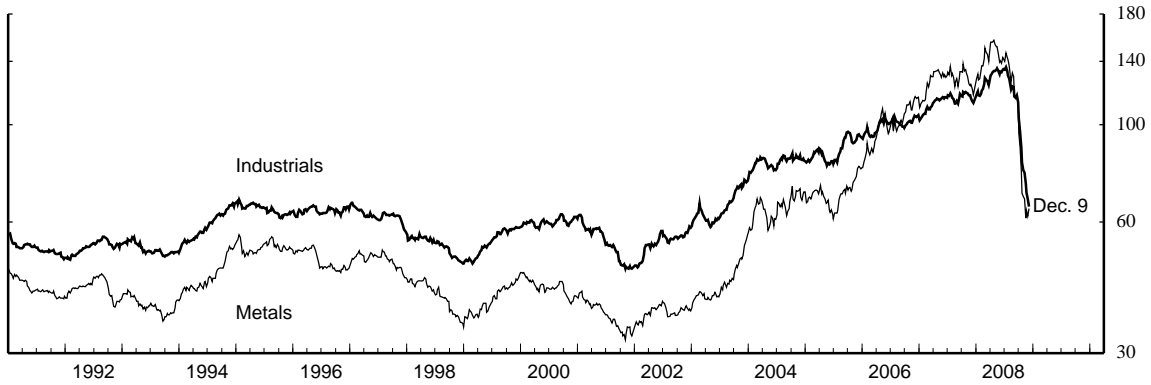
Prices at earlier stages of processing have continued to retreat. After having risen significantly in each of the first eight months of this year, the producer price index for core intermediate materials fell 1.7 percent in October, the second consecutive monthly decline. This drop likely reflects some pass-through of declining commodity prices, which started falling in mid-July and have dropped further since the close of the October Greenbook. Since late October, the *Journal of Commerce* index of industrial materials prices has plunged 24 percent, and the CRB index of spot industrials has fallen 12 percent. These two indexes now stand about 50 percent and 40 percent, respectively, below their levels in mid-July.

Survey-based measures of inflation expectations have continued to fall or hold steady. Median expected inflation over the next 5 to 10 years, as measured by the

## Commodity Price Indexes

Journal of Commerce

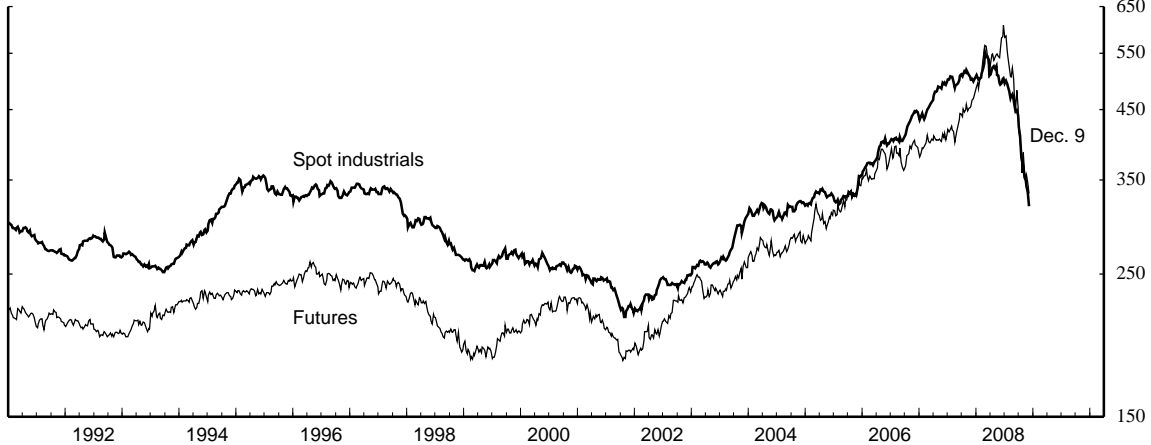
Ratio scale, 2006 = 100



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* (JOC) data is held by CIBCR, 1994.

Commodity Research Bureau

Ratio scale, 1967 = 100



Note: The Commodity Research Bureau (CRB) spot industrials index consists entirely of industrial commodities, excluding energy. The CRB futures index gives about a 60 percent weight to food commodities and splits the remaining weight roughly equally among energy commodities, industrial commodities, and precious metals.

### Selected Commodity Price Indexes (Percent change)

Index	2007 <sup>1</sup>	12/18/07 to 10/21/08 <sup>2</sup>	10/21/08 <sup>2</sup> to 12/9/08	52-week change to 12/9/08
JOC industrials	7.6	-21.0	-26.8	-42.8
JOC metals	2.1	-33.4	-17.7	-47.1
CRB spot industrials	11.1	-23.9	-16.1	-36.6
CRB spot foodstuffs	25.5	-3.7	-15.7	-18.8
CRB futures	18.2	-18.1	-12.8	-28.3

1. From the last week of the preceding year to the last week of the year indicated.
2. October 21, 2008, is the Tuesday preceding publication of the October Greenbook.

**Broad Measures of Inflation**

(Percent change, Q3 to Q3)

Measure	2005	2006	2007	2008
<i>Product prices</i>				
GDP price index	3.4	3.2	2.5	2.7
Less food and energy	3.2	3.2	2.3	2.3
Nonfarm business chain price index	3.5	3.1	1.8	2.5
<i>Expenditure prices</i>				
Gross domestic purchases price index	3.9	3.3	2.4	4.1
Less food and energy	3.1	3.1	2.3	2.4
PCE price index	3.2	2.9	2.2	4.3
Less food and energy	2.1	2.5	2.0	2.4
PCE price index, market-based components	3.1	2.7	2.0	4.5
Less food and energy	1.7	2.1	1.6	2.2
CPI	3.8	3.3	2.4	5.3
Less food and energy	2.1	2.8	2.1	2.5
Chained CPI	3.4	3.1	2.0	4.6
Less food and energy	1.8	2.6	1.7	2.2
Median CPI	2.4	3.1	3.0	3.3
Trimmed mean CPI	2.5	2.8	2.5	3.5
Trimmed mean PCE	2.4	2.9	2.4	2.7

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

**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		
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
Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
Q4	n.a.	n.a.	n.a.	n.a.	n.a.	2.5	2.2
2008:July	5.6	6.3	5.1	3.5	3.2	...	...
Aug.	5.4	5.3	4.8	3.9	3.2	2.5	2.2
Sept.	4.9	4.6	4.3	3.3	3.0	...	...
Oct.	3.7	4.3	3.9	3.1	2.9	...	...
Nov.	n.a.	2.9	2.9	3.1	2.9	2.5	2.2

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.

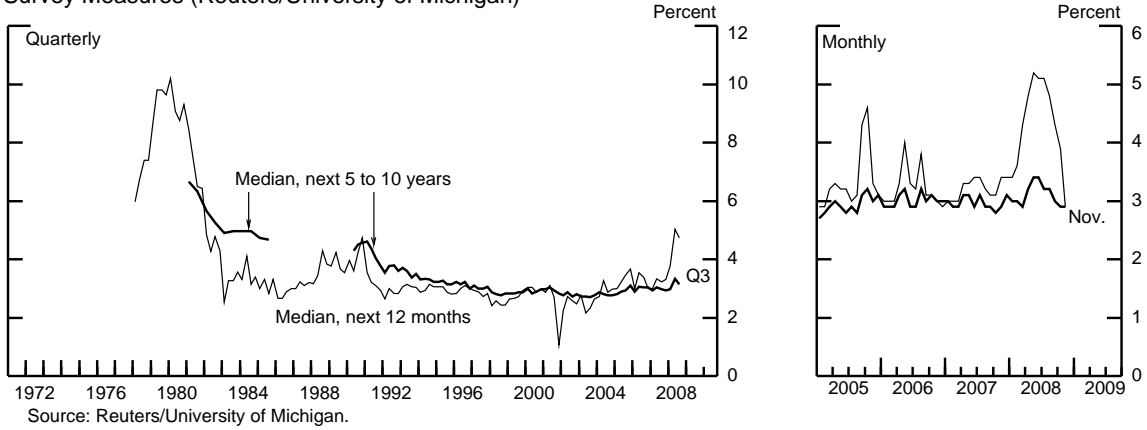
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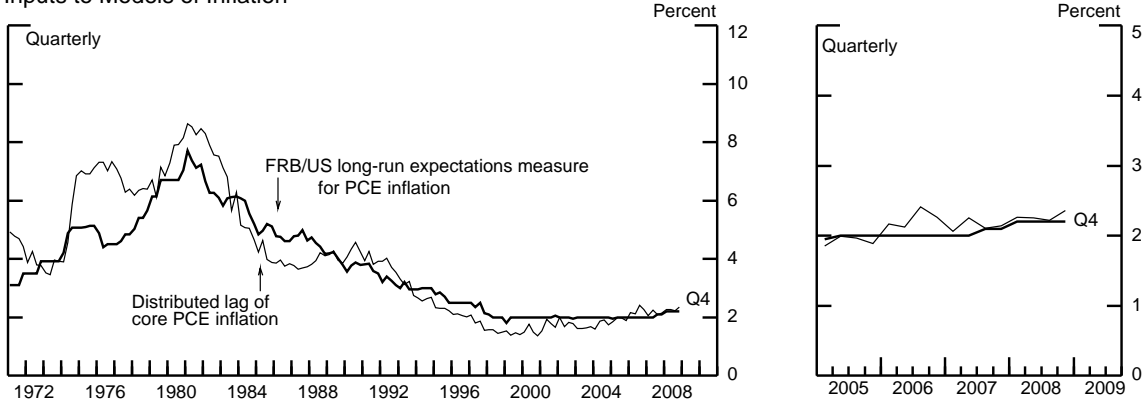
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for Reuters/Michigan Survey, Reuters/University of Michigan; for professional forecasters, the Federal Reserve Bank of Philadelphia.

## Measures of Expected Inflation

### Survey Measures (Reuters/University of Michigan)

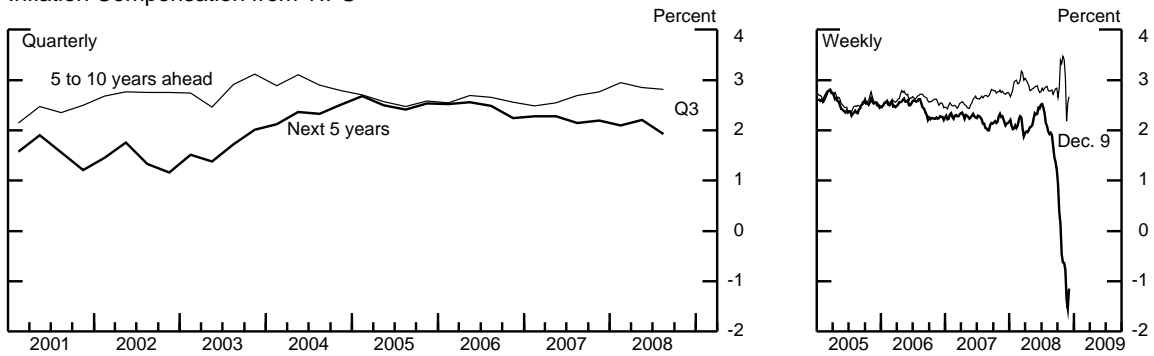


### Inputs to Models of Inflation



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

### Inflation Compensation from TIPS



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



Reuters/Michigan Survey, held at 2.9 percent in the November final release; this reading was down from a high of 3.4 percent in May and June but similar to its levels from a year ago and within the narrow range in which it fluctuated over the previous few years.

Median expected inflation over the next 12 months fell to 2.9 percent in the November Reuters/Michigan Survey, its lowest reading of the year. As discussed in the “Domestic Financial Developments” section, Treasury inflation-protected securities (TIPS) have exhibited heightened volatility in the past few months. As a result, the staff’s measure of inflation compensation based on these yields is probably not very informative at this time about movements in inflation expectations or in inflation risk premiums.

### **Labor Costs**

Labor cost increases have remained moderate. The employment cost index (ECI) for hourly compensation of private industry workers rose at an annual rate of 2.6 percent over the three months ending in September. The 12-month change in the ECI was 2.8 percent, a little lower than the increase seen over the preceding 12-month period. Similarly, compensation per hour in the nonfarm business sector increased at an annual rate of 4.1 percent in the third quarter after a downward-revised rise of 0.9 percent in the second quarter. The increase over the most recent four quarters, at 3½ percent, was down 1 percentage point from the increase over the previous four quarters.

The staff estimates that productivity in the nonfarm business sector rose at an annual rate of 1.4 percent in the third quarter.<sup>11</sup> Over the four quarters ending in the third quarter of this year, productivity rose 2 percent, down from 2½ percent over the previous four quarters. Combining the information on hourly output and compensation, the staff estimates that unit labor costs increased 1½ percent over the most recent four quarters, somewhat less than its average rate over the past several years.

More recently, average hourly earnings of production and nonsupervisory workers on private nonfarm payrolls rose 0.4 percent in November, thereby bringing the year-over-year change to 3¾ percent—about the same as its increase over the previous 12 months.

According to the ECI, employer contributions for health insurance rose about 4 percent over the 12 months ending in September; this rise followed back-to-back increases of slightly less than 5 percent over the preceding two years. Taken together, the available indicators thus far provide no evidence that any dramatic change in the rate of increase of

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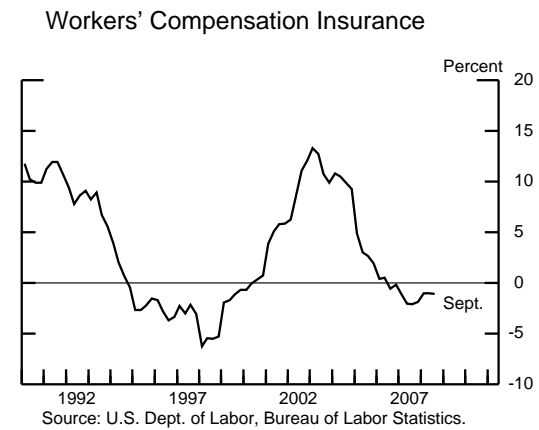
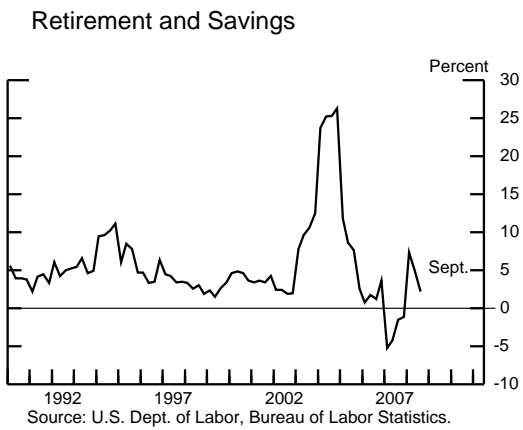
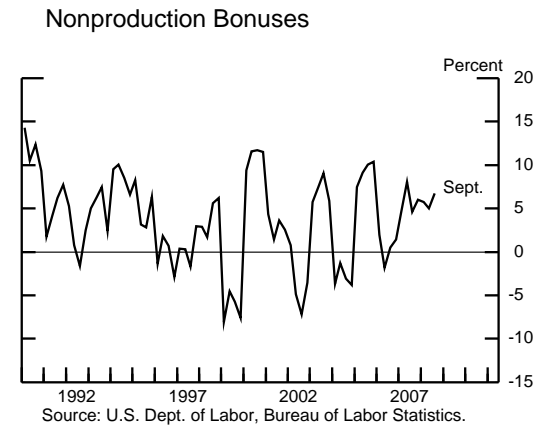
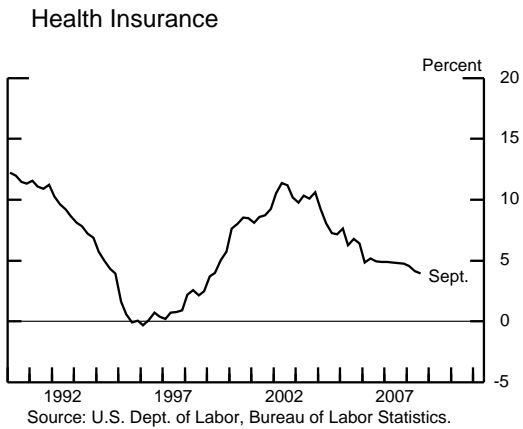
<sup>11</sup> According to the productivity and cost data based on the preliminary GDP release, productivity in the nonfarm business sector increased at an annual rate of 1.3 percent last quarter. The staff estimate is based on source data that became available after the GDP release.

**Change in Employment Cost Index of Hourly Compensation  
for Private-Industry Workers**

Measure	2007		2008		
	Sept.	Dec.	Mar.	June	Sept.
	Quarterly change (compound annual rate) <sup>1</sup>				
<b>Total hourly compensation</b>	<b>3.1</b>	<b>3.5</b>	<b>3.0</b>	<b>2.3</b>	<b>2.6</b>
Wages and salaries	3.1	3.1	3.4	3.0	2.2
Benefits	3.1	3.1	2.3	1.9	2.3
	12-month change				
<b>Total hourly compensation</b>	<b>3.1</b>	<b>3.0</b>	<b>3.2</b>	<b>3.0</b>	<b>2.8</b>
Wages and salaries	3.4	3.3	3.2	3.1	2.9
Benefits	2.4	2.4	3.2	2.6	2.4

1. Seasonally adjusted by the Bureau of Labor Statistics.  
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

**Change in ECI Benefits (confidential)**  
(Private-industry workers; 12-month change)



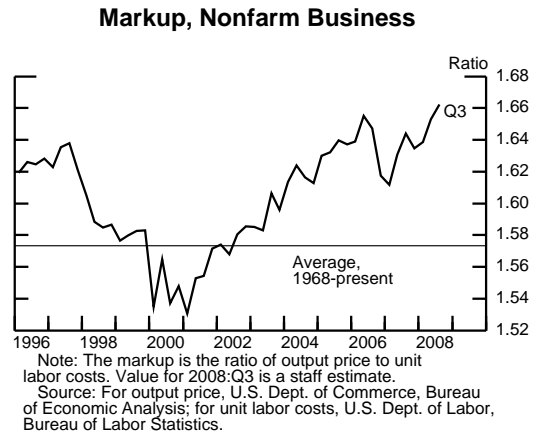
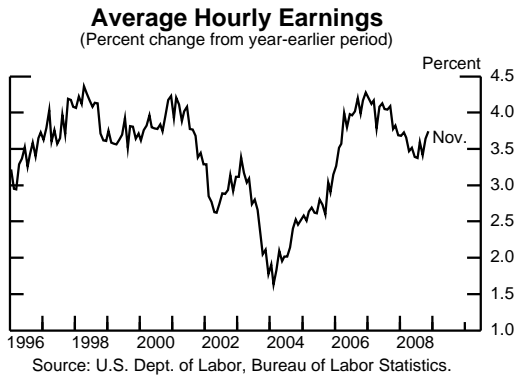
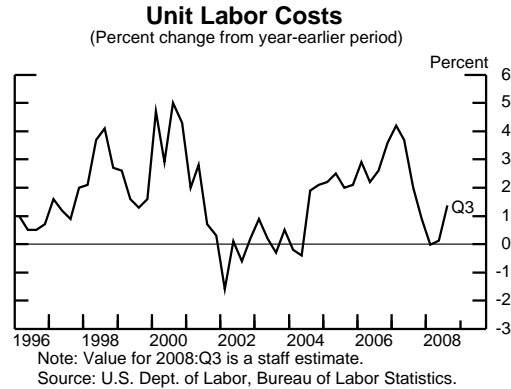
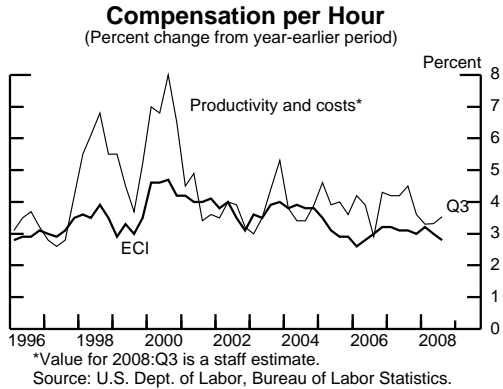
**Hourly Compensation and Unit Labor Costs**

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

Category	2006:Q3 to 2007:Q3	2007:Q3 to 2008:Q3 <sup>e</sup>	2007	2008		
			Q4	Q1	Q2	Q3 <sup>e</sup>
<i>Compensation per hour</i> Nonfarm business	4.5	3.5	5.3	3.8	.9	4.1
<i>Output per hour</i> Nonfarm business	2.5	2.1	.8	2.6	3.6	1.4
<i>Unit labor costs</i> Nonfarm business	2.0	1.4	4.5	1.2	-2.6	2.6

<sup>e</sup> Staff estimate.

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



health insurance costs is in the offing. Private surveys—which typically show somewhat larger increases than the ECI—suggest that overall premiums (that is, the shares paid by both employers and employees) will rise in the neighborhood of 5 percent to 6 percent in 2009, similar to the survey results for 2008.<sup>12</sup> Among the major plans for public employees, premiums in the Federal Employees Health Benefits Program are expected to increase 7 percent in 2009 after a rise of just 2 percent in 2008. The premiums for the California Public Employees' Retirement System are expected to move up 5 percent in 2009 after a 7 percent increase in 2008.

Last Page of Domestic Nonfinancial Developments

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<sup>12</sup> The private surveys were released in September and thus predate the sharp deterioration in economic conditions, which may be leading some firms to purchase less expensive health plans or to require employees to shoulder a greater share of the premiums.

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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 Dec. 9 from selected dates (percentage points)		
	Aug. 6	Sept. 15	Oct. 28	Dec. 9	2007 Aug. 6	2008 Sept. 15	2008 Oct. 28	
<i>Short-term</i>								
FOMC intended federal funds rate	5.25	2.00	1.50	1.00	-4.25	-1.00	-.50	
Treasury bills <sup>1</sup>								
3-month	4.74	1.03	.76	.03	-4.71	-1.00	-.73	
6-month	4.72	1.52	1.23	.25	-4.47	-1.27	-.98	
Commercial paper (A1/P1 rates) <sup>2</sup>								
1-month	5.26	2.47	2.71	.79	-4.47	-1.68	-1.92	
3-month	5.29	2.73	2.89	1.35	-3.94	-1.38	-1.54	
Large negotiable CDs <sup>1</sup>								
3-month	5.34	3.45	3.63	2.13	-3.21	-1.32	-1.50	
6-month	5.27	3.85	3.73	2.55	-2.72	-1.30	-1.18	
Eurodollar deposits <sup>3</sup>								
1-month	5.33	2.70	3.75	2.15	-3.18	-.55	-1.60	
3-month	5.35	3.00	4.50	3.00	-2.35	.00	-1.50	
Bank prime rate	8.25	5.00	4.50	4.00	-4.25	-1.00	-.50	
<i>Intermediate- and long-term</i>								
U.S. Treasury <sup>4</sup>								
2-year	4.49	1.78	1.49	.58	-3.91	-1.20	-.91	
5-year	4.52	2.60	2.81	1.71	-2.81	-.89	-1.10	
10-year	4.82	3.68	4.43	3.18	-1.64	-.50	-1.25	
U.S. Treasury indexed notes <sup>5</sup>								
5-year	2.43	1.25	3.64	2.82	.39	1.57	-.82	
10-year	2.48	1.70	3.29	2.61	.13	.91	-.68	
Municipal general obligations (Bond Buyer) <sup>6</sup>	4.51	4.54	5.32	5.58	1.07	1.04	.26	
Private instruments								
10-year swap	5.44	4.24	4.26	2.98	-2.46	-1.26	-1.28	
10-year FNMA <sup>7</sup>	5.34	4.19	5.36	3.79	-1.55	-.40	-1.57	
10-year AA <sup>8</sup>	6.12	6.63	8.26	7.05	.93	.42	-1.21	
10-year BBB <sup>8</sup>	6.57	7.11	9.77	9.64	3.07	2.53	-.13	
10-year high yield <sup>8</sup>	9.21	10.86	16.27	18.03	8.82	7.17	1.76	
Home mortgages (FHLMC survey rate) <sup>9</sup>								
30-year fixed	6.59	5.78	6.46	5.53	-1.06	-.25	-.93	
1-year adjustable	5.65	5.03	5.38	5.02	-.63	-.01	-.36	
<b>Stock exchange index</b>								
Stock exchange index	Record high		2008			Change to Dec. 9 from selected dates (percent)		
	Level	Date	Sept. 15	Oct. 28	Dec. 9	Record high	2008 Sept. 15	2008 Oct. 28
Dow Jones Industrial	14,165	10-9-07	10,918	9,065	8,691	-38.64	-20.39	-4.12
S&P 500 Composite	1,565	10-9-07	1,193	941	889	-43.22	-25.49	-5.51
Nasdaq	5,049	3-10-00	2,180	1,649	1,547	-69.35	-29.02	-6.19
Russell 2000	856	7-13-07	690	483	466	-45.58	-32.48	-3.49
Wilshire 5000	15,807	10-9-07	12,184	9,341	8,870	-43.88	-27.20	-5.04

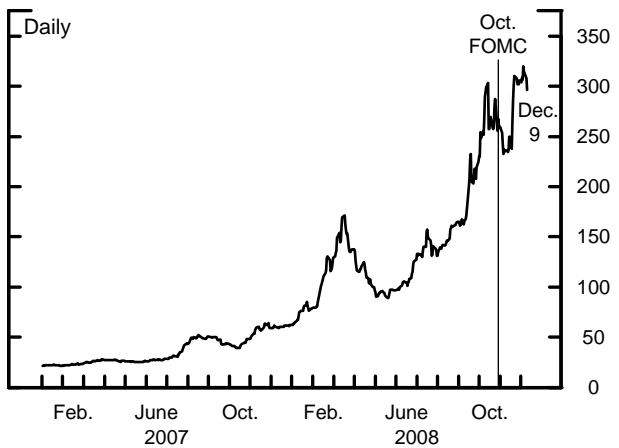
1. Secondary market.
2. Financial commercial paper.
3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time.
4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities.
5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities 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 December 9, 2008, are for the week ending December 4, 2008.

NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.  
September 15, 2008, is the day before the September 2008 FOMC monetary policy announcement.  
October 28, 2008, is the day before the most recent FOMC monetary policy announcement.  
Data for the 3-month commercial paper on December 9, 2008, are from December 4, 2008, the most recent date for which a sufficient volume of new issues was available to calculate this rate.

## Financial Institutions and Market Functioning

Investment-Grade CDS Spreads for Financial Firms  
Basis points



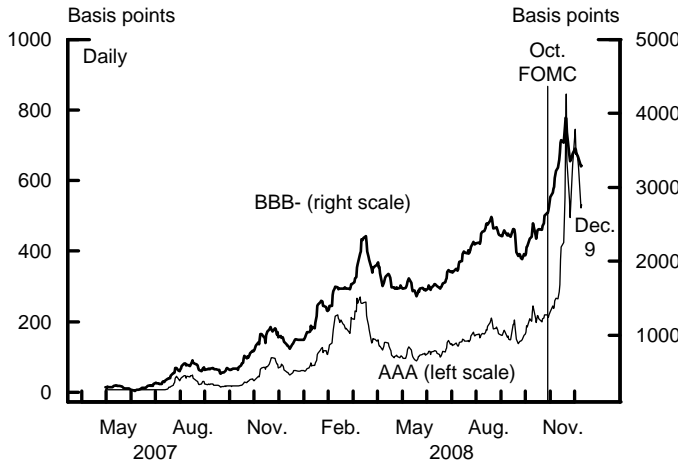
Note: Median spreads for 179 financial firms.  
Source: Markit.

AAA-rated Subprime Mortgage CDS Index Spreads  
Basis points



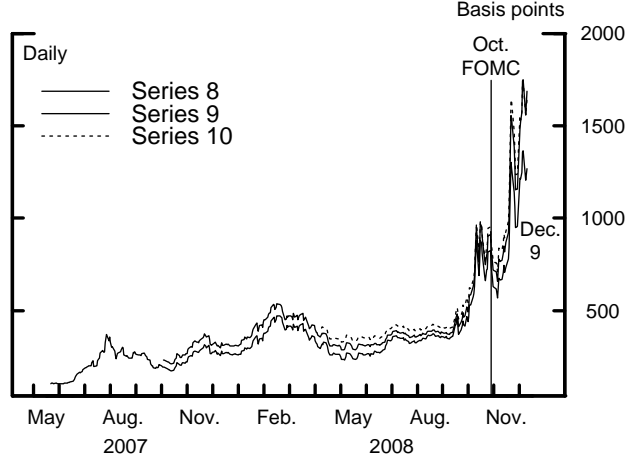
Source: JPMorgan.

CMBX Indexes



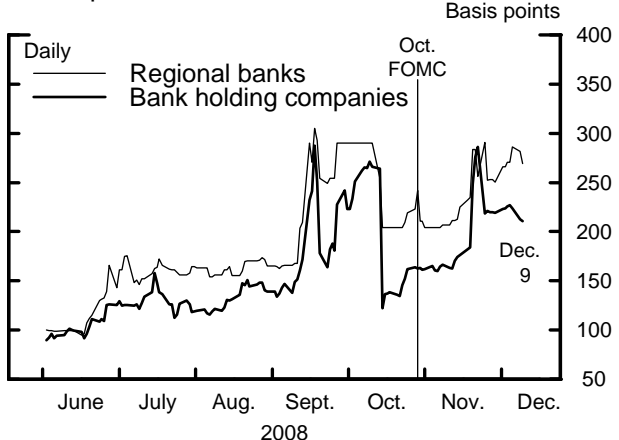
Note: Origination date is April 2007.  
Source: JPMorgan.

LCDX Index



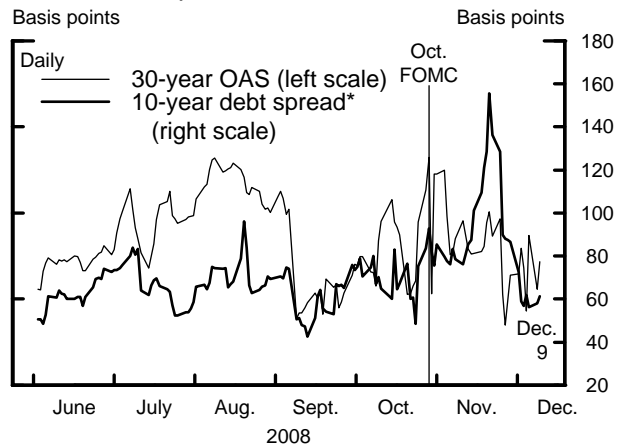
Note: The LCDX index rolls semi-annually when credits that experienced a credit event or exhibited poor liquidity are excluded from the index.  
Source: Markit.

CDS Spreads for U.S. Commercial Banks



Note: Median spreads for 5 regional banks and 6 large bank holding companies (Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, and Wells Fargo).  
Source: Markit.

Fannie Mae Spreads



\* Spread over Treasury securities of comparable maturity.  
Source: Bloomberg.

## **Domestic Financial Developments**

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### **Overview**

Investor concerns about the prospects of a deep and prolonged recession intensified over the intermeeting period. As a result, the expected trajectory of the federal funds rate dropped, and yields on Treasury securities plummeted. Broad equity price indexes fell, and risk spreads on corporate bonds ballooned. Although interest rates on most types of household loans were unchanged or moved down over the intermeeting period, households appeared to face tighter credit supply conditions amid further deterioration in credit quality. The available information suggests that credit flows to businesses and households have slowed further this quarter, likely a reflection of both the tighter financial conditions and reduced borrower demand that has accompanied the weakening of the economy. There were a few signs of improvement in some short-term funding markets, but conditions remained strained. In particular, year-end pressures emerged in the commercial paper and some interbank term funding markets.

Financial institutions remained under stress during the intermeeting period. Heightened concerns about the possible insolvency of Citigroup and the potential systemic implications prompted the U.S. government to offer a rescue package. The Federal Reserve and other authorities took broader steps as well to address the weakening economic outlook and the persistent problems in financial markets. These actions included a program to purchase \$500 billion in mortgage-backed securities (MBS) issued by the housing-related government-sponsored enterprises (GSEs) and Ginnie Mae as well as \$100 billion in debt issued by the GSEs; the actions also included the announcement of a facility to support issuance of certain asset-backed securities.

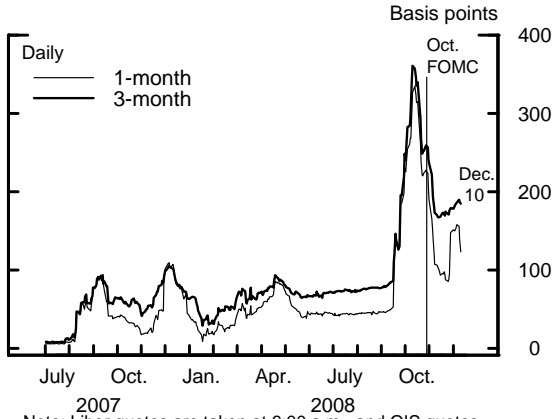
### **Financial Institutions and Financial Market Functioning**

On balance, investor concerns about the condition of financial institutions seemed to intensify over the intermeeting period, with credit default swap (CDS) spreads for investment-grade financial sector firms rising to record highs. After the Treasury Department's announcement on November 12 that funds from the Troubled Asset Relief Program (TARP) would not be used to purchase troubled mortgage-related and other securities, investors pulled back from assets they previously thought might be supported by the program. Spreads for CDS indexes of subprime MBS, commercial mortgage-backed securities, and leveraged loans all increased substantially. The deterioration in asset prices further increased concerns about the solvency of financial institutions with significant holdings of such securities.



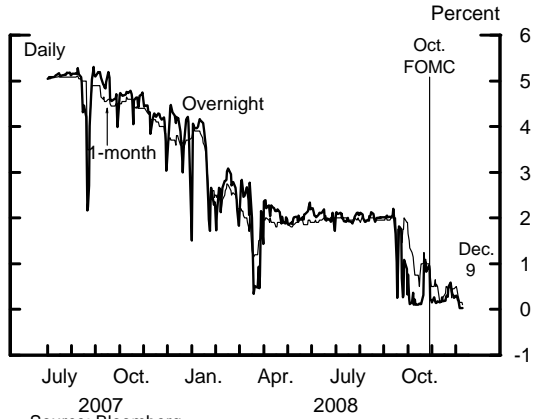
### Short-Term Funding Markets

Spread of Libor over OIS Rates



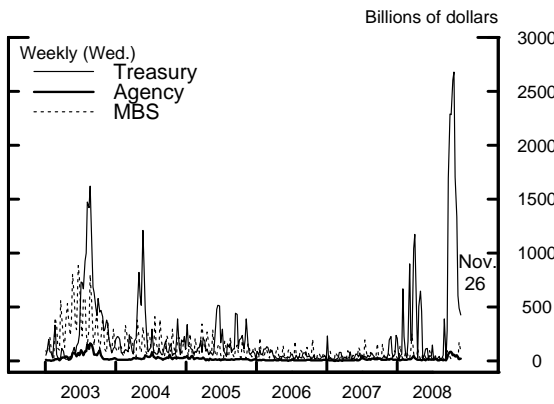
Note: Libor quotes are taken at 6:00 a.m., and OIS quotes are observed at the close of business of the previous trading day.  
 Source: British Bankers' Association.

Repo Rates on Treasury General Collateral



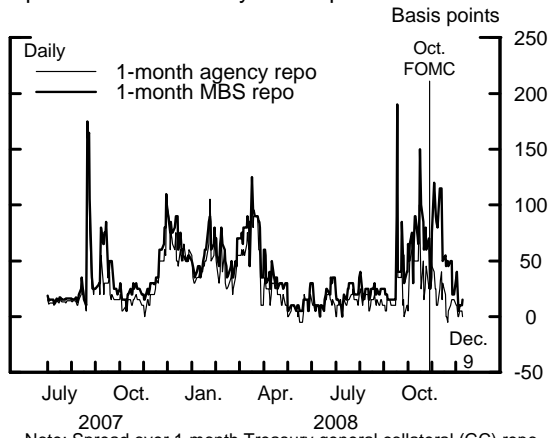
Source: Bloomberg.

Fails to Deliver



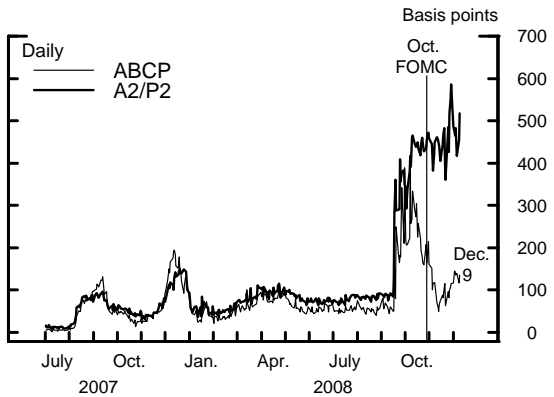
Source: FR 2004 Primary Government Securities Dealers Reports.

Spreads over Treasury GC Repos



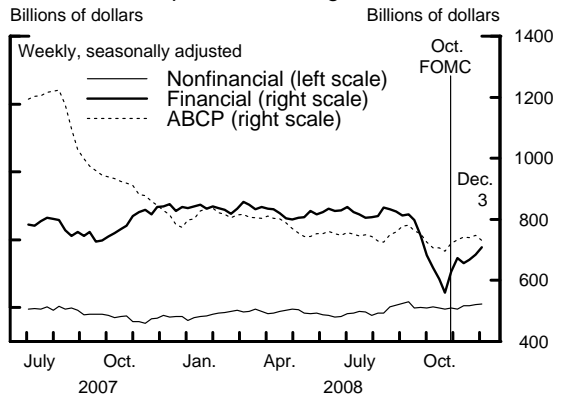
Note: Spread over 1-month Treasury general collateral (GC) repo.  
 Source: Bloomberg, Federal Reserve Bank of New York.

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.  
 Source: Depository Trust & Clearing Corporation.

Commercial Paper Outstandings



Source: Depository Trust & Clearing Corporation.

Investor anxiety intensified after Citigroup's announcement on November 19 that it would bring more than \$17 billion of distressed assets onto its books from a structured investment vehicle, which led to increased speculation about its possible insolvency and an increase in commercial bank CDS spreads more broadly. On November 23, after the Federal Reserve, the Treasury Department, and the Federal Deposit Insurance Corporation (FDIC) announced a joint rescue package for Citigroup, stock prices rose and CDS spreads for financial institutions narrowed some.

On November 25, the Federal Reserve announced that it would initiate a program to purchase MBS issued by the housing-related GSEs and Ginnie Mae and debt issued by the GSEs in an effort to reduce the cost and increase the availability of mortgage credit. Agency debt spreads and option-adjusted spreads on agency MBS fell on the announcement, but option-adjusted spreads have been volatile since then amid reports that the Treasury is considering a plan to finance mortgages at significantly lower-than-market rates. The Federal Reserve simultaneously announced the creation of the Term Asset-Backed Securities Loan Facility (TALF) to support issuance of securities backed by auto loans, student loans, and government-guaranteed small business loans, but the terms of the TALF have not yet been finalized, and conditions in those markets have shown little improvement.

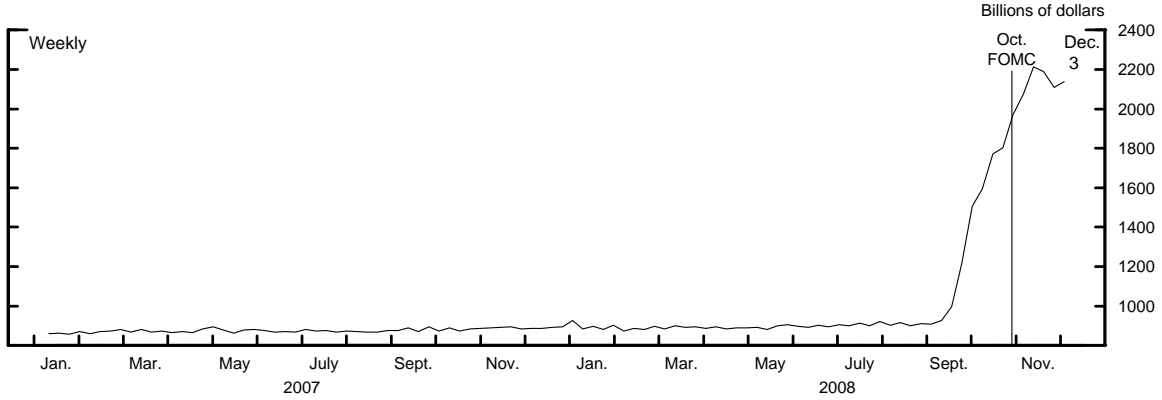
### **Short-Term Funding Markets**

Conditions in money markets remained strained, although there were a few signs of modest improvement. Spreads of London interbank offered rates (Libor) over comparable-maturity overnight index swap (OIS) rates remain extremely wide. These spreads moved lower in early November, but some of this improvement was reversed when the maturity date on one-month deposits crossed into the new year. Trading in term funding markets past one month reportedly remained thin. With market participants anticipating a cut in the target rate at the December meeting, federal funds began trading at record low rates in early December. Throughout the intermeeting period, the effective federal funds rate was well below the target rate in response to the extraordinary level of reserve balances resulting from the Federal Reserve's liquidity programs.

Strains remained in repurchase agreement (repo) markets over the period. Rates on Treasury general collateral (GC) repos were near zero. Fails to deliver in the Treasury market dropped sharply, in part because of a decline in transaction volume as well as industry efforts to resolve outstanding fails amid discussions of potential regulatory changes to address the issue. Spreads on repo transactions backed by agency and MBS

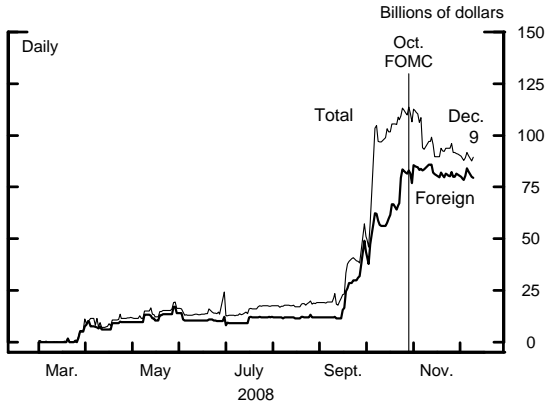
### Federal Reserve Liquidity Provision

Total Federal Reserve Assets



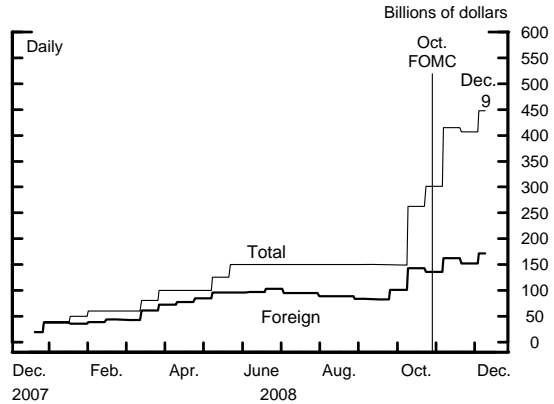
Source: Board of Governors of the Federal Reserve System, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

Primary Credit



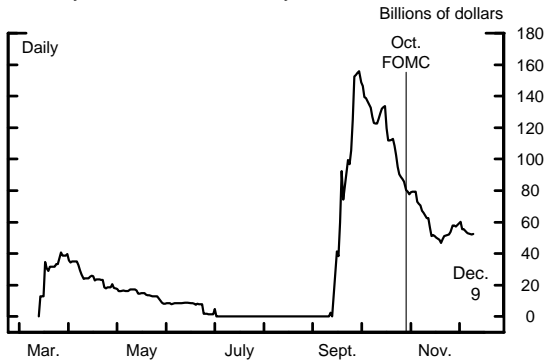
Source: Federal Reserve Board.

Term Auction Facility



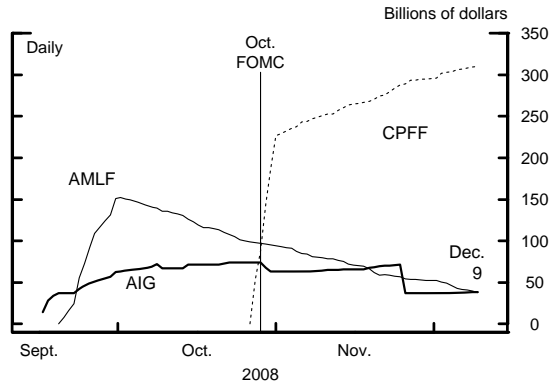
Source: Federal Reserve Board.

Primary Dealer Credit Facility



Source: Federal Reserve Board.

Other Credit Extensions



Note: AMLF is Asset-Backed Commercial Paper Money Market Mutual Fund Lending Facility; AIG is American International Group, Inc.; CPFF is Commercial Paper Funding Facility.  
Source: Federal Reserve Board.

collateral over Treasury GC rates declined, on net, but bid-ask spreads and haircuts continue to be very elevated.

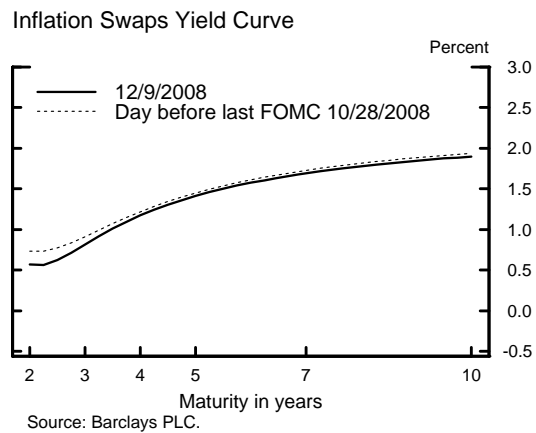
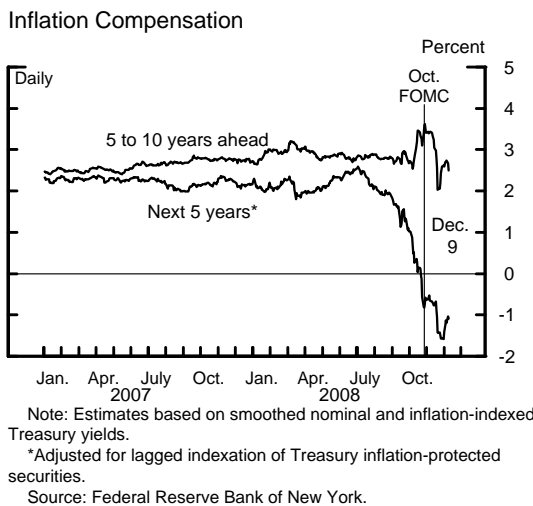
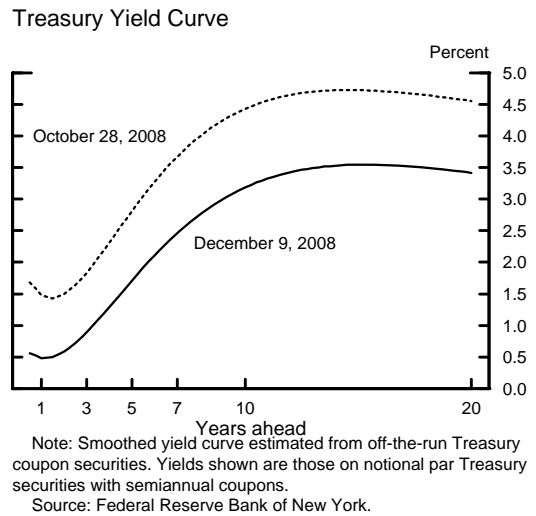
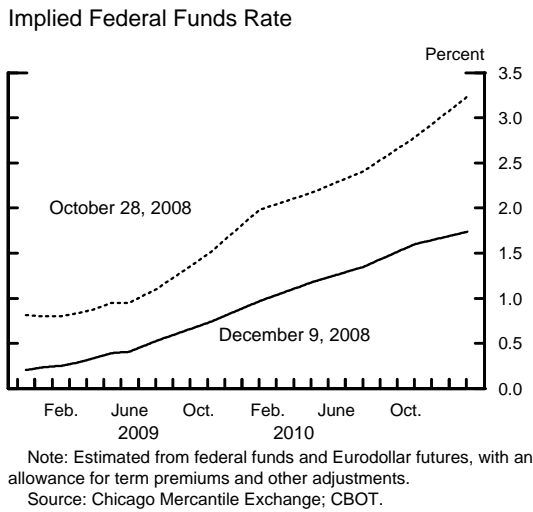
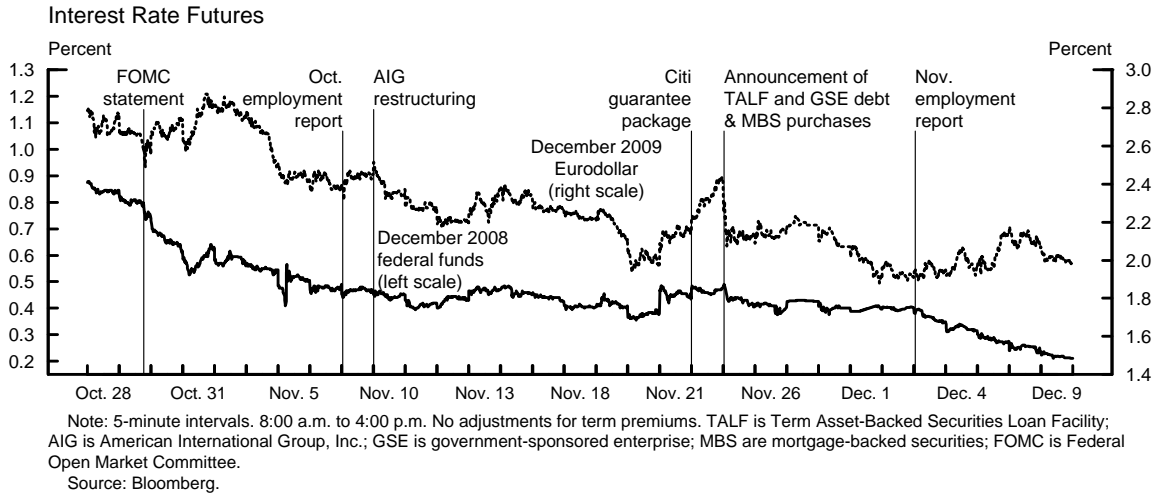
The Commercial Paper Funding Facility (CPFF), which purchases 90-day A1/P1-rated commercial paper (CP), began operation on October 27. Spreads on 30-day asset-backed commercial paper (ABCP) continued to narrow after the CPFF came on line but subsequently reversed part of the decline as that maturity extended over year-end. Spreads on A2/P2 paper, which is not eligible for the CPFF, remained extremely elevated. Reflecting heavy issuance into the CPFF, unsecured financial CP and ABCP outstanding bounced back from their respective October lows. Meanwhile, unsecured nonfinancial CP outstanding has increased only modestly over the period.

### **Federal Reserve Liquidity Provision**

The level of total Federal Reserve assets rose significantly over the intermeeting period as financial institutions continued to tap liquidity facilities and purchases of commercial paper through the CPFF ramped up. Depository institutions made heavy use of the discount window, and credit outstanding from the Term Auction Facility (TAF) increased about \$150 billion, to about \$450 billion. However, the TAF auctions held during the intermeeting period—including two 84-day auctions and two forward auctions covering year-end—were all undersubscribed. Balances at the Primary Dealer Credit Facility and the ABCP Money Market Mutual Fund Liquidity Facility (AMLF) both declined substantially, but the CPFF purchased more than \$300 billion of securities. Draws by foreign central banks under swap arrangements increased about \$90 billion over the intermeeting period.

The Treasury and the Federal Reserve also announced on November 10 a modification of the special lending facility for American International Group, Inc. (AIG). Under the new arrangement, the Treasury will purchase \$40 billion of preferred shares in AIG using TARP funds, and the rates on outstanding loans from the Federal Reserve will be reduced. In addition, the Federal Reserve Bank of New York will create two limited liability corporations (LLCs), one to purchase residential MBS from AIG and the other to purchase collateralized debt obligations on which AIG Financial Products has written CDS contracts. The assets of the LLCs will be funded by AIG and the Federal Reserve, with AIG purchasing subordinated debt of the LLCs and the Federal Reserve providing senior loans to these LLCs.

### Policy Expectations and Treasury Yields



The four Term Securities Lending Facility (TSLF) auctions held over the period had relatively tepid receptions, which reportedly reflected the large amount of liquidity currently in the financial system and further dealer liquidation of difficult-to-finance assets. Market participants exercised only \$8 billion of options on \$50 billion of TSLF loans against schedule 2 collateral on their November 28 exercise date.

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

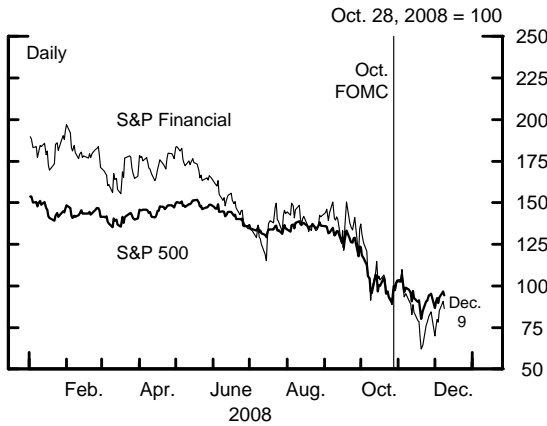
The decision by the Federal Open Market Committee (FOMC) on October 29 to lower the target for the federal funds rate 50 basis points and the language in the accompanying statement were broadly in line with market expectations. Since then, the expected path for policy has shifted down substantially on worse-than-anticipated economic data and concerns about the weaker economic outlook. Surveys of primary dealers indicate that they place significant odds on a 50 basis point cut in the federal funds rate target at the December FOMC meeting and that they expect that target to remain flat over 2009.

Quotes on federal funds futures suggest that market participants expect the effective federal funds rate to trade at about 25 basis points after the December meeting. Looking further ahead, futures quotes suggest that the FOMC is expected to begin gradually raising the target federal funds rate next spring. Under our standard assumptions about term premiums, the market appears to be pricing in a rise in the effective rate to about  $\frac{3}{4}$  percent by the end of 2009 and to about  $1\frac{3}{4}$  percent by the end of 2010. That said, heightened uncertainty about the magnitude of term premiums and the persistent softness in the federal funds rate relative to the target make it difficult to estimate the market's expected policy path with any precision.

Two-year nominal Treasury yields fell about 90 basis points over the intermeeting period, while 5- and 10-year yields dropped about 110 and 125 basis points, respectively, in response to the downward shift in the expected policy path, the deterioration in the economic outlook, and a strong flight to safe and liquid assets. Inflation compensation based on TIPS (Treasury inflation-protected securities) for the next 5 years declined sharply over the period, as did inflation compensation 5 to 10 years ahead. Although these declines appear to have reflected softer energy prices and lower-than-expected inflation readings, they likely have been exacerbated by especially poor liquidity in the TIPS and nominal Treasury markets. Inflation compensation measured by inflation swaps changed little over the period.

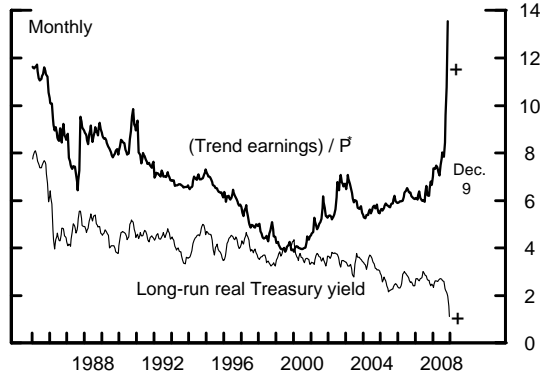
### Corporate Yields, Risk Spreads, and Stock Prices

Selected Stock Price Indexes



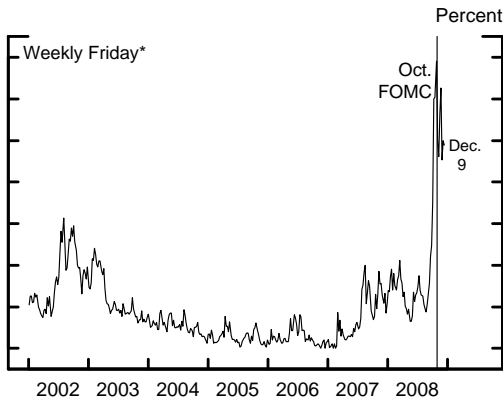
Source: Standard & Poor's.

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



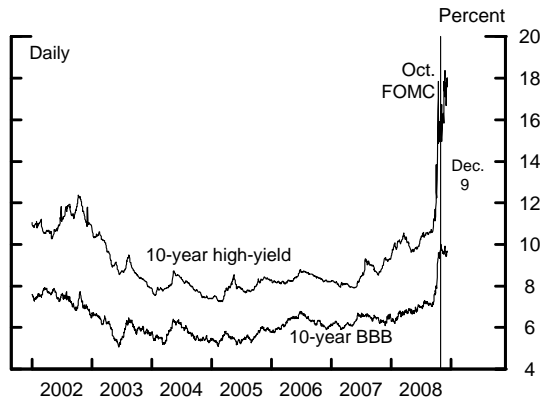
\* Trend earnings are estimated using analysts' forecasts of year-ahead earnings from I/B/E/S.  
 + Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.  
 Source: Thomson Financial.

Implied Volatility on S&P 500 (VIX)



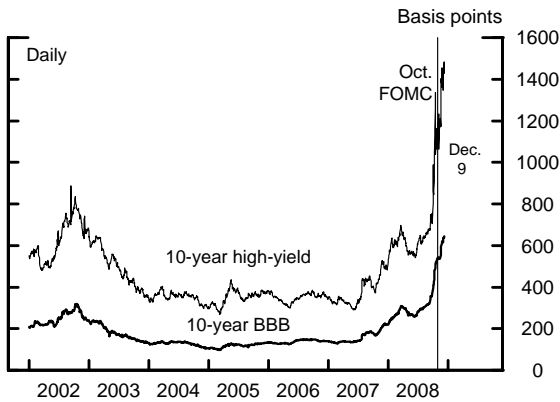
\* Latest observation is for most recent business day.  
 Source: Chicago Board of Exchange.

Corporate Bond Yields



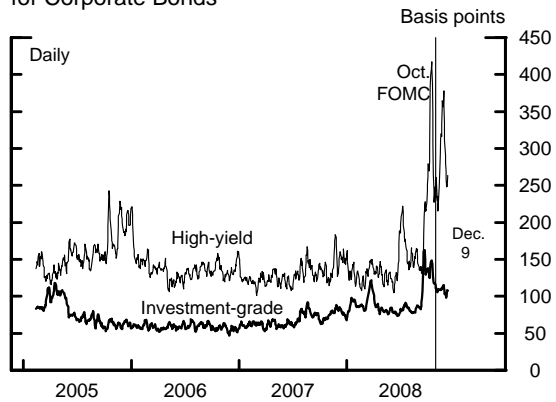
Note: Yields from smoothed yield curves based on Merrill Lynch bond data.

Corporate Bond Spreads



Note: Corporate yields from smoothed yield curves based on Merrill Lynch bond data and spreads measured relative to comparable-maturity Treasury securities.

Estimated Median Bid-Ask Spread for Corporate Bonds



Source: Staff estimate using data from NASD's TRACE.

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

Broad equity-price indexes declined about 5 percent, on net, over the intermeeting period, on continuing concerns about the likelihood of a deep and prolonged recession. Financial stocks led the declines, dropping about 15 percent. The spread between the 12-month forward trend-earnings-price ratio for S&P 500 firms and an estimate of the real long-run Treasury yield—a rough gauge of the equity premium—widened markedly in November but narrowed somewhat in early December. The option-implied volatility on the S&P 500 index remained extremely elevated.

Yields and spreads on speculative- and investment-grade corporate bonds soared to multidecade highs over the intermeeting period. Also, loan price data from the Survey of Terms of Business Lending in November indicated that commercial and industrial (C&I) loan rate spreads increased moderately from the August survey after having been relatively flat over the previous year. Liquidity in the secondary market for corporate bonds remained subpar, particularly for the speculative-grade segment.

**Corporate Earnings and Credit Quality**

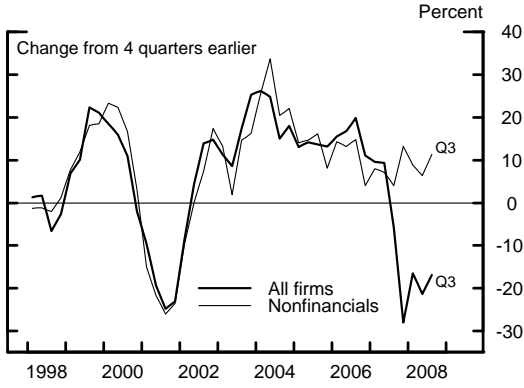
Operating earnings per share for S&P 500 firms in the third quarter came in about 20 percent below their year-earlier levels. Profit declines were concentrated in the financial sector; earnings per share for nonfinancial firms rose about 10 percent, with firms in the oil and gas industry accounting for virtually all of the increase. In mid-November, an index of analysts' revisions to year-ahead earnings for S&P 500 firms logged its most negative level on record, reflecting substantial markdowns of profit forecasts for both financial and nonfinancial firms.

The credit quality of nonfinancial firms deteriorated somewhat in recent months. In the third quarter, the aggregate leverage ratio of nonfinancial firms climbed further, and the aggregate liquid-asset ratio continued to trend down. The volume of nonfinancial corporate bonds downgraded by Moody's in the third quarter rose to a moderate level, while the volume of upgraded bonds was small. The share of corporate bonds outstanding rated "deep junk"—that is, bonds rated B3 or below—increased to about 6½ percent. The C&I loan delinquency rate remained at a low level in the third quarter, and the realized six-month trailing bond default rate was little changed in October after having shot up in September on the defaults of two large financial companies.



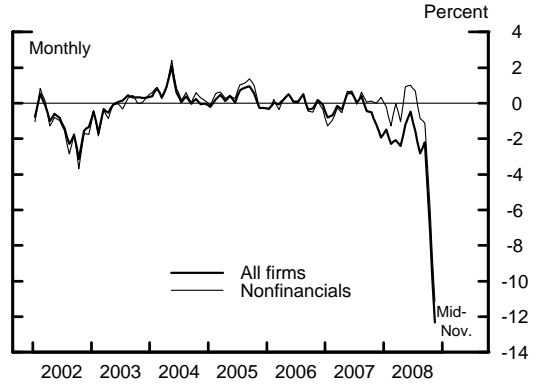
### Corporate Earnings and Credit Quality

S&P 500 Earnings Per Share



Source: Thomson Financial.

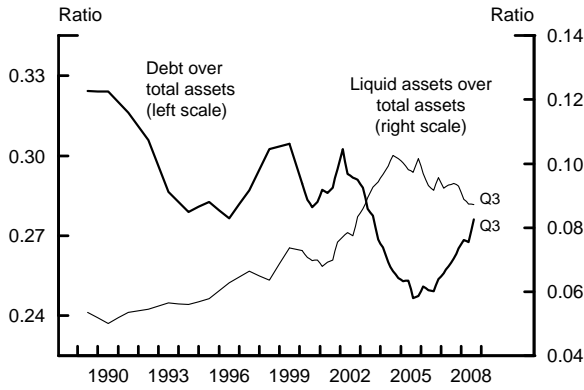
Revisions to Expected S&P 500 Earnings



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

Source: Thomson Financial.

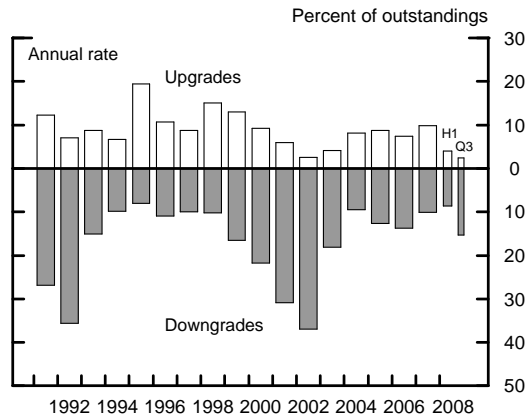
Financial Ratios for Nonfinancial Corporations



Note: Data are annual through 1999 and quarterly starting in 2000:Q1.

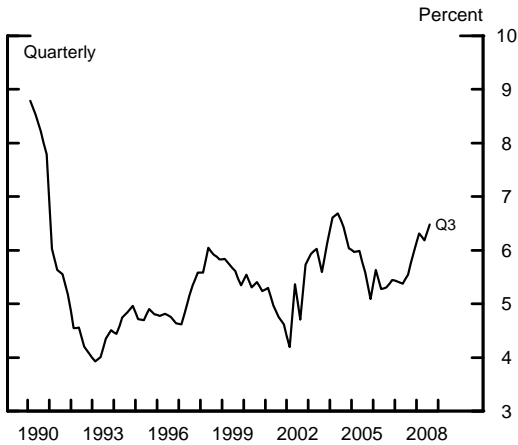
Source: Calculated using Compustat data.

Bond Ratings Changes of Nonfinancial Companies



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

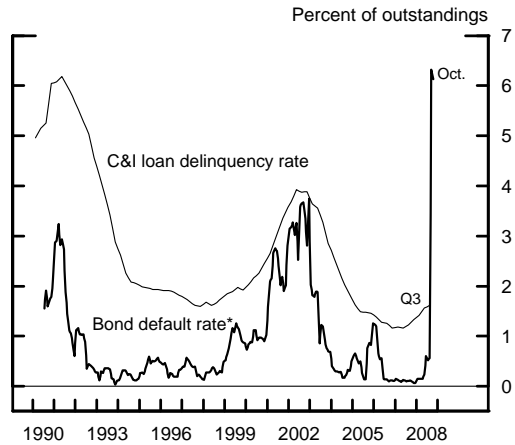
Deep Junk Share of Bonds Outstanding



Note: Nonfinancial bonds outstanding rated B3 or below over total bonds outstanding.

Source: Moody's Investors Service.

Selected Default and Delinquency Rates



\* 6-month moving average.

Source: For default rate, Moody's Investors Service; for delinquency rate, Call Report.

## 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	Q3	Sept.	Oct.	Nov. <sup>p</sup>
<i>Nonfinancial corporations</i>									
Stocks <sup>1</sup>	5.4	4.6	4.7	5.5	3.5	3.0	1.9	12.2	1.9
Initial public offerings	1.6	1.7	1.8	1.6	.6	.1	.0	.0	.1
Seasoned offerings	3.8	2.8	2.9	3.8	2.9	2.9	1.9	12.2	1.8
Bonds <sup>2</sup>	22.4	18.7	29.3	35.1	34.7	14.5	12.4	22.9	22.2
Investment grade	8.3	8.7	13.1	17.5	24.9	10.5	8.6	19.1	18.3
Speculative grade	8.2	5.2	6.2	7.5	3.1	.7	1.0	.0	.0
Other (sold abroad/unrated)	5.9	4.8	10.1	10.0	6.7	3.3	2.9	3.8	4.0
<i>Memo</i>									
Net issuance of commercial paper <sup>3</sup>	1.7	-.2	2.4	-.4	-.5	6.2	-8.4	6.2	2.2
Change in C&I loans at commercial banks <sup>3</sup>	2.4	9.6	11.4	21.0	12.5	19.3	55.5	35.1	-6.4
<i>Financial corporations</i>									
Stocks <sup>1</sup>	6.9	5.0	5.3	8.6	17.2	10.5	20.2	13.8	11.6
Bonds <sup>2</sup>	134.1	170.4	180.6	151.7	66.0	20.0	18.4	2.4	21.1

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

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

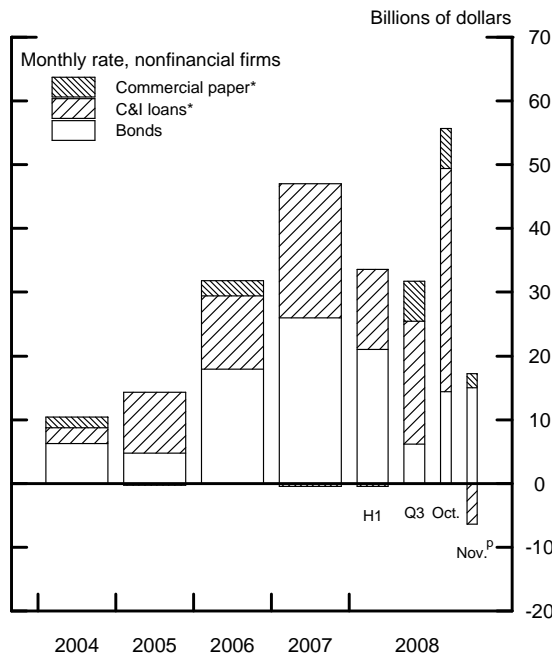
2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's.

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

p Forecast based on preliminary data.

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

### Selected Components of Net Debt Financing

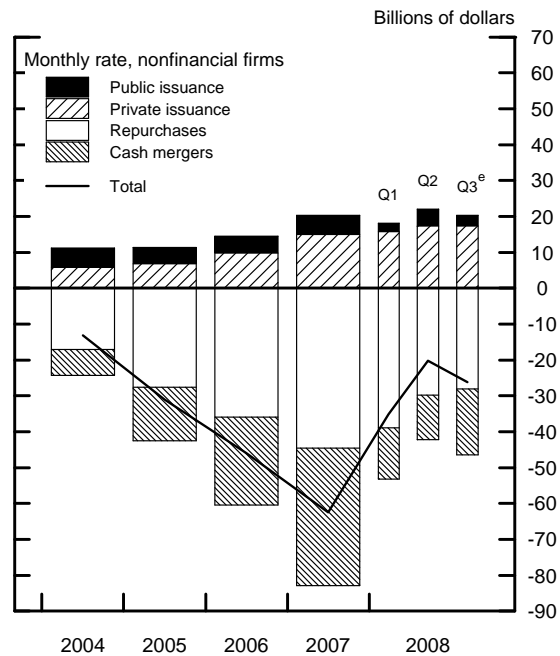


\* Seasonally adjusted, period-end basis.

p Preliminary.

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

### Components of Net Equity Issuance

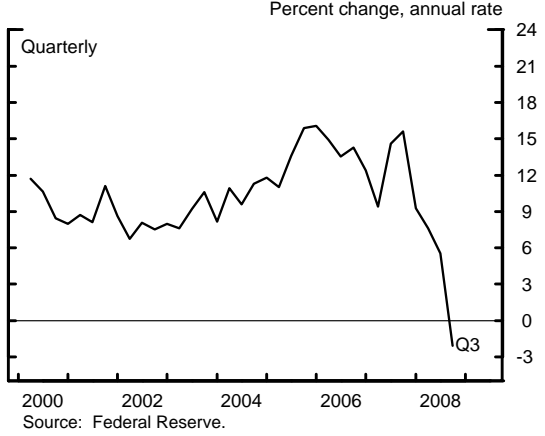


e Staff estimate.

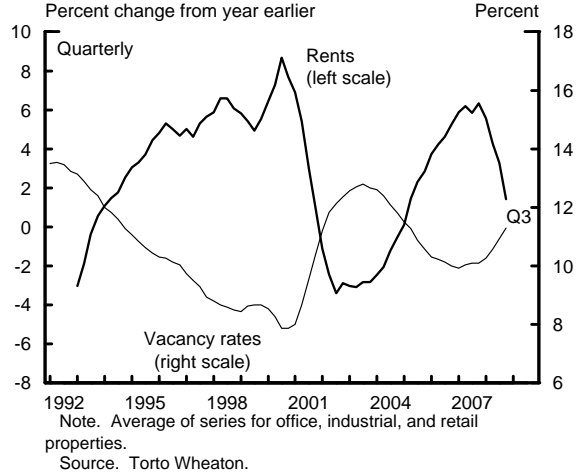
Source: Thomson Financial; Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

### Commercial Real Estate

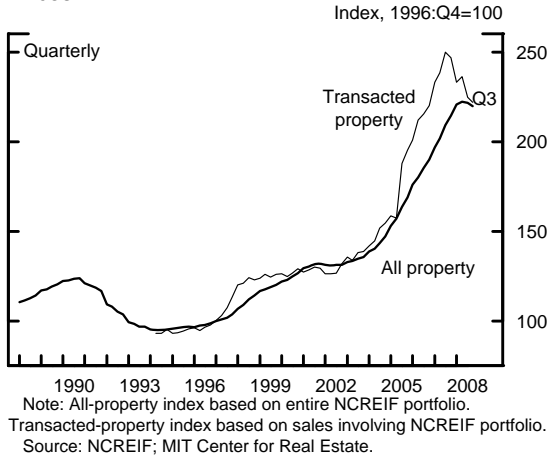
Commercial Mortgage Debt



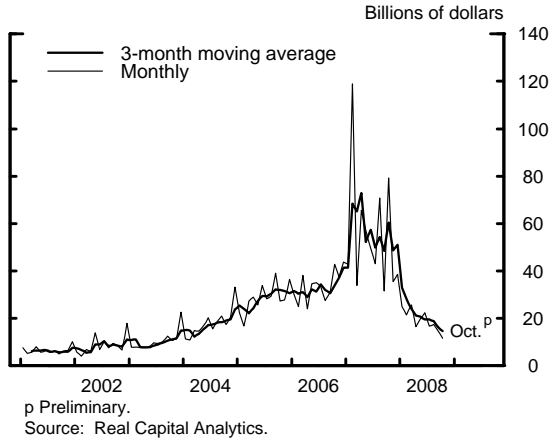
Rents and Vacancy Rates on Commercial Properties



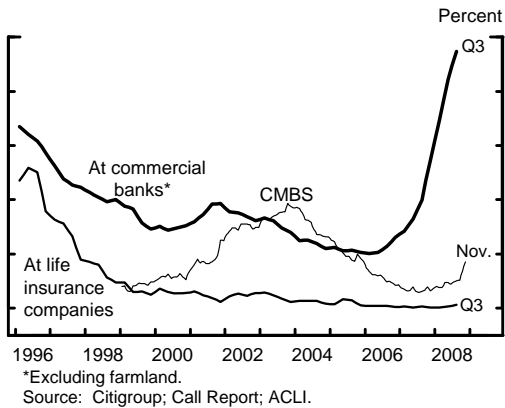
Prices



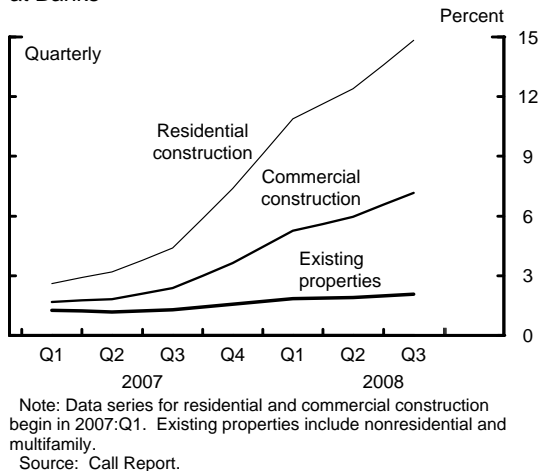
Sales of Commercial Real Estate



Delinquency Rates on Commercial Mortgages



Delinquency Rates on Commercial Mortgages at Banks



**Business Finance**

In the nonfinancial corporate sector, gross investment-grade bond issuance remained solid in November, but there was again no speculative-grade issuance. Issuance of syndicated loans also continued to be very weak. Nonfinancial commercial paper outstanding inched up further in November after posting a modest rise in October, while C&I loans declined somewhat in November after outsized increases in the previous two months that were mostly attributable to draws on existing credit lines. Overall, net debt financing by nonfinancial businesses slowed appreciably in November, which reflected tighter credit conditions—especially for lower-rated credits—and probably also lower demand for credit as companies pared spending plans.

In October and November, both seasoned and initial equity offerings by nonfinancial corporations outside the energy sector remained weak. In the third quarter, equity retirements by nonfinancial firms continued to outpace the combined amount of private and public issuance, as equity retirements from cash-financed mergers picked up somewhat with the completion of a few large deals. However, share repurchases are estimated to have moderated a bit in recent months, and announcements of future cash-financed mergers have slowed significantly, likely owing to the weaker economic outlook.

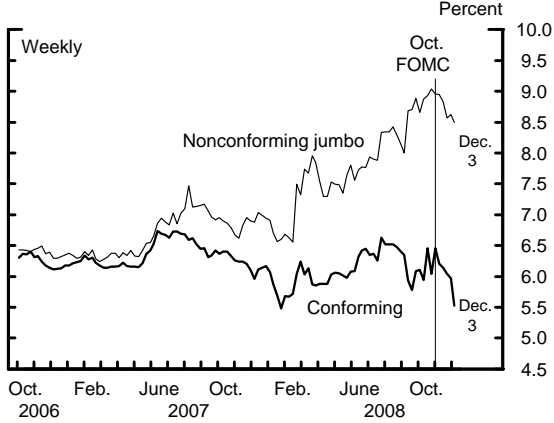
For financial firms, public equity issuance edged down in November. In contrast, gross bond issuance by financial corporations surged in late November and early December, with nearly all issuance at maturities less than three years, as some large banking organizations made use of the FDIC's temporary liquidity guarantee program.

**Commercial Real Estate**

Conditions in commercial real estate markets have deteriorated considerably in recent months. Commercial real estate debt contracted at an annual rate of 2 percent in the third quarter, held down by declines in property prices, sluggish sales of commercial real estate, and tight credit conditions. Amid rising vacancies and soft rent growth, the third-quarter reading of the price index for recently sold commercial properties fell to a level 10 percent below its peak in 2007. In October, sales dropped to their lowest level since 2003. The delinquency rate on commercial mortgages held by banks rose to nearly 5 percent in the third quarter, which mainly reflected a further deterioration in the performance of residential and commercial construction loans. The delinquency rate on commercial mortgages held in commercial mortgage-backed securities moved up in October but remained well below its peak in 2003.

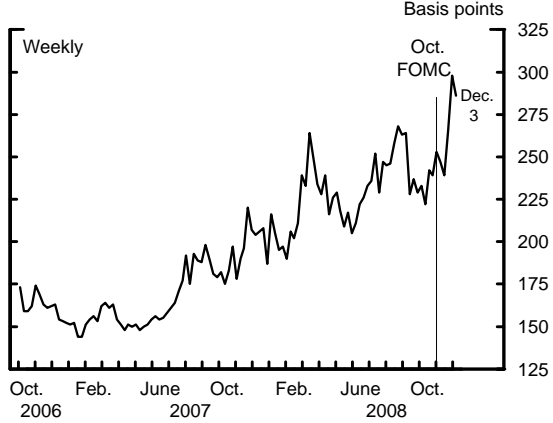
## Residential Mortgages

30-Year Fixed Mortgage Rates



Source: Freddie Mac; Inside Mortgage Finance.

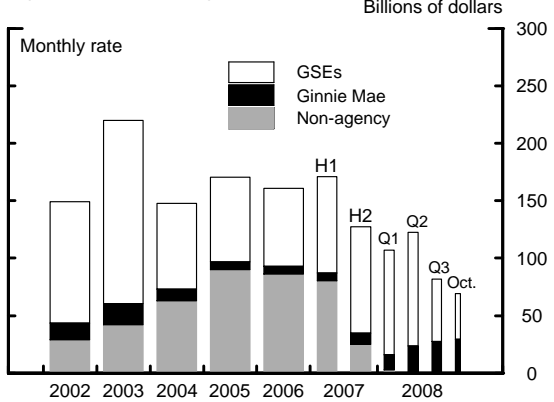
30-Year Conforming Fixed-Rate Mortgage Spread



Note: Spread is quoted relative to the on-the-run 10-year Treasury yield.

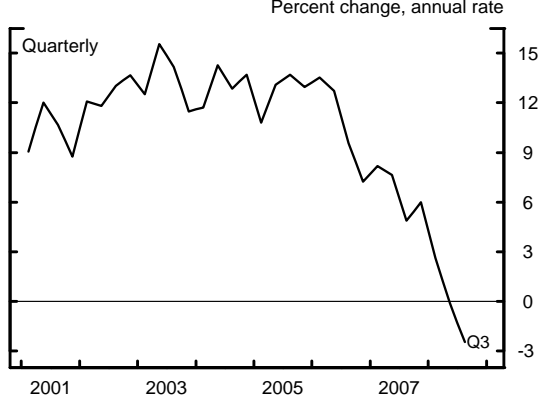
Source: Bloomberg; Freddie Mac.

Agency and Non-Agency MBS Issuance



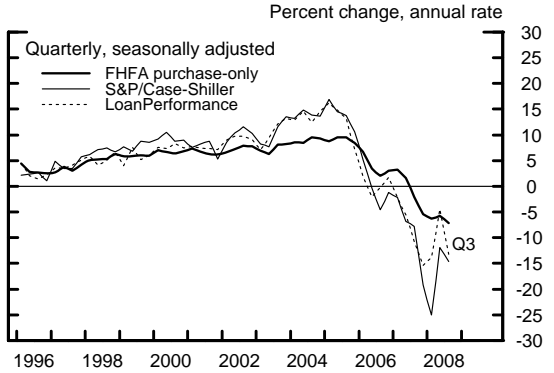
Source: For agency issuance, Fannie Mae, Freddie Mac, and Ginnie Mae. For non-agency issuance, Inside Mortgage Finance.

Mortgage Debt



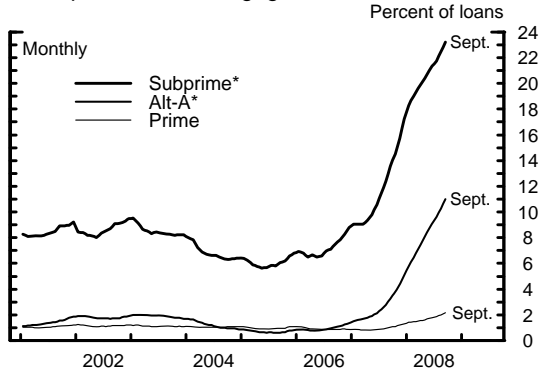
Source: Federal Reserve.

National Indexes of House Prices



Source: Federal Housing Finance Agency; Standard & Poor's; LoanPerformance, a division of First American CoreLogic.

Delinquencies on Mortgages



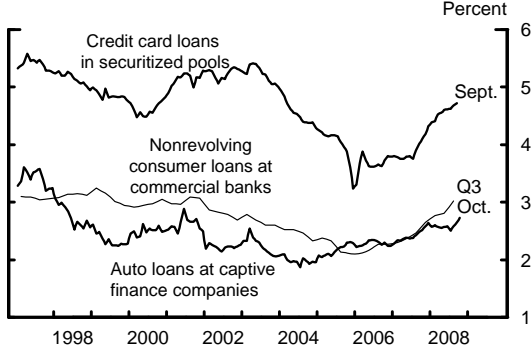
Note: Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages.

\* Among securitized loans only.

Source: LoanPerformance, a division of First American CoreLogic.

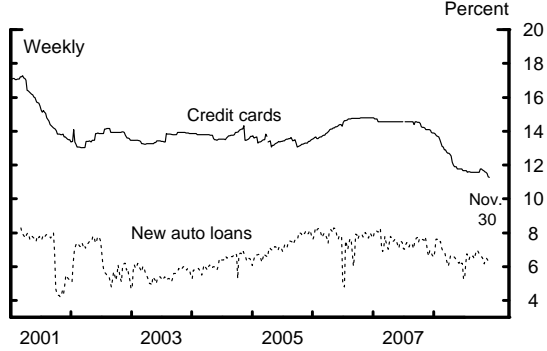
### Consumer Credit and Household Wealth

Delinquencies on Consumer Loans



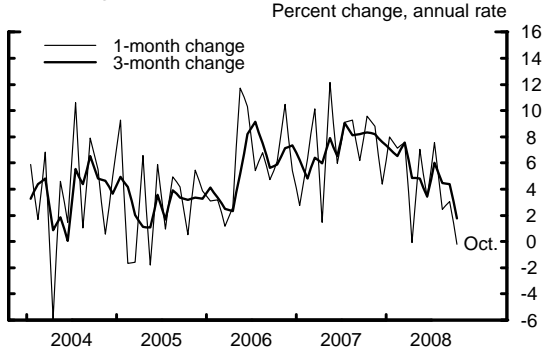
Source: For auto loans, Federal Reserve; for credit cards, Moody's; for nonrevolving consumer loans, Call Report.

Consumer Loan Rates



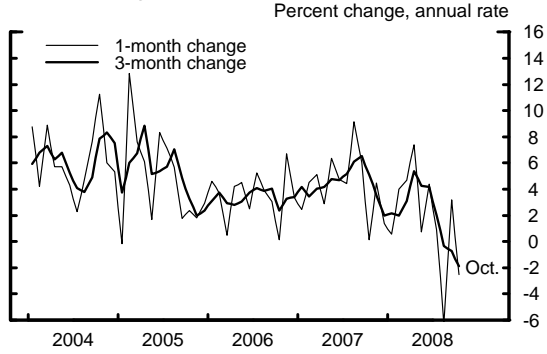
Source: For credit cards, Bank Rate Monitor; for auto, PIN.

Revolving Consumer Credit



Source: Federal Reserve.

Nonrevolving Consumer Credit



Source: Federal Reserve.

### Net Flows into Mutual Funds

(Billions of dollars, monthly rate)

Fund type	2007		2008			Oct.	Nov. <sup>e</sup>	Assets Oct.
	H1	H2	Q1	Q2	Q3			
<b>Total long-term funds</b>	<b>31.5</b>	<b>5.9</b>	<b>1.7</b>	<b>22.6</b>	<b>-34.3</b>	<b>-126.8</b>	<b>-49.0</b>	<b>6,009</b>
<b>Equity funds</b>	<b>14.3</b>	<b>1.2</b>	<b>-14.9</b>	<b>7.8</b>	<b>-34.5</b>	<b>-72.3</b>	<b>-26.4</b>	<b>3,935</b>
Domestic	0.8	-8.4	-13.4	3.3	-18.5	-47.3	-17.6	3,048
International	13.5	9.6	-1.5	4.4	-16.0	-25.0	-8.8	888
<b>Hybrid funds</b>	<b>2.6</b>	<b>1.1</b>	<b>0.7</b>	<b>2.0</b>	<b>-2.7</b>	<b>-14.0</b>	<b>-5.6</b>	<b>511</b>
<b>Bond funds</b>	<b>14.6</b>	<b>3.5</b>	<b>16.0</b>	<b>12.9</b>	<b>2.9</b>	<b>-40.6</b>	<b>-17.0</b>	<b>1,563</b>
High-yield	0.2	-0.7	-1.3	0.9	-0.3	-1.4	-0.2	113
Other taxable	12.0	4.8	15.2	8.2	1.8	-30.8	-15.6	1,099
Municipals	2.4	-0.6	2.1	3.7	1.4	-8.4	-1.3	351
<b>Money market funds</b>	<b>26.3</b>	<b>98.8</b>	<b>126.9</b>	<b>-14.8</b>	<b>-7.9</b>	<b>146.8</b>	<b>122.1</b>	<b>3,603</b>

Note: Excludes reinvested dividends.

e Staff estimate.

Source: Investment Company Institute.

## Problems in the Market for Asset-Backed Securities and the Availability of Auto and Credit Card Loans

The market for consumer loan asset-backed securities (ABS) has come under severe strain, with a sharp jump in spreads this fall and virtually no new issuance since September.

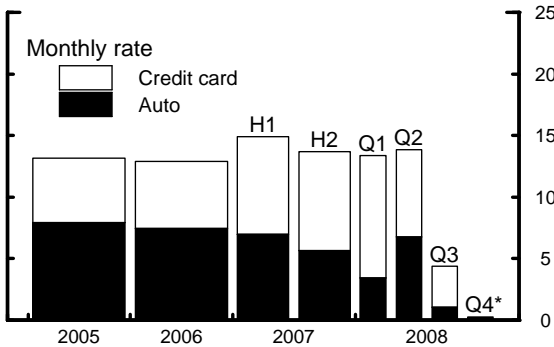
In recent years, about one-half of credit card debt has been funded through the ABS market. The strains of late in this market have increased issuers' funding costs, which, along with deteriorating household credit quality, have led lenders to tighten terms and standards. Although the aggregate interest rate on variable-rate credit cards has generally fallen with the prime rate over the past year, several large issuers have recently announced rate increases, particularly for higher-credit-risk customers. In addition, loan officers are increasingly reporting that they have reduced credit limits and are tightening standards for approving new credit applications.

In the auto loan market, finance companies, which currently account for almost one-half of the outstanding loans, have used ABS to fund about one-third of their loans. Now unable to securitize, finance companies

appear to be funding new loans by stepping up loan sales to banks and tapping existing bank credit lines. Finance companies also appear to be raising interest rates and lending more selectively—indeed, in mid-October, GMAC Financial Services announced new restrictions on lending to higher-risk customers. Loan originations by the finance companies associated with the Detroit Three automakers declined sharply in October, although this pullback mirrored the drop-off in sales and likely reflects reduced demand as well as credit constraints. While some prospective vehicle buyers may be able to obtain financing instead from depository institutions, the majority of loan officers at commercial banks have reported a tightening of terms and standards on consumer loans.

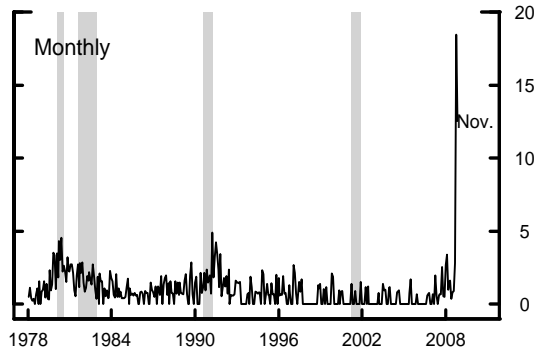
Reports of a tighter supply of vehicle loans may also be discouraging households from even seeking financing. The share of respondents to the Reuters/University of Michigan Surveys of Consumers who reported that it was a bad time to buy a car because credit is hard to get has recently climbed to a level well beyond that seen during the credit crunch in the early 1980s.

Gross Issuance of Consumer Loan ABS by Type  
Billions of dollars



Note: Auto includes car loans, leases, and financing for buyers of motorcycles, trucks, and other vehicles. ABS are asset-backed securities.  
\*Through Nov. 21.  
Source: Inside Mortgage Finance; Merrill Lynch.

One Factor That Discourages Households' Auto Purchases:  
Credit Is Hard to Get



Note: The series is calculated as the number of consumers citing this particular factor divided by the number of consumers thinking that now is a bad time to buy a car. Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.  
Source: Reuters/ University of Michigan Surveys of Consumers.

**Household Finance**

Over the intermeeting period, interest rates on 30-year fixed-rate conforming mortgages fell about  $\frac{3}{4}$  percentage point, with most of the decline following the November 25 announcement of the Federal Reserve's program to purchase MBS issued by the housing GSEs and Ginnie Mae. Even so, the spread of the conforming mortgage rate over the 10-year Treasury yield rose well above the elevated level posted just before Fannie Mae and Freddie Mac were taken into conservatorship in early September.

In secondary mortgage markets, issuance of MBS by the housing GSEs slipped further in October, in part because of reduced primary borrowing amid lower house prices. Issuance by Ginnie Mae continued to be very strong in October, but the non-agency MBS market remained closed. Total mortgage debt decreased in the second and third quarters, the first declines in the history of the series, which extends back to the 1950s.

The national house price index released by the Federal Housing Finance Agency fell about 6 percent in the third quarter, while the S&P/Case-Shiller and LoanPerformance national indexes decreased more than twice as much. Falling home prices and the slowing economy have continued to weigh on mortgage credit quality. In September, 2 percent of prime mortgages, 11 percent of alt-A mortgages, and 24 percent of subprime mortgages were 90 or more days past due or in foreclosure. These rates are well above their levels at the start of the year, and the increases have shown no sign of abating.

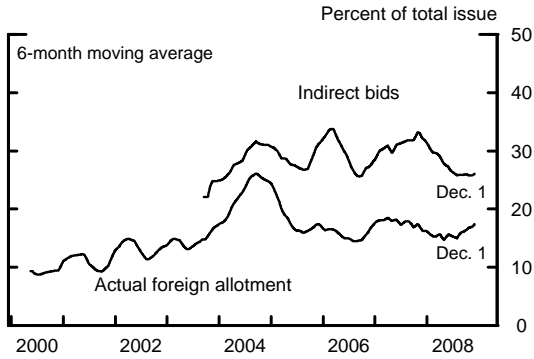
The credit quality of consumer loans has also continued to deteriorate, albeit less starkly than for mortgages. The delinquency rates on credit cards in securitized pools, on nonrevolving loans at commercial banks, and on auto loans at captive finance companies have all risen significantly, on net, over the course of this year. At this point, though, none of these delinquency rates has yet reached the level of the last recession.

Interest rates on consumer loans fell over the intermeeting period but by less than comparable-maturity Treasury yields, leaving spreads a bit wider. Annualized growth in revolving credit over the three months ending in October was just  $1\frac{3}{4}$  percent, while nonrevolving credit contracted moderately. Some part of the drop-off is likely related to weaker demand for loans, but the available evidence also suggests that lenders are restricting supply and that conditions may tighten yet further in response to the recent strains in market for asset-backed securities (ABS) (see box "Problems in the Market for Asset-Backed Securities and the Availability of Auto and Credit Card Loans"). The recently announced Term Asset-Backed Securities Loan Facility, which is designed to



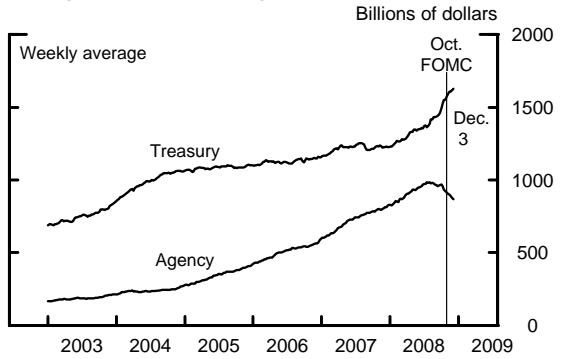
### Treasury Finance

Foreign Participation in Treasury Auctions



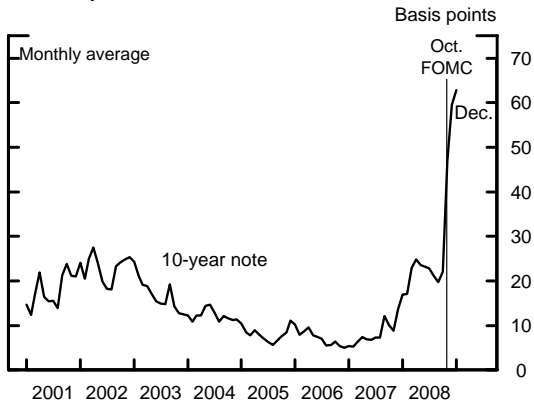
Note: Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2-, 5-, and 10-year original auctions and reopenings.  
Source: Federal Reserve Board.

Foreign Custody Holdings



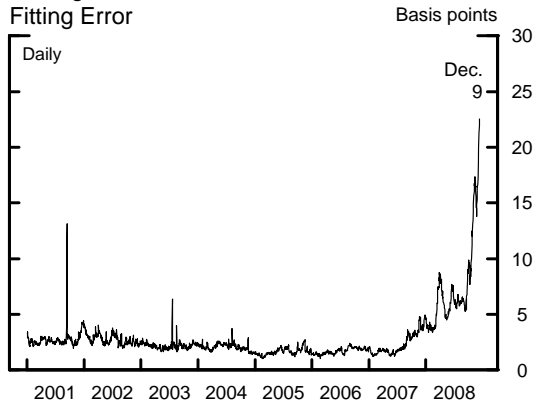
Note: Securities held in custody at the Federal Reserve Bank of New York on behalf of foreign official institutions.  
Source: Federal Reserve Bank of New York.

Treasury On-the-Run Premium



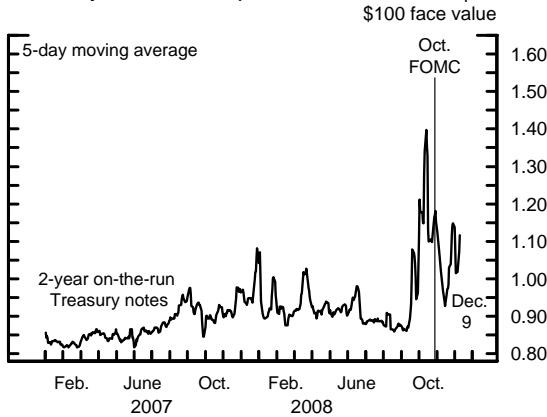
Note: Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. December observation is the month-to-date average.  
Source: Federal Reserve Bank of New York.

Average Absolute Nominal Yield Curve Fitting Error



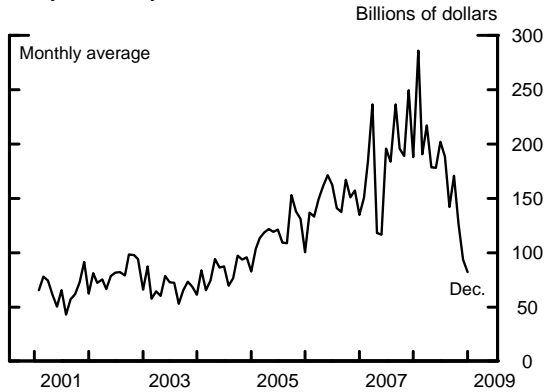
Note: Calculated from securities with 2 to 10 years until maturity, excluding on-the-run and first off-the-run securities.  
Source: Federal Reserve Board.

Treasury Bid-Asked Spread



Source: BrokerTec Interdealer Market Data.

Daily Treasury Market Volume



Note: December observation is average for month to date.  
Source: BrokerTec Interdealer Market Data.

encourage new issuance in this market, is not likely to be implemented until early next year.

Amid further drops in asset prices, investors, on net, withdrew substantial amounts from long-term mutual funds in October and November. Redemptions were widespread among fund types. Money market funds saw large net inflows in October and November, and heavy inflows have continued into early December. Inflows to prime funds picked up in early November after several weeks in which government funds had attracted most of the new cash.

### **Treasury Finance**

Over the intermeeting period, the Treasury conducted several auctions of nominal coupon securities but held no auctions of inflation-indexed securities. Issuance of Treasury bills totaled about \$800 billion, including about \$250 billion of cash management bills. However, the decline in the outstanding quantity of bills under the Supplementary Financing Program led to a drop in Treasury deposits placed at the Federal Reserve. Market demand for bills remained extremely strong, and the auctions of longer-term nominal securities were generally well received, with low stop-out rates and high bid-to-cover ratios. The reopening of the 30-year bond, however, attracted only tepid interest. Foreign participation in Treasury auctions was at or above normal levels.

Treasury market functioning continued to be poor over the intermeeting period. Spreads between on- and off-the-run securities increased to record levels, and bid-asked spreads remained wide. Volume in the Treasury cash market decreased notably amid ongoing dislocations in financing markets and reports that market participants are hoarding safe securities ahead of year-end.

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

Conditions in the municipal bond market deteriorated, on net, over the intermeeting period, despite some improvements in early November. Long-term issuance continued to rebound in November, mostly for education and transportation projects. Meanwhile, short-term issuance slowed in November, a development consistent with typical seasonal patterns.

The credit quality of municipal bonds deteriorated further over the intermeeting period amid a worsening outlook for the fiscal positions of state and local governments. The number of municipal bonds downgraded in the third quarter was substantial by historical

## State and Local Government Finance

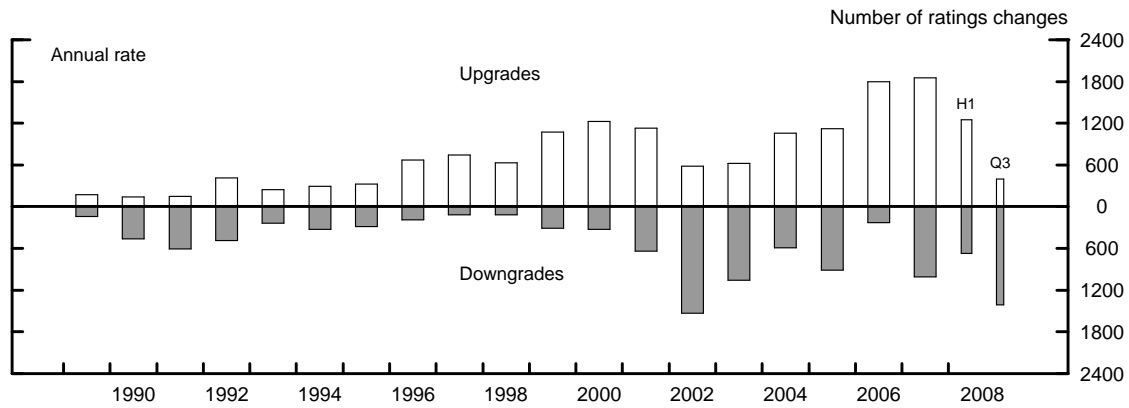
### Gross Offerings of Municipal Securities

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

Type of security	2004	2005	2006	2007	2008				
					H1	Q3	Sept.	Oct.	Nov. <sup>P</sup>
Total	34.7	38.4	36.1	40.4	41.5	36.2	25.1	30.8	33.8
Long-term <sup>1</sup>	29.8	34.2	32.5	35.5	37.9	29.8	20.8	21.6	29.2
Refundings <sup>2</sup>	10.8	15.6	10.6	12.6	17.9	13.0	9.2	8.6	11.8
New capital	19.0	18.6	21.9	22.9	20.0	16.8	11.6	13.0	17.4
Short-term	4.9	4.2	3.7	4.9	3.5	6.4	4.3	9.3	4.6
Memo: Long-term taxable	2.0	2.1	2.5	2.4	2.7	2.4	.9	.7	.4

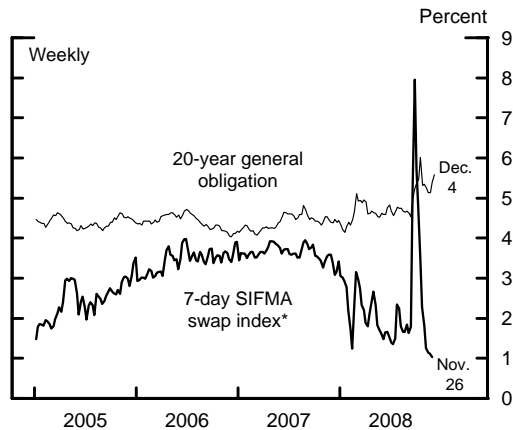
- 1. Includes issues for public and private purposes.
  - 2. All issues that include any refunding bonds.
  - <sup>p</sup> Forecast based on preliminary data through December 4, 2008.
- Source: Thomson Financial.

### Ratings Changes



Source: S&P's Credit Week Municipal; S&P's Ratings Direct.

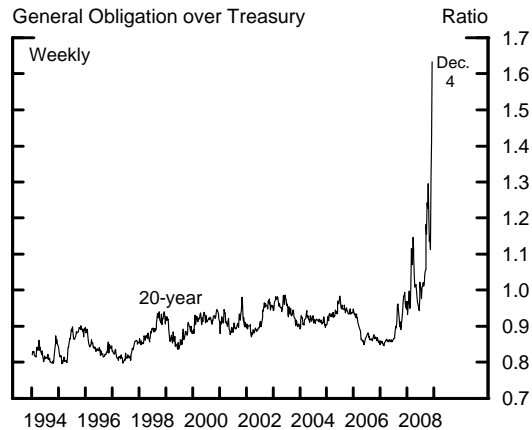
### Municipal Bond Yields



\* SIFMA is the Securities Industry and Financial Markets Association.

Source: Municipal Market Advisors; 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), Nov.
	2006	2007	2008				
			H1	Q3	Oct.	Nov.	
M2	5.1	5.7	7.2	3.6	17.0	8.4	7,934
Components <sup>2</sup>							
Currency	3.5	2.0	.9	6.8	22.9	14.9	805
Liquid deposits <sup>3</sup>	1.0	4.1	7.4	3.7	.8	3.6	4,719
Small time deposits	18.6	4.3	-1.3	9.3	55.8	33.4	1,351
Retail money market funds	13.1	20.3	22.4	-5.5	39.2	-6.6	1,054
Memo:							
Institutional money market funds	15.8	39.3	41.8	2.2	-26.4	51.9	2,243
Monetary base	3.1	2.0	.8	16.1	298.8	324.4	1,434

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.

Source: Federal Reserve.

**Commercial Bank Credit**

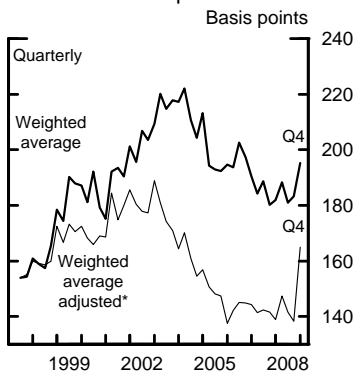
(Percent change, annual rate, except as noted; seasonally adjusted)

Type of credit	2006	2007	H1 2008	Q3 2008	Sept. 2008	Oct. 2008	Nov. 2008 <sup>e</sup>	Level <sup>1</sup> Nov. 2008 <sup>e</sup>
Total	10.3	11.2	4.6	3.6	14.2	20.7	-13.0	9,545
<i>Loans<sup>2</sup></i>								
Total	12.0	12.1	6.5	2.3	11.6	9.8	-10.9	7,175
To businesses								
Commercial and industrial	14.3	19.1	13.7	6.0	21.7	49.5	-2.4	1,598
Commercial real estate	13.6	10.4	10.2	1.4	-1.2	3.3	4.1	1,724
To households								
Residential real estate	9.9	8.4	2.4	-4.9	-5.8	-5.4	-7.5	2,061
Revolving home equity	3.1	7.1	13.7	12.0	16.7	22.4	5.2	580
Other	12.3	8.8	-1.2	-10.8	-13.9	-15.8	-12.4	1,480
Consumer	2.9	7.9	7.3	8.4	6.3	10.6	6.5	875
Originated <sup>3</sup>	3.9	7.1	7.5	5.7	7.3	12.3	-3.1	1,294
Other <sup>4</sup>	21.1	17.6	-2.5	8.7	62.3	-9.9	-73.8	917
<i>Securities</i>								
Total	5.4	8.4	-1.0	7.9	22.4	54.6	-19.3	2,370
Treasury and agency	2.0	-5.8	-1.0	24.1	30.4	80.1	59.4	1,401
Other <sup>5</sup>	10.7	29.1	-1.0	-9.3	13.0	24.3	-117.1	969

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 nonbank structure activity in October 2006, March 2007, October 2007, September 2008, and December 2008. Data also account for breaks caused by reclassifications.

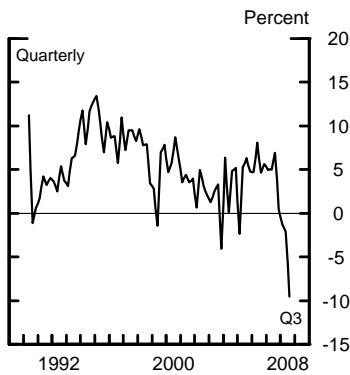
1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels.
  2. Excludes interbank loans.
  3. Includes an estimate of outstanding loans securitized by commercial banks.
  4. Includes security loans and loans to farmers, state and local governments, and all others not elsewhere classified. 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.  
Source: Federal Reserve.

**C&I Loan Rate Spreads**



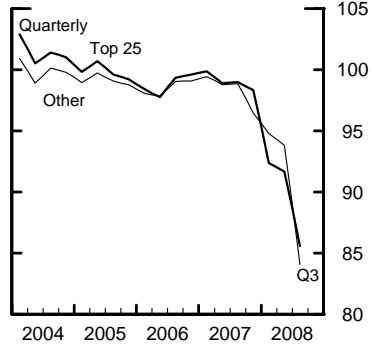
Note: Spreads over market interest rate on an instrument of comparable maturity on loans less than \$25 million (2006\$).  
\*Adjusted for changes in nonprice loan characteristics.  
Source: Survey of Terms of Business Lending.

**Growth of Unused Commitments**



Note: Data for 2008:Q3 are adjusted to remove the effect of JPMorgan Chase's acquisition of Washington Mutual.  
Source: Call Report.

**Mark-to-Market of Non-Agency MBS**



Note: The mark-to-market value of non-agency mortgage-backed securities (MBS) is defined as the fair value over historical cost for those banks that hold non-agency securities.  
Source: Call Report.

standards and far outpaced the number of upgrades. Yields on long-term municipal bonds rose over the intermeeting period, and ratios of municipal-bond yields to those on comparable-maturity Treasury securities soared to record highs.

### **Money and Bank Credit**

In November, the growth of M2 slowed markedly from the rapid October pace to an annual rate of about 8 percent. The deceleration last month was widespread across most components of M2, with the notable exception of liquid deposits. Growth of small time deposits stepped down a bit to a still-striking pace of more than 30 percent (annual rate) as banks continued to bid aggressively for these deposits to buttress their funding. Liquid deposits expanded moderately in November. Within the liquid deposits component, flows into demand deposits, which are covered by the FDIC's new Temporary Liquidity Guarantee Program, were extremely strong, with an annualized growth rate of more than 150 percent. These funds came in part from shifts out of savings accounts and reportedly also partly reflected investors' reallocation of funds from money market instruments. Currency growth also remained strong, with data suggesting continued strong demand for U.S. banknotes from abroad. The rapid expansion of the monetary base in recent months reflects the provision of balances through the Federal Reserve's liquidity programs.

The surge in bank credit in October gave way to broad weakness in November. C&I loans outstanding fell slightly in November after having expanded at an annual rate of 50 percent in October, largely because of the financial market turmoil, which led some nonfinancial companies to draw heavily on their bank lines.<sup>1</sup> Consumer loans originated by banks also declined in November after showing surprising strength in October. A significant step-down in November in the growth of home equity lines of credit contributed to weakness in real estate lending. The volatile series "other loans," which includes unplanned overdrafts, loans to nonbank financial institutions, and security loans, continued to reverse the run-up over the previous intermeeting period. The large swings in securities holdings in recent months were driven mostly by a substantial purchase of Treasury securities in October by one institution taking advantage of easier access to funding at its commercial bank than at its broker-dealer subsidiary and to another large bank steadily reducing its participation in the AMLF since mid-October.

The third-quarter Call Reports for commercial banks showed a further drop in unused commitments to extend loans, consistent with reports of widespread tightening of credit

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<sup>1</sup> The share of loans made under commitment in the November STBL increased slightly to a new high of 91 percent, in line with other reports of heavy draws from credit lines.

standards. The banking industry's return on assets fell to 0.26 percent, its lowest level since the fourth quarter of 1990. Profits were eroded by realized losses on available-for-sale securities and higher loan-loss provisions. The overall delinquency rate rose to 3½ percent, with an increase in almost all loan categories, and the ratio of charge-offs to assets increased to nearly 1 percent. In addition, the fair value of non-agency mortgage-backed securities declined significantly further to 85 percent of book value in the third quarter. Dividends exceeded net income for the second consecutive quarter.

Last Page of Domestic Financial Developments

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## **International Developments**

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## International Developments

### U.S. International Transactions

#### Trade in Goods and Services

The U.S. international trade deficit narrowed to \$56.5 billion in September, as a large decline in imports more than offset a sizable fall in exports.

#### Trade in Goods and Services

	2007	Annual rate			Monthly rate		
		2008			2008		
		Q1	Q2	Q3	July	Aug.	Sept.
Percent change							
<i>Nominal BOP</i>							
Exports	14.5	15.7	22.2	12.3	3.3	-1.7	-6.0
Imports	9.7	13.4	18.0	6.4	3.5	-2.2	-5.6
<i>Real NIPA</i>							
Exports	8.9	5.1	12.3	3.4	...	...	...
Imports	1.1	-8	-7.3	-3.2	...	...	...
Billions of dollars							
<i>Nominal BOP</i>							
Net exports	-700.3	-708.4	-722.2	-707.4	-61.3	-59.1	-56.5
Goods, net	-819.4	-844.1	-865.3	-859.1	-74.1	-71.1	-69.6
Services, net	119.1	135.7	143.1	151.7	12.8	12.0	13.1

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

BOP Balance of Payments.

NIPA National Income and Product Accounts.

Source: U.S. Department of Commerce, Bureau of Economic Analysis (BEA);  
Census Bureau.

In September, the value of exports of goods and services declined 6 percent; declines were widespread but largely concentrated in industrial supplies and capital goods. The fall in exports of industrial supplies primarily reflected a decrease in the value of exports of fuels and chemicals due to both lower prices and transportation disruptions caused by Hurricanes Gustav and Ike. The fall in exports of capital goods primarily reflected a decline in exports of aircraft and parts due to a strike at Boeing. Exports of automotive products, consumer goods, and services also moved down.

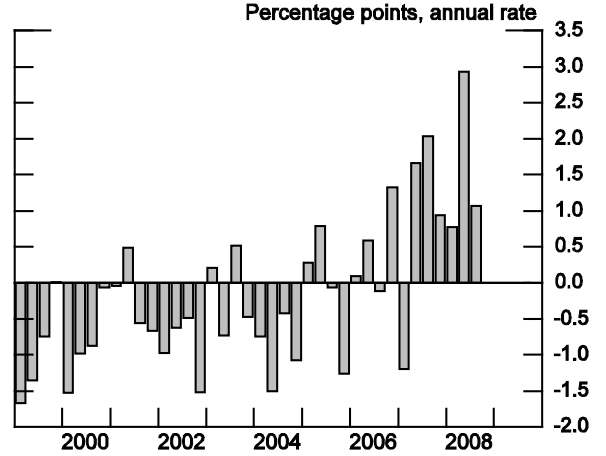
Although exports declined in both August and September, rapid increases in previous months boosted the average value of exports in the third quarter by 12.3 percent at an annual rate. The increase was supported by strong exports of industrial supplies, although other major categories of exports also exhibited large gains.

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

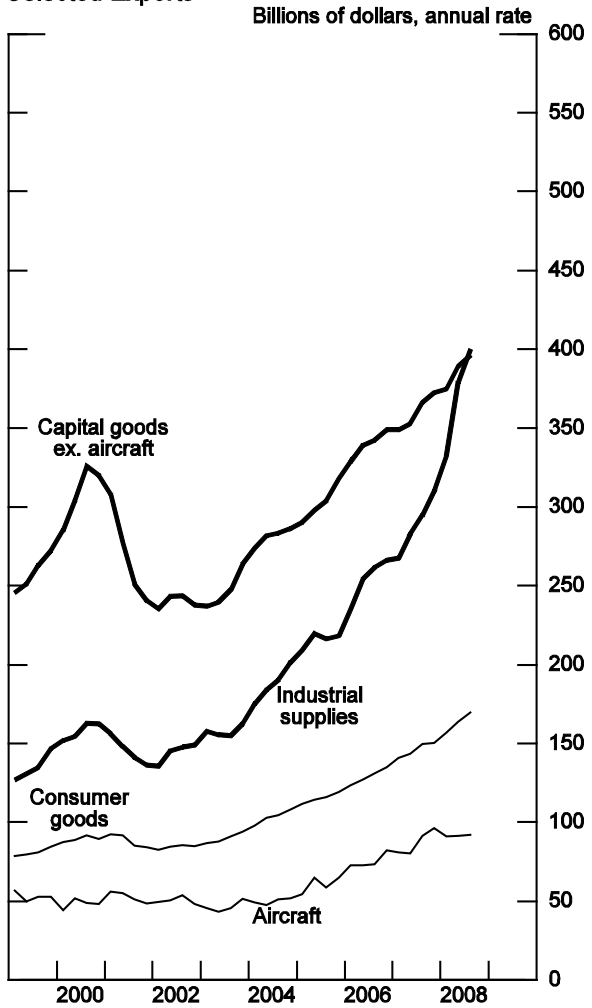
**Trade Balance**



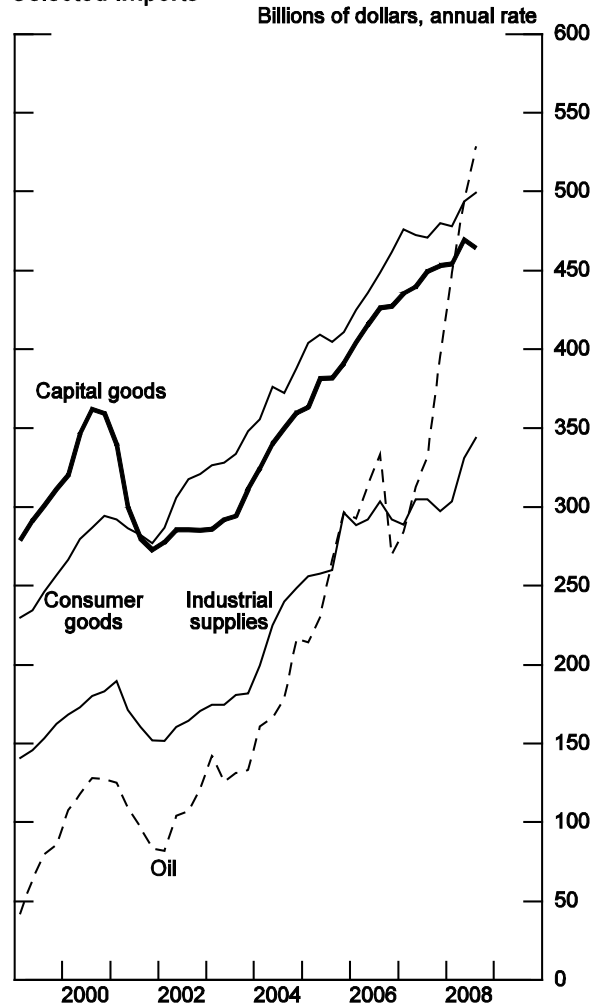
**Contribution of Net Exports to Growth of Real Gross Domestic Product**



**Selected Exports**



**Selected Imports**



Source: Bureau of Economic Analysis; Census Bureau.

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

	Levels				Change <sup>1</sup>			
	2008		2008		2008		2008	
	Q2	Q3	Aug.	Sept.	Q2	Q3	Aug.	Sept.
<b>Exports of Goods and Services</b>	<b>1899.3</b>	<b>1955.1</b>	<b>1983.3</b>	<b>1864.8</b>	<b>92.7</b>	<b>55.8</b>	<b>-33.7</b>	<b>-118.5</b>
Goods exports	1349.2	1387.2	1414.6	1296.9	78.0	37.9	-35.4	-117.7
Gold	19.0	17.7	11.3	19.7	-5.6	-1.3	-10.9	8.4
Other goods	1330.2	1369.5	1403.3	1277.2	83.6	39.3	-24.5	-126.1
Capital goods	480.6	487.7	507.9	457.3	14.4	7.1	9.9	-50.6
Aircraft & parts	91.3	91.7	110.9	70.0	.0	.4	16.8	-41.0
Computers & accessories	47.2	46.5	46.6	42.2	3.9	-.7	-4.1	-4.4
Semiconductors	51.3	53.4	53.5	53.4	-1.0	2.1	.2	-.1
Other capital goods	290.8	296.2	296.8	291.8	11.5	5.3	-3.0	-5.1
Automotive	124.2	131.9	125.7	124.0	1.8	7.7	-20.2	-1.7
Ind. supplies (ex. ag., gold)	379.0	399.8	420.2	358.6	46.4	20.8	-.4	-61.7
Consumer goods	163.9	169.5	168.0	161.8	7.0	5.5	-10.6	-6.2
Agricultural	129.8	130.2	132.5	124.3	12.0	.4	-1.3	-8.2
All other goods	52.7	50.4	49.1	51.3	1.9	-2.3	-1.5	2.2
Services exports	550.0	567.9	568.7	567.9	14.7	17.9	1.7	-.9
<b>Imports of Goods and Services</b>	<b>2621.5</b>	<b>2662.5</b>	<b>2692.3</b>	<b>2542.4</b>	<b>106.5</b>	<b>41.0</b>	<b>-60.5</b>	<b>-149.8</b>
Goods imports	2214.6	2246.3	2267.3	2132.1	99.2	31.7	-72.1	-135.2
Oil	494.5	527.4	526.5	443.8	45.8	32.9	-85.3	-82.7
Gold	12.6	12.8	7.0	17.8	-5.3	.2	-6.5	10.7
Other goods	1707.5	1706.1	1733.8	1670.5	58.7	-1.4	19.8	-63.2
Capital goods	469.3	464.1	459.1	465.1	14.9	-5.2	-9.1	6.0
Aircraft & parts	38.1	34.2	32.8	34.7	1.1	-3.9	-2.4	1.9
Computers & accessories	109.4	103.3	103.5	98.9	5.1	-6.1	-3.8	-4.6
Semiconductors	26.8	26.1	25.1	26.1	.6	-.8	-1.9	1.0
Other capital goods	295.0	300.5	297.6	305.3	8.2	5.5	-1.0	7.7
Automotive	249.9	233.1	231.4	222.6	-7.4	-16.8	-13.9	-8.8
Ind. supplies (ex. oil, gold)	331.0	343.7	353.3	337.6	27.4	12.7	13.2	-15.8
Consumer goods	493.5	499.2	522.9	481.7	15.2	5.7	30.0	-41.2
Foods, feeds, beverages	90.1	91.8	93.5	91.3	4.7	1.7	3.0	-2.3
All other goods	73.7	74.3	73.5	72.3	3.8	.6	-3.5	-1.2
Services imports	406.9	416.2	424.9	410.3	7.3	9.3	11.6	-14.6
<b>Memo:</b>								
Oil quantity (mb/d)	12.47	12.31	12.15	11.32	-1.59	-.16	-1.28	-.83
Oil import price (\$/bbl)	108.65	116.99	118.63	107.37	21.06	8.35	-6.04	-11.26

1. Change from previous quarter or month.

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

The value of imports of goods and services fell 5.6 percent in September, with imports of oil and consumer goods recording particularly large declines. The decline in oil imports reflected both a decrease in the volume of oil imports, partly on account of hurricane-related shipping disruptions, and a decrease in prices. The decline in consumer goods partly reflected a large fall in imports of pharmaceuticals, which tend to be volatile. Imports of non-oil industrial supplies and automotive products also moved down. Imports of services fell back after being boosted in August by royalty payments associated with the 2008 Summer Olympics. In contrast, imports of capital goods recorded a small increase following a decrease in August.

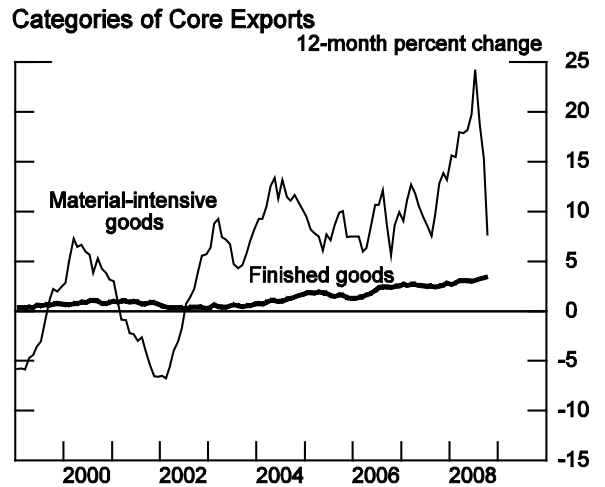
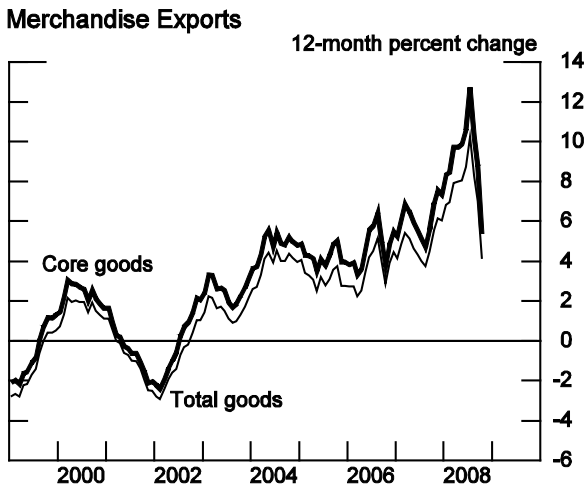
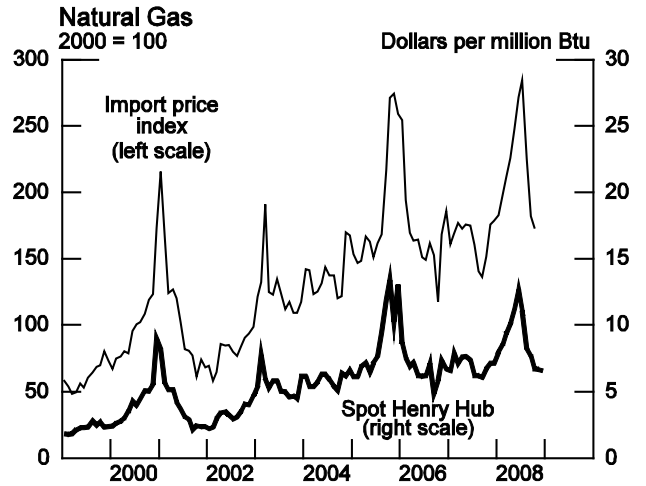
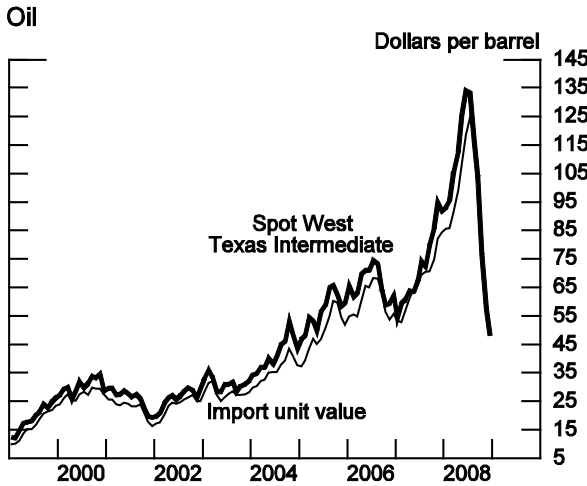
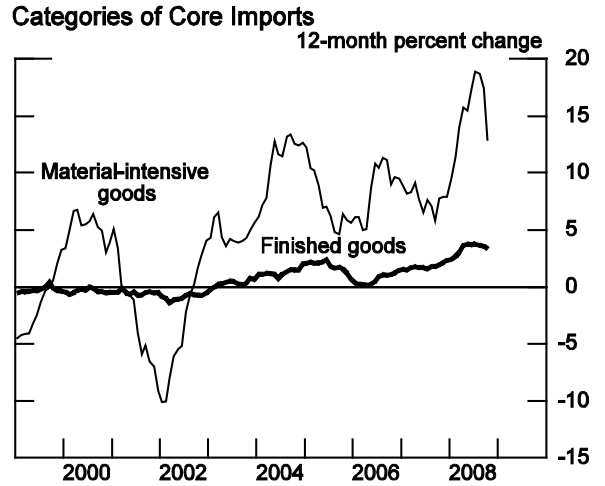
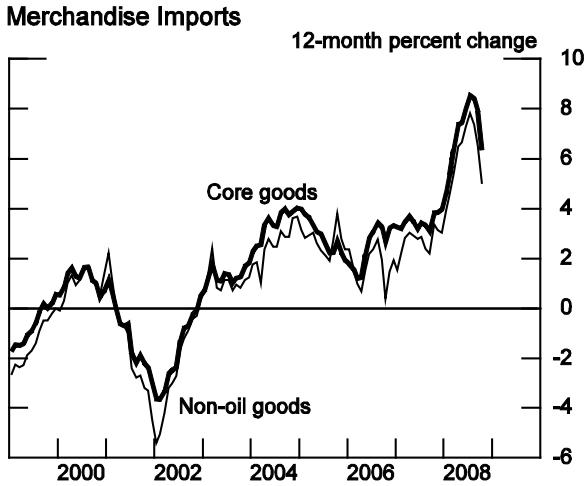
Despite declines in August and September, the average value of imports in the third quarter increased 6.4 percent at an annual rate. The increase largely reflected increased imports of oil, on account of higher prices (early in the quarter) as volumes declined. Industrial supplies, consumer goods, and services also recorded sizable gains. In contrast, imports of capital goods, particularly aircraft and computers, as well as automotive products exhibited declines.

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

**Non-oil imports.** In October, prices of core imports fell 0.9 percent, the largest one-month decline over the 14-year history of the index. This decline, combined with the 0.5 percent decline in September, reversed much of the increases reported in the previous three months. The October decline reflected a 2.8 percent drop in the prices for material-intensive goods, which was due to both falling food prices and, more important, falling metals prices. In contrast, prices for finished goods were little changed, as slightly higher prices for consumer goods and automotive products were offset by falling prices for capital goods excluding computers and semiconductors.

**Oil.** The Bureau of Labor Statistics (BLS) price index of imported oil fell nearly 17 percent in October, marking the third consecutive monthly decline. The index has fallen more than 32 percent since July, the largest three-month decline since early 1991. The spot price of West Texas Intermediate crude oil (WTI) also declined in October, falling 26 percent to an average of \$77 per barrel for the month as a whole. Since that time, the spot price of WTI has continued to decline, closing most recently on December 9 at \$42.07 per barrel. The continued decline in oil prices reflects the worsening prospects for global economic activity and global oil demand.

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



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

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

	Annual rate			Monthly rate		
	2008			2008		
	Q1	Q2	Q3	Aug.	Sept.	Oct.
	----- BLS prices -----					
<b>Merchandise imports</b>	15.4	36.6	4.8	-3.0	-3.3	-4.7
Oil	44.3	152.1	7.9	-9.7	-10.2	-16.7
Non-oil	8.4	12.9	3.4	-.4	-.9	-.9
Core goods <sup>1</sup>	9.6	13.3	6.2	.2	-.5	-.9
Finished goods	4.2	5.3	2.4	.1	-.0	.0
Cap. goods ex. comp. & semi.	4.1	8.7	4.6	.2	.2	-.1
Automotive products	3.9	2.3	1.4	.2	-.1	.1
Consumer goods	4.5	4.9	1.4	.1	-.1	.1
Material-intensive goods	21.8	31.4	13.9	.3	-1.3	-2.8
Foods, feeds, beverages	17.7	19.1	11.3	.5	-1.5	-1.6
Industrial supplies ex. fuels	23.1	35.0	14.7	.2	-1.3	-3.1
Computers	-10.6	-3.9	-8.4	-.9	-.9	-.5
Semiconductors	-7.3	-4.9	-6.4	.6	.1	-.8
Natural gas	88.2	149.9	-25.6	-20.7	-19.1	-4.9
<b>Merchandise exports</b>	12.6	10.2	3.8	-1.6	-.8	-1.9
Core goods <sup>2</sup>	15.8	12.5	5.3	-1.9	-.9	-2.2
Finished goods	4.3	3.2	2.9	.3	.1	.4
Cap. goods ex. comp. & semi.	5.8	4.0	3.4	.3	.1	.3
Automotive products	1.6	1.8	1.2	.1	.1	.4
Consumer goods	2.8	2.1	3.0	.5	.3	.5
Material-intensive goods	30.1	23.2	7.8	-4.0	-2.0	-4.9
Agricultural products	58.1	14.4	5.8	-9.6	.1	-8.7
Industrial supplies ex. ag.	21.9	26.8	8.6	-2.1	-2.7	-3.8
Computers	-10.3	-9.1	-8.9	-1.2	-.6	-1.7
Semiconductors	.6	-.8	-5.9	-.4	-.1	-2.1
	----- NIPA prices -----					
<b>Chain price index</b>						
Imports of goods & services	12.8	28.8	9.2	...	...	...
Non-oil merchandise	8.0	11.2	2.9	...	...	...
Core goods <sup>1</sup>	8.5	10.6	4.6	...	...	...
Exports of goods & services	9.1	10.8	6.7	...	...	...
Total merchandise	10.0	12.3	5.7	...	...	...
Core goods <sup>2</sup>	12.0	13.9	6.7	...	...	...

1. Excludes computers, semiconductors, and natural gas.

2. Excludes computers and semiconductors.

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

BLS Bureau of Labor Statistics.

NIPA National Income and Product Accounts.

Source: Bureau of Economic Analysis; Bureau of Labor Statistics.

**Exports.** Following a 0.9 percent decline in September, prices of exported core goods fell 2.2 percent in October. The sharp decline in October largely reflected an 8.7 percent fall in prices of agricultural goods. Prices of non-agricultural industrial supplies fell 3.8 percent in October, following a 2.7 percent drop in September. In contrast to prices for material-intensive goods, prices for finished goods rose 0.4 percent in October, a step-up from the 0.1 percent increase recorded in September. All major categories within finished goods saw comparable increases. According to the BLS, the 0.4 percent price increase for automotive products is partially attributable to year-end model changeovers.

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

Since the October Greenbook, we have received data on U.S. international financial transactions for September and October, along with partial and confidential data on custody accounts at the Federal Reserve Bank of New York (FRBNY) through November. During these months of intensified turmoil, exchange market intervention affected foreign official flows, the reciprocal currency swaps, (which enhanced dollar liquidity abroad) led to increased private banking inflows, and the strong preference of foreigners for Treasury securities over other U.S. securities became still more apparent.

Foreign official flows changed from robust net purchases of U.S. securities in September to unusual net sales in October (line 1 of the “Summary of U.S. International Transactions” table and the chart “Foreign Official Financial Inflows through October 2008”) as several countries intervened in foreign exchange markets.

. China’s acquisitions of Treasury securities jumped in September but then fell back in October and November to more typical rates, thereby contributing to the October swing to official net sales.

Stepped-up drawings on the reciprocal swap facilities (included in line 2) generated significant official outflows in September and October as the Federal Reserve acquired deposit claims on partner central banks. The corresponding, or “offsetting,” inflows could appear anywhere in the financial accounts, but, given the nature of the funding pressures abroad, we would anticipate a sizable reduction in U.S. net lending to foreign banks to generate some of these inflows. Indeed, from August 2007 to August 2008, banking positions with foreigners (line 3) had been posting consistent outflows averaging about \$45 billion per month, but these changed to inflows of \$6 billion in September and an unprecedented \$204 billion in October. This shift in funding flow was more than accounted for by reduced U.S. bank lending to foreign banks (as distinct from other foreign entities) of \$132 billion in September and \$266 billion in October.

Foreign private purchases of U.S. securities totaled \$42 billion in September and \$48 billion in October (line 4), exceeding their pace from earlier in the year. However, the composition of these inflows was even more heavily weighted toward Treasury securities than was the case earlier. In particular, private foreigners, on net, purchased a staggering \$104 billion in Treasury securities in October (line 4a), more than double the



previous high of April 2008. In contrast, private foreigners continued to sell corporate bonds in September and October (line 4c). Private foreign transactions in agency bonds returned to net sales in October after a brief renewal of net purchases in September, the month that conservatorship was announced for Fannie Mae and Freddie Mac (line 4b). Finally, foreign net purchases of equity were relatively strong in September, following weakness earlier in the quarter, but returned to net sales in October (line 4d).

After many years of quarterly net purchases, U.S. residents, on net, sold \$85 billion in foreign long-term securities in the third quarter of 2008 (line 5). The pace of net sales then increased in October to \$34 billion for the month. In addition, U.S. residents reduced investments in foreign short-term securities by \$35 billion and in foreign deposits by \$62 billion during the third quarter. (These data, not shown, will be included in line 10 upon the release of the third-quarter balance of payments accounts.) Reductions in these financial sector investments are consistent not only with a reduced desire for foreign exposure but also with the easing effect of the currency swaps on foreign banks' dollar funding needs. Overall, the third-quarter reduction in all types of U.S. investments abroad totaled more than \$180 billion, generating a significant portion of the quarter's net inflows.

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

	2006	2007	2007	2008				
			Q4	Q1	Q2	Q3	Sept.	Oct.
<b>Official financial flows</b>	<b>487.2</b>	<b>362.9</b>	<b>115.8</b>	<b>178.2</b>	<b>99.3</b>	<b>-106.0</b>	<b>-165.3</b>	<b>-268.3</b>
1. Change in foreign official assets in the U.S. (increase, +)	484.8	387.0	139.8	173.5	143.6	120.4	61.0	-22.9
a. G-10 countries + ECB	26.1	36.8	11.8	-1.5	0.2	8.9	12.3	-0.4
b. OPEC	45.2	30.9	16.3	18.1	16.7	16.6	0.4	1.6
c. All other countries	413.5	319.3	111.7	156.9	126.7	94.9	48.4	-24.1
2. Change in U.S. official assets (decrease, +) <sup>1</sup>	2.4	-24.1	-24.0	4.7	-44.3	-226.4	-226.3	-245.4
<b>Private financial flows</b>	<b>351.9</b>	<b>411.5</b>	<b>97.6</b>	<b>12.2</b>	<b>37.4</b>	<b>n.a.</b>	<b>...</b>	<b>...</b>
<b>Banks</b>								
3. Change in net foreign positions of banking offices in the U.S. <sup>2</sup>	111.5	-86.6	-53.7	-140.5	-99.7	-61.0	6.4	204.4
<b>Securities<sup>3</sup></b>								
4. Foreign net purchases (+) of U.S. securities	634.2	751.0	191.4	42.5	84.9	15.3	42.2	48.4
a. Treasury securities	-58.2	157.1	67.2	62.9	66.4	88.9	29.0	103.6
b. Agency bonds	25.8	19.4	16.4	-19.6	-33.3	-45.3	12.8	-31.1
c. Corporate and municipal bonds	517.8	383.5	49.4	-11.9	50.2	-33.5	-11.1	-18.1
d. Corporate stocks <sup>4</sup>	148.9	191.1	58.4	11.1	1.6	5.3	11.5	-6.0
5. U.S. net acquisitions (-) of foreign securities	-362.4	-287.2	-4.7	-35.2	-33.0	84.6	33.6	33.8
a. Bonds	-224.5	-168.0	-13.6	-7.8	-11.1	70.5	37.1	13.8
b. Stock purchases	-119.1	-107.9	11.5	-26.7	-19.9	14.2	-3.5	20.7
c. Stock swaps <sup>4</sup>	-18.8	-11.3	-2.6	-0.8	-2.0	0.0	0.0	-0.8
<b>Other flows<sup>5</sup></b>								
6. U.S. direct investment (-) abroad	-241.2	-333.3	-110.9	-89.1	-65.5	n.a.	...	...
7. Foreign direct investment in the U.S.	242.0	237.5	55.7	80.4	93.8	n.a.	...	...
8. Net derivatives (inflow, +)	29.7	6.5	-13.5	-8.0	-2.5	n.a.	...	...
9. Foreign acquisitions of U.S. currency	2.2	-10.7	-3.5	-0.9	0.2	n.a.	...	...
10. Other (inflow, +) <sup>6</sup>	-64.2	134.2	36.8	163.0	59.3	n.a.	...	...
<b>U.S. current account balance<sup>7</sup></b>	<b>-788.1</b>	<b>-731.2</b>	<b>-167.2</b>	<b>-175.6</b>	<b>-183.1</b>	<b>n.a.</b>	<b>...</b>	<b>...</b>
<b>Capital account balance<sup>8</sup></b>	<b>-3.9</b>	<b>-1.8</b>	<b>-0.6</b>	<b>-0.6</b>	<b>-0.7</b>	<b>n.a.</b>	<b>...</b>	<b>...</b>
<b>Statistical discrepancy<sup>7</sup></b>	<b>-47.1</b>	<b>-41.3</b>	<b>-45.6</b>	<b>-14.1</b>	<b>47.1</b>	<b>n.a.</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 nonmarket means such as mergers and reincorporations.

5. Quarterly data; seasonally adjusted.

6. 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.

7. Seasonally adjusted.

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

G-10 Group of Ten (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, United Kingdom, United States).

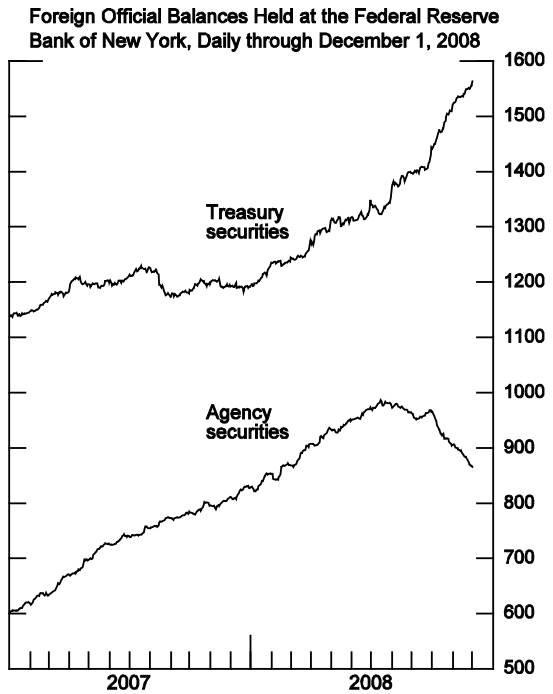
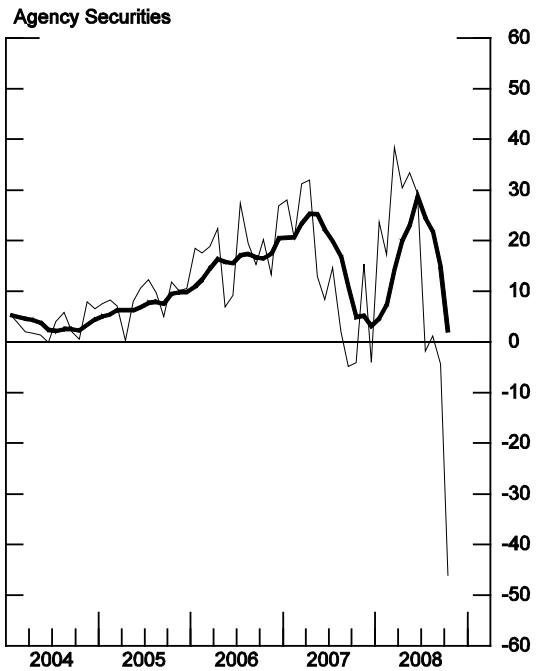
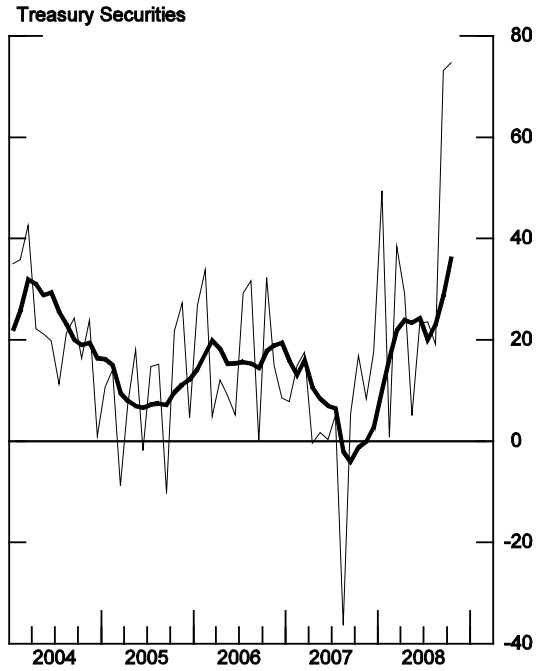
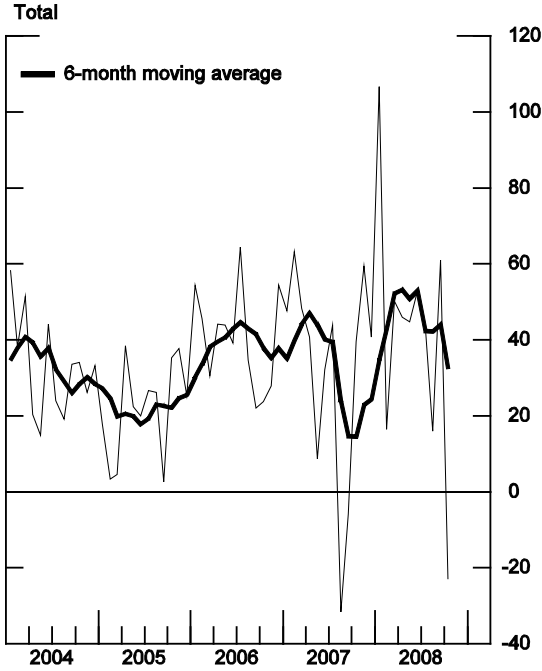
ECB European Central Bank.

OPEC Organization of the Petroleum Exporting Countries.

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

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

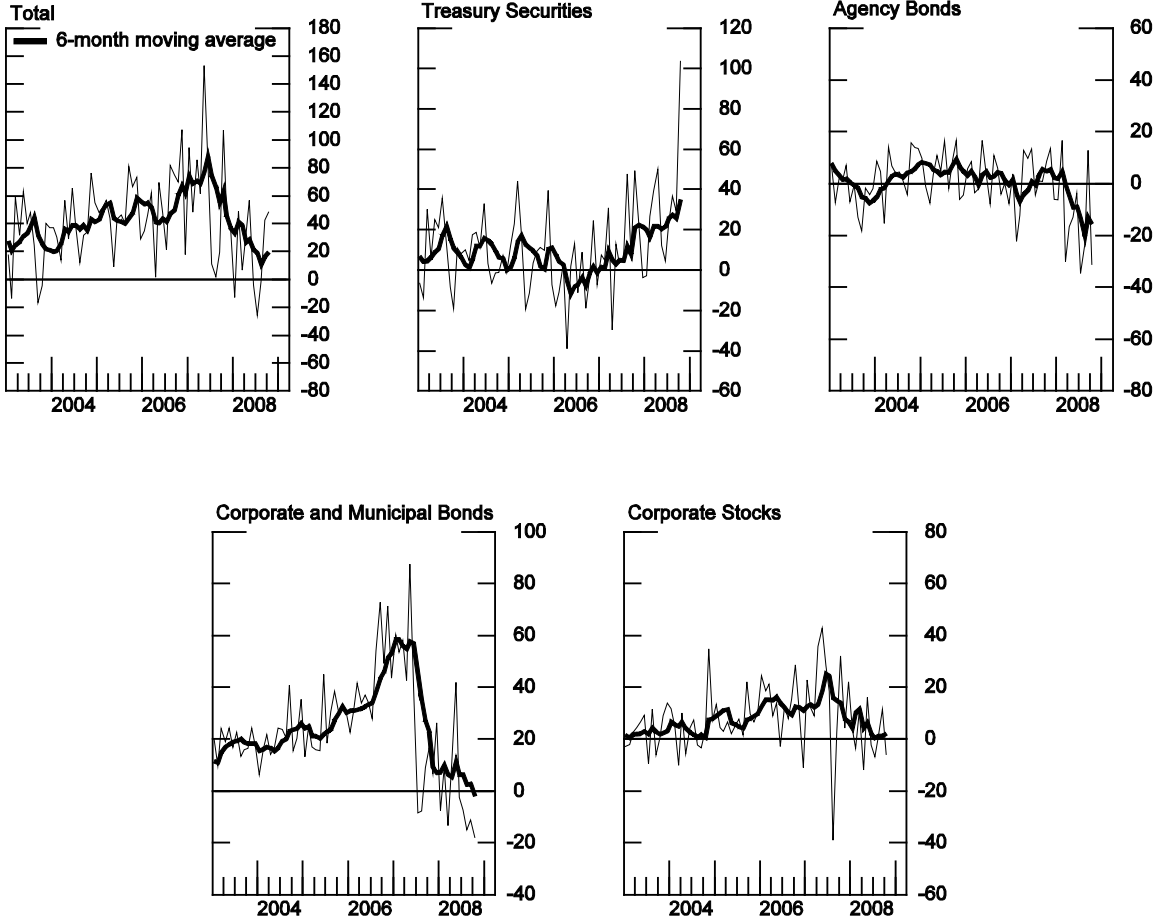
**Foreign Official Financial Inflows (+) through October 2008**  
 (Billions of dollars; monthly rate, not seasonally adjusted)



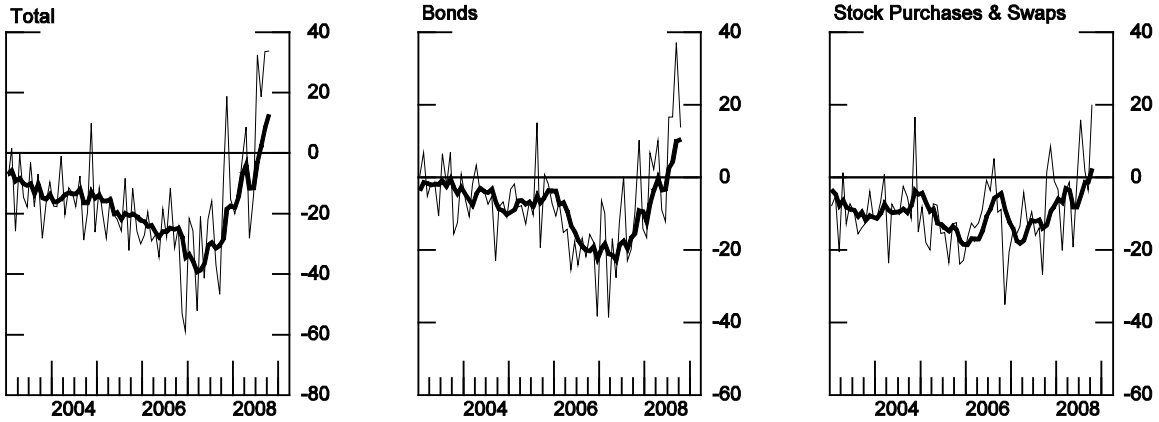
Source: U.S. Treasury International Capital reports with staff adjustments and FRBNY

**Private Securities Flows through October 2008**  
 (Billions of dollars; monthly rate, not seasonally adjusted)

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



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



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

## **Foreign Financial Markets**

Clear evidence of a slowdown in activity and the rapid waning of inflationary pressures prompted central banks in advanced foreign economies to lower their policy interest rates, and long-term sovereign bond yields in these economies dropped sharply. Net movements in equity prices and exchange rates were more moderate, although the volatility of these asset prices continued to be high amid further uncertainty about the severity and the duration of the ongoing global recession

Conditions in interbank funding markets have improved on net since the October Greenbook, with one-month Libor-OIS spreads in euro, sterling, and dollars narrowing, particularly in dollars. The basis spread implied by foreign exchange swaps between the dollar and the euro rose slightly in November, consistent with continued dollar funding pressure for some institutions, but the spread has declined sharply in the past few days as funding pressure seems to have abated since early December. There were relatively few new initiatives by governments in the major foreign economies aimed at stabilizing funding markets, but a number of European governments did clarify the debt guarantee programs they had initiated in October, and a few banks began to issue debt backed by those programs.

Ten-year nominal sovereign bond yields, which changed relatively little in the previous period, dropped about 90 basis points in the United Kingdom, and 50 to 60 basis points in Germany and Canada. Corporate spreads (both investment-grade and lower-rated) changed little in the euro area, but they rose in the United Kingdom, Canada, and Japan. Equity indexes, which suffered very large drops in September, remained highly volatile but registered more moderate net movements in October. The FTSE 100 rose 8 percent, and the Dow Jones Euro Stoxx changed little on net. Japan's TOPIX index dropped 6 percent, about as much as the S&P 500. Banking sector share prices fell sharply in the euro area and in the United States.

The major currencies index of the dollar has changed little on net since the time of the October Greenbook, but some bilateral exchange rate movements have been more substantial. The dollar depreciated 1 percent on net versus the euro and 6 percent against the Japanese yen, which seemed to be boosted by a continued reduction in carry trades. But the dollar appreciated 9 percent versus sterling. Implied volatilities in most currency pairs remained elevated, although well below the multiyear highs reached in the previous intermeeting period.

On October 29, the Federal Reserve announced the establishment of temporary reciprocal currency agreements (swap lines) with the central banks of Brazil, Mexico, and Korea, and with the Monetary Authority of Singapore. These facilities, designed to address dollar funding pressure in these economies, can support the provision of dollar liquidity in amounts of up to \$30 billion to each of the central banks. Financial markets in the four countries reacted positively to the announcements, including, in most cases, a narrowing of their sovereign spreads and an appreciation of their domestic currencies. By the end of the intermeeting period, only the Bank of Korea had drawn on its swap line and auctioned dollar funding to its banks. The Bank of Korea auctioned \$4 billion of 84-day funds on December 2 at a weighted-average interest rate of 6.84 percent, and \$3 billion of 84-day funds on December 9 at a weighted-average interest rate of 5.58 percent; the interest rates in both auctions were well above 3-month dollar Libor.

Exchange rate movements against emerging market currencies were much more moderate than in the previous period. In aggregate, the dollar has changed little against the currencies of our other important trading partner since the October Greenbook. The dollar appreciated 5 percent versus the Brazilian *real*, was little changed on net against the Mexican peso and the Chinese renminbi, and depreciated 3 percent versus the Korean won. There continued to be reports of foreign exchange intervention by a number of emerging market countries in support of their domestic currencies. Following a few days when Chinese authorities let the renminbi depreciate a bit more than had previously been allowed, some concerns arose that the Chinese government was considering guiding the renminbi to depreciate against the dollar to help boost exports. By the end of the period, nondeliverable forward renminbi exchange rates were pricing in a 4 percent depreciation of the renminbi against the dollar over the next 12 months.

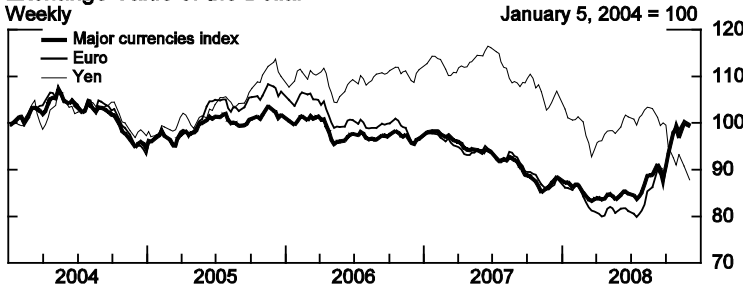
Equity indexes were mixed in Latin American and Asian markets over the period. The Chinese government's announcement of a large fiscal stimulus package may have helped support Chinese equity prices, which rose 10 percent on net. Equity markets in the emerging market economies were likely supported as well by further steps by a number of governments to help stabilize funding markets and to increase spending. Sovereign yield spreads in Latin America and emerging Asia declined from their peaks of mid-October, but remained quite elevated.

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

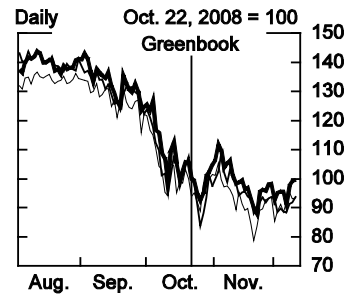
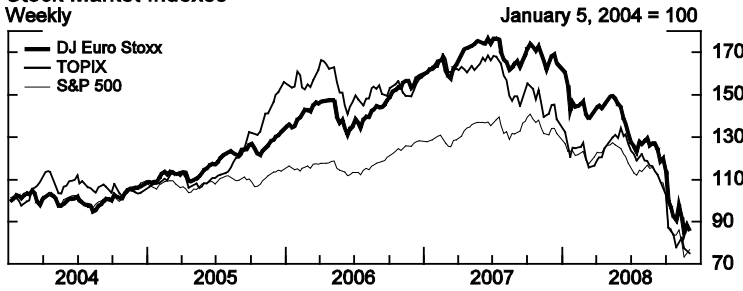
	Latest	Percent change since October Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.2973	-1.1
Yen (¥/\$)	92.8	-5.9
Sterling (\$/£)	1.4788	9.4
Canadian dollar (C\$/\\$)	1.2568	0.6
<i>Nominal dollar indexes*</i>		
Broad index	110.2	0.1
Major currencies index	82.7	-0.3
OITP index	139.3	0.5
<i>Stock market indexes</i>		
DJ Euro Stoxx	225.2	-0.4
TOPIX	834.6	-6.1
FTSE 100	4378.9	8.4
S&P 500	892.2	-6.6

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

Exchange Value of the Dollar



Stock Market Indexes

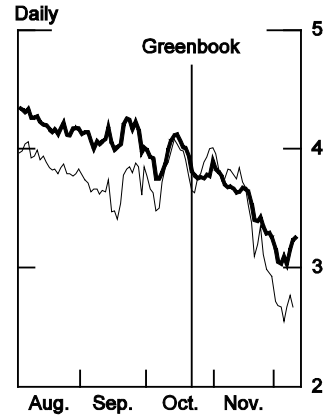
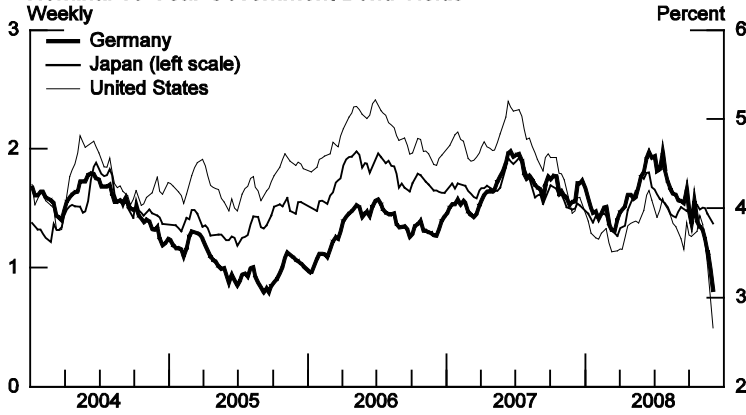


**Industrial Countries: Nominal and Real Interest Rates**

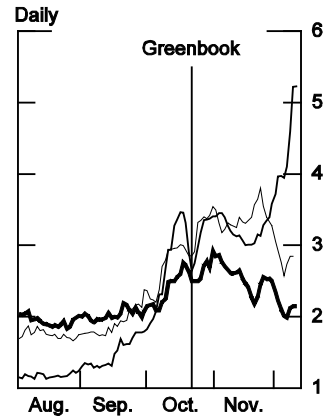
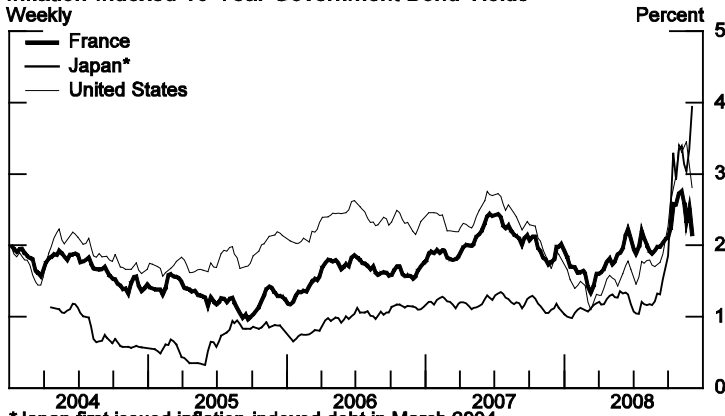
	3-month Libor		10-year nominal		10-year indexed		Percent
	Latest	Change since Oct. Greenbook	Latest	Change since Oct. Greenbook	Latest	Change since Oct. Greenbook	
Germany	3.38	-1.55	3.26	-0.54	1.97	-0.45	
Japan	0.95	-0.08	1.41	-0.11	5.23	2.59	
United Kingdom	3.25	-2.79	3.60	-0.88	2.63	0.42	
Canada	2.30	-1.14	3.13	-0.57	...	...	
United States	2.10	-1.74	2.67	-1.09	2.85	-0.01	

... Not applicable.  
 Libor London interbank offered rate.

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



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

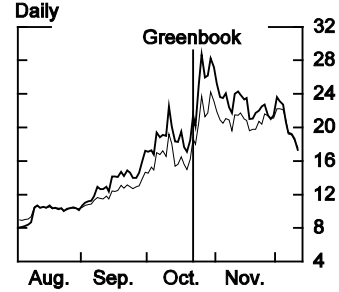
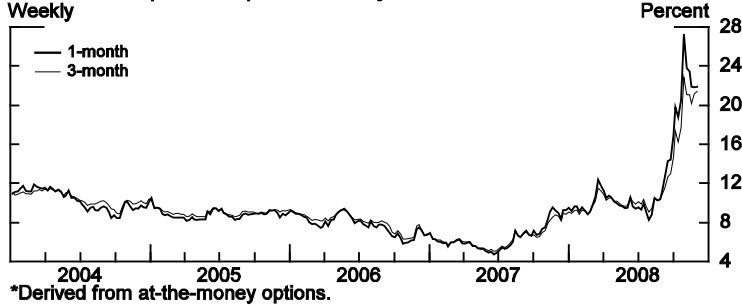


\*Japan first issued inflation-indexed debt in March 2004.

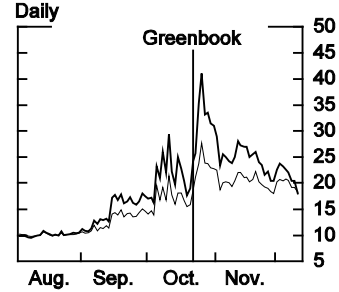
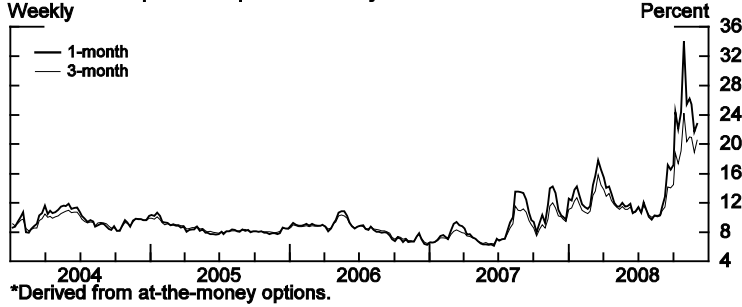


### Measures of Market Volatility

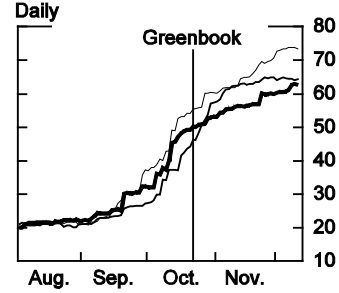
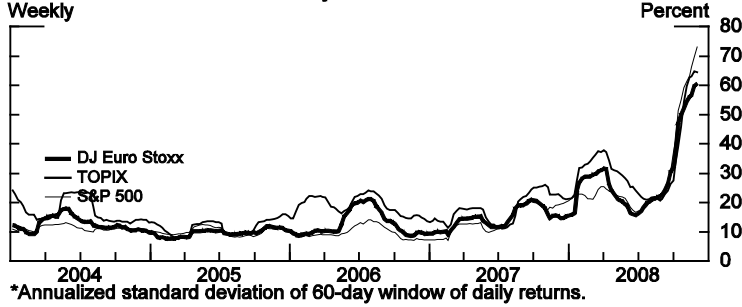
**Dollar-Euro Options-Implied Volatility\***



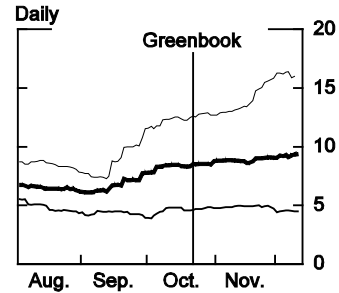
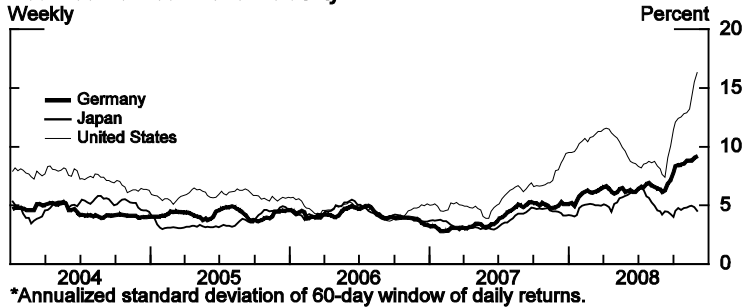
**Yen-Dollar Options-Implied Volatility\***



**Realized Stock Market Volatility\***



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

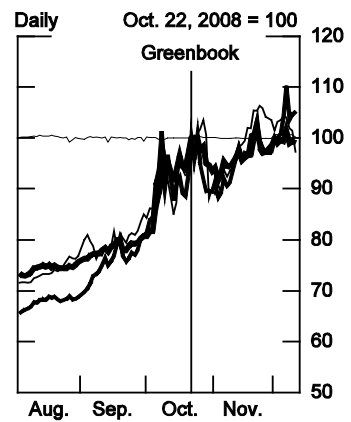
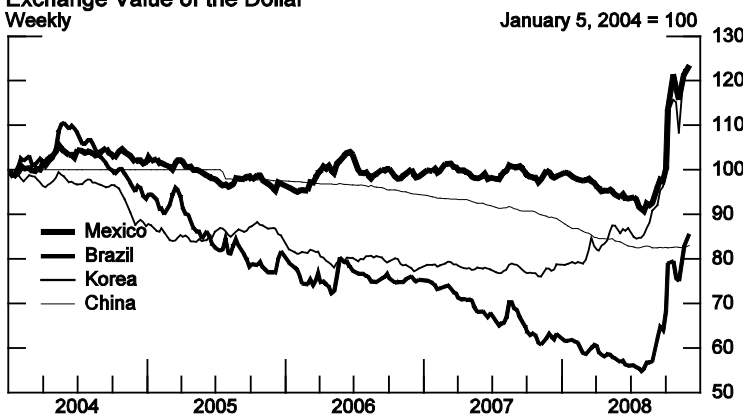


### Emerging Markets: Exchange Rates and Stock Market Indexes

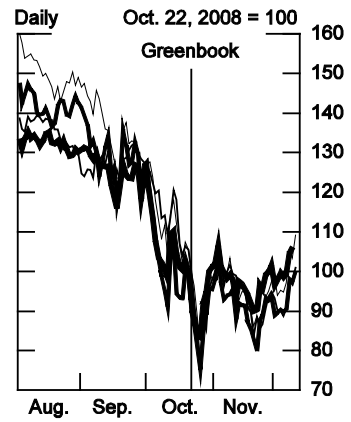
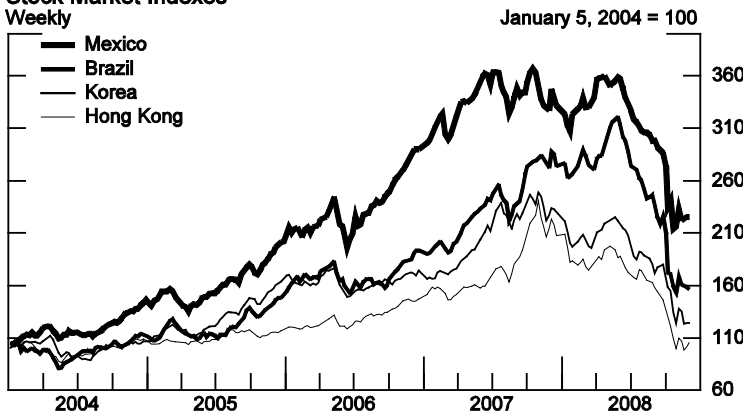
	Exchange value of the dollar		Stock market index	
	Latest	Percent change since Oct. Greenbook*	Latest	Percent change since Oct. Greenbook
Mexico	13.4795	-0.8	21440	6.1
Brazil	2.4999	5.2	39019	-0.1
Venezuela	2.14	-0.0	34711	-4.0
China	6.8475	0.2	2079	9.7
Hong Kong	7.7501	-0.0	15578	9.2
Korea	1380.9	-2.7	1146	1.0
Taiwan	33.44	1.4	4659	-4.2
Thailand	35.33	2.3	424	-8.9

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

Exchange Value of the Dollar  
Weekly



Stock Market Indexes  
Weekly

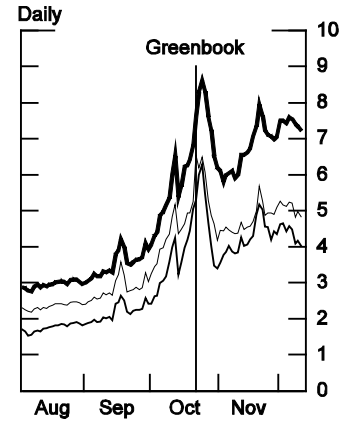
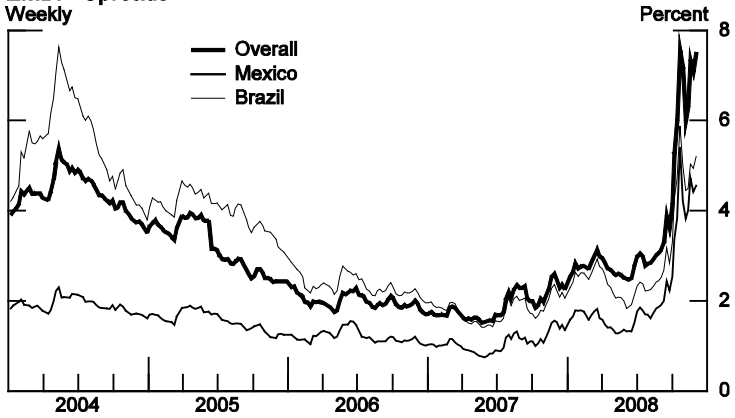


**Emerging Markets: Short-Term Interest Rates and Dollar-Denominated Bond Spreads**

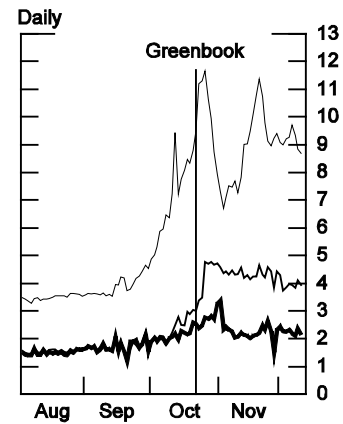
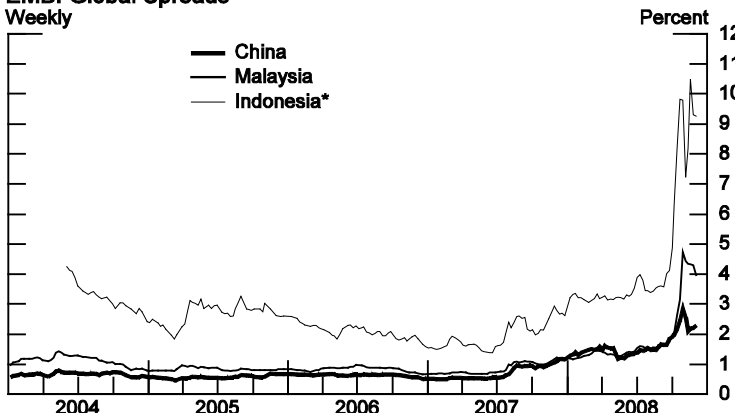
	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Oct. Greenbook	Latest	Change since Oct. Greenbook
Mexico	8.17	0.58	4.02	-1.03
Brazil	14.01	-0.39	4.83	-0.42
Argentina	16.13	0.44	18.49	2.06
China	...	...	2.16	-0.43
Korea	5.35	-0.00	...	...
Taiwan	2.21	-0.22	...	...
Singapore	0.69	-0.31	...	...
Hong Kong	1.14	-1.76	...	...

\*One-month interest rate except 1-week rate for Korea. (No reliable short-term interest rate exists for China.)  
 \*\*EMBI+ Spreads or EMBI Global Spreads over similar-maturity U.S. Treasury securities.  
 ... Not applicable. Korea, Taiwan, and Hong Kong have no outstanding dollar-denominated sovereign bonds.

**EMBI+ Spreads**  
Weekly



**EMBI Global Spreads**  
Weekly



\*Begins May 2004.

**Developments in Advanced Foreign Economies**

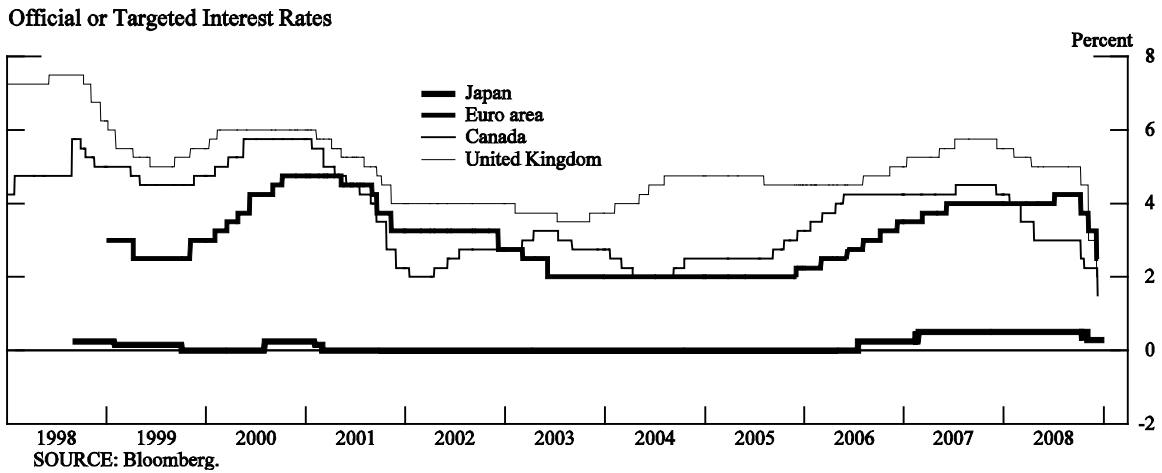
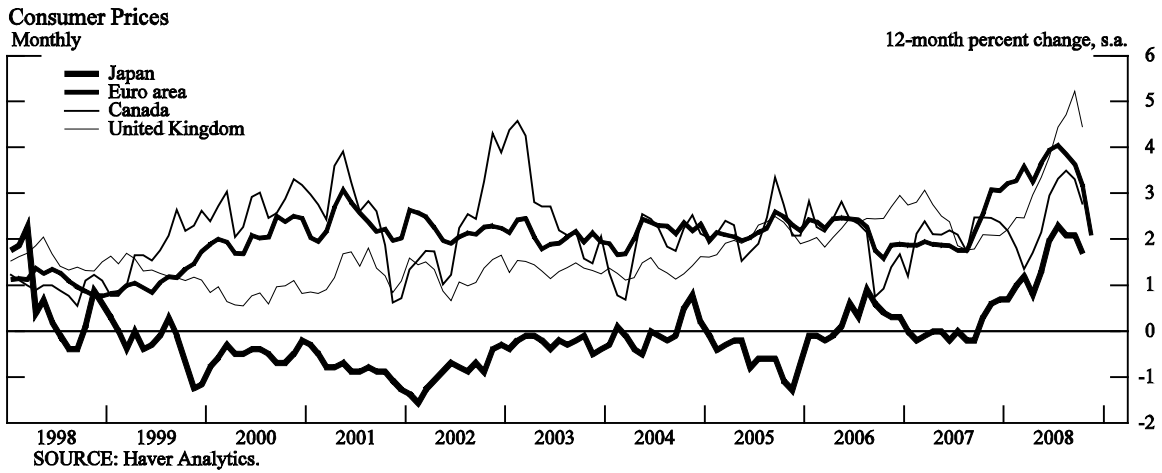
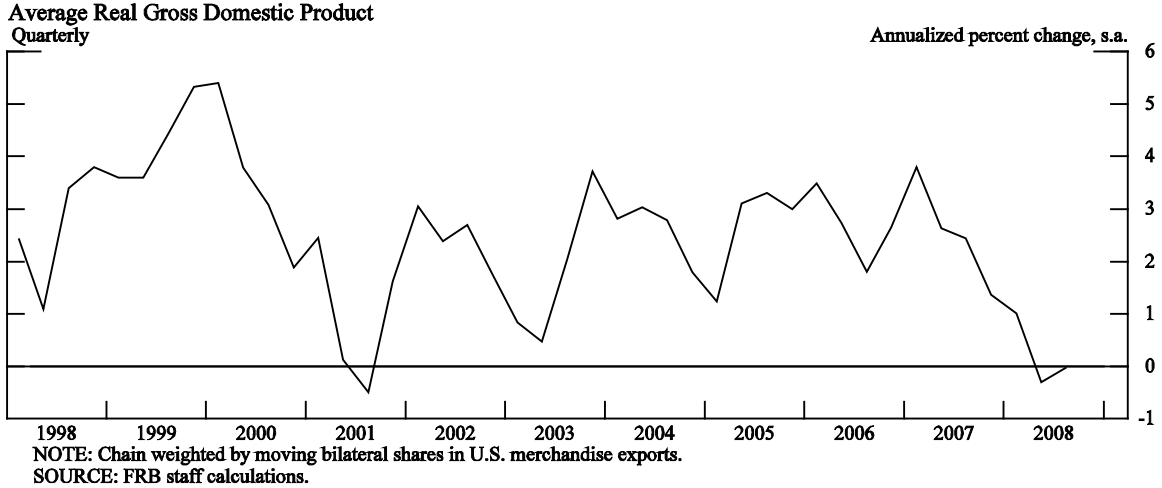
Economic activity in most advanced foreign economies contracted in the third quarter, driven by sharp declines in investment and significant negative contributions of net exports, as the recession took hold more strongly. Real GDP in Canada increased at a faster-than-expected pace, although consumption and investment continued to soften.

Incoming data point to an even weaker pace of activity in the fourth quarter. Confidence indicators plunged and have now reached levels not observed since the early 1990s. In November, the euro-area and U.K. purchasing managers indexes (PMI) fell to levels associated with severe contractions in economic activity. Labor market conditions deteriorated further, with rising unemployment rates in most countries.

After peaking during the third quarter, consumer price inflation has moderated in all advanced foreign economies, primarily as a result of falling energy and food prices. Faced with clear evidence of a slowdown in economic activity and rapid waning of inflationary pressures, all major central banks lowered policy rates in the intermeeting period. The Bank of England slashed its base rate a total of 250 basis points and the European Central Bank by 125 basis points. The Bank of Canada lowered its overnight target rate by 75 basis points. The Bank of Japan lowered its target for the overnight call rate by 20 basis points, to 30 basis points.

Since the last Greenbook, a number of countries have announced fiscal stimulus packages to cope with the slowdown in economic activity. However, given the nature of the measures announced – mostly tax exemptions for private investment and increased spending for public infrastructure – fiscal policy will likely have limited impact in the current and upcoming quarters.

### Advanced Foreign Economies



In **Japan**, GDP fell 1.8 percent (s.a.a.r.) in the third quarter after falling a downwardly revised 3.7 percent in the second quarter. Domestic demand declined, as a modest rebound in private consumption was offset by a sharp drop in private investment. Private investment has fallen in five out of the past six quarters. Net exports subtracted 0.5 percentage point from GDP growth, with a bounceback in imports outpacing that of exports.

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

Component	2006 <sup>1</sup>	2007 <sup>1</sup>	2007	2008		
			Q4	Q1	Q2	Q3
<b>GDP</b>	2.1	2.0	2.1	2.4	-3.7	-1.8
<b>Total domestic demand</b>	1.5	0.6	0.8	0.5	-3.8	-1.0
<b>Consumption</b>	1.7	1.5	1.0	2.4	-2.2	1.1
<b>Private investment</b>	4.2	-1.5	-5.3	3.8	-8.5	-4.6
<b>Public investment</b>	-7.8	-3.7	1.4	-19.6	-4.7	1.6
<b>Government consumption</b>	1.2	3.4	8.3	-1.5	-3.5	-1.3
<b>Inventories<sup>2</sup></b>	0.2	0.3	0.3	-1.0	0.2	-0.6
<b>Exports</b>	6.5	10.2	10.9	14.5	-10.1	3.4
<b>Imports</b>	2.7	2.0	3.6	4.1	-11.5	9.6
<b>Net Exports<sup>2</sup></b>	0.6	1.3	1.3	1.8	-0.4	-0.5

1. Q4/Q4

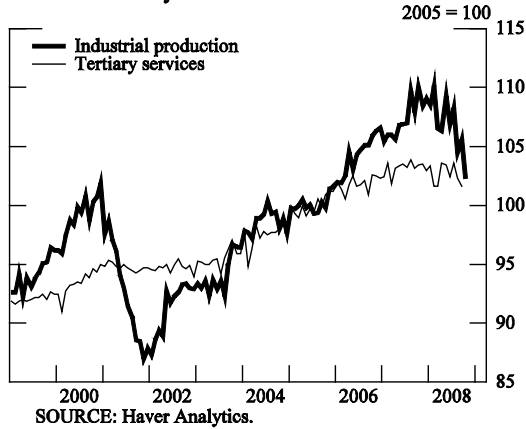
2. Percentage point contribution to GDP growth.

SOURCE: Haver Analytics.

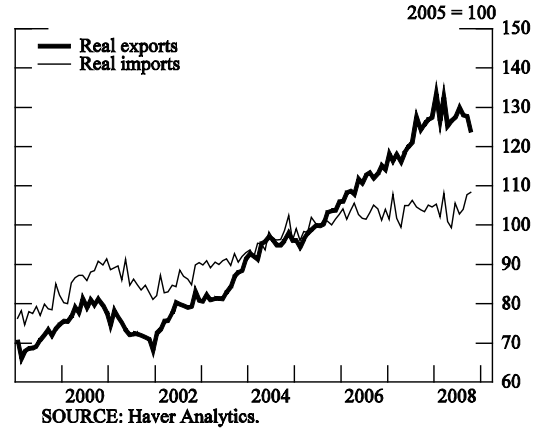
More recently, exports fell 3.2 percent in October following declines in August and September. Household spending has been anemic, and housing starts fell almost 9 percent in October from the previous month, continuing a long decline. Industrial production plummeted in October and is currently 7 percent below its October 2007 peak. The job openings-to-applicants ratio (the number of officially posted job openings relative to the number of officially registered job seekers) in October hit its lowest level since May 2004.

## Japan

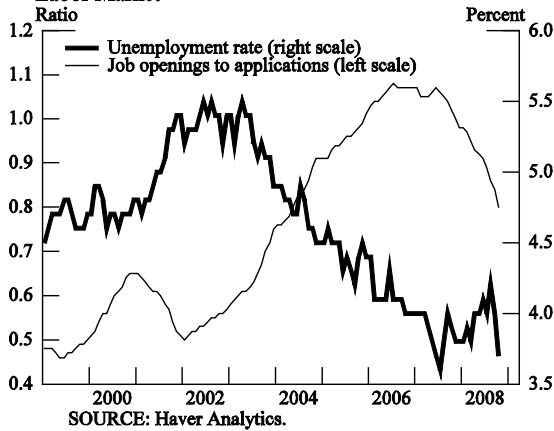
Economic Activity



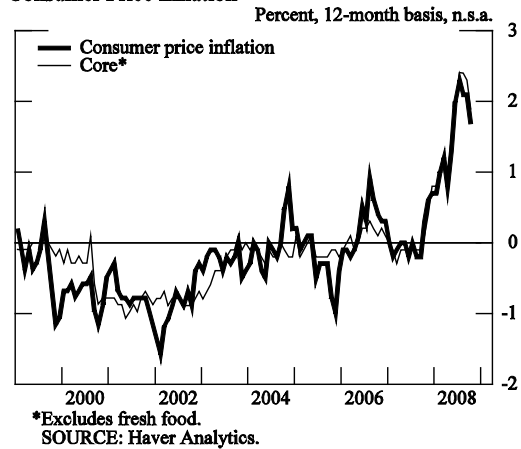
Real Trade



Labor Market



Consumer Price Inflation



## Economic Indicators

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

Indicator	2008			2008			
	Q1	Q2	Q3	Aug.	Sept.	Oct.	Nov.
Housing starts	19.6	-2.1	1.4	-1.2	-0.4	-8.9	n.a.
Machinery orders <sup>1</sup>	2.2	0.6	-10.4	-14.5	5.5	-4.4	n.a.
Household expenditures	0.7	-3.3	-0.1	-3.4	1.7	-1.4	n.a.
New car registrations	-1.4	-2.0	-3.3	-11.8	2.1	-2.1	-15.3
Business sentiment <sup>2</sup>	-4.0	-7.0	-14.0	...	...	...	...
Wholesale prices <sup>3</sup>	3.5	4.9	7.1	7.4	6.8	5.0	2.8

1. Private sector excluding ships and electric power.

2. Tankan survey, diffusion index. Level.

3. Percent change from year earlier; not seasonally adjusted.

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

SOURCE: Haver Analytics.

Japanese twelve-month consumer price inflation was 1.7 percent in October, down sharply from 2.1 percent in September, reflecting a decline in food and energy prices. Excluding food and energy prices, consumer prices rose 0.2 percent from the previous year.

On October 31, the Bank of Japan lowered its policy rate 20 basis points to 0.3 percent. Market participants seem to expect further easing by the Bank of Japan in 2009, although Governor Shirakawa has repeatedly expressed concerns about the negative impact of a policy rate near zero on the functioning of money markets.

The Japanese government announced an ¥26.9 trillion fiscal stimulus on October 30 (5.2 percent of GDP). The majority of the package is allocated to credit guarantees for small and medium-sized enterprises. The remaining measures include modest taxpayer rebates, increased tax breaks on mortgages, and a decrease in highway tolls. Actual government expenditure is expected to increase by ¥5 trillion (1.0 percent of GDP).

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

Component	2006 <sup>1</sup>	2007 <sup>1</sup>	2007	2008		
			Q4	Q1	Q2	Q3
<b>GDP</b>	3.3	2.1	1.3	2.7	-0.7	-0.8
<b>Total domestic demand</b>	2.5	2.0	0.0	2.3	-1.2	1.5
<b>Consumption</b>	2.4	1.2	0.7	-0.1	-0.8	0.2
<b>Investment</b>	6.3	3.2	4.0	5.8	-3.5	-2.5
<b>Government consumption</b>	2.3	2.1	1.3	1.3	3.2	3.4
<b>Inventories<sup>2</sup></b>	-0.6	0.2	-1.4	0.8	-0.6	1.0
<b>Exports</b>	9.4	3.9	1.7	7.1	-0.4	1.5
<b>Imports</b>	7.6	3.8	-1.2	6.4	-1.6	6.8
<b>Net Exports<sup>2</sup></b>	0.8	0.1	1.3	0.4	0.5	-2.2
<b>Memo:</b>						
<b>GDP of selected countries</b>						
<b>France</b>	2.2	2.2	1.4	1.6	-1.1	0.6
<b>Germany</b>	4.1	1.7	1.4	5.7	-1.7	-2.1
<b>Italy</b>	2.5	0.1	-1.7	2.1	-1.7	-2.1

1. Q4/Q4

2. Percentage point contribution to GDP growth.

SOURCE: Haver Analytics.



In the **euro area**, real GDP contracted 0.8 percent (s.a.a.r.) in the third quarter, with GDP for Germany and Italy falling about 2 percent. Domestic demand rebounded somewhat from the poor second-quarter performance; additional declines in investment were offset by increases in total consumption and inventories. A surge in imports provided sizable negative contribution of net exports to headline growth.

Recent indicators suggest considerable weakness in the current quarter. In October, the volume of retail sales fell 0.8 percent, with marked declines in Germany and Spain, and the unemployment rate increased to 7.7 percent. November PMI figures for manufacturing and services dropped sharply to the lowest level since the early 1990s. Consumer and industrial confidence indicators continued to plunge in November.

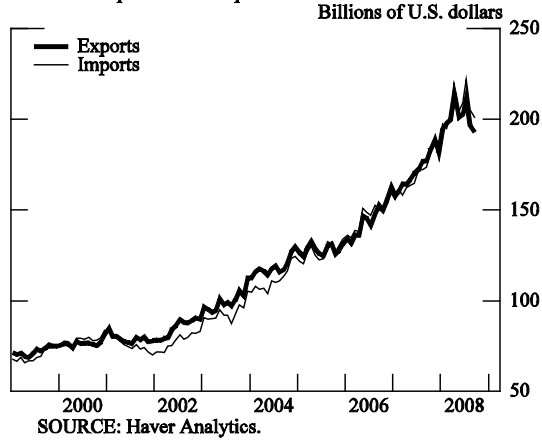
Twelve-month consumer price inflation in the euro area in November fell to 2.1 percent, according to the flash estimate, down from 3.2 percent in October and a peak of 4 percent in July. Although components are not yet available, the marked moderation in November appears to reflect the recent fall in oil and other energy prices.

The European Central Bank cut its policy rate 50 basis points in early November and an additional 75 basis points on December 4. The policy rate now stands at 2.5 percent. The central bank stated that the downside risks to growth have increased in response to the recent financial developments and inflationary pressures have diminished further.

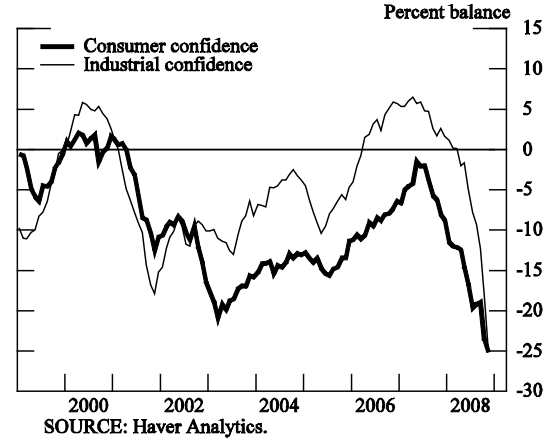
In the last month, the European Commission has officially stated that it will allow national governments to temporarily breach the 3 percent budget deficit limit imposed by the Stability and Growth Pact, in application of the “exceptional circumstances” clause. Several governments—including Germany, France, Italy, and Spain—have announced fiscal stimulus packages. However, the measures adopted so far only include modest corporate tax credits for new investments or increases in expenditures for public infrastructure.

## Euro Area

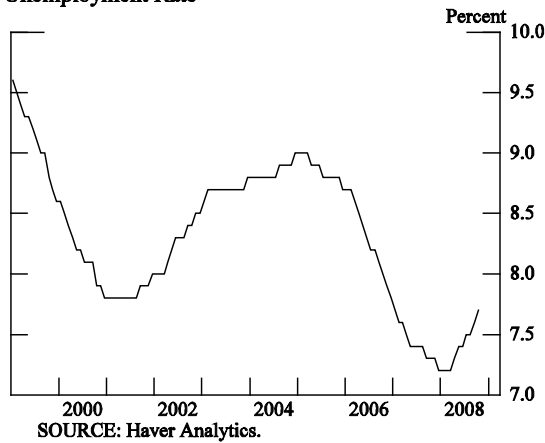
Nominal Exports and Imports



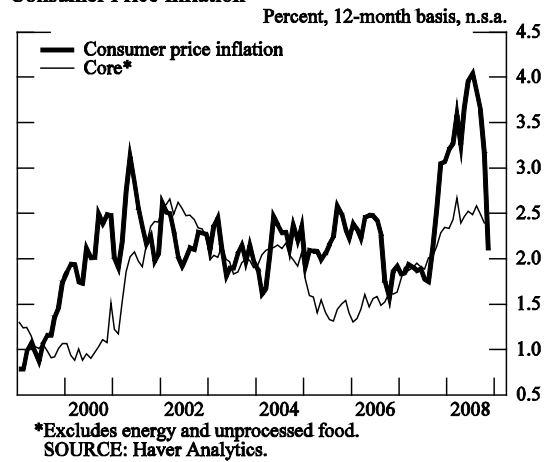
Economic Sentiment



Unemployment Rate



Consumer Price Inflation



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

Indicator	2008			2008			
	Q1	Q2	Q3	July	Aug.	Sept.	Oct.
Industrial production <sup>1</sup>	0.2	-0.7	-0.9	-0.2	0.8	-1.7	n.a.
Retail sales volume <sup>2</sup>	-0.2	-0.8	0.0	0.3	0.1	0.1	-0.8
New car registrations	-4.0	-1.5	-5.6	-2.0	-0.9	-0.1	-5.7
Employment	0.3	0.2	n.a.	...	...	...	...
Producer prices <sup>3</sup>	5.4	7.1	8.6	9.2	8.6	7.9	6.3
M3 <sup>3</sup>	9.9	9.5	n.a.	9.3	n.a.	n.a.	n.a.

1. Excludes construction.

2. Excludes motor vehicles.

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

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

M3 Manufacturers' shipments, inventories, and orders.

SOURCE: Haver Analytics.

Real GDP in the **United Kingdom** shrank 2.0 percent (a.r.) in the third quarter. Domestic demand plummeted, decreasing for the third consecutive quarter, and net exports made a negative contribution.

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

Component	2006 <sup>1</sup>	2007 <sup>1</sup>	2007	2008		
			Q4	Q1	Q2	Q3
<b>GDP</b>	3.2	2.9	2.0	1.1	0.0	-2.0
Total domestic demand	3.7	3.5	2.2	-0.1	-0.6	-1.6
Consumption	1.9	3.6	2.7	3.6	-0.2	-0.5
Investment	9.5	3.9	7.2	-7.7	-10.7	-9.2
Government consumption	1.8	1.6	0.9	3.9	2.0	4.0
Inventories <sup>2</sup>	0.6	0.2	-0.9	-1.9	0.8	-0.3
Exports	-2.0	2.5	-2.8	3.0	-0.2	-1.2
Imports	0.2	4.7	-1.4	-1.3	-2.1	0.3
Net Exports <sup>2</sup>	-0.6	-0.7	-0.3	1.2	0.6	-0.4

1. Q4/Q4

2. Percentage point contribution to GDP growth.

SOURCE: Haver Analytics.

Incoming data point to further weakness in the fourth quarter. Unemployment claims continued to rise in October, and retail sales posted a small decline. In November, business confidence plummeted to a level not seen since the trough of the early 1980s recession, and consumer confidence was at its lowest level since 1992. The November readings of the PMIs are consistent with a severe contraction in the manufacturing, services, and construction sectors. The housing sector is still under significant stress; housing prices have fallen 15 percent since their peak, and mortgage lending remains constrained.

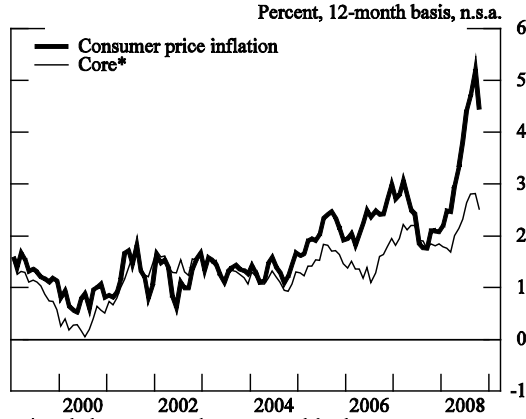
On November 24, the U.K. government unveiled a £20 billion (1.4 percent of GDP) fiscal stimulus package effective over the current and next fiscal year. The value-added tax (VAT) rate was temporarily lowered from 17.5 percent to 15 percent until December 31, 2009. The measure is expected to cost £12.5 billion in lost revenues. In addition, the government permanently increased tax exemptions for individuals and brought forward almost £3 billion of spending in public infrastructure to 2009.

Twelve-month consumer price inflation in October moderated from 5.2 percent to 4.5 percent as a result of falling commodity and energy prices. The Office for National Statistics estimates that the reduction in the VAT will shave an additional 1.3 percentage points from inflation in December.

On December 4, the Bank of England cut its main policy rate 100 basis points to 2.0 percent, citing additional deterioration in economic activity and considerable stress in credit markets as important factors contributing to the monetary policy decision. The rate cut followed a 150 basis-point reduction in the policy rate in November.

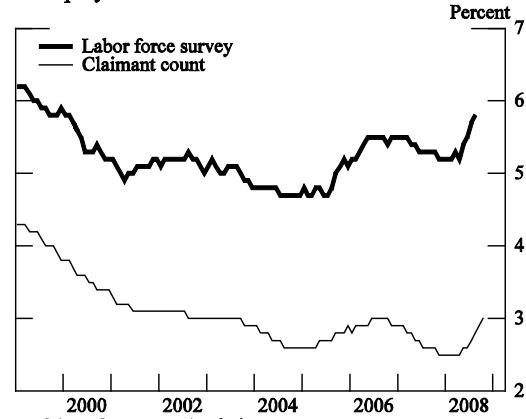
## United Kingdom

Consumer Price Inflation



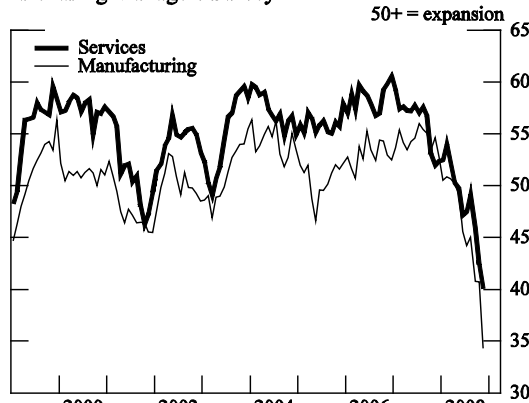
\*Excludes energy and unprocessed food.  
SOURCE: Haver Analytics.

Unemployment Rates



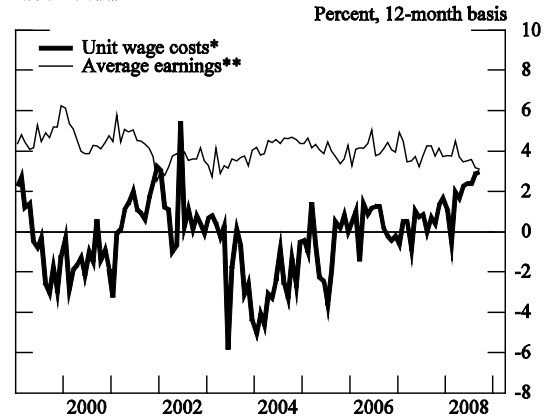
SOURCE: Haver Analytics.

Purchasing Managers Survey



SOURCE: Reuters.

Labor Costs



\*Manufacturing industries.  
\*\*Whole economy, including bonuses.  
SOURCE: Haver Analytics.

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

Indicator	2008			2008			
	Q1	Q2	Q3	Aug.	Sept.	Oct.	Nov.
Producer input prices <sup>1</sup>	20.7	29.9	28.1	29.1	24.0	15.4	7.5
Industrial production	-0.6	-0.9	-1.4	-0.7	-0.3	-1.6	n.a.
Business confidence <sup>2</sup>	12.7	0.7	-12.0	-13.0	-16.0	-31.0	-42.0
Consumer confidence <sup>2</sup>	-8.6	-16.0	-24.2	-23.9	-22.6	-26.6	-26.8
Trade balance <sup>3</sup>	-24.1	-24.2	-23.1	-7.8	-6.3	-6.5	n.a.
Current account <sup>3</sup>	-10.9	-21.7	n.a.	...	...	...	...

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

In **Canada**, real GDP rose an unexpectedly rapid 1.3 percent (s.a.a.r.) in the third quarter, following a 0.6 percent increase in the second quarter. Both consumption and investment provided softening, yet positive, contributions to growth. Net exports provided no contribution to growth with a marked decline in imports balancing a reduction in exports.

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

Component	2006 <sup>1</sup>	2007 <sup>1</sup>	2007	2008		
			Q4	Q1	Q2	Q3
<b>GDP</b>	2.2	2.8	0.8	-0.6	0.6	1.3
<b>Total domestic demand</b>	3.7	6.3	6.2	-2.6	3.8	1.1
<b>Consumption</b>	4.6	5.3	7.5	2.5	2.0	0.7
<b>Investment</b>	4.6	4.2	3.8	0.7	0.7	0.4
<b>Government consumption</b>	3.7	4.6	5.8	2.2	3.9	0.5
<b>Inventories<sup>2</sup></b>	-0.7	1.5	-0.0	-4.0	1.5	0.4
<b>Exports</b>	-1.0	-1.4	-7.4	-4.2	-5.2	-5.4
<b>Imports</b>	3.0	8.6	8.6	-9.0	2.8	-6.1
<b>Net Exports<sup>2</sup></b>	-1.7	-4.2	-5.3	1.6	-2.7	0.1

1. Q4/Q4

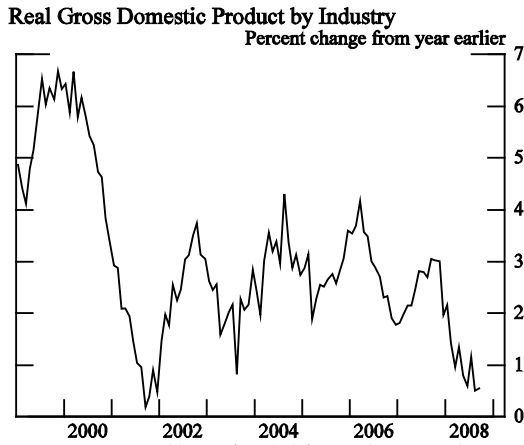
2. Percentage point contribution to GDP growth.

SOURCE: Haver Analytics.

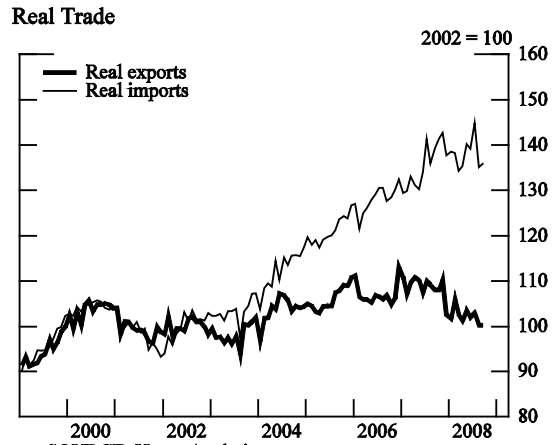
Third-quarter strength does not appear have continued into the fourth quarter. In November, employment declined 0.4 percentage point, posting the largest monthly loss since 1982. The unemployment rate increased to 6.3 percent, and housing starts fell almost 19 percent from the previous month. The PMI dropped sharply into the contraction region after a weak October reading.

Twelve-month consumer price inflation slowed to 2.8 percent in October and core inflation remained at 1.7 percent. The reduction in consumer price inflation reflects primarily the recent fall in food and energy prices. On December 9, the Bank of Canada lowered the overnight rate target 75 basis points to 1.5 percent, stating that the country is entering a recession.

**Canada**



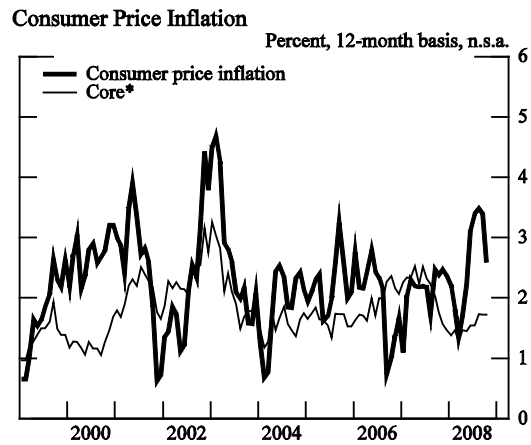
NOTE: Constructed from various Statistics Canada surveys and supplements to the quarterly income and expenditure-based estimates.  
SOURCE: Haver Analytics.



SOURCE: Haver Analytics.



SOURCE: Haver Analytics.



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

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

Indicator	2008			2008			
	Q1	Q2	Q3	Aug.	Sept.	Oct.	Nov.
Industrial production	-1.8	-0.8	0.6	-1.6	-0.3	n.a.	n.a.
New manufacturing orders	-3.3	-1.5	-0.0	-1.1	-1.1	n.a.	n.a.
Retail sales	1.0	0.4	-0.1	-0.3	0.7	n.a.	n.a.
Employment	0.5	0.3	-0.1	0.1	0.6	0.1	-0.4
Consumer attitudes <sup>1</sup>	92.8	79.6	n.a.	...	...	...	...
Business confidence <sup>1</sup>	96.4	91.5	n.a.	...	...	...	...

1. 2002 = 100.  
n.a. Not available. ... Not applicable.  
SOURCE: Haver Analytics; Bank for International Settlements.

## **Economic Situation in Other Countries**

Economic activity in most emerging market economies decelerated sharply in the third quarter. In Mexico and India, however, a surge in agricultural output helped to support growth. Recent data on industrial production, retail sales, PMIs, and business and consumer confidence suggest that growth has likely remained depressed in the current quarter as well. Headline inflation generally declined across emerging market economies, due primarily to lower food and energy prices and, in some cases, to weaker economic activity, but Brazil and Mexico are notable exceptions. With inflation moderating and growth slowing significantly, authorities in several countries loosened monetary policy and announced fiscal stimulus packages.

In **China**, growth slowed to an estimated 5.4 percent (a.r.) in the third quarter, half the pace of the previous quarter. Indications are that growth has likely continued to slow in the current quarter. In October, industrial production contracted for the fourth straight month. The trade surplus widened in October and November as exports fell less than imports. However, exports in November were below year-ago levels for the first time since 2001. Domestic demand has held up well, with retail sales in October up 22 percent from a year earlier, roughly the pace recorded in September. With the slowing of the economy and declines in commodity prices, twelve-month headline inflation dropped sharply to 4 percent in October.

Over the past few months, Chinese authorities have shifted their focus from containing price pressures to supporting growth. Since the time of the October Greenbook, the People's Bank of China has lowered the one-year benchmark bank lending rate by 135 basis points and has also lowered deposit rates and reserve requirements. In addition, the government announced a large fiscal stimulus package totaling 16 percent of 2007 GDP over the next two years. Nearly half of the spending is slated for infrastructure investment, and the remainder is to be allocated to rural development, health care, education, and various projects to protect the environment and spur technological innovation. It is unclear, however, how much new stimulus is included in the package, particularly given uncertainties over the funding and timing of the expenditures. Moreover, the total value of the package includes projects that had been previously announced, including the reconstruction of areas affected by the Sichuan earthquake in May.



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

Indicator	2006	2007	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Real GDP <sup>1</sup>	10.6	11.4	10.8	5.4	...	...	...
Industrial production	14.6	18.6	3.3	.1	-1	-7	n.a.
Consumer prices <sup>2</sup>	2.8	6.5	7.8	5.3	4.6	4.0	n.a.
Merch. trade balance <sup>3</sup>	177.5	262.2	213.7	297.8	271.0	344.6	452.0

1. Gross domestic product. Annual rate. Quarterly data estimated by staff from reported 4-quarter growth rates. 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 valued at cost, insurance, and freight. n.a. Not available. ... Not applicable.

Source: CEIC.

**India's** real GDP grew at a surprisingly strong 8¼ percent pace in the third quarter. Manufacturing production was weak and exports contracted, but activity in the agricultural, mining, and construction sectors rebounded sharply from their depressed second-quarter levels. Little hard data are yet available for the fourth quarter, but anecdotal evidence suggests that exports fell sharply in October and that overall economic activity is slowing. Although consumer price inflation moved up, the closely watched wholesale price inflation declined further, to 11 percent in the twelve months ended in October.

The Reserve Bank of India cut its policy rate a total of 150 basis points, to 6½ percent, in two consecutive meetings in November and December. In addition, the central bank took a number of measures aimed at increasing liquidity and access to credit, including a 350 basis point reduction in the reserve requirement ratio, an increase in the ceiling on foreign borrowing for non-bank financial companies and mutual funds, and a repurchase of sterilization bonds. In early December, the government announced a fiscal stimulus package valued at approximately 1 percent of GDP, which includes expenditures on public infrastructure, a reduction in the value added tax, and assistance to small and medium enterprises. The government also announced a 10 percent reduction in retail fuel prices.

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

Indicator	2006	2007	2008				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP <sup>1</sup>	9.3	8.8	5.4	8.3	...	...	...
Industrial production	10.5	9.9	.1	.1	-3.3	2.1	n.a.
Consumer prices <sup>2</sup>	6.5	5.5	7.8	8.7	9.0	8.8	9.5
Wholesale prices <sup>2</sup>	5.7	3.8	9.6	12.5	12.8	12.3	11.0
Merch. trade balance <sup>3</sup>	-51.8	-71.1	-109.4	-133.8	-158.0	-108.3	-119.7
Current account <sup>4</sup>	-9.5	-12.1	-42.9	n.a.	...	...	...

1. Gross domestic product. 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.

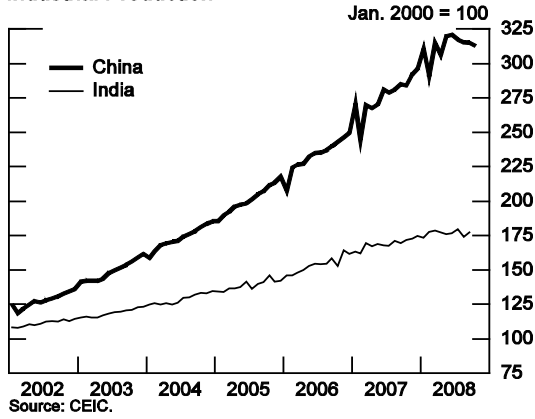
4. Billions of U.S. dollars, not seasonally adjusted, annual rate.

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

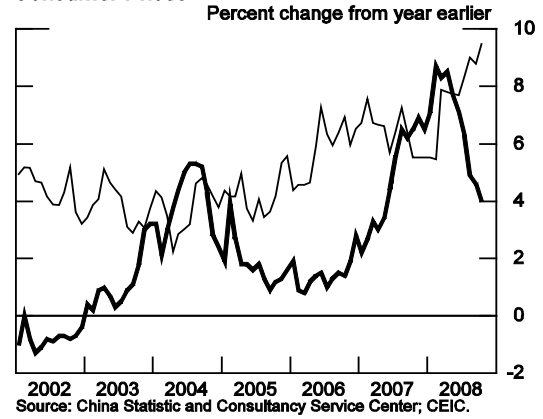
Source: CEIC.

## China and India

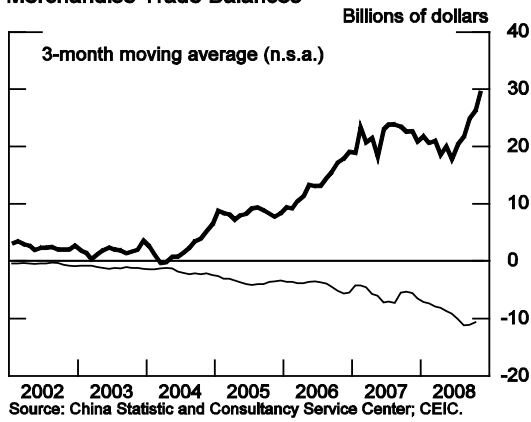
**Industrial Production**



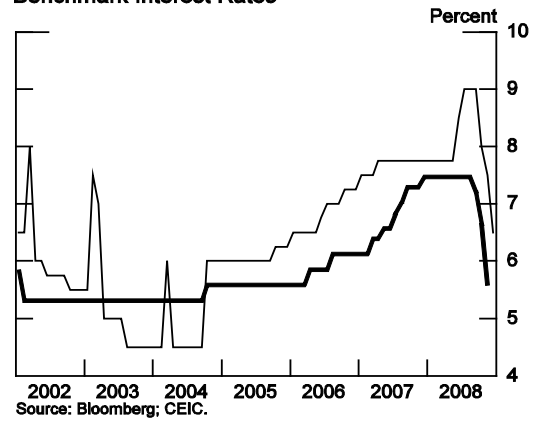
**Consumer Prices**



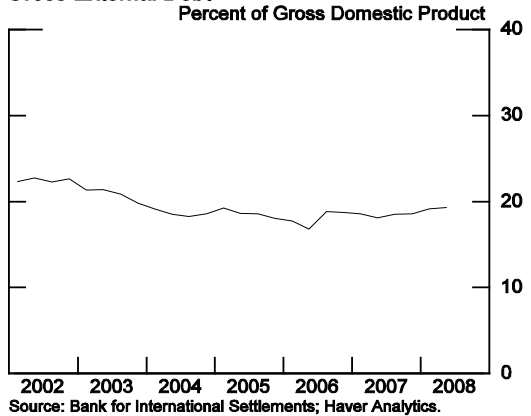
**Merchandise Trade Balances**



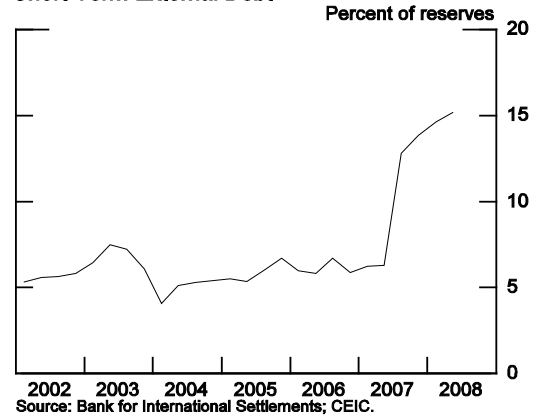
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In the NIEs<sup>1</sup>, economic activity fell sharply in the third quarter as the slowdown in global activity weighed significantly on the region's exports and the deterioration in financial conditions adversely affected sentiment and domestic demand. Real GDP contracted in both Singapore and Hong Kong for the second consecutive quarter, plunged over 10 percent (a.r) in Taiwan, and expanded only 2 percent in South Korea. Recent data suggest that activity has remained weak in the current quarter. Industrial production for Singapore, Korea, and Taiwan fell in October. Other indicators of activity, such as PMI surveys, retail sales, and consumer and business sentiment, also point to weak activity. Incoming trade data for the current quarter generally show significant improvements in trade balances, including a swing to surpluses in Korea and Taiwan from deficits in previous months. Exports generally contracted, but this was more than offset by declines in imports owing to lower commodity prices and weaker domestic demand.

Inflation declined further across the NIEs as food and energy prices continued to retreat. With inflation rates falling and economic growth slowing rapidly, central banks continued to ease monetary policy. The monetary authorities of Taiwan and Hong Kong cut their policy rates by 50 basis points. The Bank of Korea cut its policy rate by 75 basis points in late October and again by 25 basis points in early November. In addition, governments are loosening fiscal policy. South Korea is implementing a previously announced fiscal stimulus package estimated at 3¾ percent of GDP. Taiwan announced the distribution in January of consumption vouchers worth nearly 1 percent of GDP, and Hong Kong is proceeding with implementing previously announced infrastructure spending.

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

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

Indicator	2006	2007	2008				
			Q2	Q3	Aug.	Sept.	Oct.
<i>Real GDP<sup>1</sup></i>							
Hong Kong	6.5	7.0	-5.5	-2.0	...	...	...
Korea	4.2	5.9	3.4	2.1	...	...	...
Singapore	7.0	5.5	-5.3	-6.8	...	...	...
Taiwan	3.8	6.4	4.4	-10.3	...	...	...
<i>Industrial production</i>							
Hong Kong	2.4	-1.6	-1.1	n.a.	...	...	...
Korea	8.9	6.9	1.3	-2.1	-2.2	-5	-2.3
Singapore	11.9	5.9	-14.8	2.7	-3.3	5.7	-12.0
Taiwan	4.7	7.8	.1	-2.6	.3	-4.8	-8.3

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

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

Source: CEIC; Reuters.

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

Indicator	2006	2007	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Hong Kong	-17.9	-23.5	-31.4	-27.6	-36.0	-38.4	n.a.
Korea	27.9	29.4	24.6	-13.9	-17.8	17.7	n.a.
Singapore	33.1	36.2	24.9	19.4	3.8	13.9	n.a.
Taiwan	11.6	16.8	14.5	-6.5	-8	15.7	.2

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

Source: CEIC.

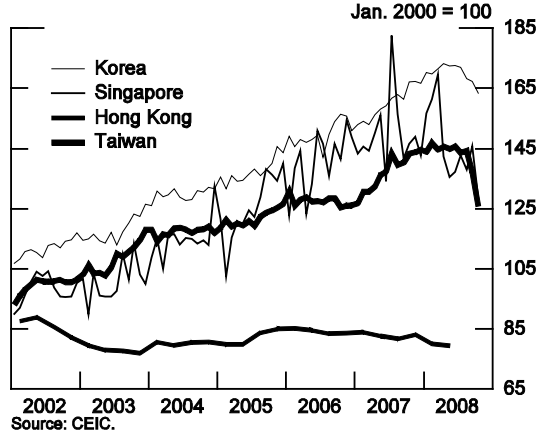
**Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation**  
(Percent change from year earlier except as noted)

Indicator	2006 <sup>1</sup>	2007 <sup>1</sup>	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Hong Kong	2.3	3.8	5.7	4.6	3.1	1.8	n.a.
Korea	2.1	3.6	4.8	5.5	5.1	4.8	4.5
Singapore	.8	4.4	7.5	6.6	6.7	6.4	n.a.
Taiwan	.7	3.3	4.2	4.5	3.1	2.4	1.9

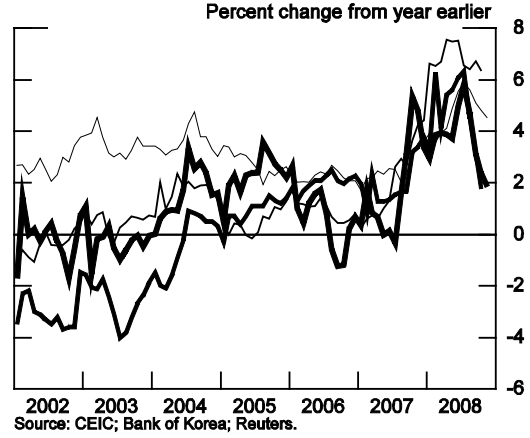
1. Percent change from year-earlier period, except annual data, which are Dec./Dec.  
n.a. Not available. ... Not applicable.  
Source: CEIC.

### Newly Industrialized Economies

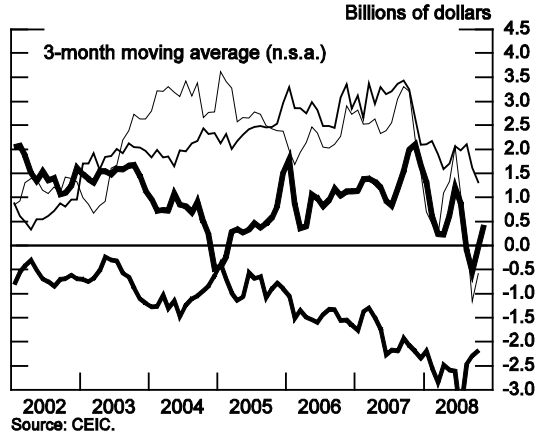
**Industrial Production**



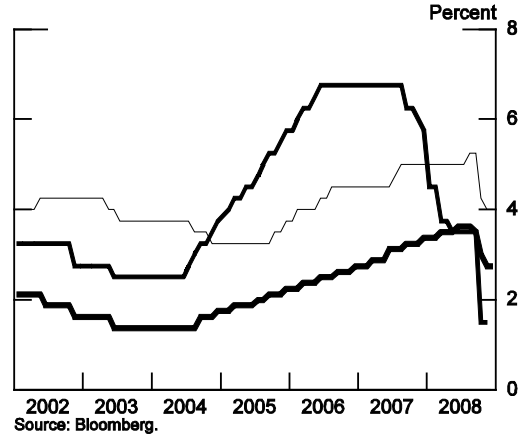
**Consumer Prices**



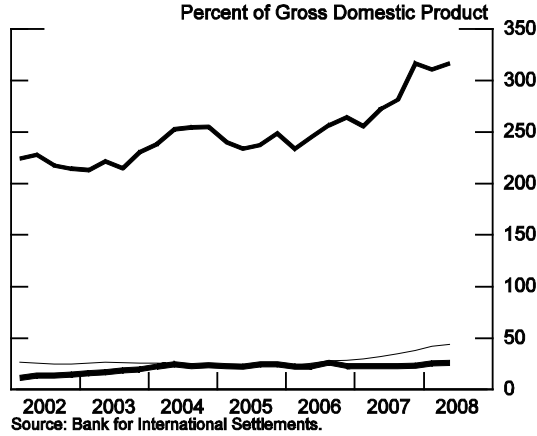
**Merchandise Trade Balances**



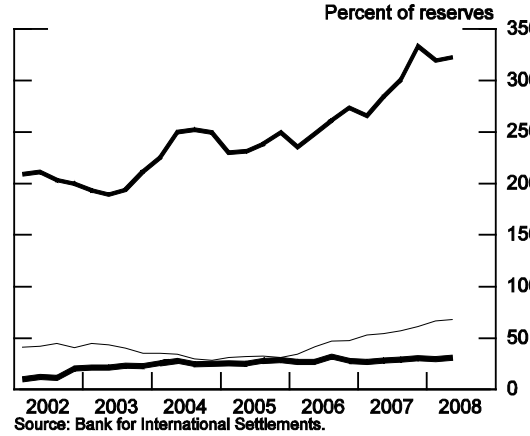
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In the ASEAN-4<sup>2</sup> region, growth fell significantly in the third quarter owing primarily to a contraction in exports. Early indicators for the fourth quarter suggest that activity remains weak. In October, exports fell in Indonesia, Malaysia, and Thailand. Indicators of business and consumer confidence as well as retail sales data have been weak. Across the region, twelve-month headline inflation has continued to decline, reflecting the moderation in food and energy prices. In response to slowing growth and moderating inflation, the Bank of Thailand cut its policy rate 100 basis points in early December. In a surprise move, the central bank of Malaysia cut its policy rate 25 basis points, the first rate change since April 2006. Bank Indonesia began to loosen policy, lowering its policy rate 25 basis points to 9¼ percent in early December.

In early November, the Malaysian government announced a \$2 billion fiscal stimulus package to develop the country's infrastructure. In Thailand, an already fragile political situation deteriorated further over the past few weeks when protests caused the country's largest airport to shut down, stranding thousands of tourists. Subsequently, Prime Minister Somchai Wongsawat resigned after the Constitutional Court banned him from politics for five years and dissolved the country's top three ruling parties for electoral fraud. A special election is expected to be held soon.

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<sup>2</sup>ASEAN-4 economies: Indonesia, Malaysia, Philippines, and Thailand.



**ASEAN-4<sup>1</sup> Economic Indicators: Growth**  
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2006	2007	2008					
			Q2	Q3	Aug.	Sept.	Oct.	
<i>Real GDP<sup>2</sup></i>								
Indonesia	5.8	6.1	11.4	6.3	...	...	...	
Malaysia	5.4	7.4	3.7	1.1	...	...	...	
Philippines	5.6	6.5	7.9	3.4	...	...	...	
Thailand	4.5	5.8	3.1	2.3	...	...	...	
<i>Industrial production<sup>3</sup></i>								
Indonesia <sup>4</sup>	-1.6	5.6	-1	-1.4	2.6	-5.3	n.a.	
Malaysia	4.5	2.0	-9	-1.9	-2.1	-1.5	n.a.	
Philippines	-8.5	-2.7	2.3	2.8	-3.5	7.2	n.a.	
Thailand	7.3	8.2	.0	1.6	-4	-2.7	.3	

1. Association of Southeast Asian Nations.

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

3. Annual data are annual averages.

4. Staff estimate.

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

Source: CEIC.

**ASEAN-4<sup>1</sup> Economic Indicators: Merchandise Trade Balance**  
(Billions of U.S. dollars; seasonally adjusted annualized rate)

Indicator	2006	2007	2008				
			Q2	Q3	Aug.	Sept.	Oct.
Indonesia	39.7	39.6	31.9	30.6	35.7	35.2	10.5
Malaysia	29.5	29.2	56.0	50.5	42.1	51.8	28.5
Philippines	-4.4	-5.0	-5.0	-9.6	-4.4	-6.4	n.a.
Thailand	1.0	11.6	12.7	-10.9	-7.6	-16.2	-17.5

1. Association of Southeast Asian Nations.

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

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

**ASEAN-4<sup>1</sup> Economic Indicators: Consumer Price Inflation**  
(Percent change from year earlier except as noted)

Indicator	2006 <sup>2</sup>	2007 <sup>2</sup>	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Indonesia	6.6	5.8	10.1	12.0	12.2	11.8	11.5
Malaysia	3.1	2.4	4.9	8.4	8.2	7.6	n.a.
Philippines	4.3	3.9	9.7	12.2	11.8	11.2	9.9
Thailand	3.5	3.2	7.5	7.2	6.0	3.9	2.2

1. Association of Southeast Asian Nations.

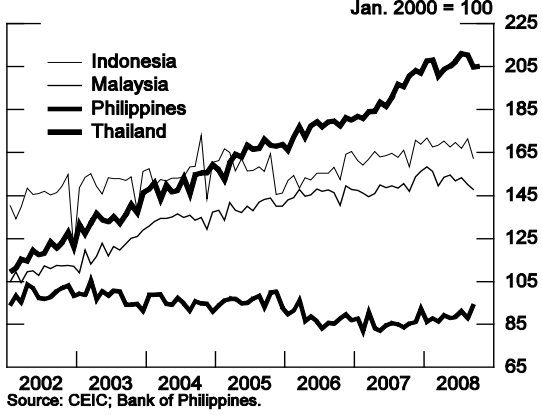
2. Dec./Dec.

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

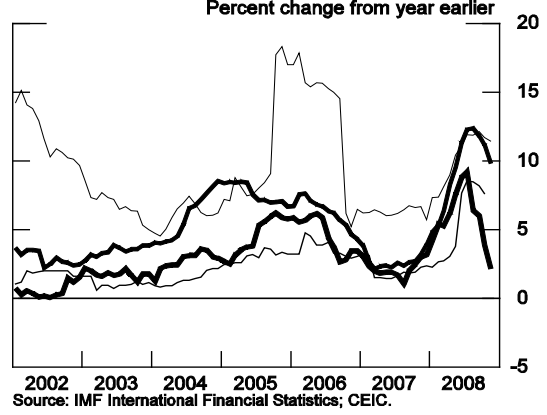
Source: CEIC; IMF International Financial Statistics database.

**ASEAN-4**

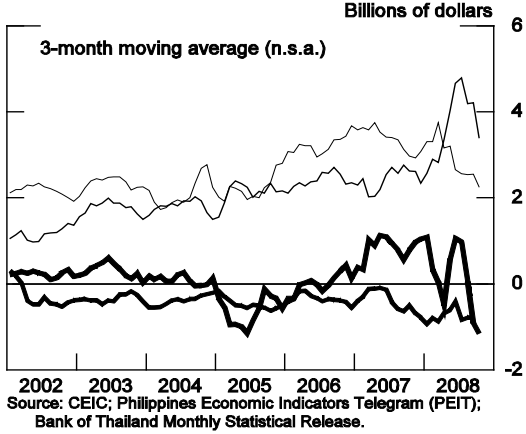
**Industrial Production**



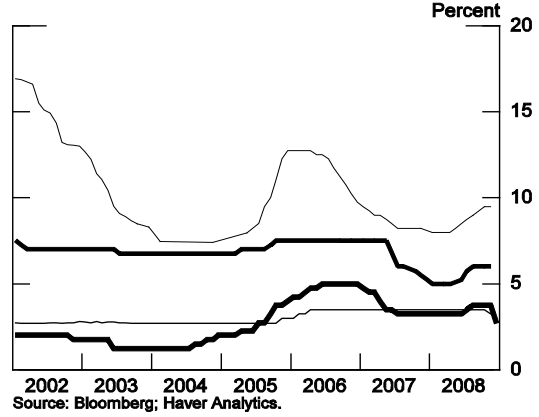
**Consumer Prices**



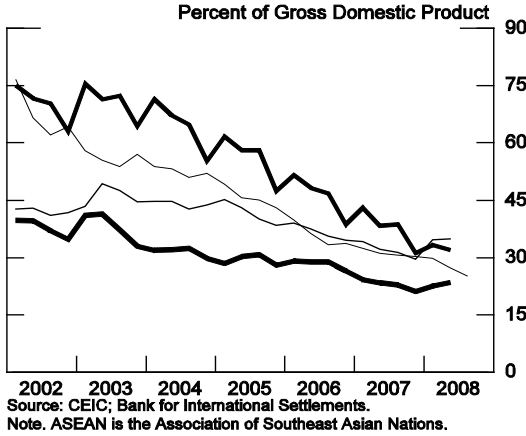
**Merchandise Trade Balances**



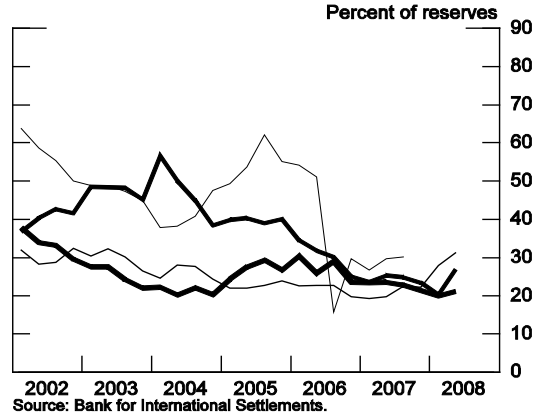
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**



In **Mexico**, third-quarter real GDP grew at a higher-than-expected pace of 2½ percent, owing primarily to a surge in agricultural output. Activity in other sectors generally remained weak; industrial production fell, and the trade deficit widened. The impetus from the agricultural sector will likely wane, and recent indicators of activity have deteriorated, suggesting that growth will fall in the current quarter. In October, exports contracted on account of weak U.S. demand, and business and consumer confidence as well as the manufacturing PMI plunged. Despite tepid domestic activity and the fall in global commodity prices, twelve-month headline and core inflation remain elevated, reflecting the pass-through of previous increases in food and energy prices as well as the effect of the sharp depreciation of the peso against the U.S. dollar.

Mexico has taken a number of steps to contain the effect of the financial turmoil. The Bank of Mexico intervened in the foreign exchange market to support the depreciating peso. The Mexican government unveiled a fiscal stimulus package estimated at 1 percent of GDP, and the lower house of Congress passed a bill that authorizes private investment in PEMEX, the state's oil monopoly. Mexico's oil export revenues are partially shielded from the recent declines in crude oil prices because of put options that give the country the right to sell its oil production for at least \$70 per barrel over the next year.

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

Indicator	2006	2007	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Real GDP <sup>1</sup>	3.7	4.2	.8	2.6	...	...	...
Overall economic activity	5.1	3.1	.3	.6	-1.0	n.a.	n.a.
Industrial production	5.3	1.8	-1.0	-.6	-2.7	n.a.	n.a.
Unemployment rate <sup>2</sup>	3.6	3.7	3.8	3.9	4.0	3.9	n.a.
Consumer prices <sup>3</sup>	4.1	3.8	4.9	5.5	5.5	5.8	6.2
Merch. trade balance <sup>4</sup>	-6.1	-10.1	-7.3	-21.0	-24.3	-19.9	n.a.
Merchandise imports <sup>4</sup>	256.1	281.9	313.6	330.6	319.6	303.6	n.a.
Merchandise exports <sup>4</sup>	249.9	271.9	306.3	309.6	295.3	283.7	n.a.
Current account <sup>5</sup>	-5.9	-10.1	-10.8	-20.0	...	...	...

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

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

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

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

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

Source: Haver Analytics; Bank of Mexico.

In **Brazil**, third-quarter real GDP grew at an annual rate of 7½ percent, up 1 percentage point from the pace in the first half of the year. Growth was supported by strong domestic demand, with consumption and investment up 11½ percent and nearly 30 percent, respectively. Indications are that activity has slowed significantly in the current quarter. In October, industrial output fell nearly 2 percent. The decline was broad-based and led by a sharp fall in production of consumer durables. In addition, preliminary data indicate that auto production and sales, which fell sharply in October, continued to decline in November. Signs of the weakening economy are also apparent in the external sector where exports have plummeted. Headline inflation remained elevated; with consumer prices rose 6.4 percent for the twelve months ending in October. Since the October Greenbook, the central bank has continued to relax reserve requirements in an attempt to improve access to credit for smaller banks and to the private sector, but it has kept its target policy rate on hold at 13¾ percent since September.

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

Indicator	2006	2007	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Real GDP <sup>1</sup>	4.6	6.1	6.4	7.4	...	...	...
Industrial production	2.8	6.0	.8	2.6	1.5	-1.7	n.a.
Unemployment rate <sup>2</sup>	10.0	9.3	7.8	7.7	7.6	7.6	n.a.
Consumer prices <sup>3</sup>	3.1	4.5	5.6	6.3	6.3	6.4	6.4
Merch. trade balance <sup>4</sup>	46.5	40.0	33.5	23.0	25.9	10.3	29.1
Current account <sup>5</sup>	13.6	1.7	-27.4	-24.5	-33.2	-18.1	n.a.

1. Gross domestic product. 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, not seasonally adjusted, annual rate.

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

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

In **Argentina**, indicators for the third quarter have generally been mixed, but on balance point to a moderation of activity. Exports improved following a resolution of the conflict between farmers and the government over a proposal to tax exports, and industrial production was up, but other indicators such as retail sales suggest that domestic demand was lackluster. In October, industrial production fell and exports contracted sharply. Confidence indicators deteriorated further, weighed down by rapid declines in commodity prices and the government's decision to nationalize the private pension funds, which prompted large capital outflows. In November, the government unveiled a fiscal stimulus plan, calling for expenditure of more than \$21 billion on public infrastructure beginning in mid-December. In addition, the government announced tax breaks for Argentines who repatriate their funds and debt relief for small businesses and firms that encourage employment. Twelve-month consumer price inflation fell to 8.4 percent in October due to weak domestic demand and declines in commodity prices; however, the reliability of the official inflation data remains questionable.

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

Indicator	2006	2007	2008				
			Q2	Q3	Aug.	Sept.	Oct.
Real GDP <sup>1</sup>	8.5	9.2	8.7	n.a.	...	...	...
Industrial production	8.4	7.5	1.4	2.2	1.0	2.0	-1.9
Unemployment rate <sup>2</sup>	10.2	8.5	8.0	7.8	...	...	...
Consumer prices <sup>3</sup>	9.8	8.5	9.1	8.9	9.0	8.7	8.4
Merch. trade balance <sup>4</sup>	12.3	11.1	8.5	19.7	28.8	21.3	14.9
Current account <sup>5</sup>	7.7	7.1	3.6	n.a.	...	...	...

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

2. Percent; not seasonally adjusted.

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, not seasonally adjusted, annual rate.

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

Source: Haver Analytics, IMF International Financial Statistics database; Ministerio de economia; U.S. State Department.

**Venezuelan** real GDP growth slowed sharply in the third quarter to 2¾ percent as non-petroleum output stagnated. Twelve-month headline inflation remained elevated at over 30 percent in November. The Venezuelan government repurchased \$800 million of its external debt. As expected, Chavez supporters won the majority of governorship and local posts during the November elections because the Chavez-controlled Supreme Court barred roughly 300 opposition candidates from running. Since the election, Chavez has called for additional nationalizations and for another referendum to allow him to stay in power indefinitely.

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

Indicator	2006	2007	2008				
			Q2	Q3	Sept.	Oct.	Nov.
Real GDP <sup>1</sup>	11.4	8.5	14.8	2.8	...	...	...
Consumer prices <sup>2</sup>	17.0	22.5	29.7	33.6	34.5	34.4	31.8
Non-oil trade balance <sup>3</sup>	-23.0	-34.6	-34.0	-35.6	...	...	...
Merch. trade balance <sup>3</sup>	32.7	23.7	68.7	70.2	...	...	...
Current account <sup>4</sup>	27.1	20.0	66.5	72.1	...	...	...

1. Gross domestic product. 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.

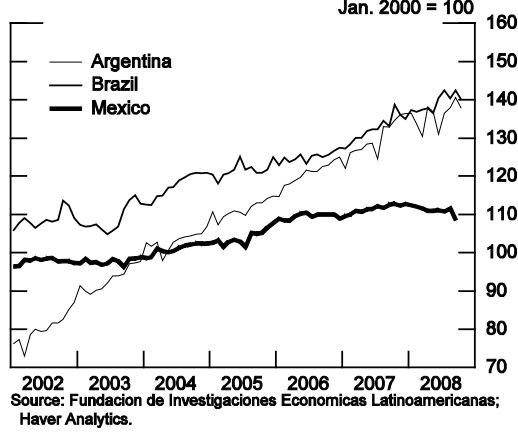
4. Billions of U.S. dollars, not seasonally adjusted, annual rate.

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

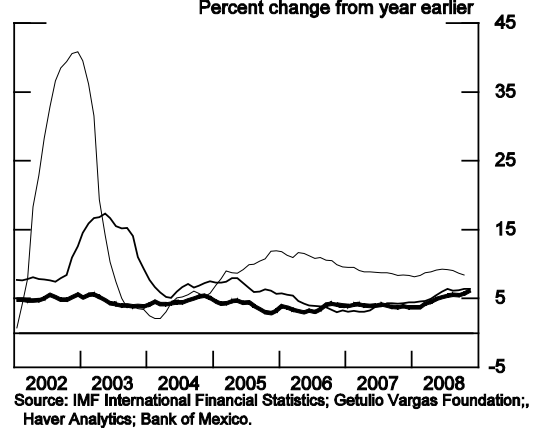
Source: IMF International Financial Statistics database; Bank of Venezuela; Reuters and Embassy cables.

**Latin America**

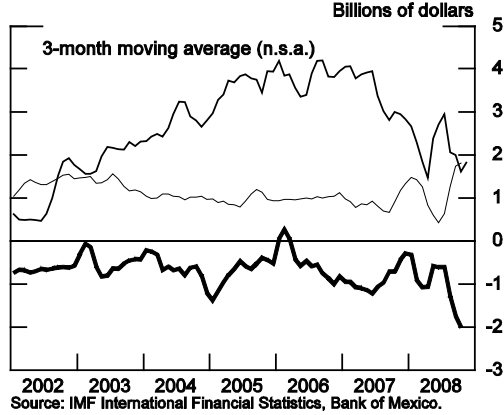
**Industrial Production**



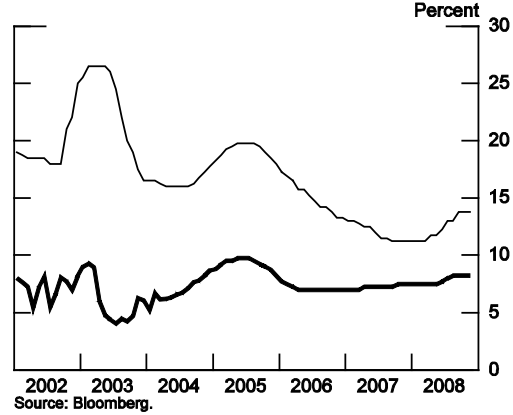
**Consumer Prices**



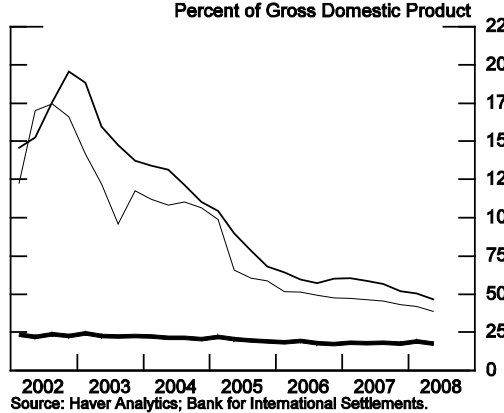
**Merchandise Trade Balances**



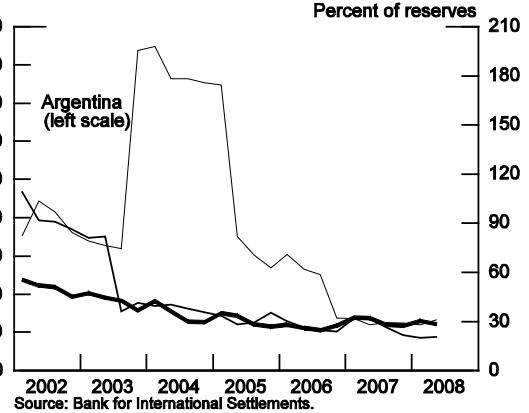
**Benchmark Interest Rates**



**Gross External Debt**



**Short-Term External Debt**





In **Russia**, third-quarter growth fell to 2¼ percent, down from 6 percent in the second quarter, due to the declines in oil and other commodity prices, and the effect of stresses in financial markets. Since then, conditions appear to have deteriorated further. In October, retail sales and industrial production declined, and business confidence sank. Inflation remained high, at more than 14 percent over the twelve months ending in October. Russia's financial system has been under considerable stress, as the global crisis revealed the Russian corporate sector's dependence on foreign borrowing. The central bank raised interest rates 100 basis points to 13 percent in early December and intervened in the foreign exchange market to support the ruble. Reflecting the interventions, the provision of dollar funding to Russian banks and corporations, and valuation effects of the euro-denominated portion of the reserves, international reserves fell to \$450 billion at the end of November, down from a peak of \$600 billion last summer.