

Prefatory Note

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Part 2

October 22, 2008

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Recent Developments

October 22, 2008

Recent Developments

Domestic Nonfinancial Developments

Domestic Nonfinancial Developments

The spending and production data that we have received since the September Greenbook have been almost uniformly dour. Consumer outlays fell precipitously, weighed down by stagnant real income, tightening credit, declining household wealth, and concerns about the overall health of the economy. The housing market remained exceptionally weak as construction activity continued its steep decline and the pace of new home sales eroded further over the summer. In the business sector, fundamentals turned more negative; spending on equipment and software looks to have decreased for a third consecutive quarter, and nonresidential construction outside of the drilling and mining category decelerated noticeably. In the labor market, private employment in September fell faster than earlier in the year, while the unemployment rate remained at 6.1 percent, after having jumped nearly ½ percentage point in August. Regarding inflation, falling energy prices held down headline PCE inflation in August and September. After having risen more rapidly earlier in the summer, core PCE prices also decelerated over the past two months.

Labor Market Developments

Conditions in the labor market deteriorated further in September. Private nonfarm payroll employment fell 168,000, a noticeably larger decline than the average pace of job loss over the first eight months of the year.¹ Manufacturing and the related temporary help industry continued to post sizable losses, as did the construction industry. Retail trade and financial services saw greater declines in employment than over the previous few months, while nonbusiness services, which include education and health services, continued to add jobs last month, but at the slowest pace this year.

The average workweek of production and nonsupervisory workers ticked down 0.1 hour in September, and aggregate hours of production workers fell ½ percent. For the third quarter as a whole, production worker hours fell at an annual rate of 2 percent after an average decline of about 1 percent in the first half of the year.

In the household survey, the unemployment rate held steady at 6.1 percent last month after rising more than a percentage point between April and August.² Another indicator of labor market slack, the fraction of workers who are working part time for economic

¹ The employment figures for September do not appear to have been significantly affected by either Hurricanes Gustav or Ike or the strike at Boeing. Separately, the Bureau of Labor Statistics (BLS) announced the preliminary estimate for the annual benchmark revision to be incorporated into the payroll figures next February. The BLS estimates that the level of private payroll employment in March 2008 will be revised down by 81,000 or 0.1 percent, a small revision by historical standards.

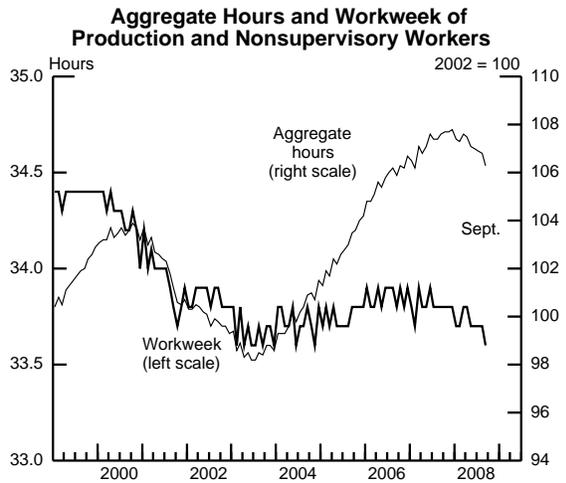
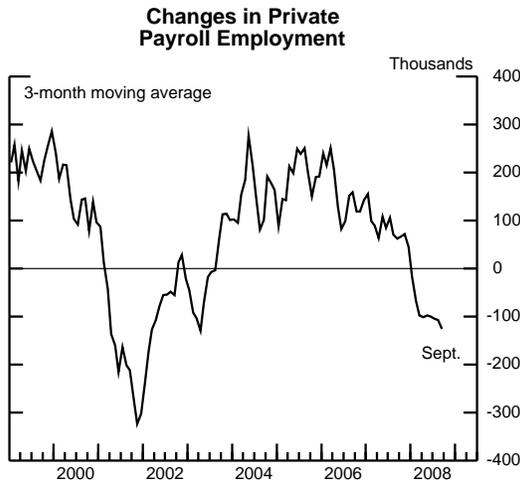
² We estimate that the unemployment rate was boosted by about 0.3 percentage point in August and September by the Emergency Unemployment Compensation (EUC) program.

Changes in Employment

(Thousands of employees; seasonally adjusted)

Measure and sector	2007	2008					
		Q1	Q2	Q3	July	Aug.	Sept.
		Average monthly change			Monthly change		
Nonfarm payroll employment (establishment survey)	91	-82	-71	-100	-67	-73	-159
Private	71	-97	-100	-126	-106	-104	-168
Natural resources and mining	3	4	6	10	9	12	9
Manufacturing	-22	-43	-39	-49	-40	-56	-51
Ex. motor vehicles	-15	-31	-31	-31	-39	-22	-33
Construction	-19	-41	-49	-24	-23	-13	-35
Residential	-20	-30	-30	-14	-15	-15	-13
Nonresidential	1	-11	-19	-10	-9	2	-22
Wholesale trade	9	-6	-7	-10	-17	-9	-4
Retail trade	6	-29	-26	-29	-22	-25	-40
Financial activities	-9	-7	-6	-10	-7	-5	-17
Temporary help services	-7	-24	-30	-28	-24	-35	-24
Nonbusiness services ¹	76	66	63	27	25	43	14
Total government	21	15	29	26	39	31	9
Total employment (household survey)	22	-81	-26	-212	-72	-342	-222
Memo:							
Aggregate hours of private production workers (percent change) ²	1.3	-1.1	-.9	-2.0	-.1	-.1	-.5
Average workweek (hours) ³	33.8	33.7	33.7	33.7	33.7	33.7	33.6
Manufacturing (hours)	41.2	41.1	41.0	40.9	41.0	40.9	40.7

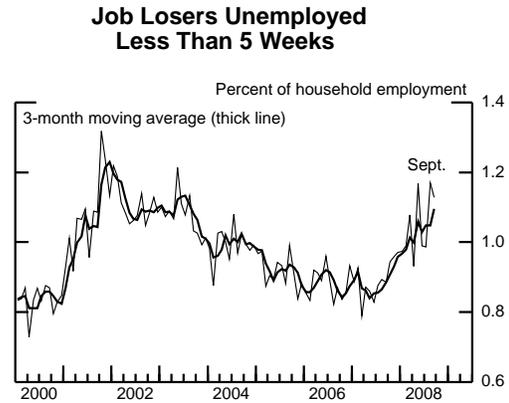
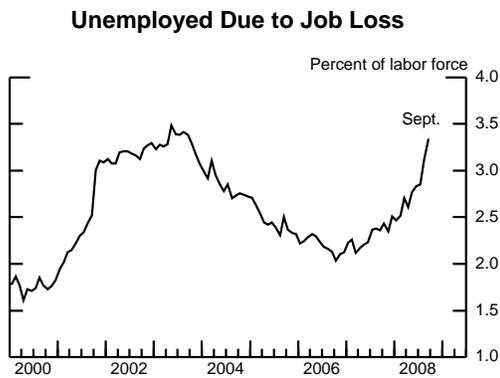
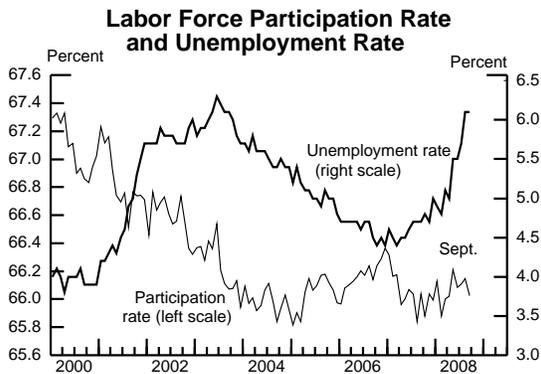
1. Nonbusiness services comprises education and health, leisure and hospitality, and "other."
 2. Establishment survey. Annual data are percent changes from Q4 to Q4. Quarterly data are percent changes from preceding quarter at an annual rate. Monthly data are percent changes from preceding month.
 3. Establishment survey.



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

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

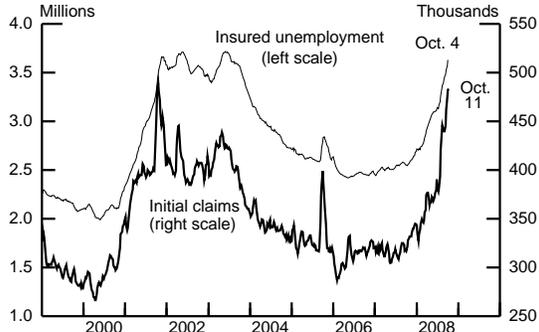
Rate and group	2007	2008					
		Q1	Q2	Q3	July	Aug.	Sept.
<i>Civilian unemployment rate</i>							
Total	4.6	4.9	5.3	6.0	5.7	6.1	6.1
Teenagers	15.7	16.8	17.4	19.5	20.3	18.9	19.1
20-24 years old	8.2	9.0	9.8	10.4	10.2	10.5	10.5
Men, 25 years and older	3.6	3.8	4.2	5.0	4.6	5.0	5.5
Women, 25 years and older	3.6	3.9	4.1	4.5	4.2	4.8	4.4
<i>Labor force participation rate</i>							
Total	66.0	66.0	66.1	66.1	66.1	66.1	66.0
Teenagers	41.3	40.3	41.4	40.4	40.8	40.2	40.1
20-24 years old	74.4	73.9	74.6	74.8	74.9	74.9	74.5
Men, 25 years and older	75.6	75.5	75.2	75.6	75.6	75.6	75.5
Women, 25 years and older	59.7	59.9	60.0	60.0	59.9	60.1	60.0



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

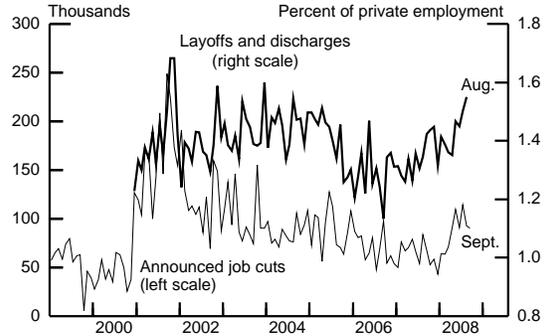
Labor Market Indicators

Unemployment Insurance



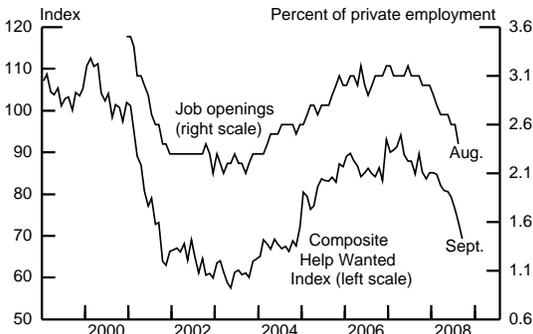
Note: 4-week moving averages.
Source: U.S. Dept. of Labor, Employment and Training Administration.

Layoffs and Job Cuts



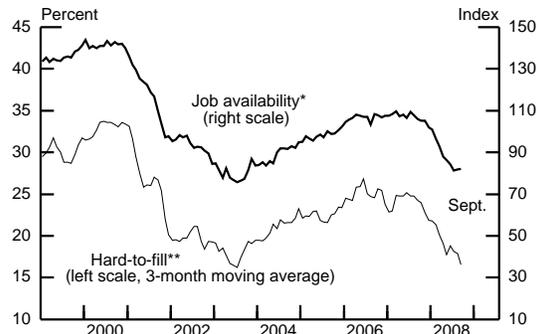
Note: Both series are seasonally adjusted by FRB staff.
Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for job cuts, Challenger, Gray, and Christmas, Inc.

Job Openings



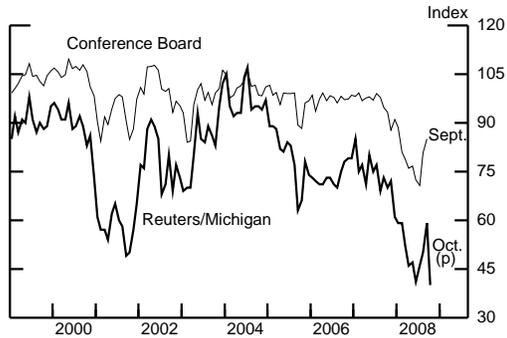
Source: For job openings, Job Openings and Labor Turnover Survey; for Help Wanted Index, Conference Board and staff calculations.

Job Availability and Hard-to-Fill Positions



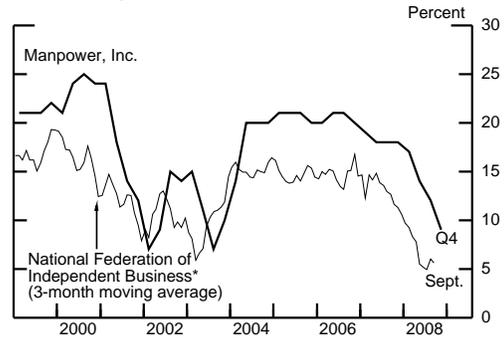
*Proportion of households believing jobs are plentiful, minus the proportion believing jobs are hard to get, plus 100.
**Percent of small businesses surveyed with at least one "hard-to-fill" job opening. Seasonally adjusted by FRB staff.
Source: For job availability, Conference Board; for hard-to-fill, 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.
p Preliminary.
Source: Conference Board; Reuters/University of Michigan Survey.

Net Hiring Plans



Note: Percent planning an increase in employment minus percent planning a reduction.
*Seasonally adjusted by FRB staff.
Source: National Federation of Independent Business; Manpower, Inc.

reasons, rose further in September and now stands 1 percentage point above its level at the end of last year. The labor force participation rate moved down to 66 percent last month but has changed little, on net, thus far this year.

The four-week moving average of initial claims for unemployment insurance under regular state programs has risen steeply since mid-September, boosted by filings after Hurricanes Gustav and Ike. However, even after subtracting the Department of Labor's estimate of hurricane-related claims, the four-week average moved up about 6,000 over the past month to 446,000 for the week ending October 11. Insured unemployment (continuing claims) continued to rise through early October, with some of this increase also reflecting the effects of the hurricanes. Both the rise in insured unemployment and the continued high level of claims are consistent with another substantial decline in employment in October.

Additional measures of job separations—the short-term job losers rate from the household survey and the layoffs and discharges rate, as measured by the Job Openings and Labor Turnover Survey (JOLTS)—have crept up, on balance, in recent months. In addition, announcements of downsizing plans compiled by Challenger, Gray, and Christmas, Inc. remained somewhat elevated in September.

Other labor market indicators suggest that jobs are in short supply. The JOLTS job openings rate continued on its downward trajectory in August, and help-wanted advertising fell again in September. Both the measure of positions hard-to-fill and the measure of hiring plans in the National Federation of Independent Business's survey remained low in September, as did perceptions of current job availability in the Conference Board survey.

According to the Reuters/University of Michigan survey, household expectations for labor market conditions deteriorated markedly in early October, which reversed the improvement seen over the summer.

Industrial Production

Industrial production (IP) plunged 2.8 percent (monthly rate) in September, although nearly the entire decline was due to the effects of the recent hurricanes and the ongoing machinists' strike at Boeing. For the third quarter as a whole, IP fell at an annual rate of 6 percent, with about two-thirds of the drop reflecting these special factors. Energy producers bore the brunt of the hurricanes, and production in that industry has not yet fully recovered. As of October 21, roughly 40 percent of both crude oil and natural gas extraction capacity in the Gulf of Mexico remained offline. In contrast, the effect on

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

Component	Proportion 2007 (percent)	2007 ¹	2008		2008		
			Q2	Q3	July	Aug.	Sept.
			Annual rate		Monthly rate		
Total	100.0	2.1	-3.1	-6.0	.0	-1.0	-2.8
Previous	100.0	2.1	-3.1	...	.1	-1.1	...
Manufacturing	78.7	2.3	-3.8	-5.8	.0	-.9	-2.6
Ex. motor veh. and parts	73.6	2.6	-2.0	-5.8	-.2	-.2	-2.8
Ex. high-tech industries	69.3	1.3	-3.4	-6.5	-.3	-.2	-3.0
Mining	11.6	.2	2.2	-3.6	1.6	.0	-7.8
Utilities	9.7	3.1	-4.6	-10.8	-2.0	-3.1	2.2
<i>Selected industries</i>							
Energy	24.7	2.3	-1.7	-8.9	.2	-1.2	-5.0
High technology	4.3	22.3	20.8	6.0	.9	.1	.5
Computers	1.0	16.7	14.4	4.3	.1	.6	.9
Communications equipment	1.3	20.6	25.4	5.6	.4	.4	.8
Semiconductors ²	2.0	25.9	20.9	7.1	1.6	-.4	.1
Motor vehicles and parts	5.1	-2.2	-28.1	-6.6	2.6	-11.3	1.9
Aircraft and parts	2.3	13.6	1.1	-26.5	-.6	-.2	-24.1
<i>Total ex. selected industries</i>	63.6	.7	-3.4	-4.8	-.4	-.2	-1.6
Consumer goods	19.9	.3	-1.5	-3.7	-.4	-.4	-.7
Durables	3.6	-2.4	-6.1	-9.3	.3	-2.0	-2.7
Nondurables	16.3	.9	-.5	-2.5	-.5	-.1	-.3
Business equipment	6.4	1.0	-7.5	-1.6	-.2	.7	-2.0
Defense and space equipment	1.2	7.2	-4.3	-5.3	-1.1	.0	-1.5
Construction supplies	4.2	-1.9	-5.2	-2.3	.8	-1.0	-1.6
Business supplies	7.4	-.1	-5.2	-6.1	-.6	.4	-1.6
Materials	24.5	1.2	-2.9	-6.2	-.4	-.3	-2.3
Durables	12.8	1.8	-3.0	-4.7	-.3	-.4	-1.3
Nondurables	11.7	.6	-2.8	-7.8	-.6	-.3	-3.3

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	Aug.	Sept.
Total industry	81.0	85.1	73.6	80.7	79.7	78.2	78.7	76.4
Manufacturing	79.7	84.6	71.5	78.7	77.6	76.1	76.6	74.5
Mining	87.5	88.7	84.8	90.5	90.8	89.9	92.2	85.0
Utilities	86.8	93.9	84.6	87.1	85.6	82.8	81.3	82.9
<i>Stage-of-process groups</i>								
Crude	86.6	89.5	81.9	89.5	89.4	88.2	90.4	83.7
Primary and semifinished	82.2	88.2	74.6	80.9	79.8	77.9	78.0	76.7
Finished	77.7	80.4	69.9	77.2	76.0	74.8	75.1	73.3

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

non-energy producers, most notably petrochemical producers, appears to have been short-lived, with many reports suggesting production disruptions of about one week.

In manufacturing, production fell at an annual rate of 5¾ percent last quarter, with more than one-half of the decline attributable to the special factors. Nonetheless, the three-month manufacturing IP diffusion index indicates that a majority of industries experienced declining output. The factory operating rate sank to 74.5 percent in September, more than 5 percentage points below its 1972–2007 average.

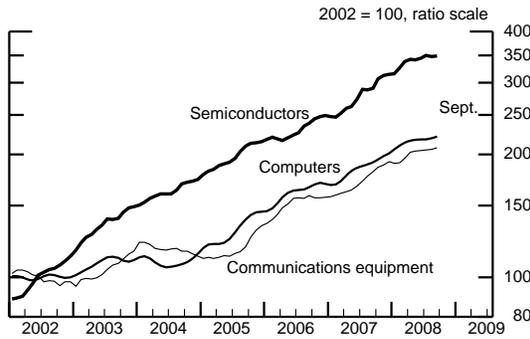
The output of high-tech products rose at an annual rate of just 6 percent in the third quarter after rising at an average pace of 20 percent during the first half of the year. Output gains for both computers and communication equipment slowed, and anecdotal information suggests that tight credit market conditions held down demand for these products. A major producer of communications equipment reported that orders have fallen off noticeably, and private-sector forecasts for corporate spending on computers, particularly by financial companies, have become dimmer. Moreover, sales of personal computers at retail outlets are reportedly weaker than would typically be expected at this time of year.

Further up the high-tech supply chain, the output of semiconductors decelerated during the third quarter, as the production of memory chips and microprocessor units (MPUs) declined. Looking forward, near-term indicators have been gloomy. Revenue guidance from Intel Corporation suggests that the production of MPUs will decline in the fourth quarter. In addition, other companies have been slashing prices on memory chips to clear excess inventories. Moreover, orders for circuit boards have continued to decline and remain below shipments. Several industry groups, including iSuppli and SEMI, have sharply cut their forecasts for capital expenditures by semiconductor companies in 2009, citing the glut of memory chips and problems in financial markets.

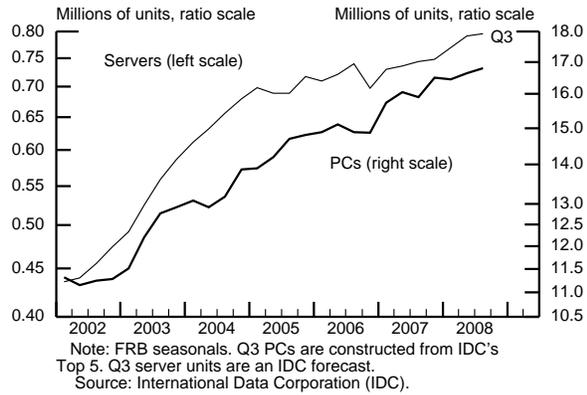
Manufacturing production excluding high tech, motor vehicles, and aircraft declined in the third quarter, and the weakness was broad based. Looking forward, recent readings on new orders suggest that the pace of production would likely decline further in coming months absent the expected hurricane-related rebound. The staff's measure of real adjusted durable goods orders fell abruptly in August, and the new orders diffusion index from the Institute for Supply Management (ISM) plunged in September to a low that has been reached only three times since the early 1980s. In addition, both the Empire State Manufacturing Survey and the Philadelphia Business Outlook Survey reported sharp declines in their orders indexes for October. Moreover, after having boosted domestic

Indicators of High-Tech Manufacturing Activity

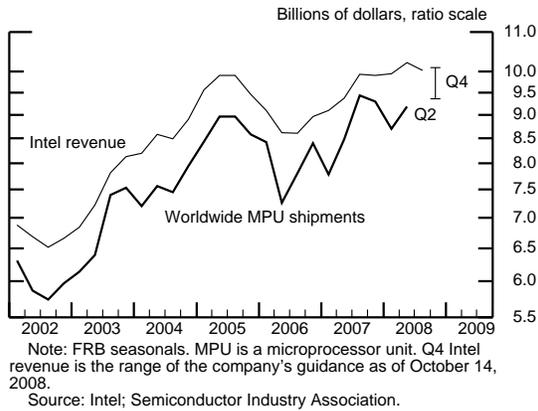
Industrial Production in the High-Tech Sector



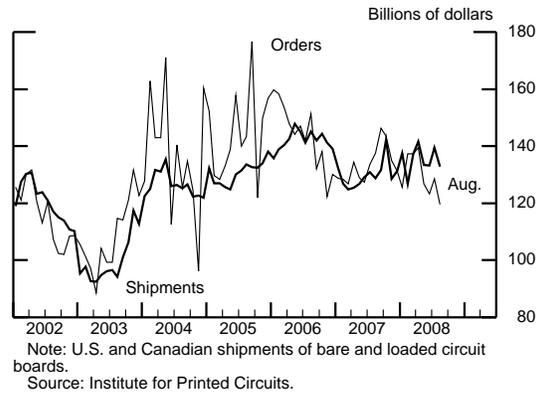
U.S. Personal Computer and Server Absorption



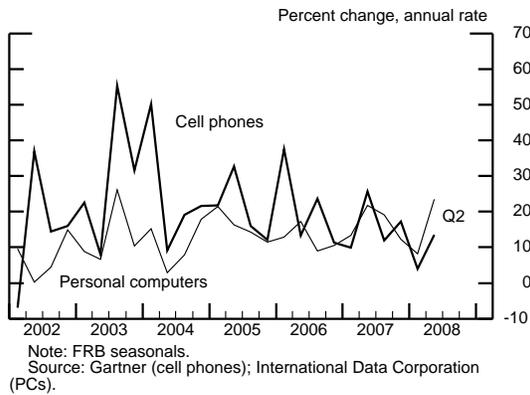
MPU Shipments and Intel Revenue



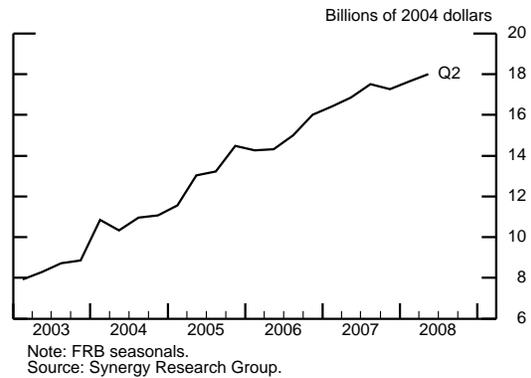
Circuit Board Orders and Shipments



Worldwide Unit Absorption of Personal Computers and of Cell Phones

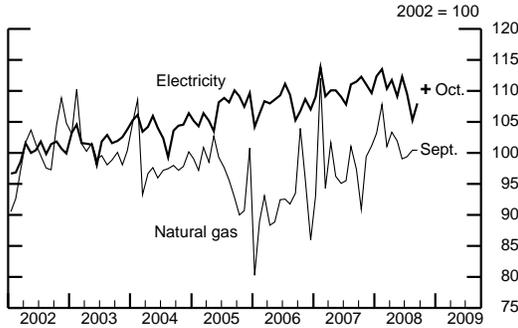


Enterprise Spending on Voice and Data Networking Equipment



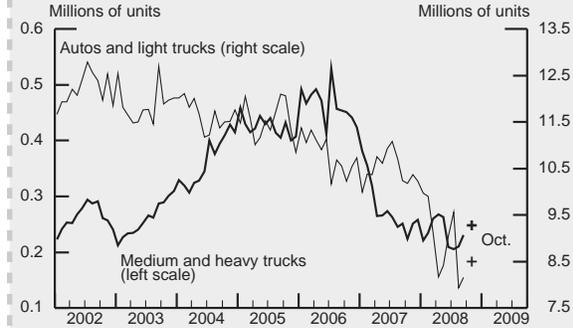
Indicators of Industrial Activity

Utilities Output



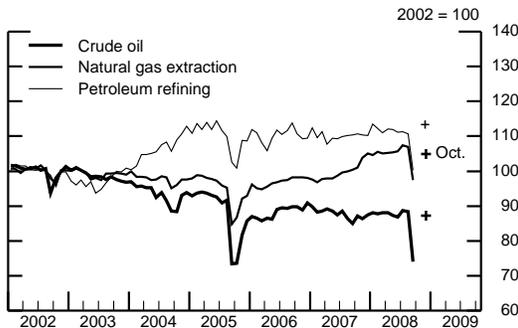
Note: The October value for electricity generation is based on weekly generation data from the Edison Electrical Institute.
Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Motor Vehicle Assemblies



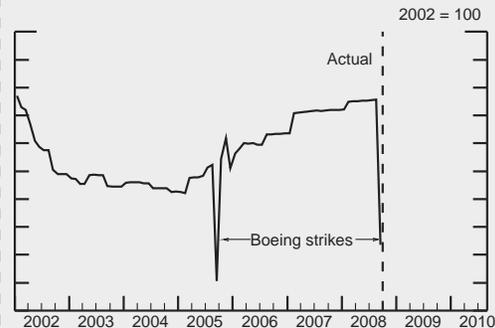
Note: October values are based on latest industry schedules.
Source: Ward's Communications

Energy Industrial Production



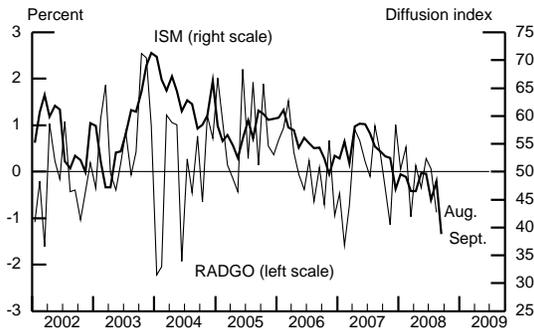
Note: Oct. values based on available weekly data from the Dept. of Energy (DOE) and estimates of facilities that remain offline from DOE and Dept. of the Interior.
Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Boeing Commercial Aircraft Completions: Actual



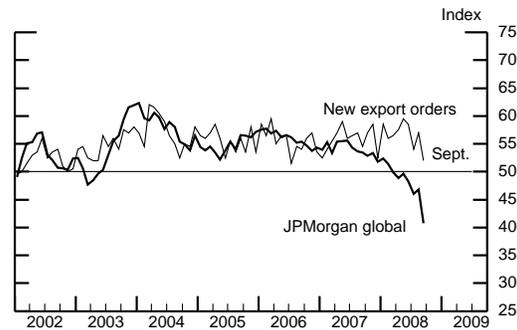
Note: 1998 price-weighted index. Actual completions equal deliveries plus the change in the stock of finished aircraft.
Source: Boeing.

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.

JPMorgan Global New Orders Index and ISM New Export Orders Diffusion Index



Note: The JPMorgan Global New Orders Index is based on surveys covering purchasing executives in 26 countries.
Source: JPMorgan; Institute for Supply Management.

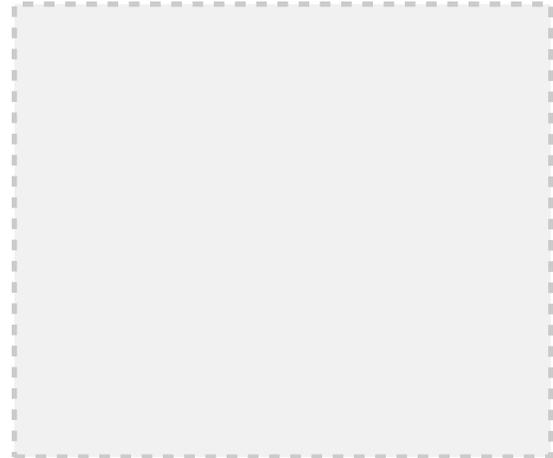
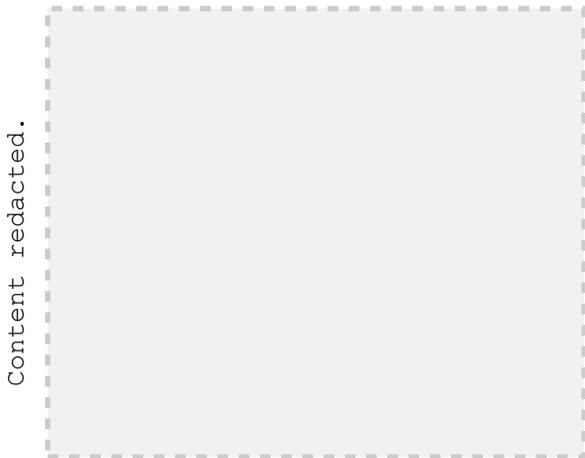
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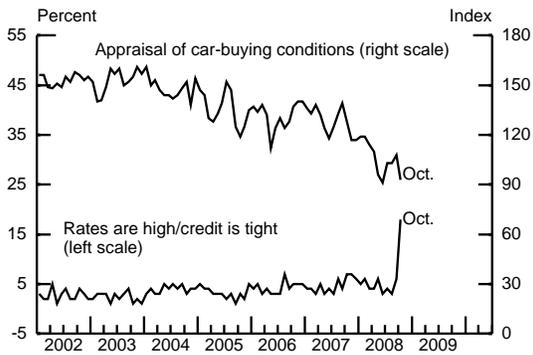
Sales of Light Vehicles
(Millions of units at an annual rate; FRB seasonals)

Category	2007	2008					
		Q1	Q2	Q3	July	Aug.	Sept.
Total	16.1	15.2	14.1	12.9	12.5	13.7	12.5
Autos	7.6	7.4	7.6	6.6	6.9	6.8	6.2
Light trucks	8.5	7.8	6.5	6.3	5.6	6.9	6.3
North American ¹	12.3	11.5	10.4	9.7	9.1	10.4	9.5
Autos	5.2	5.1	5.0	4.4	4.4	4.5	4.3
Light trucks	7.1	6.5	5.3	5.3	4.6	5.9	5.2
Foreign-produced	3.8	3.7	3.7	3.2	3.5	3.3	2.9
Autos	2.4	2.4	2.6	2.2	2.5	2.3	1.9
Light trucks	1.4	1.3	1.1	1.0	1.0	1.0	1.0
Memo: Detroit Three domestic market share (percent) ²	51.3	50.2	45.9	46.7	42.4	45.9	51.9

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.

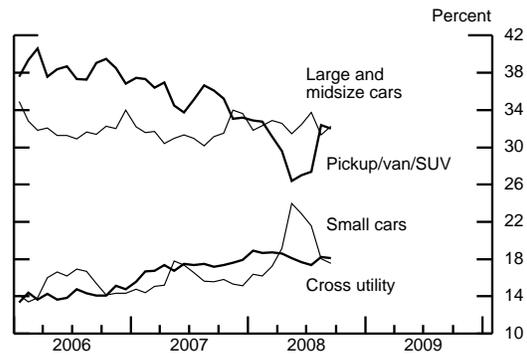


Car-Buying Attitudes



Source: Reuters/University of Michigan Survey.

Domestic Market Share of Light Vehicles



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

production considerably over the past year, demand from abroad appears to be slowing; the ISM export orders index declined sharply in September, and, while still above 50, it was well below the levels seen earlier this year.

The industrial slowdown has not been confined to the United States. The JPMorgan Global New Orders Index—constructed from surveys of purchasing managers in 26 countries—sank further below 50 in September, consistent with declining industrial production among many of the United States’ major trading partners. Given the increased use of globally integrated supply chains, the drop in the Global New Orders Index may both reflect and portend weakness in U.S. manufacturing.

Motor Vehicles

Sales of automobiles and light trucks tumbled 1¼ million units at an annual rate in September, back down to their July pace of 12½ million units.

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Early reports suggest that sales continued to slump in October. Our contacts at the Detroit Three expect total light vehicle sales this month to run well below September’s pace, and sales of the major Japanese nameplates were very weak through the first 20 days of this month. Anecdotal reports suggest that buyers may have encountered considerable financing difficulties this month. The Reuters/Michigan index of car-buying attitudes dropped in the first half of October, and the percent of respondents who felt that it was a bad time to buy because “interest rates were high or credit is tight” surged to a level not seen since 1982. Indeed, GM and Ford reported that they had substantially cut back their leasing programs.⁴ And GMAC—which is jointly owned by GM and Cerberus Capital Management—announced that it would provide financing only to the most credit worthy individuals and that it would extend fewer longer-term loans. Because of worries about the impact of the GMAC announcement, both GM and Ford began efforts around mid-month to try to assure potential buyers that their dealerships could help consumers obtain financing for their purchases.

Turning to production, light motor vehicle assemblies were unchanged in the third quarter at an annual rate of 8.5 million units. Relative to initial schedules, last quarter’s underbuild was 18 percent, compared with an average third-quarter underbuild of 4 percent. Despite the low level of production last quarter, days’ supply of light vehicles

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⁴ Last summer, Chrysler announced that it would no longer lease vehicles.

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

Item	2008							
	Q1	Q2	Q3	Q4	June	July	Aug.	Sept.
U.S. production ¹	9.7	8.5	8.5	8.6	9.0	9.6	7.9	8.2
Autos	3.9	3.6	4.3	4.1	3.7	4.7	4.1	4.0
Light trucks	5.7	4.9	4.3	4.5	5.3	4.9	3.8	4.1
Days' supply ²	66	72	77	n.a.	75	88	71	78
Autos	52	48	67	n.a.	49	59	60	68
Light trucks	77	94	85	n.a.	99	115	79	86
Inventories ³	2.48	2.41	2.41	n.a.	2.41	2.58	2.40	2.41
Autos	.86	.78	.96	n.a.	.78	.85	.88	.96
Light trucks	1.63	1.63	1.45	n.a.	1.63	1.73	1.52	1.45
Memo: U.S. production, total motor vehicles ⁴	9.9	8.8	8.8	8.8	9.2	9.8	8.1	8.4

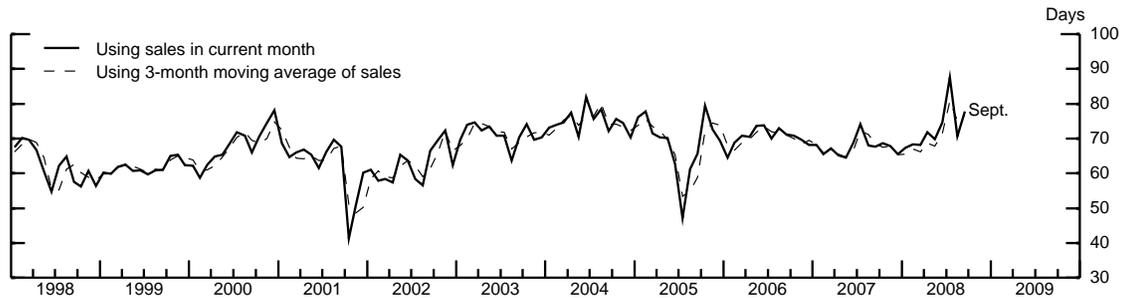
Note: FRB seasonals. Components may not sum to totals because of rounding.
 1. Production rates for the third and fourth quarters reflect the latest industry schedules.
 2. Quarterly values are calculated with end-of-period stocks and average reported sales.
 3. End-of-period stocks.
 4. Includes medium 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



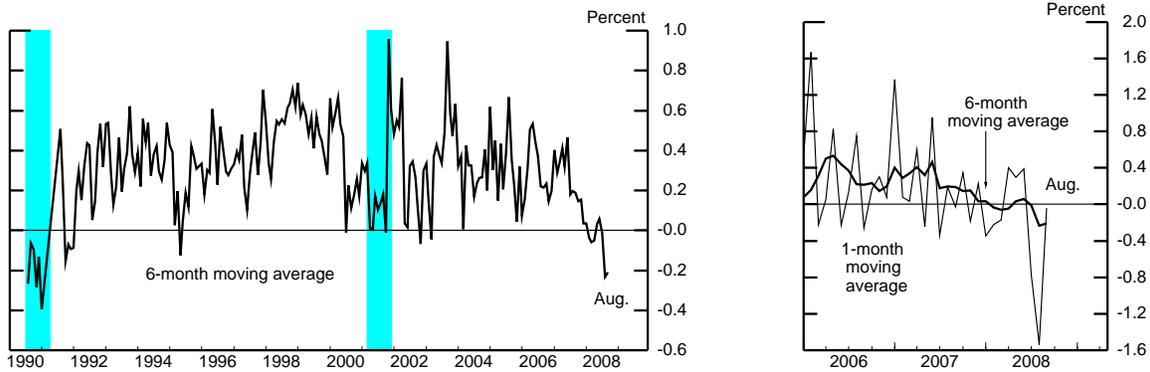
Source: Constructed from Ward's Communications data. Adjusted using FRB seasonals.

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

Category	2007	2008		2008		
		Q2	Q3	July	Aug.	Sept.
		Annual rate		Monthly rate		
Total real PCE¹	2.8	1.2	n.a.	-0.6	-0.1	n.a.
Motor vehicles	2.0	-19.7	n.a.	-8.2	5.8	n.a.
Goods ex. motor vehicles	3.2	4.8	-6.9	-0.9	-0.6	-0.7
Ex. energy	3.5	6.4	-7.1	-1.0	-0.9	-0.5
Services	2.6	.7	n.a.	.1	-0.1	n.a.
Ex. energy	2.6	1.2	n.a.	.2	.0	n.a.
Memo:						
Nominal retail control ²	5.2	10.0	1.0	.1	-0.8	-0.6

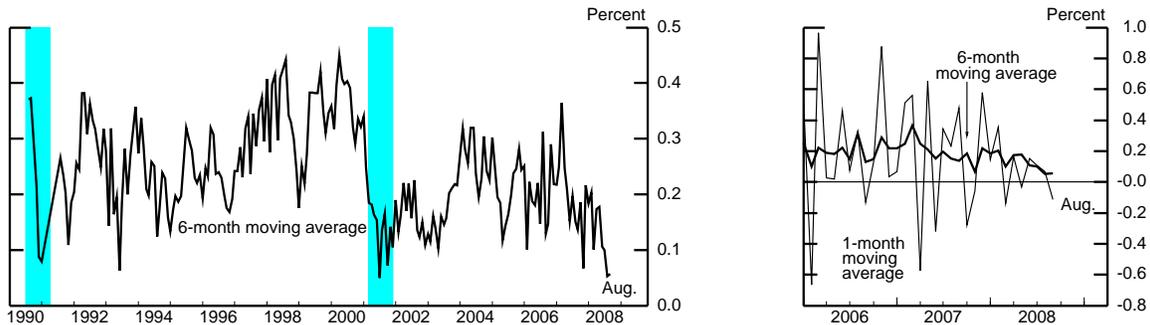
1. The values for Q3 and July, August, and September are staff estimates based on available data.
 2. Total sales less outlays at building material and supply stores and automobile and other motor vehicle dealers.
 n.a. Not available.
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Change in Real PCE Goods



Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

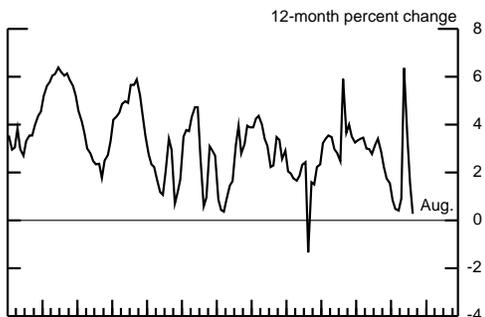
Change in Real PCE Services



Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

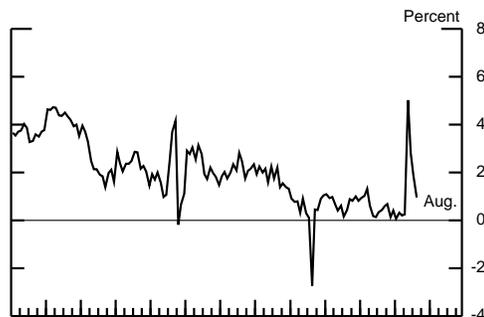
Fundamentals of Household Spending

Change in Real Disposable Personal Income



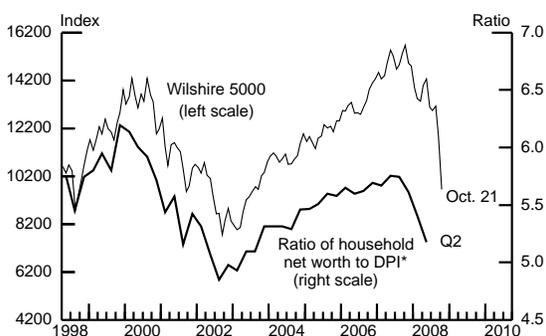
Note: Values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004.
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Personal Saving Rate



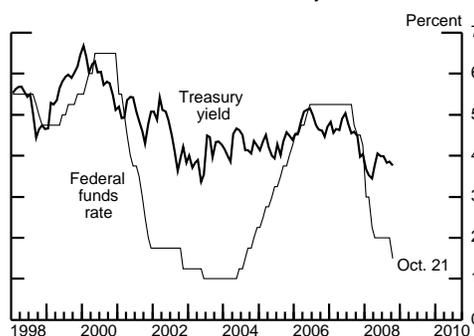
Note: The value for December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.
 Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Household Net Worth and Wilshire 5000



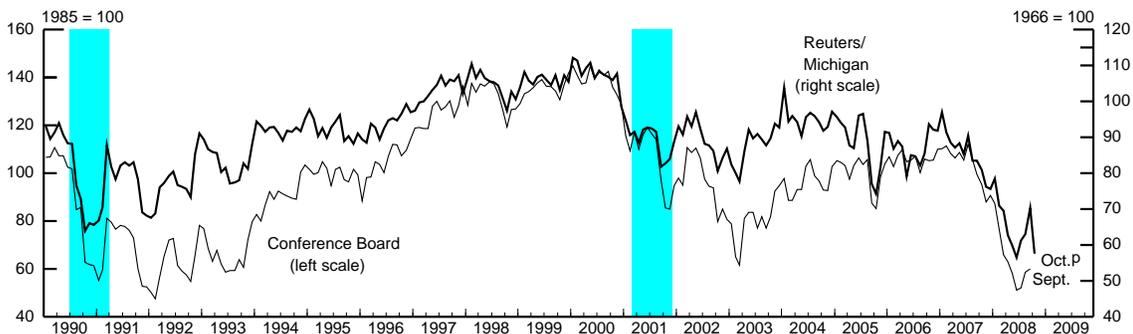
*The value for 2004:Q4 disposable personal income (DPI) excludes the effect on income of the one-time Microsoft dividend in December 2004.
 Source: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; *Wall Street Journal*.

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

has been moving up, on balance, throughout the year; at September's sales pace, dealers held an uncomfortably high 78 days supply at the end of last month. Automakers' schedules currently call for light vehicle assemblies to move up a touch this quarter; at the current sales pace, these schedules, if maintained, would imply no improvement in the inventory situation.

Consumer Spending

The available data suggest that consumer spending declined in September for the fourth consecutive month. For the third quarter as a whole, real personal consumption expenditures (PCE) appear to have fallen sharply, with the cutbacks extending well beyond vehicle purchases. We estimate that real purchases of goods other than motor vehicles fell at an annual rate of nearly 7 percent last quarter, the sharpest decrease for this category since 1980. Data on services spending lag the indicators of goods purchases by a month, but the most recent readings have not been encouraging. Real outlays for services were flat, on balance, in July and August, and excluding the volatile energy component, real spending was up just a touch over the two months. Early indicators of October spending, including weekly chain store sales, suggest that demand has continued to deteriorate.

The headwinds facing consumers have been intensifying. Real incomes have stagnated recently: Taken together, the September labor market report and the latest readings on consumer prices suggest that real labor income fell last month, and, excluding the tax rebates and transfers related to the Emergency Unemployment Compensation program, real disposable income in July and August was little changed, on average, from its second-quarter level. In addition, credit conditions have tightened, and the recent steep drop in the stock market and the continuing decline in house prices have further strained households' balance sheets. Likely reflecting these developments, the preliminary reading from the Reuters/University of Michigan survey of consumer sentiment in early October moved back down to near the recessionary low recorded in June.

On the credit-supply side, preliminary data from the October Senior Loan Officer Opinion Survey (SLOOS) on Bank Lending Practices indicate that, on net, about half of domestic banks reported they were less willing to make consumer installment loans over the past three months than in the prior three-month period, and about 60 percent indicated they had tightened credit standards on both credit card loans and other consumer loans (see the appendix to the "Domestic Financial Developments" section). Total consumer credit declined in August for the first time in a decade. Although the drop may have been due, in part, to households using their tax rebates to pay down balances, a large portion of

Private Housing Activity

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

Sector	2007	2008					
		Q1	Q2	Q3	July	Aug.	Sept.
<i>All units</i>							
Starts	1.36	1.05	1.03	.88	.95	.87	.82
Permits	1.40	.99	1.03	.86	.94	.86	.79
<i>Single-family units</i>							
Starts	1.05	.73	.68	.60	.64	.62	.54
Permits	.98	.65	.63	.56	.58	.55	.53
Adjusted permits ¹	.99	.67	.65	.57	.60	.57	.55
Permit backlog ²	.108	.096	.089	.085	.091	.083	.085
New homes							
Sales	.78	.56	.52	n.a.	.52	.46	n.a.
Months' supply ³	8.40	10.24	10.53	n.a.	9.85	10.64	n.a.
Existing homes							
Sales	4.94	4.39	4.34	n.a.	4.41	4.35	n.a.
Months' supply ³	8.67	10.23	10.28	n.a.	9.73	9.56	n.a.
<i>Multifamily units</i>							
Starts	.309	.325	.350	.277	.305	.254	.273
Permits	.419	.341	.400	.304	.353	.304	.254
Permit backlog ²	.075	.067	.068	.061	.066	.064	.061
<i>Mobile homes</i>							
Shipments	.096	.092	.088	n.a.	.084	.082	n.a.
<i>Condos and co-ops</i>							
Existing home sales	.713	.560	.573	n.a.	.610	.560	n.a.

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

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

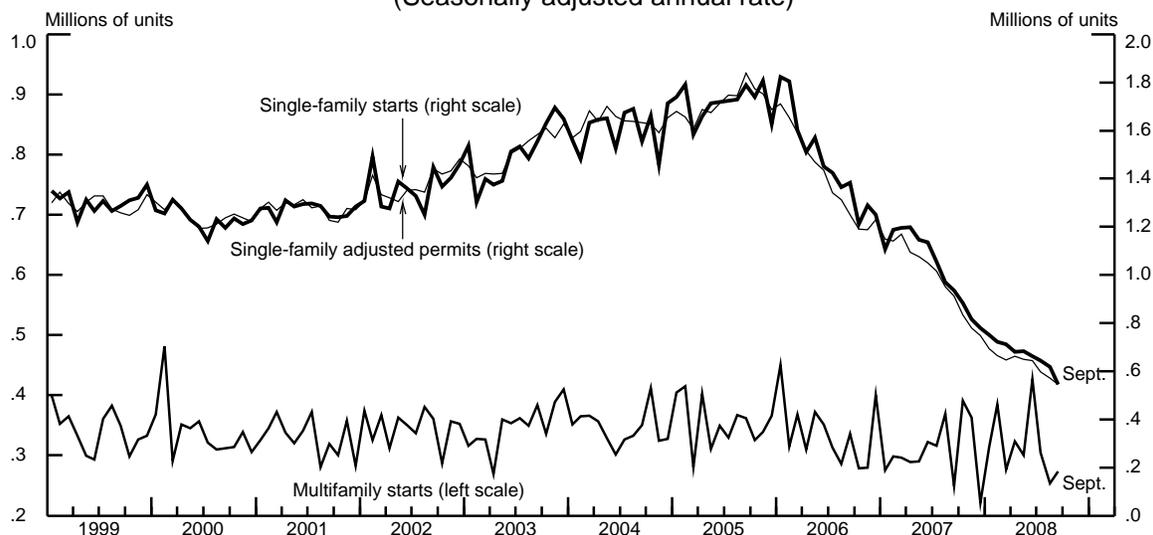
3. At current sales rate; expressed as the ratio of seasonally adjusted inventories to seasonally adjusted sales. Quarterly and annual figures are averages of monthly figures.

n.a. Not available.

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.

the drop probably reflected the tightened borrowing conditions and a precautionary pullback in spending.

Housing

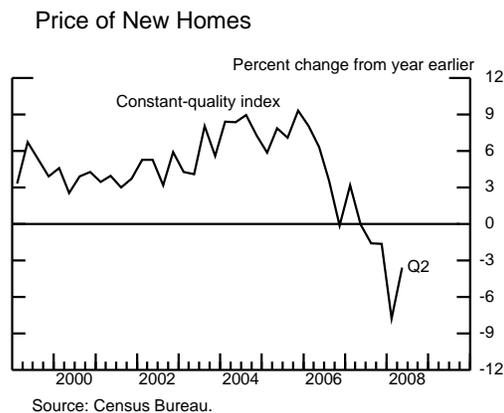
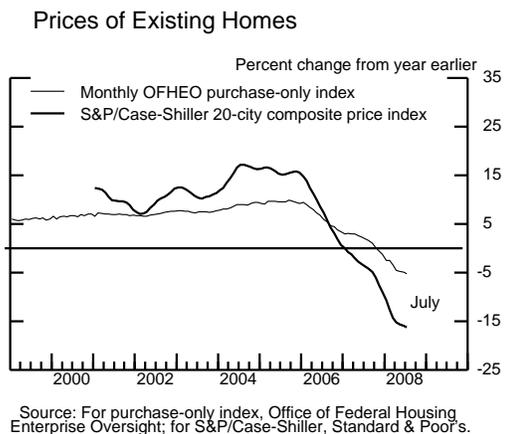
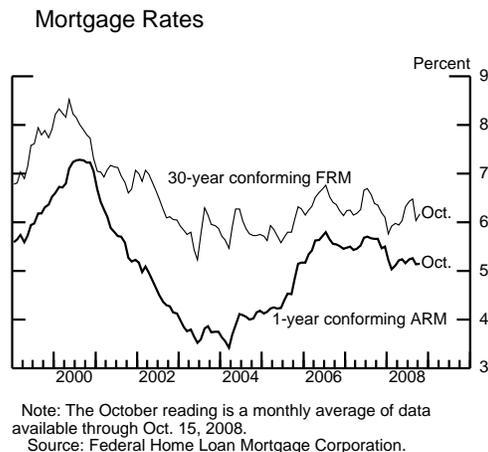
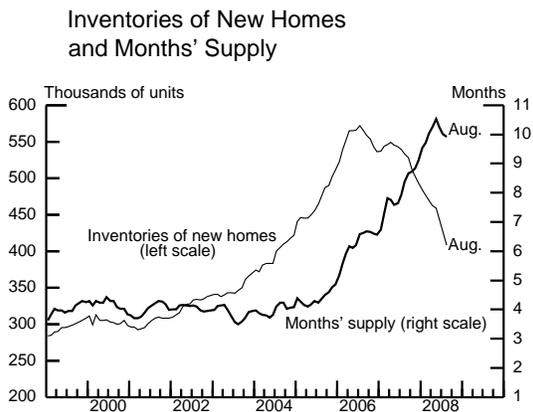
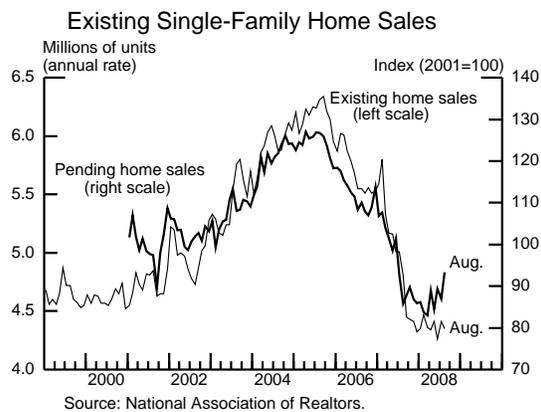
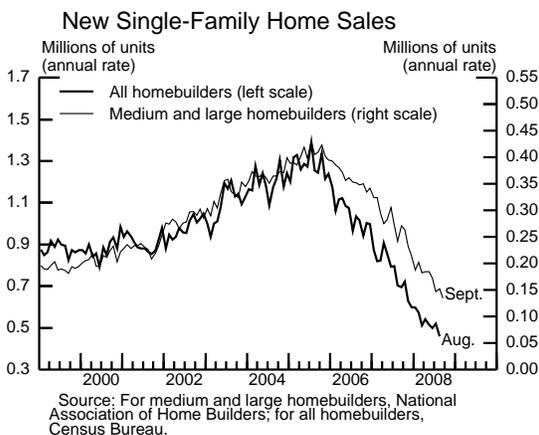
Housing activity continued its steep descent in the third quarter. In September, single-family housing starts fell nearly 12 percent to an annual rate of 544,000 units, and adjusted permit issuance—a useful month-ahead indicator of starts—dropped to a similar level. So far this year, single-family starts have fallen at an annual rate of 38 percent, the same rate of decline as in 2007. Multifamily starts edged up to 273,000 units in September but remained toward 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 nearly 12 percent in August and has declined at a 33 percent annual rate so far this year. More recently, sales agreements at medium and large homebuilders—which currently represent about a third of overall new home sales—fell close to 12 percent in September according to the National Association of Home Builders. The number of unsold new single-family homes continued to move lower in August. However, inventories remained extremely elevated relative to the current pace of sales, as the months' supply of new homes stood at more than double its average prior to the recent housing market downturn.

Sales of existing single-family homes, which are registered at closing rather than when an agreement is signed, moved down a bit in August, though the jump in August pending home sales suggests a rebound in the near term. Since the end of last year, existing home sales have changed little, on balance, but the pace of sales in recent months likely has been boosted by increases in foreclosure-related sales. Foreclosures often transfer the ownership of homes to banks or other mortgage holders, and these institutions, which typically do not hold real estate on their balance sheets, tend to price houses to sell relatively quickly. According to the National Association of Realtors, 35 percent to 40 percent of recently surveyed Realtors reported their latest transaction to have been either a short sale or a sale resulting from foreclosure, and the Realtors have suggested that recent sales increases—and outsized price declines—in parts of California and Florida were related to the large number of foreclosures in those areas.⁵

⁵ Foreclosure proceedings generally provide for a public auction of the foreclosed property. Sales from such auctions would not be captured in existing home sales figures. However, when, as is now often the case, the value of a home is less than the amount owed on the mortgage, auctions often result in ownership of the property being transferred to the mortgage holder (typically a bank), which may hire a real estate agent to sell the property. These sales would then be captured in the existing home sales data.

Indicators of Single-Family Housing



After having fallen in September, rates for conforming 30-year fixed-rate mortgages moved back up about 35 basis points over the first half of October to around 6½ percent at midmonth. Meanwhile, the market for nonconforming loans (that is, loans that cannot be purchased by Fannie Mae or Freddie Mac) has remained severely impaired. Although increased lending through the Federal Housing Administration (FHA)—which can insure loans with down payments as little as 3 percent—has offered an alternative source of mortgage finance for some nonprime and near prime borrowers, the higher costs associated with FHA mortgages and the FHA’s relatively strict lending standards and documentation requirements suggest that their lending is unlikely to have completely replaced the reduction in credit from other sources.

House prices remain on a downward trajectory. For existing homes, the monthly version of the purchase-only repeat-sales price index calculated by the Office of Federal Housing Enterprise Oversight (OFHEO) decreased 5¼ percent over the 12 months ending in July. By comparison, the 20-city S&P/Case-Shiller repeat-sales price index—which, unlike the OFHEO index, includes houses financed by nonconforming loans but is less geographically representative—fell more than 16 percent over the same period. 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 potential buyers reluctant to purchase homes until prices show signs of stabilizing.

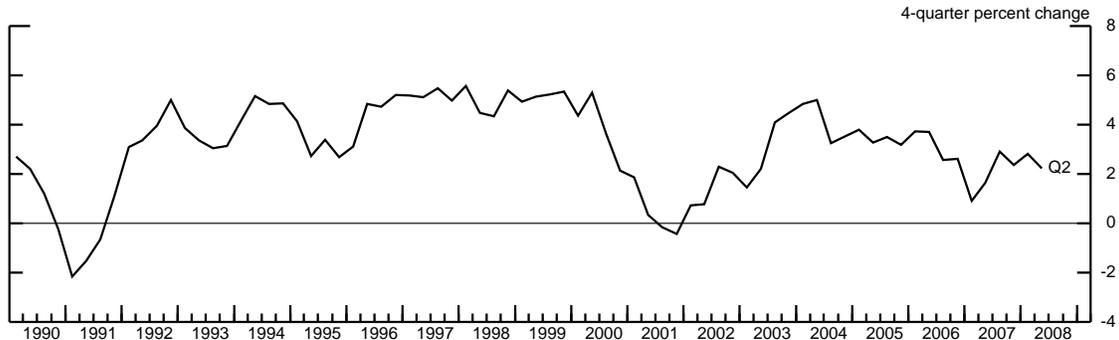
Equipment and Software

Real spending on equipment and software (E&S) appears to have posted its third consecutive quarterly decline last quarter. Over the first half of the year the declines were concentrated in business purchases of motor vehicles, construction machinery, and a few other categories. Recently, however, the spending cutbacks appear to have become more widespread.

The fundamentals underlying investment demand have deteriorated from earlier in the year. Anecdotal evidence suggests that an increasing number of businesses have had difficulty securing new credit, and the National Federation of Independent Businesses (NFIB) survey on loan availability indicates that credit conditions for small businesses have tightened considerably. In addition, the October SLOOS showed that the vast majority of banks had again tightened both price and nonprice terms for business loans. Moreover, forward-looking indicators of business activity have become noticeably darker

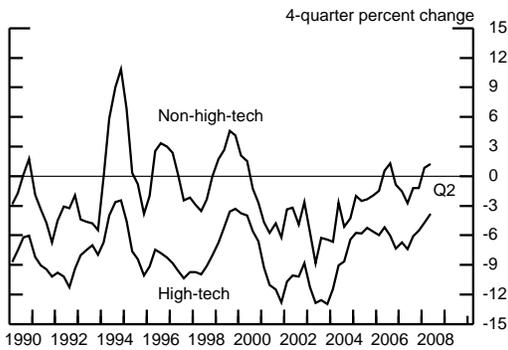
Fundamentals of Equipment and Software Investment

Real Business Output



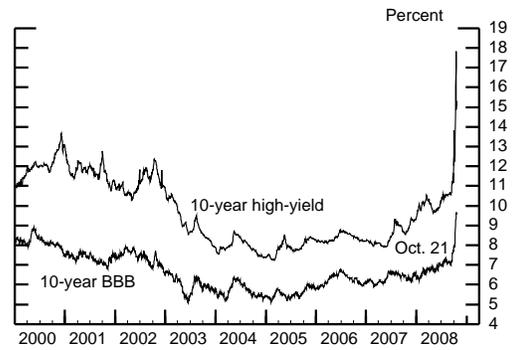
Source: Bureau of Economic Analysis.

User Cost of Capital



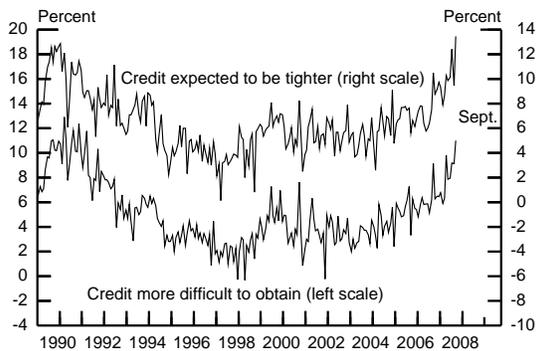
Source: Staff calculation.

Corporate Bond Yields



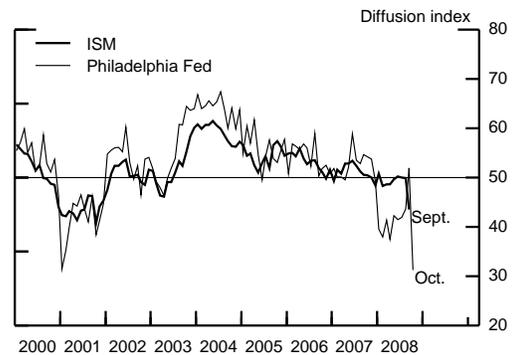
Note: Daily averages.
Source: Merrill Lynch.

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.

of late; the national ISM manufacturing index moved sharply lower in September, and the available regional indicators of business conditions plummeted in October.

Real spending on high-tech E&S appears to have stalled last quarter. Shipments of communications equipment fell considerably in July and August, and telecom service providers lowered their guidance for capital expenditures in the second half of the year. Real spending on computers and software appears to have decelerated to an extremely sluggish pace last quarter, partly a result of weaker demand from the reeling finance industry, which accounts for a disproportionate share of spending on these items.

Real outlays on transportation equipment seem to have held about steady in the third quarter after steep declines earlier in the year. Business purchases of light vehicles appear to have risen in the third quarter, as automakers significantly boosted their deliveries to daily rental companies. But sales of medium and heavy trucks fell sharply in the third quarter after little change over the first half of the year; orders for these vehicles collapsed last quarter, and industry analysts attributed the decline to difficulties in obtaining financing, even for shippers with reportedly good credit. As for aircraft, Boeing deliveries, which were robust in July and August, plunged in September because of the machinists' strike; with the strike continuing, it is likely that Boeing will make no deliveries this month.

Real purchases of equipment other than high-tech and transportation appear to have fallen last quarter. Nominal orders and shipments of these capital goods posted broad-based declines in August, and the earlier reported increases for July were revised markedly lower; moreover, continued significant increases in capital goods prices imply that real orders and shipments were even weaker than their nominal counterparts.

Nonresidential construction

Real nonresidential investment (other than drilling and mining) appears to have decelerated sharply in the third quarter after having risen at a robust rate in the first half of the year. Nominal expenditures turned down in July and fell further in August. Meanwhile, vacancy rates have been rising, and property values have been falling. In addition, it has become increasingly difficult to acquire financing for new construction projects: Interest rates have increased, and lending standards for commercial real estate loans have continued to tighten over the past three months according to the most recent SLOOS. Consistent with these worsening fundamentals, the architectural billings index—a leading indicator of nonresidential investment—remained at a low level in September.

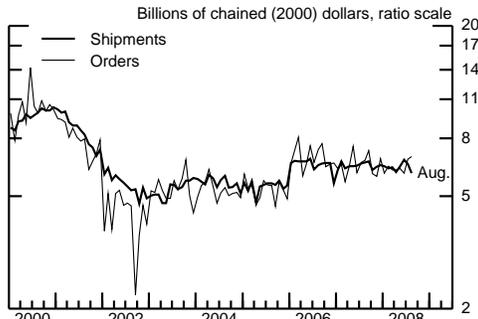
Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

Category	2008				
	Q1	Q2	June	July	Aug.
	Annual rate		Monthly rate		
Shipments	-.1	3.4	.7	1.2	-3.2
Excluding aircraft	-.4	5.9	.6	.3	-2.1
Computers and peripherals	-5.8	-19.0	-2.4	-4.8	-2.8
Communications equipment	2.6	5.8	5.7	-3.0	-7.3
All other categories	-.1	8.8	.4	1.1	-1.6
Orders	-5.6	-6.8	-2.3	3.5	-7.9
Excluding aircraft	4.7	10.2	1.6	.3	-2.4
Computers and peripherals	-1.7	-5.3	.3	-13.1	1.7
Communications equipment	.6	.2	-4.1	12.4	2.1
All other categories	5.7	12.9	2.3	.6	-3.2
Memo:					
Shipments of complete aircraft ¹	43.4	43.1	41.8	40.9	50.6

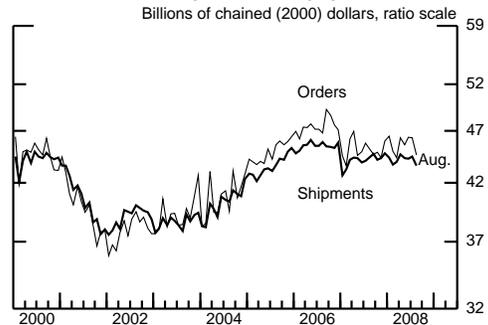
1. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate.
Source: Census Bureau.

Communications Equipment



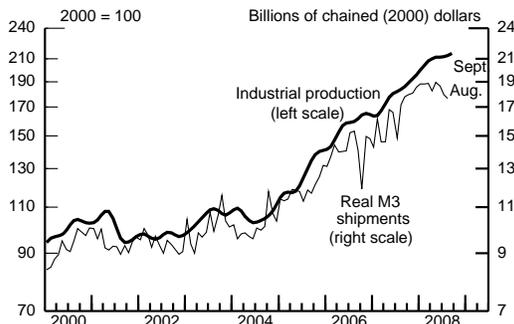
Note: Shipments and orders are deflated by a price index that is derived from the BEA's quality-adjusted price indexes and uses the PPI for communications equipment for monthly interpolation.
Source: Census Bureau.

Non-High-Tech, Nontransportation Equipment



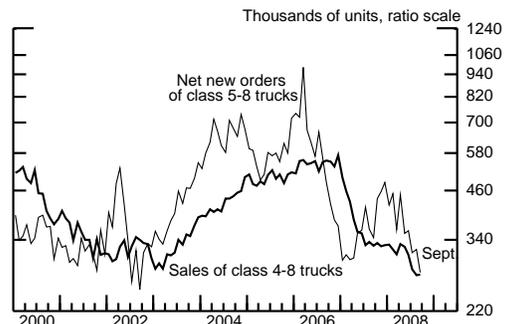
Note: Shipments and orders are deflated by the staff price indexes for the individual equipment types included in this category. Indexes are derived from the BEA's quality-adjusted price indexes.
Source: Census Bureau.

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

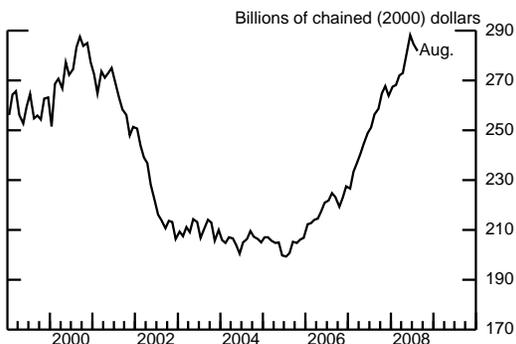


Note: Annual rate, FRB seasonals.
Source: For sales, Ward's Communications; for orders, ACT Research.

Nonresidential Construction and Indicators

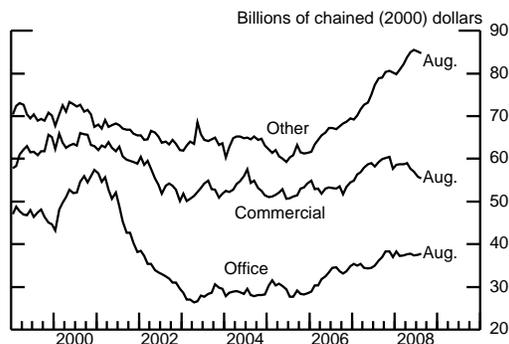
(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q2 and by staff projection thereafter)

Total Structures



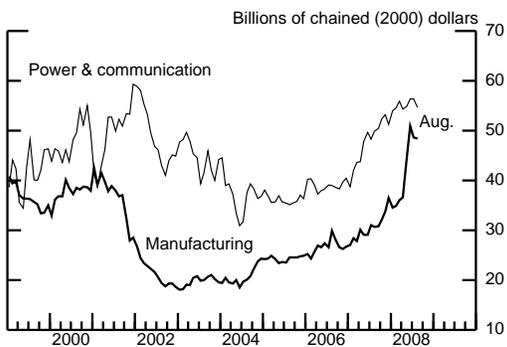
Source: Census Bureau.

Office, Commercial, and Other



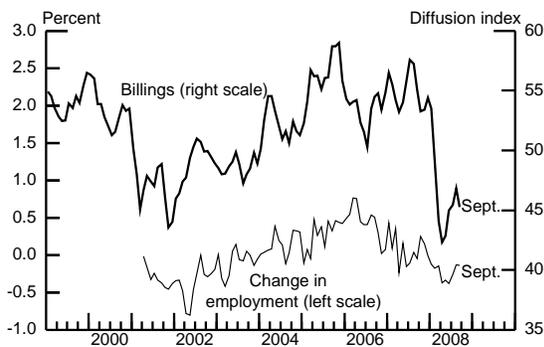
Note: Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care.
Source: Census Bureau.

Manufacturing and Power & Communication



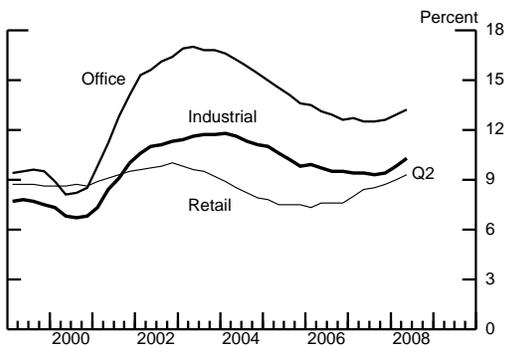
Source: Census Bureau.

Architectural Billings and Nonresidential Construction Employment



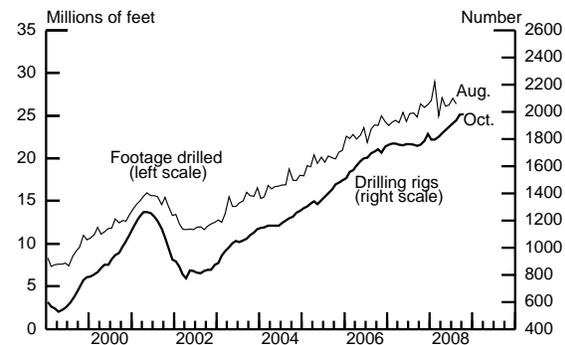
Note: Both series are 3-month moving averages. Employment consists of industrial, commercial, and specialty trade construction.
Source: For billings, American Institute of Architects; for employment, Bureau of Labor Statistics.

Vacancy Rates



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

Drilling and Mining Indicators



Note: The October readings for drilling rigs are based on data through October 17, 2008. Both series are seasonally adjusted by FRB staff.
Source: For footage drilled, Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

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

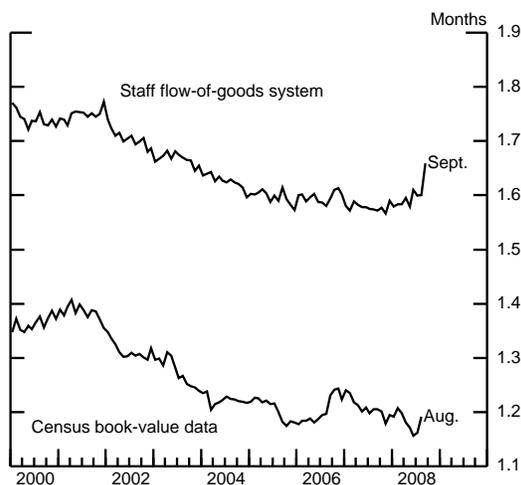
Measure and sector	2007	2008				
	Q4	Q1	Q2	June	July	Aug.
<i>Real inventory investment (chained 2000 dollars)</i>						
Total nonfarm business	-20.6	-17.9	-55.1	n.a.	n.a.	n.a.
Motor vehicles	-21.3	-15.3	-10.9	n.a.	n.a.	n.a.
Nonfarm ex. motor vehicles	.7	-2.6	-44.2	n.a.	n.a.	n.a.
Manufacturing and trade ex. wholesale and retail motor vehicles and parts						
Manufacturing	2.9	13.7	-26.0	-6.7	-25.3 ^e	n.a.
Wholesale trade ex. motor vehicles & parts	-3.3	.0	4.9	4.3	21.5 ^e	n.a.
Retail trade ex. motor vehicles & parts	6.5	-8.2	-3.1	-9.4	3.2 ^e	n.a.
<i>Book-value inventory investment (current dollars)</i>						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	70.4	95.8	97.5	136.2	132.6	72.3
Manufacturing	34.7	60.5	39.3	81.6	41.3	40.6
Wholesale trade ex. motor vehicles & parts	23.0	39.0	48.5	42.8	67.7	37.0
Retail trade ex. motor vehicles & parts	12.7	-3.7	9.6	11.8	23.6	-5.2

n.a. Not available.

^e 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.

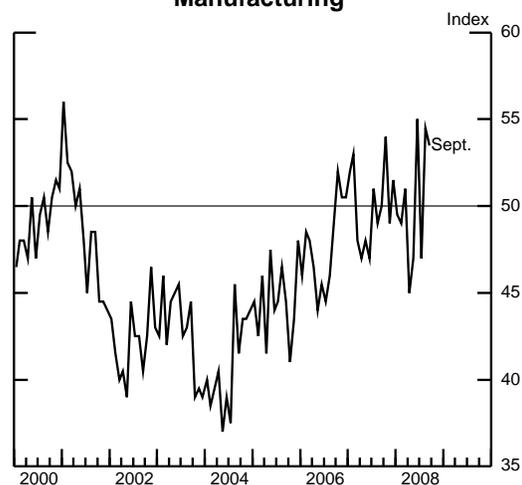
Inventory Ratios ex. Motor Vehicles



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.

Although the latest readings on footage drilled and the number of drilling rigs in operation suggest that real expenditures on drilling and mining structures increased further in the third quarter, the recent decline in oil and gas prices will likely damp activity in this sector.

Business Inventories

Firms drew down their inventories at a rapid pace in the second quarter, and book-value data for the manufacturing and trade sectors through August suggest that businesses have continued to shed real stocks over the summer. Despite these runoffs, the indicators we track suggest that inventories in some industries remain above desired levels. In particular, the Census Bureau data indicate that the ratio of book-value inventories to sales in the manufacturing and trade sectors, excluding motor vehicles, moved up in August, especially in a number of durable goods sectors. In addition, information from the staff's flow-of-goods inventory system suggests that months' supply excluding motor vehicles and parts remained elevated in September, particularly in areas such as business equipment, consumer goods, construction supplies, and materials. Finally, purchasing managers reported that their customers' inventories were too high in September.

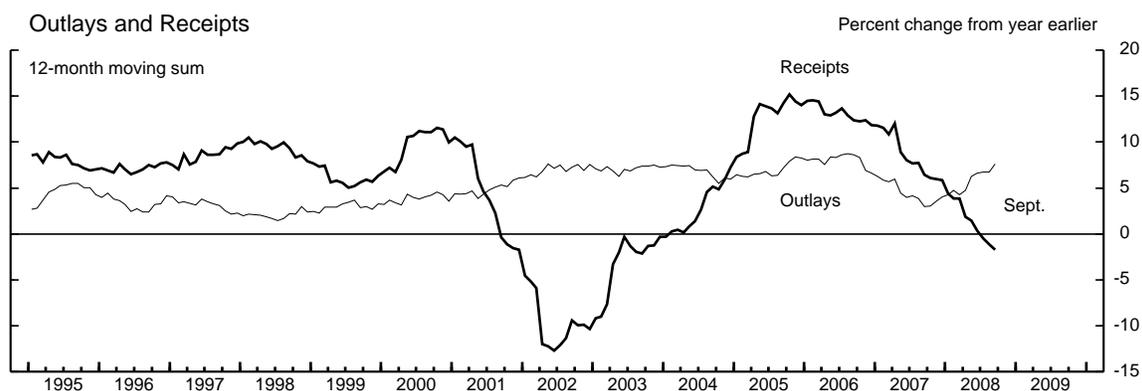
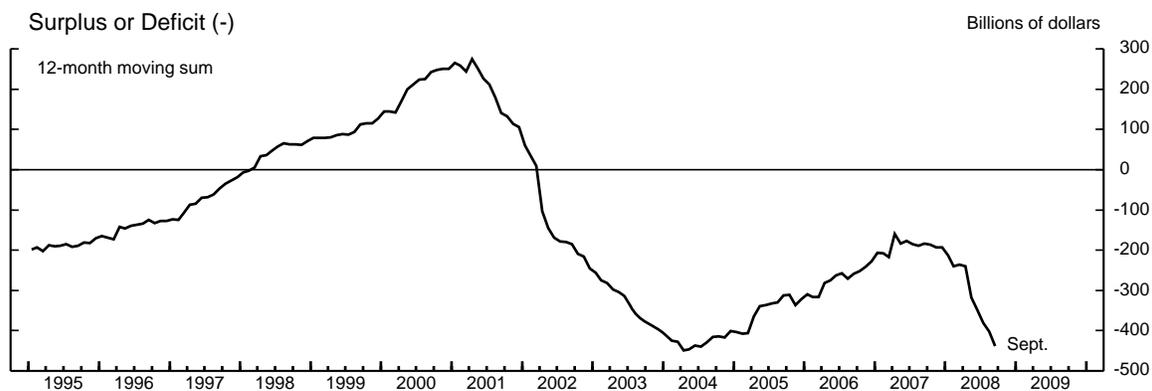
Federal Government Sector

The federal unified budget position eroded noticeably in the third quarter. Receipts, adjusted for payment-timing shifts and financial transactions, fell 5 percent relative to the same period a year earlier, reflecting an anemic increase in individual income and payroll taxes and a 25 percent drop in corporate tax payments. Individual income tax collections were held down by surprisingly weak quarterly nonwithheld payments in September, possibly the result of a further slowing in personal income and lower capital gains realizations. The drop in corporate tax payments was likely due to weak profits and the effects of the bonus depreciation provision that firms are allowed to claim for capital spending in 2008.

Turning to the expenditure side of the ledger, adjusted outlays in the third quarter rose 8 percent from a year earlier. This increase was spurred both by the costs of the EUC program that was introduced in July and by continued robust increases in defense spending. Data on defense spending from the Monthly Treasury Statement (MTS) are consistent with another large increase in real defense purchases in the national accounts in the third quarter.

For fiscal year 2008 as a whole, which ended in September, the federal unified deficit reached \$455 billion (3¼ percent of GDP), up from \$162 billion (or 1¼ percent of GDP)

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



Recent Federal Outlays and Receipts

(Billions of dollars except as noted)

Function or source	July-September			12 months ending in September		
	2007	2008	Percent change	2007	2008	Percent change
Outlays						
Outlays	682.9	739.9	8.3	2,751.8	2,961.8	7.6
Net interest	60.6	63.9	5.5	237.9	248.9	4.6
National defense	145.0	165.9	14.4	561.5	624.5	11.2
Major transfers ¹	367.9	399.9	8.7	1,521.6	1,642.0	7.9
Other	109.5	110.2	.7	430.7	446.4	3.6
Receipts						
Receipts	622.3	590.0	-5.2	2,567.7	2,523.9	-1.7
Individual income and payroll taxes	474.9	468.7	-1.3	1,987.5	1,996.5	.5
Corporate income taxes	90.7	67.8	-25.2	370.2	304.3	-17.8
Other	56.7	53.4	-5.8	209.9	223.0	6.2
Surplus or deficit (-)	-60.6	-150.0	...	-184.2	-437.9	...
Memo:						
Unadjusted surplus or deficit (-)	-40.6	-169.0	...	-161.5	-454.8	...

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

... Not applicable.

in fiscal 2007. The substantial deterioration in the deficit reflects numerous factors, including the fiscal stimulus package, relatively strong growth in defense spending, and the effect of the weakening economy on receipts and outlays.

The recently approved Emergency Economic Stabilization Act (EESA) included \$700 billion to fund the Troubled Assets Relief Program (TARP). Besides the TARP, the EESA also included \$110 billion in net revenue reductions, largely arising from the temporary extension of tax provisions such as relief from the alternative minimum tax and the research and experimentation tax credit. Separately, the continuing resolution that passed in September provided funding for discretionary programs in defense, homeland security, and veterans affairs for all of fiscal 2009 and provided funding for all other discretionary programs through March 6, 2009; the bill also included funding to support \$25 billion in loans to help U.S. automakers update their factories and \$23 billion of emergency funding in response to recent natural disasters.⁶

State and Local Government Sector

Despite reports of mounting budget pressures, the incoming data point to a moderate increase in real state and local purchases in the third quarter. Employment rose 24,000 per month, on average, over the three months ending in September, a pace similar to that recorded over the first half of the year. In addition, nominal construction spending rose in August (the latest available data) to a level 2½ percent (not at an annual rate) above its second-quarter average; this gain was spurred by a sharp increase in spending on highways and sets the stage for a solid rise in real construction outlays in the third quarter.

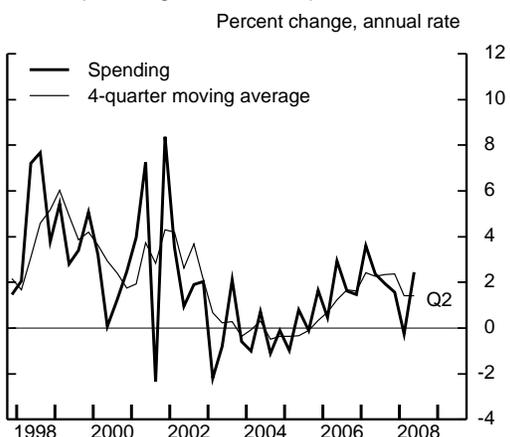
Going forward, however, state and local spending will no doubt be squeezed by the substantial deterioration in the sector's fiscal position that is now taking hold. Revenue collections in the final months of fiscal 2008 (which ended on June 30 in all but a few states) were tepid at both the state and local levels.⁷ So far in fiscal 2009, revenues in many states are running below previously projected levels, and revenue forecasts for the year as a whole are being revised down in response to the weakness in recent collections and the darker economic outlook. In New York, for example, where the financial

⁶ Following the September CPI release, the Social Security Administration announced that the automatic cost-of-living allowance (COLA) for Social Security would be 5.8 percent. The COLA adjustment is based on the change in the CPI-W and will boost benefits in January 2009.

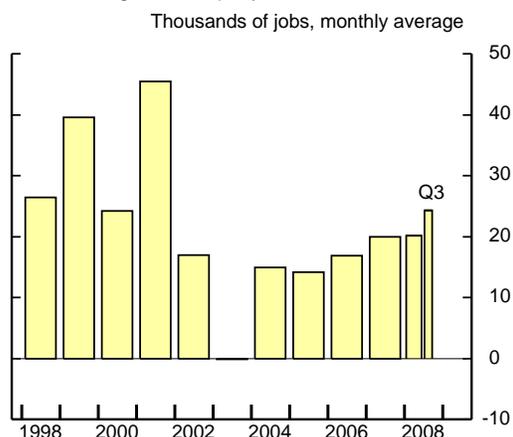
⁷ According to the Census Bureau's *Quarterly Summary of State and Local Tax Revenue*, state revenues during the year ending in June were just 3 percent above their year-earlier level, while local revenues rose just 4 percent. Both increases were more than 2 percentage points smaller than those recorded during the preceding year.

State and Local Indicators

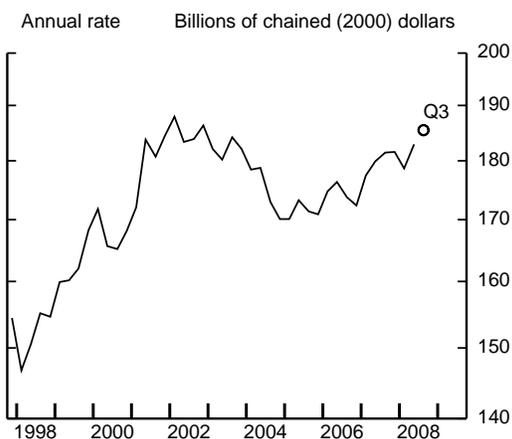
Real Spending on Consumption & Investment



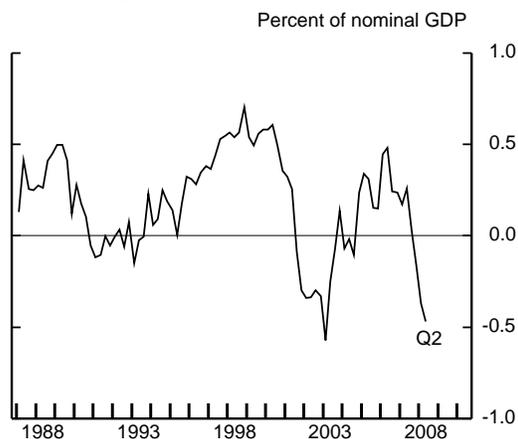
Net Change in Employment



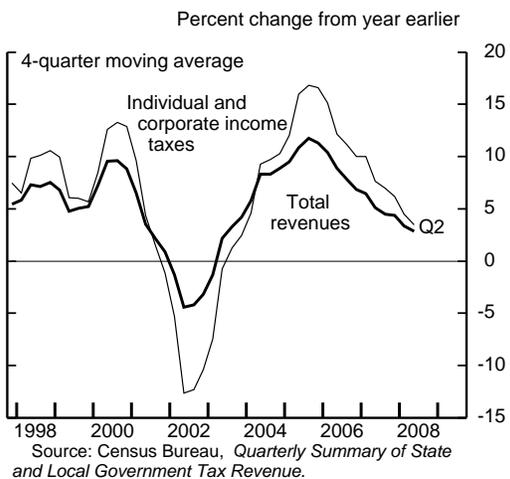
Real Construction



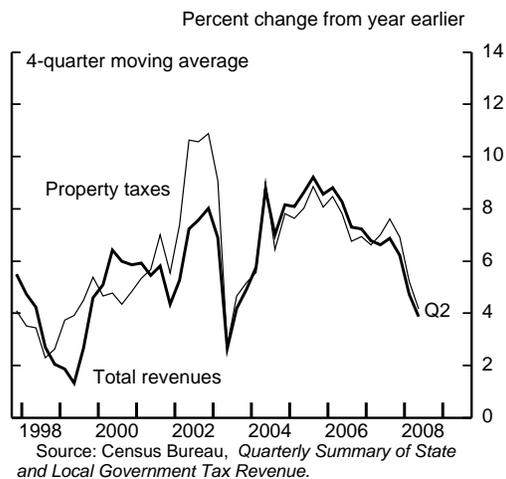
Net Saving



State Revenues



Local Revenues



Price Measures
(Percent change)

Measures	12-month change		3-month change		1-month change	
	Sept. 2007	Sept. 2008	Annual rate		Monthly rate	
			June 2008	Sept. 2008	Aug. 2008	Sept. 2008
<i>CPI</i>						
Total	2.8	4.9	7.9	2.6	-1	.0
Food	4.5	6.2	8.5	8.7	.6	.6
Energy	5.3	23.1	53.6	-4.9	-3.1	-1.9
Ex. food and energy	2.1	2.5	2.5	2.7	.2	.1
Core goods	-1.8	.5	-1	1.4	.1	-.2
Core services	3.3	3.2	3.6	3.2	.2	.3
Shelter	3.5	2.4	2.2	2.3	.1	.3
Other services	3.0	4.5	5.4	4.5	.5	.2
Chained CPI (n.s.a.) ¹	2.3	4.3	...	...	...	...
Ex. food and energy ¹	1.6	2.2	...	...	...	...
<i>PCE prices</i> ²						
Total	2.6	4.2	6.0	3.1	.0	.1
Food and beverages	4.2	6.1	7.2	9.0	.6	.6
Energy	5.9	23.9	53.3	-5.2	-3.3	-1.9
Ex. food and energy	2.0	2.5	2.5	2.9	.2	.2
Core goods	-1.1	.5	-.4	1.0	.1	-.1
Core services	3.3	3.2	3.6	3.6	.3	.3
Housing services	3.4	2.6	2.4	2.3	.1	.3
Other services	3.3	3.5	4.0	4.0	.4	.3
Core market-based	1.6	2.1	2.3	2.4	.2	.2
Core non-market-based	4.1	3.8	3.3	4.9	.5	.2
<i>PPI</i>						
Total finished goods	4.4	8.7	14.6	-4	-9	-4
Food	5.8	8.1	9.2	3.1	.3	.2
Energy	10.7	22.4	51.6	-16.7	-4.6	-2.9
Ex. food and energy	2.0	4.0	4.4	5.4	.2	.4
Core consumer goods	2.3	4.2	4.9	5.3	.2	.5
Capital equipment	1.5	3.6	4.0	5.6	.1	.5
Intermediate materials	4.1	15.4	25.7	2.1	-1.0	-1.2
Ex. food and energy	1.7	12.1	17.9	14.2	1.7	-.3
Crude materials	11.3	26.0	79.1	-48.9	-11.9	-7.9
Ex. food and energy	14.2	18.2	62.2	-28.4	-1.9	-9.4

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

2. PCE prices in September 2008 are staff estimates.

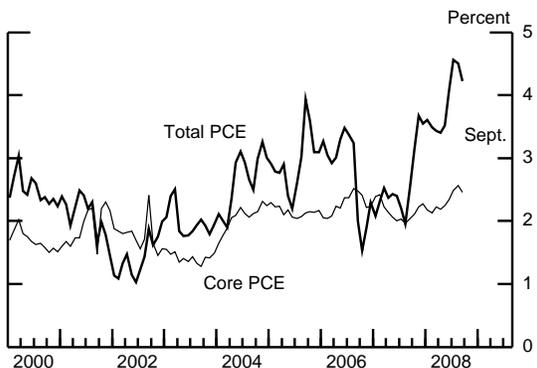
... Not applicable.

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

Consumer Prices

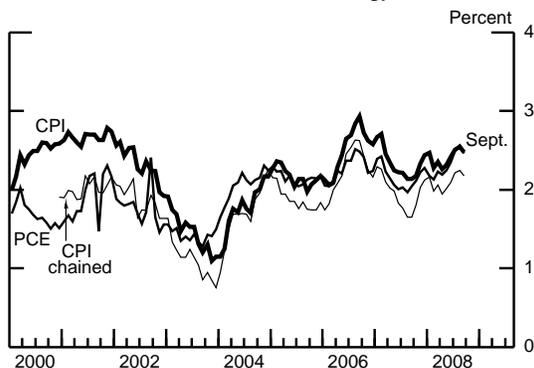
(12-month change except as noted; PCE prices in September are staff estimates)

PCE Prices



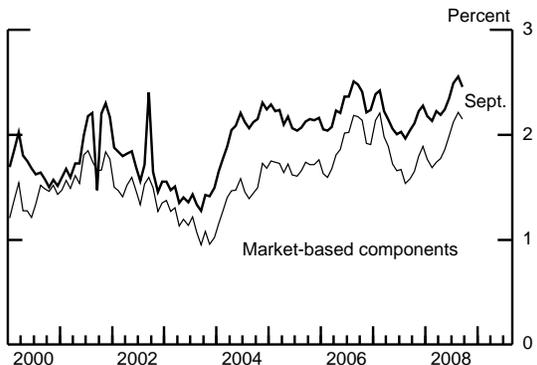
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

CPI and PCE ex. Food and Energy



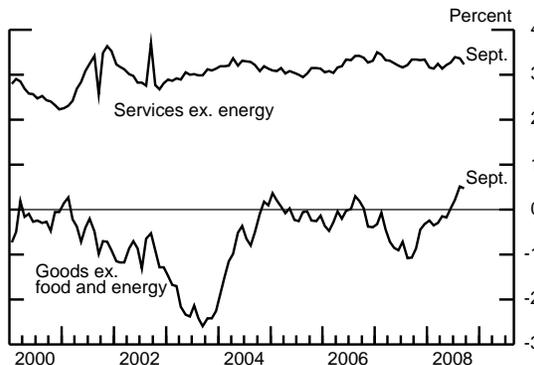
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for PCE, U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE excluding Food and Energy



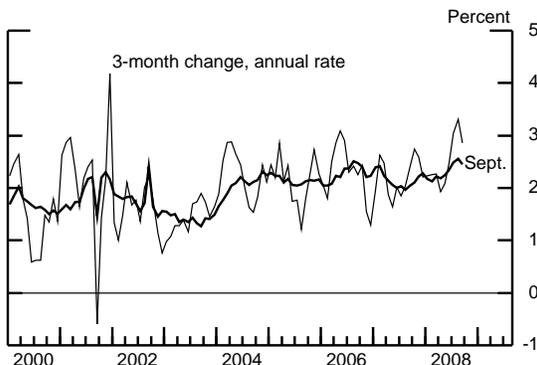
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Goods and Services



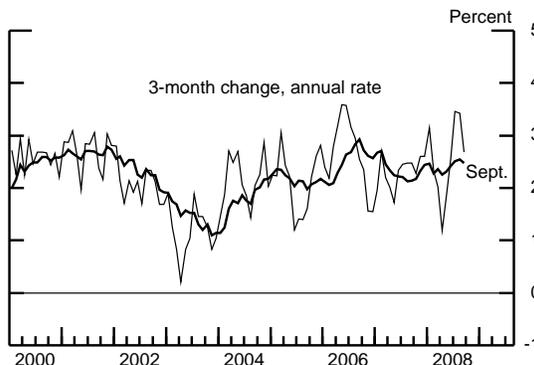
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.

services industry accounts for one-fifth of the state's tax revenue, the Division of Budget has shaved more than \$1 billion (3 percent) from its July projection of fiscal 2009 state tax collections; it expects to make a substantial downward adjustment to its projection for fiscal 2010 as well. Sizable shortfalls have also been reported in many other states, including California, Georgia, Illinois, Maryland, Massachusetts, and Virginia.

The responses to the deterioration in revenues generally include calls for freezes on hiring and pay, layoffs, and other actions to move operating budgets back toward balance; some stretching out of construction projects is also beginning to be reported. In some cases, states are drawing down rainy day funds to help close the emerging fiscal gaps and satisfy their balanced-budget requirements.

Prices

Headline consumer price inflation eased over the past two months, held down by declines in consumer energy prices. We estimate that overall PCE prices increased 0.1 percent in September after remaining unchanged in August.⁸ Despite these low readings, overall prices rose briskly over the past year: The 12-month change through September was 4¼ percent, up from the 2½ percent rise recorded over the previous 12 months. Core PCE prices rose 0.2 percent in August and September after two months of 0.3 percent increases. Although increases in core consumer prices remain somewhat elevated relative to their pace earlier this year and last, many of the factors that have been putting upward pressure on core inflation have diminished recently: Prices for oil and other commodities have fallen sharply, core non-oil import prices and intermediate materials prices have both turned down, and inflation expectations have retreated somewhat.

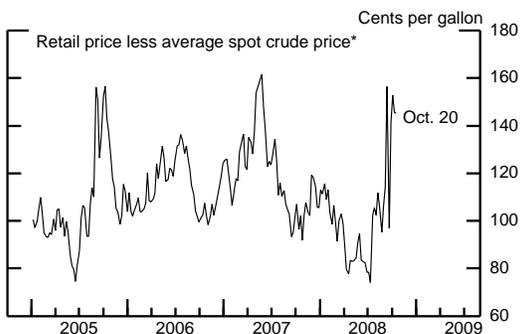
Consumer energy prices have fallen back recently as sizable declines in spot prices for crude oil and natural gas have begun to show through to the retail level. Consumer energy prices fell ¾ percent in August, and we estimate that they decreased another 2 percent in September. Survey data from the first half of October suggest that retail gasoline prices fell much more sharply this month. Despite these price declines, gasoline margins have soared, both because of the usual lagged reaction of retail prices to changes in crude prices and because refinery outages in the Gulf region caused by Hurricanes Gustav and Ike pushed inventories to extremely tight levels. With nearly all of the gasoline refineries idled by the hurricanes having now restarted production, inventories are quickly being rebuilt and margins have started to turn down. In contrast to very tight

⁸ PCE prices for September are staff estimates based on data from the CPI and PPI releases.

Energy and Food Price Indicators

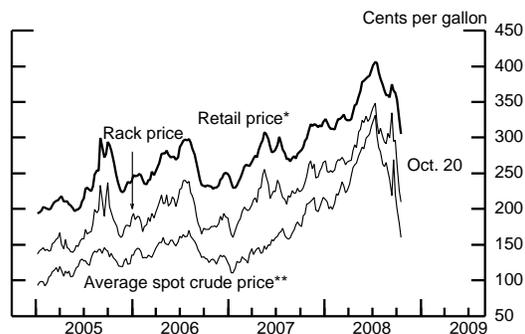
(Data from Energy Information Administration except as noted)

Total Gasoline Margin



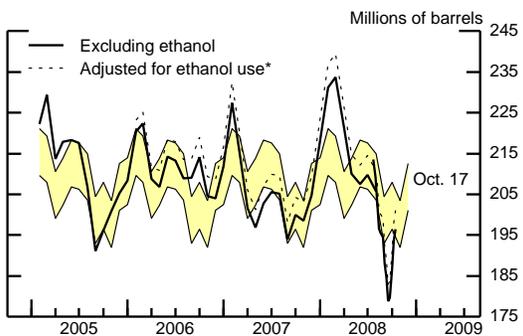
* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas intermediate, 40% Maya heavy crude. Includes gasoline taxes.

Gasoline Price Decomposition



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

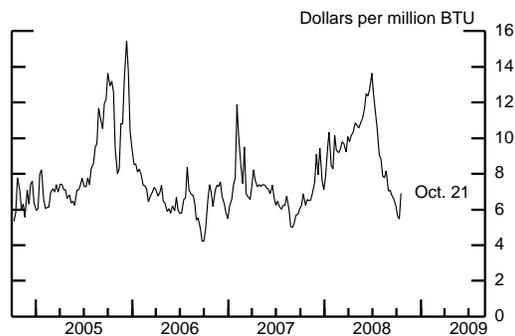
Gasoline Inventories



Note: Shaded region is average historical range as calculated by Dept. of Energy. Monthly data through July 2008, weekly data thereafter.

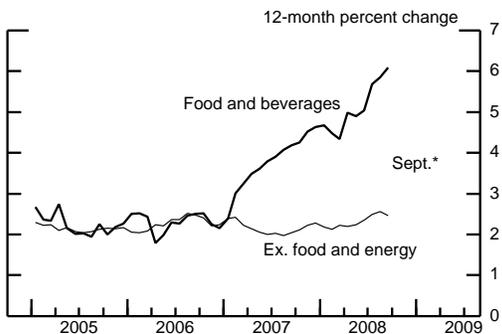
* Adjustment for approximate amount of fuel ethanol to be blended with RBOB component of inventories; estimated by FRB staff.

Natural Gas Prices



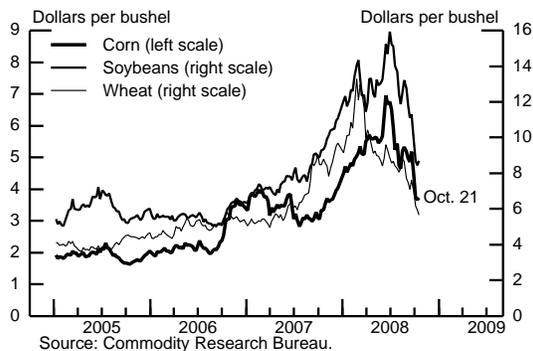
Note: National average spot price.
Source: Bloomberg.

PCE Food Prices



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

Spot Agricultural Commodity Prices



Source: Commodity Research Bureau.

gasoline inventories, heating oil inventories are only slightly lower than average for this time of the year, and natural gas inventories remain ample.

Consumer food prices have continued to rise rapidly in recent months, boosted in part by the substantial run up in farm commodity prices through midyear. After surging 1 percent in July, PCE food prices are estimated to have moved up 0.6 percent in both August and September, thereby lifting their three-month change to an annual rate of 9 percent. Over the 12 months ending in September, food prices increased 6 percent, after having risen 4¼ percent over the previous 12 months. Prices for most agricultural commodities have fallen considerably since July, although these do not appear to have yet shown through to the retail level.

Core PCE prices are estimated to have risen 2½ percent over the 12 months ending in September, up ½ percentage point from the previous 12-month change. The step-up in core PCE price inflation this year likely reflects an acceleration in import prices and the pass-through of the previous large increases in the costs of energy and materials. Indeed, prices of nearly all categories of goods have accelerated, and prices in many energy-intensive categories of services—such as household operations and supplies, airfares, and other transportation services—have shown significantly larger accelerations than core PCE prices as a whole. More recently, these cost pressures have begun to ease with the drop in energy and other commodity prices as well as the deceleration in import prices.

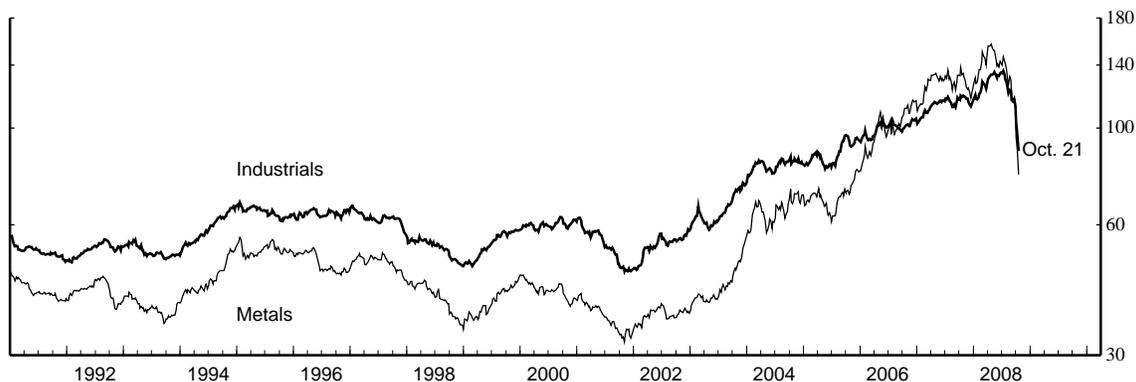
Prices at earlier stages of processing have begun to soften. After having risen significantly in each of the first eight months of this year, the producer price index for core intermediate materials fell 0.3 percent in September. This drop likely reflects some pass-through of declining commodity prices, which started falling in mid-July and have dropped further since the close of the September Greenbook. Over the past six weeks, the *Journal of Commerce* index of industrial materials plunged 24 percent, and the Commodity Research Bureau index of spot industrials tumbled 17 percent. Both now stand between 20 percent and 25 percent below year-earlier levels.

Survey-based measures of inflation expectations have reversed some of the upward movement seen during the spring and early summer. Median expected inflation over the next 5 to 10 years, as measured by the Reuters/Michigan Survey, dropped back to 2.8 percent in the October preliminary release, similar to its level from a year ago and within the narrow range in which it fluctuated over the previous few years. Near-term inflation expectations have also declined in recent months; however, the 4.5 percent reading for median expected inflation over the next 12 months from the October

Commodity Price Indexes

Journal of Commerce

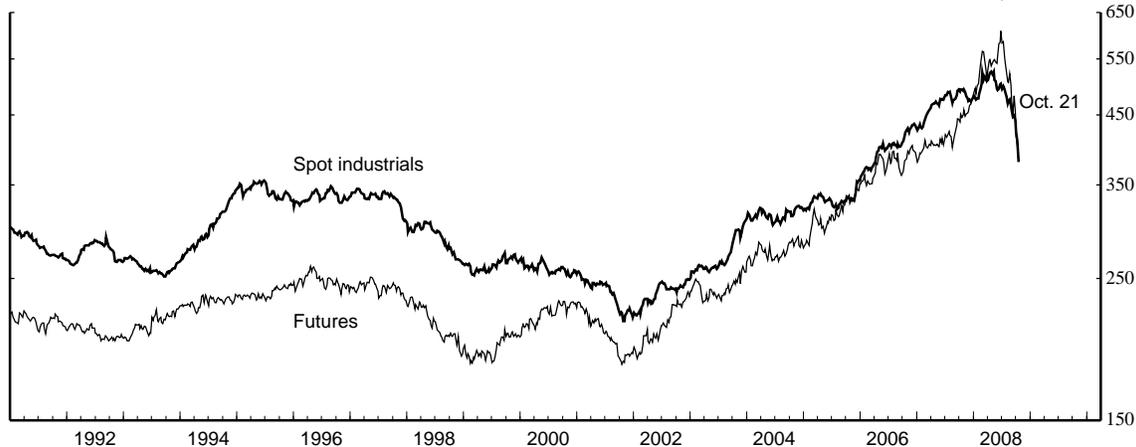
Ratio scale, 2006 = 100



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 ¹	12/18/07 to 9/9/08 ²	9/9/08 ² to 10/21/08	52-week change to 10/21/08
JOC industrials	7.6	3.5	-23.6	-24.8
JOC metals	2.1	-1.1	-32.7	-41.2
CRB spot industrials	8.2	-2.9	-17.1	-22.9
CRB spot foodstuffs	25.5	13.9	-15.5	1.8
CRB futures	18.2	1.5	-19.3	-14.2

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

2. September 9, 2008, is the Tuesday preceding publication of the September Greenbook.

Broad Measures of Inflation

(Percent change, Q2 to Q2)

Measure	2005	2006	2007	2008
<i>Product prices</i>				
GDP price index	2.9	3.5	2.8	2.0
Less food and energy	3.1	3.4	2.5	1.9
Nonfarm business chain price index	3.1	3.6	2.1	1.5
<i>Expenditure prices</i>				
Gross domestic purchases price index	3.3	3.9	2.6	3.5
Less food and energy	3.0	3.2	2.4	2.2
PCE price index	2.5	3.3	2.4	3.7
Less food and energy	2.1	2.3	2.1	2.3
PCE price index, market-based components	2.2	3.1	2.2	3.6
Less food and energy	1.7	1.9	1.8	1.9
CPI	2.9	3.9	2.6	4.3
Less food and energy	2.2	2.5	2.3	2.3
Chained CPI	2.6	3.6	2.4	3.8
Less food and energy	1.9	2.2	1.9	2.0
Median CPI	2.4	2.9	3.1	3.1
Trimmed mean CPI	2.4	2.6	2.7	3.0
Trimmed mean PCE	2.3	2.7	2.6	2.6

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 ¹	Reuters/Michigan Survey				Professional forecasters (10 years) ⁴	
		1 year ²		5 to 10 years ³		CPI	PCE
		Mean	Median	Mean	Median		
2006:Q4	1.9	3.5	3.0	3.5	3.0	2.5	...
2007:Q1	2.4	3.6	3.0	3.4	2.9	2.4	2.0
Q2	2.7	4.2	3.3	3.5	3.0	2.4	2.0
Q3	2.4	4.1	3.2	3.5	3.0	2.4	2.1
Q4	4.0	4.1	3.3	3.3	2.9	2.4	2.1
2008:Q1	4.1	4.2	3.8	3.3	3.0	2.5	2.2
Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
2008:June	5.0	6.5	5.1	4.0	3.4	...	...
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.	n.a.	4.6	4.5	2.9	2.8	...	...

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

2. Responses to the question, By about what percent do you expect prices to go up, on average, during the next 12 months?

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

4. Median CPI and PCE price projections.

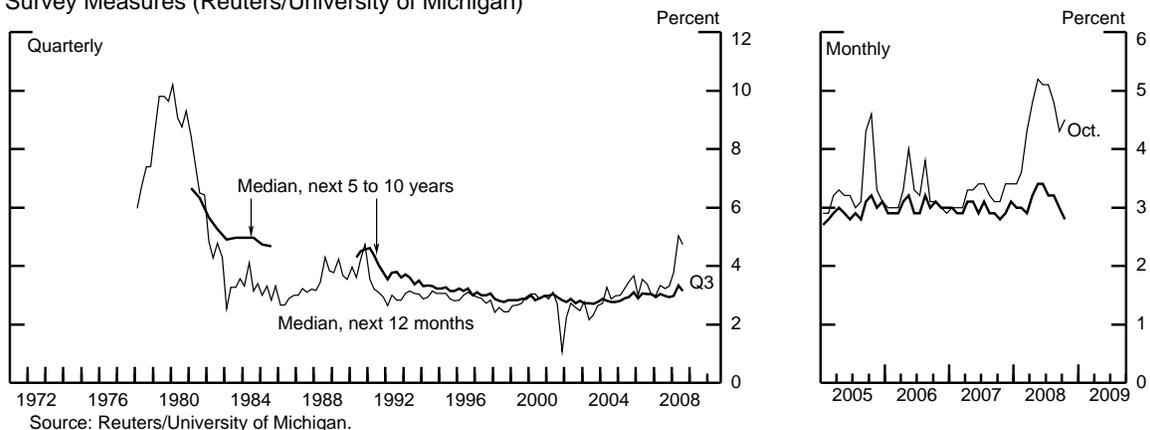
... Not applicable.

n.a. Not available.

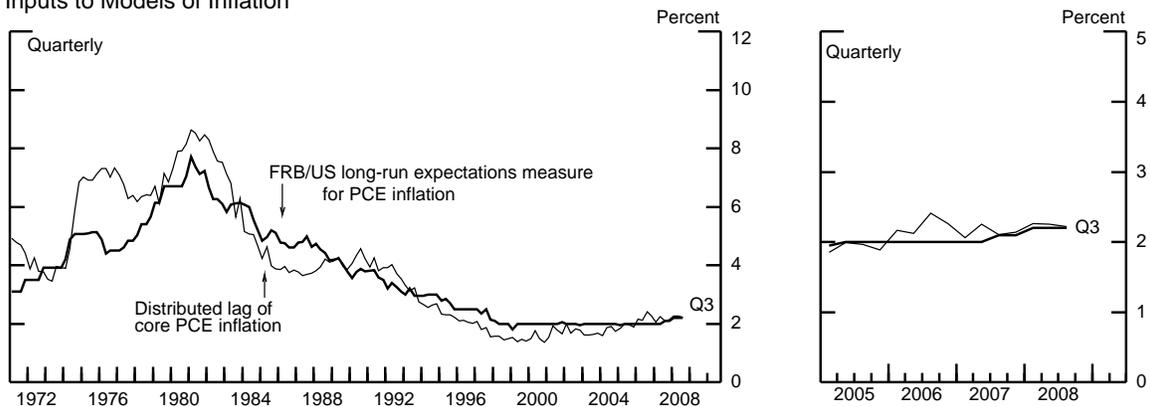
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for Reuters/Michigan Survey, Reuters/University of Michigan; for Professional Forecasters, Federal Reserve Bank of Philadelphia.

Measures of Expected Inflation

Survey Measures (Reuters/University of Michigan)

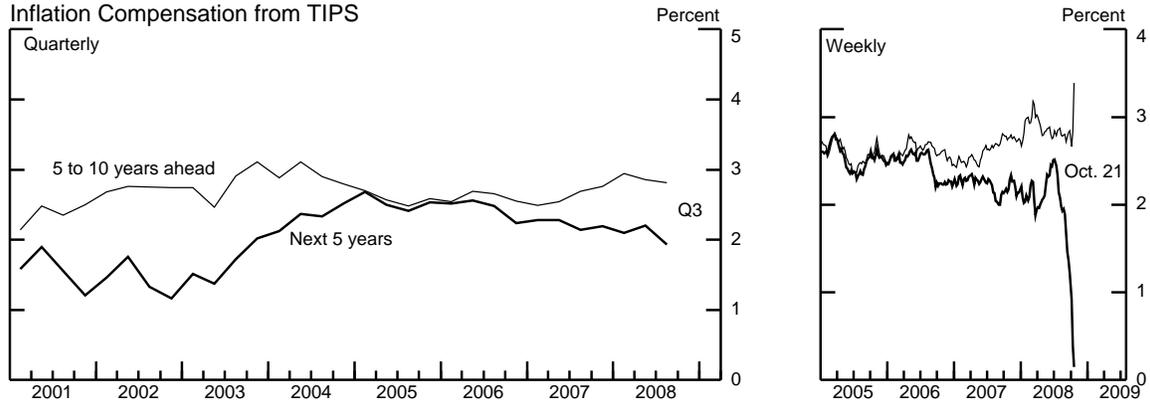


Inputs to Models of Inflation



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.

preliminary Reuters/Michigan Survey release remains quite elevated relative to its level in the past few years. As discussed in the “Domestic Financial Developments” section, TIPS (Treasury inflation-protected securities) 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

Increases in labor costs have remained moderate. Based on data from the latest GDP release, we estimate that compensation per hour in the nonfarm business sector increased $3\frac{3}{4}$ percent in the second quarter and 4 percent over the most recent four quarters—about the same pace as in the past several years. We estimate that productivity in the nonfarm business sector rose $3\frac{1}{4}$ percent, up from only $\frac{1}{2}$ percent over the previous four quarters. Accordingly, the increase in unit labor costs over the most recent four quarters—at $\frac{3}{4}$ percent—is well below its average rate over the past several years. More recently, average hourly earnings of production and nonsupervisory workers on private nonfarm payrolls rose 0.2 percent in September, thereby bringing the year-over-year change to 3.4 percent—about $\frac{3}{4}$ percentage point lower than its increase over the previous 12 months.

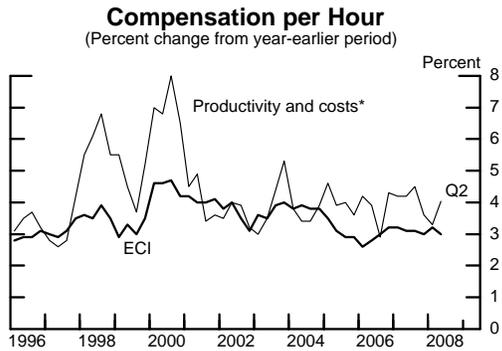
Hourly Compensation and Unit Labor Costs

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

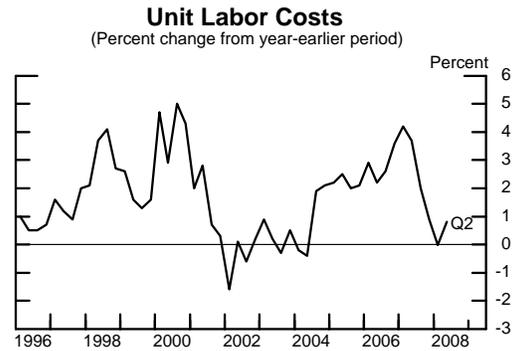
Category	2006:Q2 to 2007:Q2	2007:Q2 to 2008:Q2 ^e	2007		2008	
			Q3	Q4	Q1	Q2 ^e
<i>Compensation per hour</i> Nonfarm business	4.2	4.0	3.3	5.3	3.8	3.7
<i>Output per hour</i> Nonfarm business	.5	3.2	5.8	.8	2.6	3.6
<i>Unit labor costs</i> Nonfarm business	3.7	.8	-2.4	4.5	1.2	.1

e Staff estimate.

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



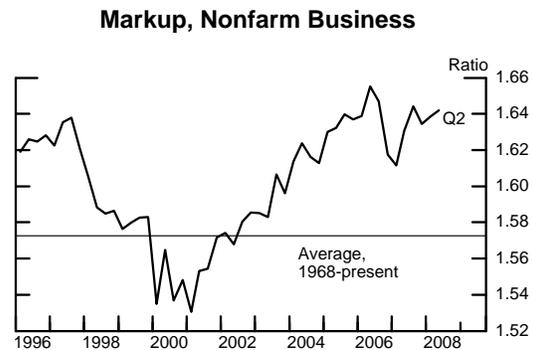
*Value for 2008:Q2 is a staff estimate.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



Note: Value for 2008:Q2 is a staff estimate.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



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



Note: The markup is the ratio of output price to unit labor costs. Value for 2008:Q2 is a staff estimate.
Source: For output price, U.S. Dept. of Commerce, Bureau of Economic Analysis; for unit labor costs, U.S. Dept. of Labor, Bureau of Labor Statistics.

Domestic Financial Developments

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

Instrument	2007	2008			Change to Oct. 21 from selected dates (percentage points)		
	Aug. 6	Aug. 4	Sept. 15	Oct. 21	2007 Aug. 6	2008 Aug. 4	2008 Sept. 15
<i>Short-term</i>							
FOMC intended federal funds rate	5.25	2.00	2.00	1.50	-3.75	-.50	-.50
Treasury bills ¹							
3-month	4.74	1.72	1.03	1.09	-3.65	-.63	.06
6-month	4.72	1.93	1.52	1.58	-3.14	-.35	.06
Commercial paper (A1/P1 rates) ²							
1-month	5.26	2.41	2.47	2.59	-2.67	.18	.12
3-month	5.29	2.72	2.73	3.10	-2.19	.38	.37
Large negotiable CDs ¹							
3-month	5.34	2.80	3.45	3.74	-1.60	.94	.29
6-month	5.27	3.10	3.85	3.66	-1.61	.56	-.19
Eurodollar deposits ³							
1-month	5.33	2.60	2.70	4.00	-1.33	1.40	1.30
3-month	5.35	3.00	3.00	4.50	-.85	1.50	1.50
Bank prime rate	8.25	5.00	5.00	4.50	-3.75	-.50	-.50
<i>Intermediate- and long-term</i>							
U.S. Treasury ⁴							
2-year	4.49	2.49	1.78	1.46	-3.03	-1.03	-.32
5-year	4.52	3.25	2.60	2.64	-1.88	-.61	.04
10-year	4.82	4.15	3.68	4.29	-.53	.14	.61
U.S. Treasury indexed notes ⁵							
5-year	2.43	1.15	1.25	2.52	.09	1.37	1.27
10-year	2.48	1.71	1.70	2.74	.26	1.03	1.04
Municipal general obligations (Bond Buyer) ⁶	4.51	4.74	4.54	6.01	1.50	1.27	1.47
Private instruments							
10-year swap	5.44	4.66	4.24	4.20	-1.24	-.46	-.04
10-year FNMA ⁷	5.34	4.82	4.19	4.89	-.45	.07	.70
10-year AA ⁸	6.12	6.62	6.63	7.95	1.83	1.33	1.32
10-year BBB ⁸	6.57	7.17	7.11	9.52	2.95	2.35	2.41
10-year high yield ⁸	9.21	10.57	10.86	15.15	5.94	4.58	4.29
Home mortgages (FHLMC survey rate) ⁹							
30-year fixed	6.59	6.52	5.78	6.46	-.13	-.06	.68
1-year adjustable	5.65	5.22	5.03	5.16	-.49	-.06	.13

Stock exchange index	Record high		2008			Change to Oct. 21 from selected dates (percent)		
	Level	Date	Aug. 4	Sept. 15	Oct. 21	Record high	2008 Aug. 4	2008 Sept. 15
Dow Jones Industrial	14,165	10-9-07	11,284	10,918	9,034	-36.22	-19.94	-17.26
S&P 500 Composite	1,565	10-9-07	1,249	1,193	955	-38.98	-23.54	-19.93
Nasdaq	5,049	3-10-00	2,286	2,180	1,697	-66.39	-25.77	-22.17
Russell 2000	856	7-13-07	704	690	531	-37.99	-24.64	-23.07
Wilshire 5000	15,807	10-9-07	12,738	12,184	9,651	-38.94	-24.24	-20.79

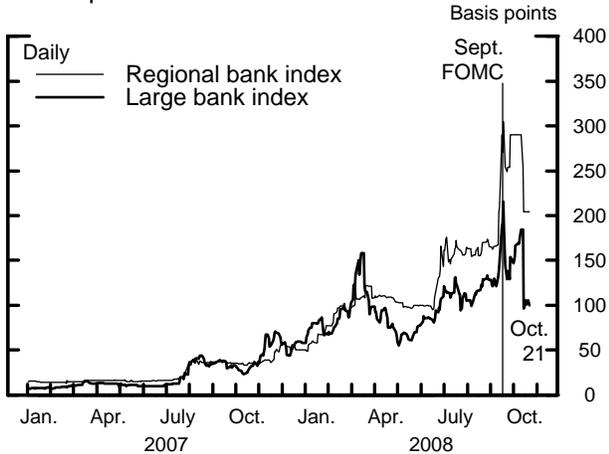
1. Secondary market.
2. Financial commercial paper.
3. Bid rates for Eurodollar deposits collected around 9:30 a.m. eastern time.
4. Derived from a smoothed Treasury yield curve estimated using off-the-run securities.
5. Derived from a smoothed Treasury yield curve estimated using all outstanding securities 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 October 21, 2008, are for the week ending October 16, 2008.

NOTES:

August 6, 2007, is the day before the August 2007 FOMC meeting.
August 4, 2008, is the day before the August 2008 FOMC monetary policy announcement.
September 15, 2008, is the day before the most recent FOMC monetary policy announcement.

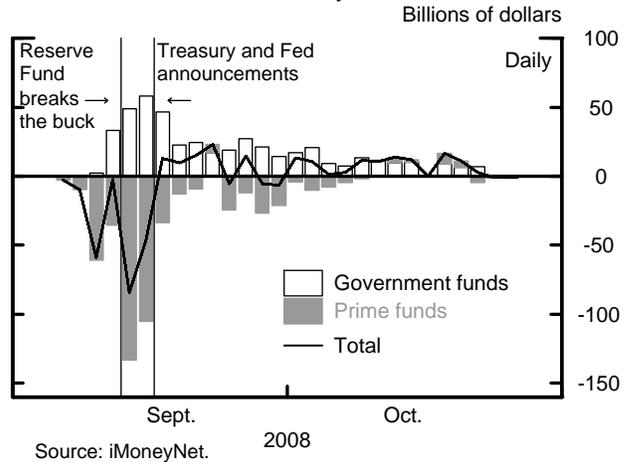
Financial Institutions and Short-Term Funding Markets

CDS Spreads for Commercial Banks

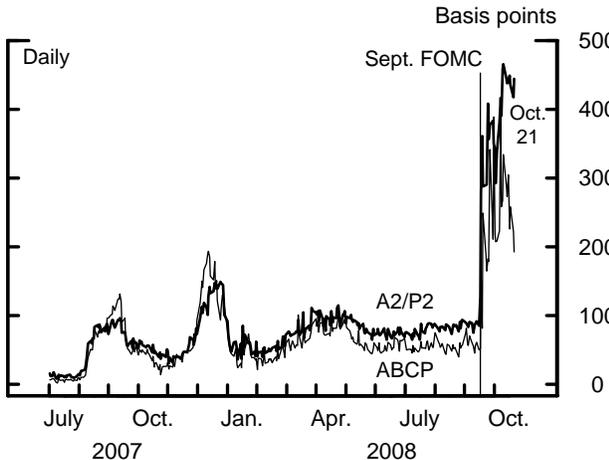


Note: Median spreads for 7 regional and 5 large commercial banks.
Source: Markit.

Net Flows of Taxable Money Market Mutual Funds

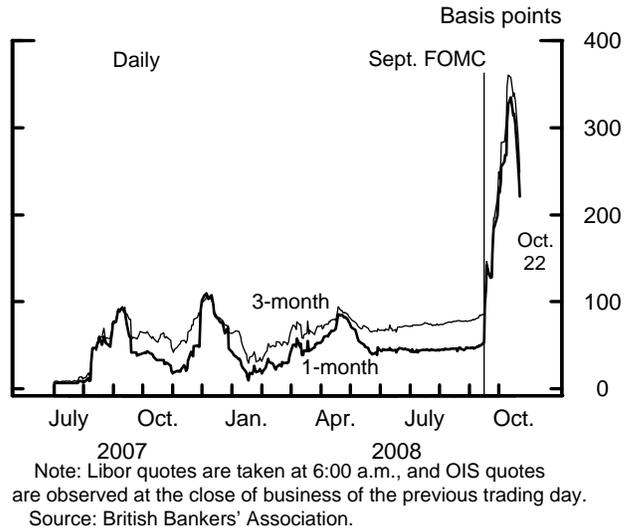


Spreads on 30-Day Commercial Paper

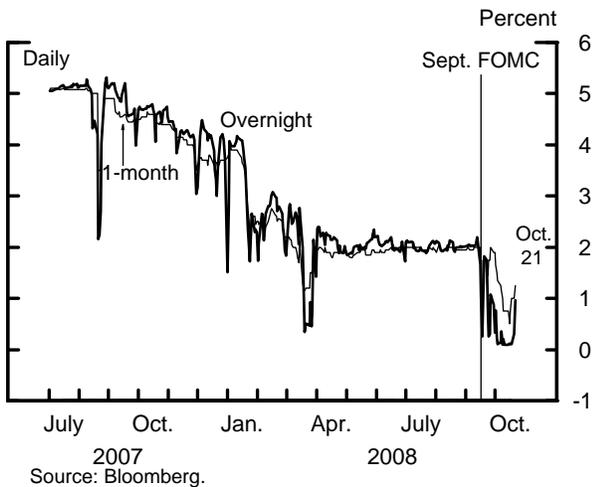


Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.
Source: Depository Trust & Clearing Corporation.

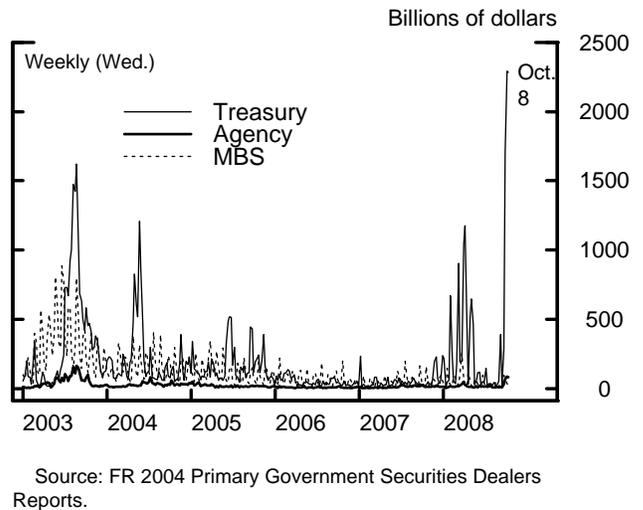
Spread between Libor and OIS Rates



Repo Rates on Treasury General Collateral



Fails to Deliver



Domestic Financial Developments

Overview

Financial markets experienced extraordinary strains over the intermeeting period. Following the bankruptcy of Lehman Brothers, the rapid deterioration of the position of American International Group, Inc. (AIG), the closing of Washington Mutual, and the mounting pressures that forced the sale of Wachovia, concerns about financial institutions intensified and liquidity in many markets became severely impaired. In short-term funding markets, spreads between term Libor and overnight index swap (OIS) rates soared to record highs, money market mutual funds faced large redemptions for a period, and demand for commercial paper dropped. Investor demand shifted heavily to the safety and liquidity of short-dated Treasury securities, which generally traded at very low yields. Against a backdrop of pronounced volatility, stock prices registered a steep decline, and credit spreads for corporate bonds jumped.

On October 8, the FOMC, in coordination with other central banks, lowered the target federal funds rate 50 basis points to 1½ percent. Based on futures quotes, market participants now anticipate further policy easing this year. In addition, the Federal Reserve responded to the financial market turmoil—partly in conjunction with the Treasury, the Federal Deposit Insurance Corporation (FDIC), and other central banks—by taking numerous other actions to address market functioning and liquidity. Late in the intermeeting period, conditions in short-term funding markets improved somewhat.

Borrowing by nonfinancial businesses has held up so far in October, reflecting continued sizable draws on existing lines of credit at banks and moderate bond issuance by investment-grade firms. In the household sector, mortgage delinquency rates have continued to rise, and the government-sponsored enterprises (GSEs) and the Federal Housing Administration have remained the main source of residential mortgage funding. Over the intermeeting period, markets for short-term and long-term municipal securities came under pressure, and yields in secondary markets climbed. In the October Senior Loan Officer Opinion Survey on Bank Lending Practices, a large fraction of banks reported having continued to tighten their lending standards and terms on all major types of loans to businesses and households over the past three months.

Financial Institutions

Investor anxiety about the conditions of financial institutions intensified over the past six weeks, and the accompanying pressures led to a number of significant reorganizations. With confidence about its condition eroding, Merrill Lynch agreed to be acquired by Bank of America in the days immediately before the September FOMC meeting. Around

Selected Recent Actions by the Federal Reserve

Existing Liquidity Facilities

- 9/14 The Federal Reserve broadens the collateral eligible to be pledged at the Primary Dealer Credit Facility to closely match the types of collateral that can be pledged in the triparty repo systems of the two major clearing banks.
- 9/14 Expands the collateral for schedule 2 Term Securities Lending Facility (TSLF) auctions to include all investment-grade debt securities. Schedule 2 TSLF auctions are to be conducted weekly instead of every two weeks.
- 9/18 Expands its swap lines with the European Central Bank (ECB), Swiss National Bank (SNB), Bank of Japan (BOJ), Bank of England, and Bank of Canada by \$180 billion to a total of \$247 billion.
- 9/24 Announces the establishment of swap lines with the central banks of Australia, Denmark, Norway, and Sweden, representing a \$30 billion addition to total swap lines with all central banks, which now amount to \$277 billion.
- 9/26 Expands its swap lines with the ECB and the SNB. Total swap lines with all central banks amount to \$290 billion.
- 9/29 Increases the size of the 84-day maturity Term Auction Facility (TAF) auctions to \$75 billion from \$25 billion.
- 9/29 Announces two forward TAF auctions totaling \$150 billion to be conducted in November to provide funding over year-end.
- 9/29 Increases its swap authorization limits with many central banks to a total of \$620 billion.
- 10/6 Increases the size of 28-day and 84-day TAF auctions to \$150 billion each and increases the size of the two forward TAF auctions to \$150 billion each. In total, \$900 billion of TAF credit will be available over year-end.
- 10/13 Increases the size of its swap lines with the Bank of England, the ECB, and the SNB to accommodate whatever quantity of U.S. dollar funding is required.
- 10/14 Increases the size of its swap lines with the BOJ to accommodate whatever quantity of U.S. dollar funding is required.

New Liquidity Facilities

- 9/16 Extends an \$85 billion, 24-month term line of credit to American International Group, Inc., or AIG.
- 9/19 Announces its Asset-Backed Commercial Paper Money Market Mutual Fund Lending Facility (AMLF) to extend nonrecourse loans at the primary credit rate to depository institutions and bank holding companies to finance purchases of high-quality asset-backed commercial paper from money market mutual funds (MMMFs).
- 9/19 Announces plans to purchase federal agency discount notes from primary dealers.
- 10/7 Announces the creation of the Commercial Paper Funding Facility (CPFF) to help provide liquidity to term funding markets.
- 10/21 Announces the creation of the Money Market Investor Funding Facility (MMIFF) to help provide liquidity to U.S. money market investors.

Supervisory and Regulatory Actions

- 9/14 Adopts an interim final rule that provides a temporary exception to the limitations in section 23A of the Federal Reserve Act and allows all insured depository institutions to provide liquidity to their affiliates for assets typically funded in the triparty repo market.
- 9/19 In connection with the AMLF, approves two interim final rules that provide a temporary exception from leverage and risk-based capital rules and from sections 23A and 23B of the Federal Reserve Act.
- 9/21 Approves the applications of Goldman Sachs and Morgan Stanley to become bank holding companies.
- 9/22 Approves a policy statement that provides additional guidance on the Federal Reserve Board's position on minority equity investments in banks and bank holding companies that generally do not constitute "control" for the purpose of the Bank Holding Company Act.
- 10/6 Approves the application by Mitsubishi UFJ Financial Group to acquire up to 24.9 percent of the voting shares of Morgan Stanley.
- 10/6 Announces that it will begin to pay interest on depository institutions' required and excess reserve balances.
- 10/6 Grants a request by a depository institution to receive an exemption to allow limited purchases of assets from affiliated MMMFs.
- 10/12 Approves the application of Wells Fargo to acquire Wachovia.
- 10/16 Approves an interim final rule that will allow bank holding companies to include in tier 1 capital the preferred stock issued to the Treasury Department.
- 10/22 Approves a narrowing of the spread between the target federal funds rate and the rate paid on excess reserve balances.

Actions and Statements with Other Agencies

- 9/17 The Treasury announces a temporary Supplementary Financing Program at the request of the Federal Reserve to provide cash for use in Federal Reserve initiatives.
- 10/14 The Federal Reserve, the Treasury, and the Federal Deposit Insurance Corporation (FDIC) issue a joint statement announcing
 - the Treasury's voluntary capital purchase program to buy preferred stock in financial institutions
 - a systemic risk exception to the FDIC Act, which enables the FDIC to temporarily guarantee the senior debt of all insured institutions and their holding companies, as well as deposits in non-interest-bearing deposit transaction accounts
 - additional details of the CPFF, expected to be operational on October 27

the same time, Lehman Brothers filed for bankruptcy, and conditions at AIG deteriorated rapidly. On September 16, the Federal Reserve, with the support of the Treasury, announced its intention to extend a sizable loan to AIG to assist the company in meeting its obligations, thereby facilitating a process under which AIG could sell some of its businesses in an orderly manner. On September 26, the FDIC took Washington Mutual (WaMu) into receivership and facilitated JPMorgan Chase's acquisition of WaMu's banking operations that same evening. Holders of WaMu's senior and subordinated debt suffered significant losses, which seemed to heighten anxiety among depositors and other creditors of other banks. As pressures on standalone investment banks mounted, Goldman Sachs and Morgan Stanley applied for and received bank holding company charters from the Federal Reserve. Subsequently, Goldman Sachs received a sizable equity injection from Berkshire Hathaway, as did Morgan Stanley from Mitsubishi UFJ. In addition, after initially reaching an agreement with Citigroup, Wachovia eventually agreed to be acquired by Wells Fargo in a transaction covering all of Wachovia's preferred equity and debt and requiring no financial assistance from the FDIC.

The negative sentiment toward financial firms weighed on the sector's equity prices, which dropped about 17 percent over the intermeeting period. In addition to worries about future earnings, some of the reductions in market value may have reflected shareholders' concerns about the dilutive effects of possible equity injections by outside private investors or the federal government. Credit default swap (CDS) spreads for large banks and for regional banks, which had soared in the wake of Lehman Brothers' bankruptcy and AIG's deterioration in mid-September, changed little on net over the next month, but fell after the October 14 announcement of the Treasury's Capital Purchase Program and the FDIC's Temporary Liquidity Guarantee Program. Under these programs, a broad range of depository institutions are eligible to sell preferred shares to the U.S. government and to obtain guarantees of non-interest-bearing transaction deposits and some senior unsecured debt.

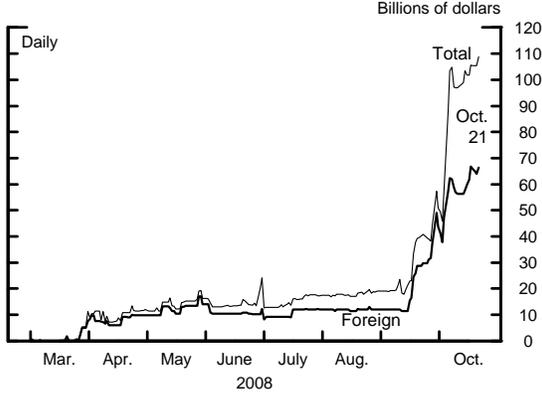
Short-Term Funding Markets

Over the intermeeting period, money markets came under extraordinary pressure, and the Federal Reserve and other central banks took a number of actions to provide liquidity and improve market functioning.¹ In September, the Lehman bankruptcy and the problems at AIG sparked anxiety about short-term debt exposures among investors. The combination of markdowns on sizable holdings of Lehman Brothers commercial paper and enormous

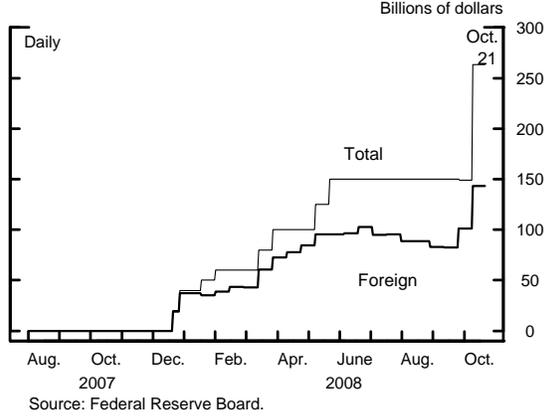
¹ The table "Selected Recent Actions by the Federal Reserve" lists a number of official actions taken since mid-September.

Federal Reserve Liquidity Provision

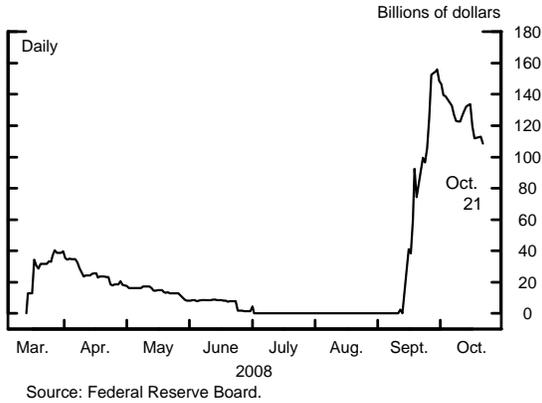
Primary Credit



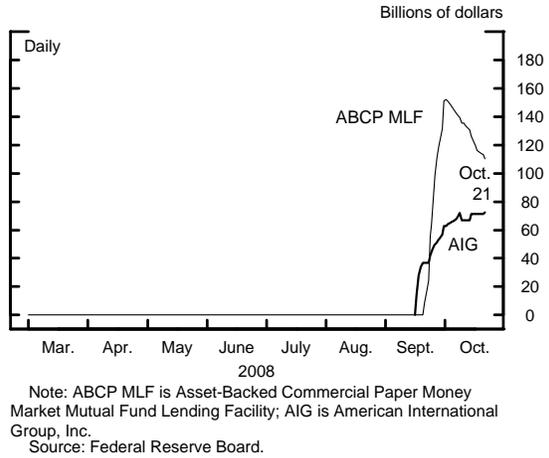
Term Auction Facility



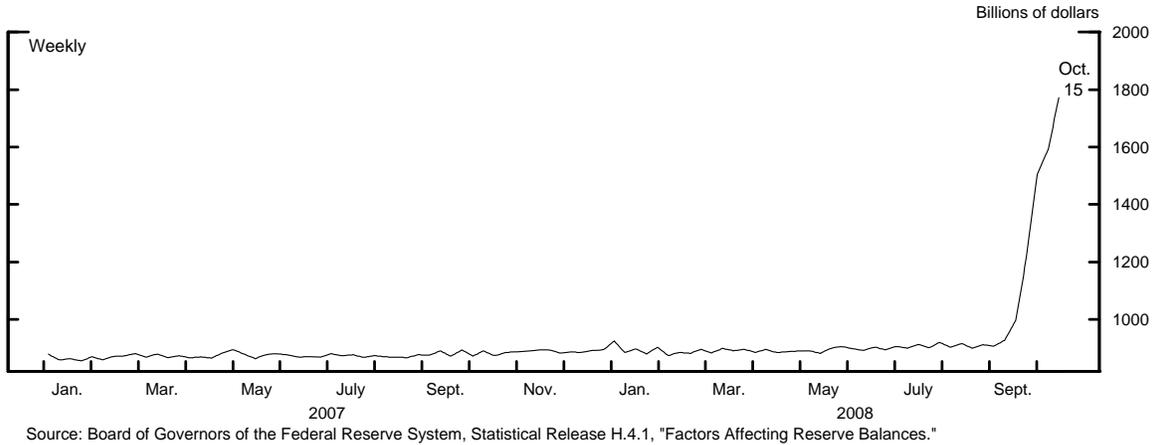
Primary Dealer Credit Facility



Other Credit Extensions



Total Federal Reserve Assets



net redemptions by institutional investors caused the net asset value of the Reserve Prime Money Market Fund to drop below \$1 per share on September 16. Other prime money market mutual funds (MMMFs), which invest mostly in short-term instruments other than Treasury and agency securities, experienced massive net outflows that week, while government-only MMMFs saw substantial net inflows. This reallocation sharply reduced the demand for commercial paper (CP) and significantly raised the demand for Treasury bills and other short-dated government securities. As a consequence, short-dated Treasury bills traded frequently at near-zero yields, despite billions of dollars of new issuance under the Supplementary Financing Program (SFP), while risk spreads on CP surged and were extremely volatile.

On September 19, the Treasury and the Federal Reserve announced two new programs aimed at alleviating the pressures on MMMFs and the CP market: The Treasury announced it would offer insurance to registered MMMFs using the Exchange Stabilization Fund, and the Federal Reserve announced its Asset-Backed Commercial Paper (ABCP) Money Market Mutual Fund Lending Facility (AMLF). The facility extends nonrecourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance their purchases of highly rated ABCP from money market funds. The announcements helped stem the net redemptions from MMMFs. However, CP markets remained under pressure—particularly those for unsecured paper issued by financial firms and for ABCP, as risk spreads on such paper stayed wide and amounts outstanding continued to trend down. On October 7, the Federal Reserve approved the establishment of the Commercial Paper Funding Facility (CPFF), which will provide financing to a special purpose vehicle that purchases highly rated three-month unsecured CP and ABCP directly from issuers at moderate spreads to three-month OIS rates. Additional details about the CPFF were provided on October 14, and the program is expected to begin operation on October 27. On October 21, the Federal Reserve announced the creation of the Money Market Investor Funding Facility (MMIFF), in which the Federal Reserve will provide financing for a private-sector initiative to create a set of special purpose vehicles that would purchase highly-rated commercial paper, certificates of deposit, and other eligible money market instruments from eligible MMMFs. In the past several days, conditions in the CP market have improved somewhat, and yields on highly-rated unsecured financial paper and on ABCP have decreased.

Conditions in unsecured interbank funding markets deteriorated significantly further over much of the intermeeting period, with spreads of one-month and three-month Libor over

comparable-maturity OIS soaring to record highs. Conditions in these term funding markets improved somewhat after the FDIC announced late in the intermeeting period that it would guarantee certain liabilities of U.S. banking organizations, although there is considerable uncertainty about how the FDIC program will be implemented. In recent days, one-month and three-month Libor-OIS spreads have been around 100 basis points below their peak levels in early October.

Early this month, substantial pressures emerged even in the overnight funding markets, which had previously functioned reasonably well. The spread between overnight Libor and the target federal funds rate climbed to more than 350 basis points in early October, and overnight federal funds traded within an unusually wide range, reflecting tiering across institutions. Conditions in overnight funding markets improved significantly after the Federal Reserve, in conjunction with other central banks, injected considerable amounts of liquidity, with overnight Libor dropping about 400 basis points since October 9. Even after the Federal Reserve started paying interest to depository institutions on required and excess reserves on October 9, the federal funds rate moved down to very low levels by the end of the day. Entities that are not eligible to earn interest on their account balances at the Federal Reserve—such as the GSEs—reportedly have accounted for much of the lending at rates below that paid to depository institutions for excess reserves. On October 22, the Board approved a narrowing of the spread between the target federal funds rate and the rate paid on excess reserve balances—a move that should help foster trading in the federal funds market at rates closer to the target.

The repo market also experienced substantial dislocations over the intermeeting period. Amid extremely high demand for Treasury securities and reluctance among investors holding Treasury securities to lend them out, the overnight repo rate for Treasury general collateral was quite volatile and traded at very low levels for most of the period. Against this backdrop, failures to deliver Treasury securities (which include failures in the cash and repo markets) reached record high levels in recent weeks, and the overnight lending of securities from the System Open Market Account (SOMA) soared. To address strains in the Treasury repo market, the Federal Reserve introduced temporary changes in SOMA lending during the intermeeting period, including a reduction in the fee structure and an increase in the dealer limit from \$4 billion to \$5 billion. In addition, the U.S. Treasury conducted special auctions of coupon securities that were in particularly short supply. Repo rates on agency mortgage-backed security (MBS) collateral were also very volatile. The repo market for nontraditional collateral—that other than Treasuries, agencies, and agency MBS—came under significant pressure, as investors anxious about

exposures to riskier securities pulled back and as heavy redemptions at MMMFs reduced their ability to provide liquidity to funding markets. On net in recent weeks, dealers raised haircuts on a number of types of repo collateral from already elevated levels.

Federal Reserve Liquidity Provisions

Amid the disruptions in financial markets, on September 17, the Treasury announced a temporary SFP at the request of the Federal Reserve. Under this program, the Treasury has issued bills, over and above its regular borrowing program, with the proceeds deposited at the Federal Reserve for the purpose of draining reserves to keep the federal funds rate close to the FOMC's target. The level of balances held at the Federal Reserve under the SFP currently stands at about \$560 billion. After the SFP was initiated, the Federal Reserve announced significant expansions to its Term Auction Facility (TAF) and reciprocal currency swap lines with some foreign central banks.

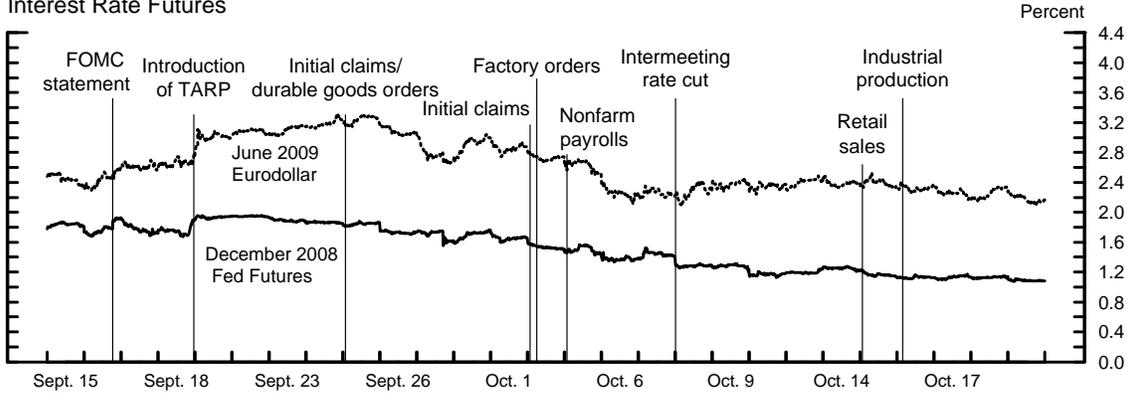
Over the intermeeting period, the Federal Reserve's balance sheet grew and the composition of its assets shifted further away from government securities. Depository institutions—both domestic and foreign—made heavy use of the discount window, with primary credit outstanding rising about \$75 billion in recent weeks to almost \$110 billion. Meanwhile, TAF credit outstanding increased \$113 billion to \$263 billion. Credit extended through the Primary Dealer Credit Facility also surged ahead of quarter-end; although it has moved down some in recent weeks, the current level of \$109 billion outstanding is much higher than at any point before mid-September. The nine Term Security Lending Facility (TSLF) auctions conducted over the intermeeting period—three for schedule 1 collateral and six for schedule 2 collateral—saw very high demand and stopped out well above the corresponding minimum fee rates. In addition, on September 24, dealers exercised about \$47 billion of the nearly \$50 billion of options for TSLF loans spanning the September quarter-end. In terms of new programs, the total amount of credit extended under the AMLF is currently about \$110 billion, while credit extended to AIG amounts to around \$83 billion.

Policy Expectations and Treasury Yields

Since the September FOMC meeting, market participants have marked down their expected path for the federal funds rate for the next two years. Initially, the FOMC's decision to leave its policy rate unchanged at the September meeting led some market participants to scale back expectations for policy easing over the next year. However, market expectations quickly reversed in response to the heightened financial turmoil and to generally weaker-than-expected economic data. As part of a coordinated action with

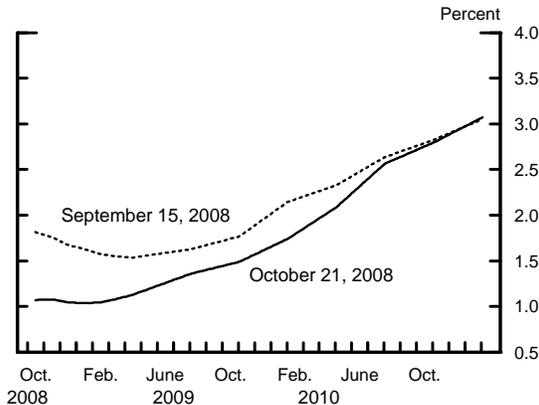
Policy Expectations and Treasury Yields

Interest Rate Futures



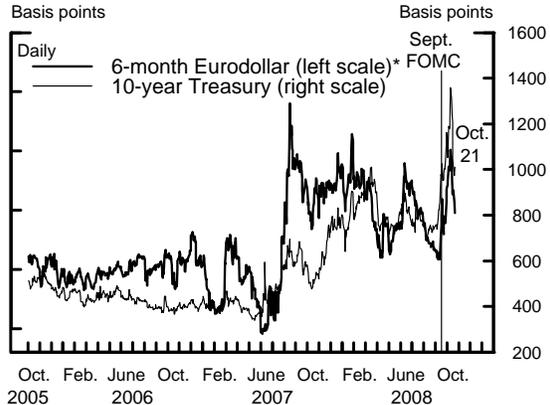
Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums. TARP is Troubled Asset Relief Program.
Source: Bloomberg.

Implied Federal Funds Rate



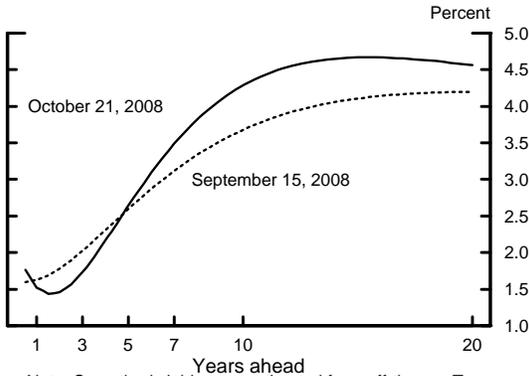
Note: Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments.
Source: Chicago Mercantile Exchange; CBOT.

Implied Volatility of Interest Rates



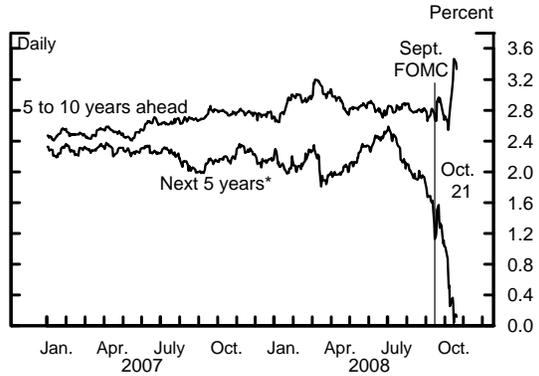
*Width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility.
Source: Bloomberg.

Treasury Yield Curve



Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.
Source: Federal Reserve Bank of New York.

Inflation Compensation



Note: Estimates based on smoothed nominal and inflation-indexed Treasury yields.
*Adjusted for lagged indexation of Treasury Inflation Protected Securities.
Source: Federal Reserve Bank of New York.

other central banks on October 8, the Federal Reserve reduced the target federal funds rate by 50 basis points. Investors evidently interpreted the accompanying statement as suggesting a likelihood of additional easing in coming months. Options on federal funds futures currently suggest that investors place considerable odds on the federal funds rate being reduced at least 25 basis points at the October meeting. Futures prices suggest that market participants expect the funds rate to be about 1 percent by year-end. Eurodollar futures quotes, combined with our usual assumptions regarding term premia, imply that investors expect the FOMC to begin raising the funds rate by the second quarter of 2009, with the rate expected to be roughly 2¾ percent by the end of 2010. However, translating futures quotes into policy expectations is more difficult than usual given the difficulties in adjusting for term premiums in the current, volatile environment and also the likelihood that market participants may expect the funds rate to continue to trade below the target for a while longer.

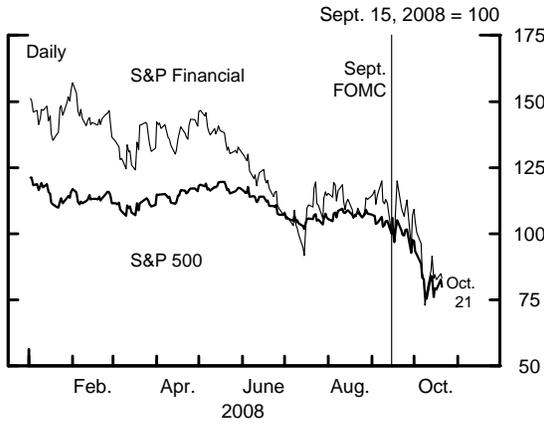
The short end of the nominal Treasury yield curve declined notably owing to substantial flight-to-quality flows and high demand for liquidity. However, higher term premiums in connection with heightened uncertainty along with expectations of a large increase in the supply of Treasury securities associated with the Emergency Economic Stabilization Act, which was enacted on October 3, and other initiatives, pushed longer-term Treasury yields higher. All told, two-year nominal Treasury yields decreased 32 basis points, while five- and ten-year yields increased about 5 and 60 basis points respectively. TIPS-based inflation compensation over the next five years dropped more than 100 basis points. Although the decrease partly reflected a drop in the prices of oil and other commodities as well as the weaker economic outlook, it was likely amplified by a sharp increase in the premium investors required to hold TIPS rather than their more liquid nominal counterparts. Implied inflation compensation five to ten years ahead rose about 60 basis points over the intermeeting period, but this increase seems to have been driven more by the effects of an expected future increase in the supply of longer-term nominal Treasury yields than by an increase in either inflation expectations or perceived inflation uncertainty. Measures of inflation compensation derived from inflation swap contracts posted modest declines across the term structure and appeared more consistent with the mixed changes in inflation expectations reported in the Michigan survey in mid-October.

Stock Prices, Corporate Yields, and Risk Spreads

Broad stock price indexes fell more than 20 percent, on net, over the intermeeting period, as concerns about financial turmoil intensified significantly and economic data showed further signs of weakness. Although equity prices jumped more than 11 percent on

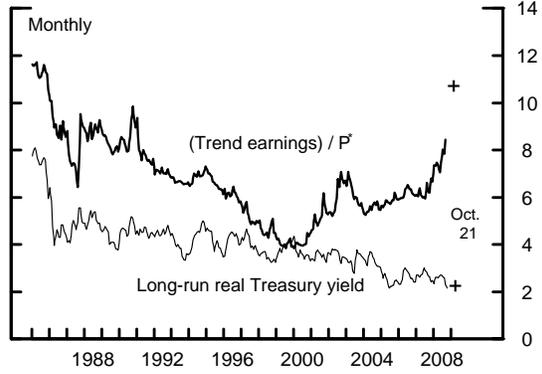
Corporate Yields, Risk Spreads, and Stock Prices

Selected Stock Price Indexes



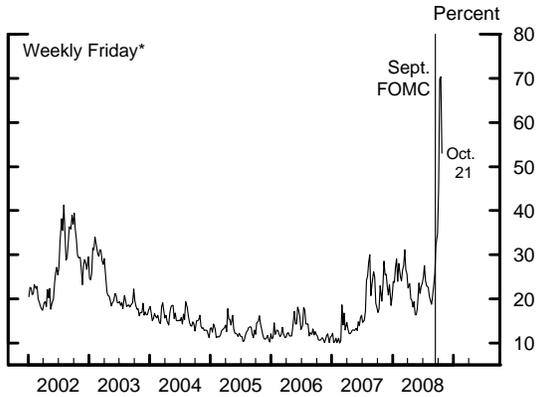
Source: Standard & Poor's.

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



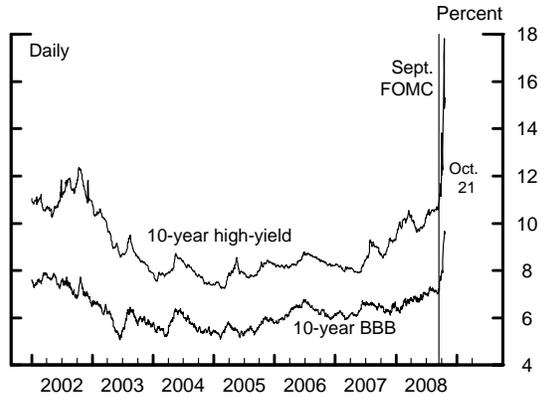
* Trend earnings are estimated using analysts' forecasts of year-ahead earnings from I/B/E/S.
 + Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.
 Source: Thomson Financial.

Implied Volatility on S&P 500 (VIX)



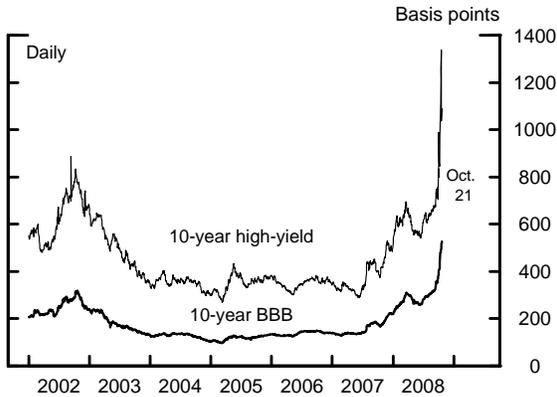
* Latest observation is for most recent business day.
 Source: Chicago Board of Exchange.

Corporate Bond Yields



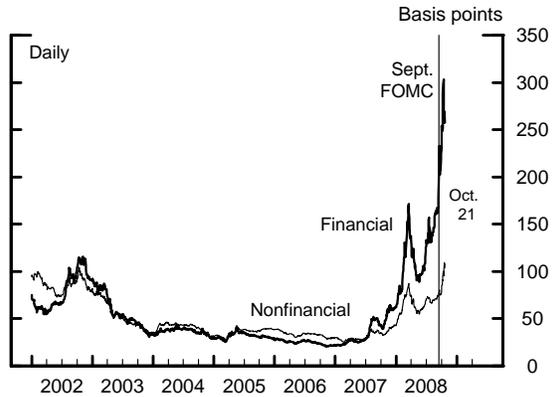
Note: Yields from smoothed yield curves based on Merrill Lynch bond data.

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.

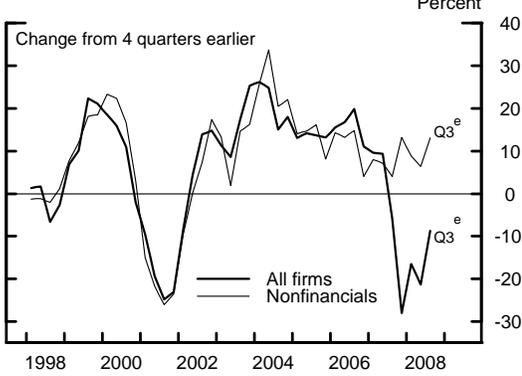
Investment-Grade CDS Indexes



Source: Markit.

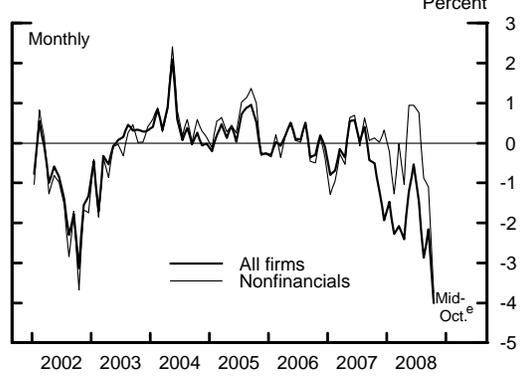
Corporate Earnings and Credit Quality

S&P 500 Earnings Per Share



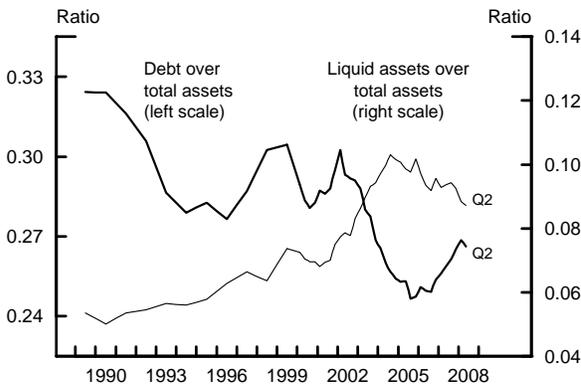
e Bottom-up forecast by equity analysts.
Source: Thomson Financial.

Revisions to Expected S&P 500 Earnings



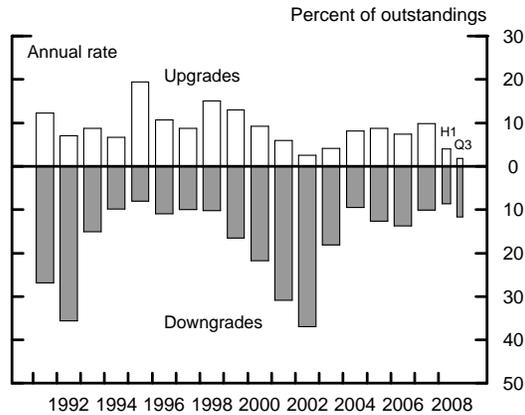
Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year EPS for a fixed sample.
e Staff estimate.
Source: Thomson Financial.

Financial Ratios for Nonfinancial Corporations



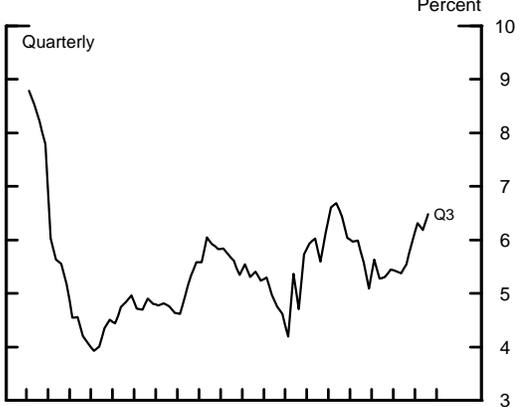
Note: Data are annual through 1999 and quarterly starting in 2000:Q1.
Source: Calculated using Compustat data.

Bond Ratings Changes of Nonfinancial Companies



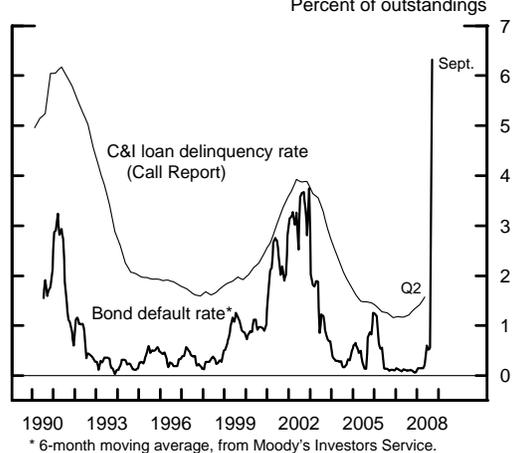
Source: Calculated using data from Moody's Investors Service.

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, from Moody's Investors Service.

Business Finance

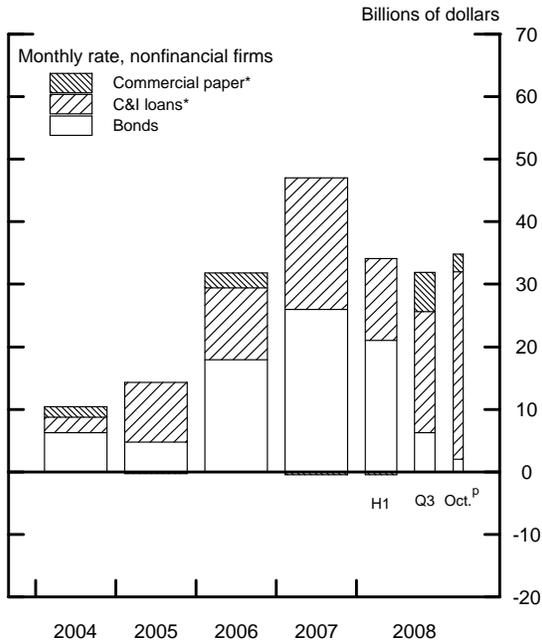
Gross Issuance of Securities by U.S. Corporations

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

Type of security	2004	2005	2006	2007	2008			
					H1	Q3	Sept.	Oct. ^p
<i>Nonfinancial corporations</i>								
Stocks ¹	5.4	4.6	4.7	5.5	3.5	3.0	1.9	13.6
Initial public offerings	1.6	1.7	1.8	1.6	.6	.1	.0	.0
Seasoned offerings	3.8	2.8	2.9	3.8	2.9	2.9	1.9	13.6
Bonds ²	22.4	18.7	29.3	35.1	34.7	14.6	12.2	10.2
Investment grade	8.3	8.7	13.1	17.5	24.9	10.5	8.6	10.0
Speculative grade	8.2	5.2	6.2	7.5	3.1	.7	1.0	.0
Other (sold abroad/unrated)	5.9	4.8	10.1	10.0	6.7	3.4	2.6	.2
<i>Memo</i>								
Net issuance of commercial paper ³	1.7	-.2	2.4	-.4	-.5	6.2	-8.4	2.8
Change in C&I loans at commercial banks ^{3,4}	2.4	9.6	11.4	21.1	13.1	19.4	54.6	30.0
<i>Financial corporations</i>								
Stocks ¹	6.9	5.0	5.3	8.6	17.2	10.5	20.1	12.6
Bonds ²	134.1	170.4	180.6	151.7	66.0	16.9	10.2	1.0

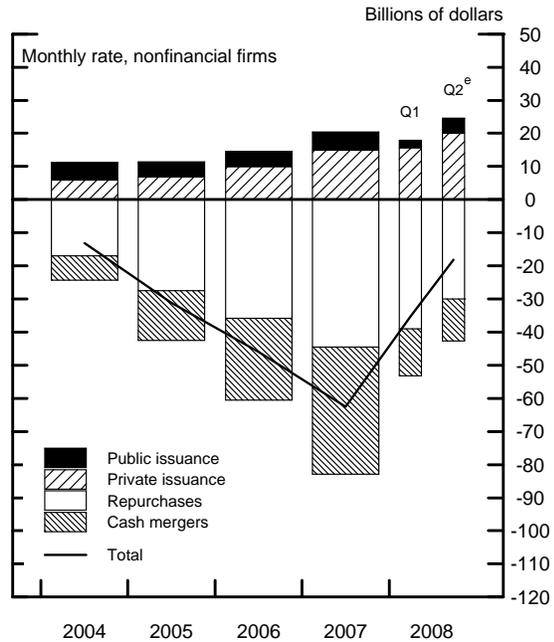
Note: Components may not sum to totals because of rounding.
 1. Excludes private placements and equity-for-equity swaps that occur in restructurings.
 2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's.
 3. End-of-period basis, seasonally adjusted.
 4. October 2008 value is a staff estimate.
 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.

October 13 after reports that the Treasury would soon announce a plan to inject capital into banks, they subsequently retraced a good part of those gains. Over the intermeeting period, the spread between the twelve-month forward trend-earnings-price ratio for S&P 500 firms and a real long-run Treasury yield—a rough measure of the equity risk premium—soared to an extraordinarily high level, and option-implied volatility on the S&P 500 surged well beyond previous record highs.

Yields and spreads on investment-grade and speculative-grade corporate bonds also ballooned, as perceived default risk and risk premiums evidently jumped. An index of CDS spreads for investment-grade financial firms climbed to about twice its previous high, and an index for nonfinancial firms set a record as well, although its level has remained far below that for financial firms. Judging from the wide range and the declining frequency of dealer quotes, liquidity and price discovery in the CDS market continued to be strained, particularly for financial firms. Markets for corporate bonds were also less liquid than usual, as estimated bid-asked spreads in the secondary market for corporate bonds rose sharply—particularly for speculative-grade bonds. Conditions also deteriorated sharply in the secondary market for syndicated leveraged loans. The average bid price plunged an unprecedented 15 cents to nearly 71 cents on the dollar, which reportedly reflected continued deleveraging by institutional investors and the unwinding of total return swaps. The average bid-asked spread for leveraged loans surged.

Corporate Earnings and Credit Quality

About 150 firms in the S&P 500 index have reported for the third quarter. Using actual earnings for those firms and Wall Street analysts' estimates for the rest, earnings per share for the S&P 500 appear on track to come in about 9 percent below the year-earlier level. Financial sector profits are again expected to post a substantial four-quarter decline. In contrast, analysts expect nonfinancial profits to be about 12 percent above the year-earlier level, although the oil and gas industry accounts for virtually all of the anticipated gains. In addition, an index of revisions to analysts' expectations of earnings for S&P 500 firms over the coming year is estimated to have hit its most negative level on record in mid-October, a result of substantial markdowns of profit forecasts for both financial and nonfinancial firms.

For the roughly half of publicly traded bank and thrift holding companies that have reported to date, third-quarter earnings were weaker than had been expected; almost

90 percent of banks and thrifts reported earnings that fell short of analysts' expectations. Excluding the three financial institutions that will be acquired in the near term (Merrill Lynch, Sovereign, and Wachovia), third-quarter earnings were only about 15 percent of the level reported a year earlier. Among the factors reportedly contributing to weak earnings last quarter were write-downs on portfolios of security holdings and continued sizable loan-loss provisions to offset increased credit losses on residential real estate loans, construction and land development loans, auto loans, and credit card loans.

Although the credit quality of nonfinancial corporations has remained solid overall, there has been some deterioration in recent months. In the second quarter, the aggregate ratio of liquid assets to total assets continued to trend down gradually, while the aggregate leverage ratio was little changed at a low level by historical standards. In the third quarter, Moody's downgraded a moderate volume of nonfinancial bonds, while the volume upgraded was very small. In addition, the share of corporate bonds outstanding rated "deep junk"—that is, bonds rated B3 or below on Moody's scale—increased to about 6½ percent last quarter. The realized default rate on all corporate bonds skyrocketed in September, but two financial companies, Washington Mutual and Lehman Brothers, accounted for most of the jump.

Business Finance

Gross issuance of investment-grade bonds by nonfinancial firms has been moderate in October, while no speculative-grade bonds have been issued. Nonfinancial commercial paper outstanding has risen a bit this month, after having contracted noticeably in September. Commercial and industrial lending stayed strong in early October, as firms reportedly continued to draw heavily on existing bank lines of credit. Overall, based on data for the first half of the month, net debt financing by nonfinancial businesses in October is on track to be close to the third-quarter pace.

Outside of a very large offering by General Electric, the volume of seasoned equity offerings by nonfinancial corporations has been weak this month, and there have been no initial public offerings. In the second quarter, equity retirements from cash-financed mergers and share repurchases slowed somewhat. As a result, net equity retirements by nonfinancial firms in the second quarter slowed further. In the third quarter, cash-financed mergers continued at roughly the pace of the previous quarter, while announcements of share repurchase programs moderated again. A few large financial institutions issued equity in September and October, although the total amount was below the pace in the first half of the year.

Commercial Real Estate

The growth of commercial mortgage debt is likely to have slowed further in the third quarter after having moderated quite a bit during the first half of the year. Preliminary data suggest that the value of commercial real estate transactions declined in September to its lowest level in five years, which likely reflected tight financing and falling commercial property prices. Conditions in secondary markets for commercial mortgages continued to be strained. Issuance of commercial mortgage-backed securities (CMBS) was shut off completely in the third quarter. Spreads on CDS of indexes of CMBS stayed high over the intermeeting period. In September, the delinquency rate for commercial mortgages held in CMBS pools was little changed at a fairly low level, but the delinquency rate on commercial mortgages held by banks appears likely to have increased further in the third quarter on continued deterioration in the performance of construction loans.

Household Finance

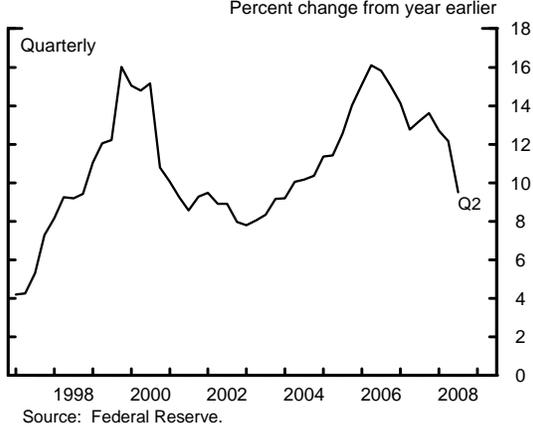
Over the intermeeting period, the interest rate on 30-year fixed-rate conforming mortgages was volatile and increased, on net, about 50 basis points, to almost 6.5 percent as of October 16 (the latest observation). As of that reading, the spread between the conforming mortgage rate and the on-the-run ten-year Treasury yield had nearly returned to the very elevated level posted just before Fannie Mae and Freddie Mac were taken into conservatorship in early September. In recent days, however, posted interest rates on 30-year fixed-rate mortgages have moved down noticeably, largely reflecting a decline in nominal Treasury yields. Meanwhile, the interest rate on nonconforming jumbo mortgages has remained extremely high in recent weeks.

The national house price indexes released by the Office of Federal Housing Enterprise Oversight and by S&P/Case-Shiller showed further pronounced declines in July. The very soft housing market has also continued to weigh on mortgage credit quality. Delinquency rates for prime, alt A, and subprime mortgages all rose again in August. Currently both prime and subprime delinquency rates stand at levels that are about double those seen a year earlier, while the alt-A delinquency rate is almost four times the level a year earlier.

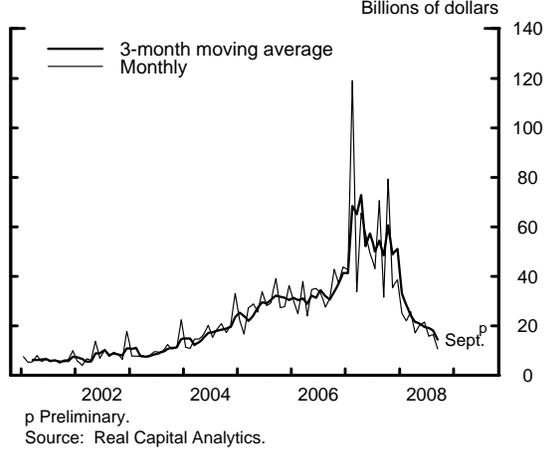
In secondary mortgage markets, issuance of MBS by the housing GSEs increased slightly in September but remained somewhat below the pace seen in the first half of the year. Issuance by Ginnie Mae continued to be very strong last month, but the non-agency MBS market remained closed.

Commercial Real Estate

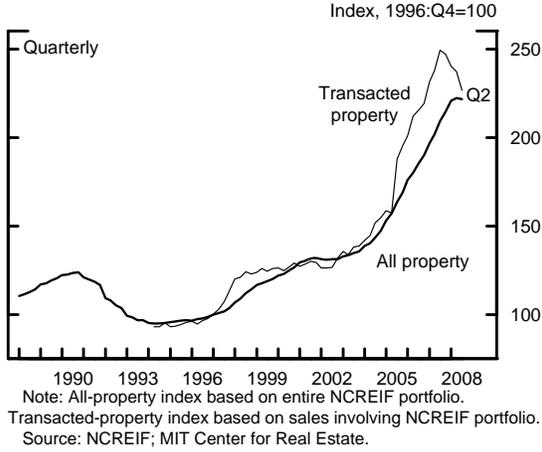
Commercial Mortgage Debt



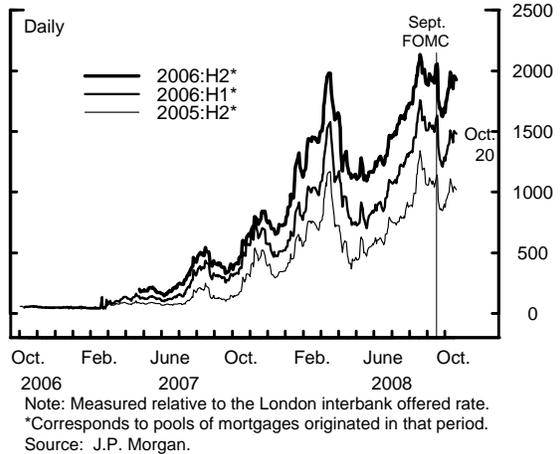
Sales of Commercial Real Estate



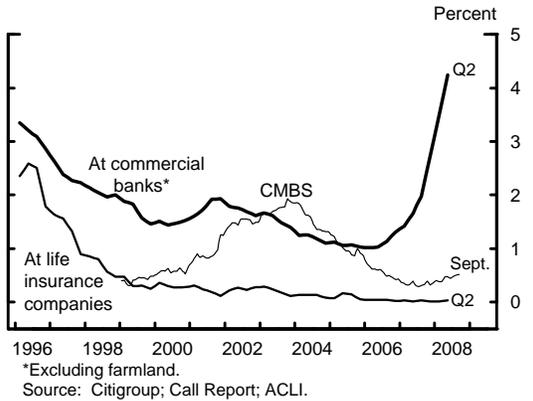
Prices



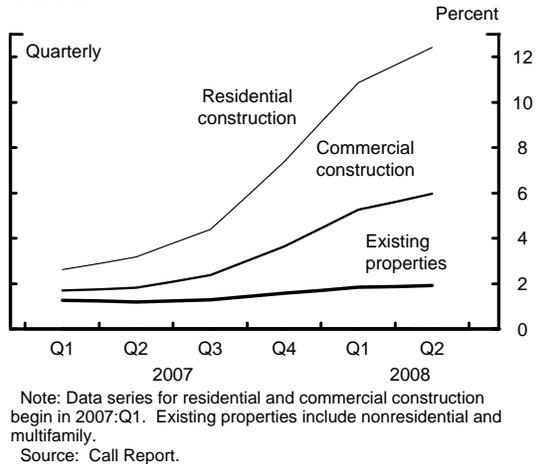
BBB Commercial Mortgage CDS Index Spreads



Delinquency Rates on Commercial Mortgages

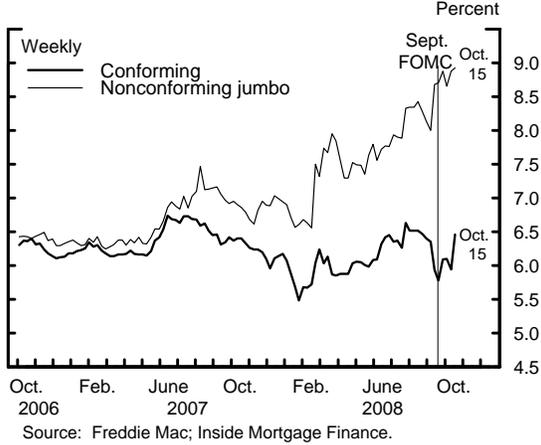


Delinquency Rates on Commercial Mortgages at Banks

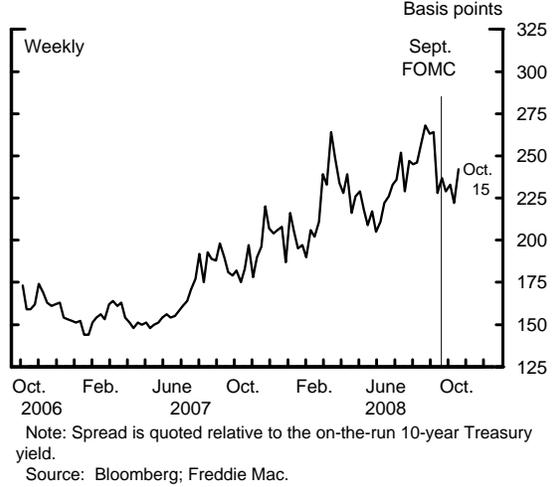


Residential Mortgages

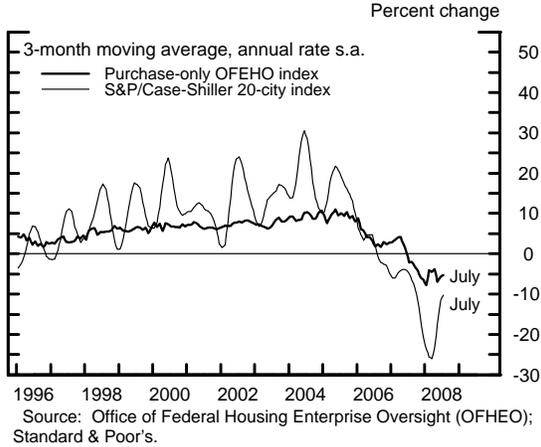
30-Year Fixed Mortgage Rates



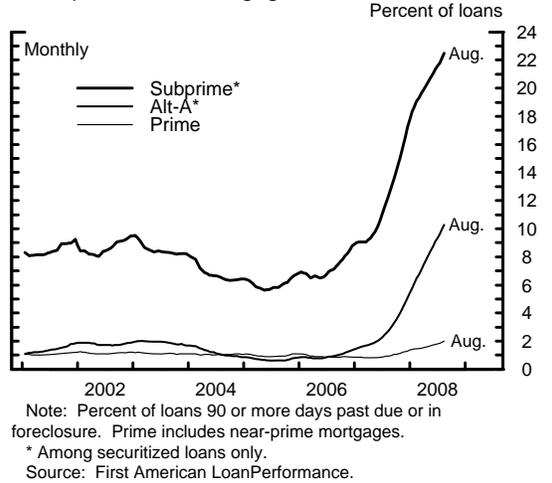
30-Year Fixed-Rate Mortgage Rate Spread



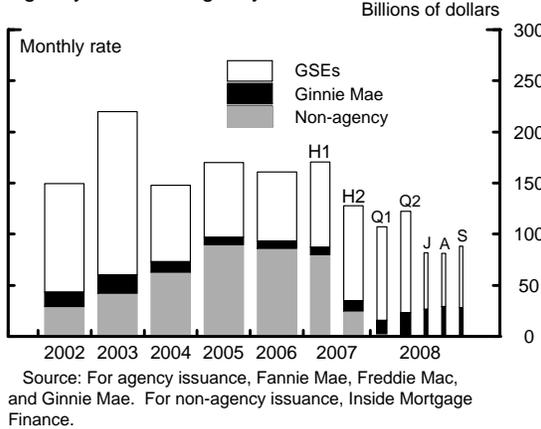
House Prices



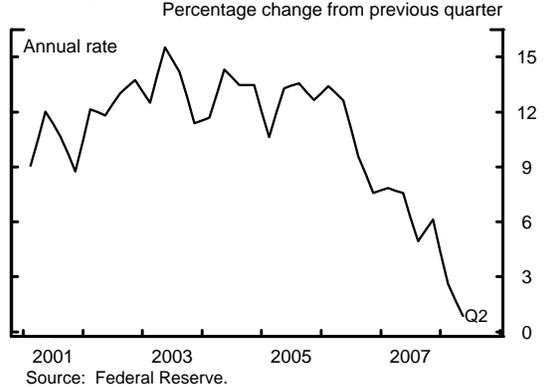
Delinquencies on Mortgages



Agency and Non-Agency MBS Issuance

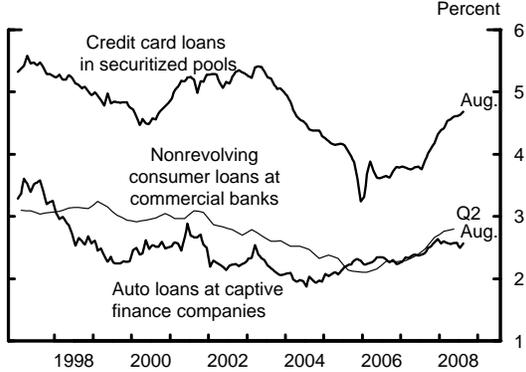


Mortgage Debt



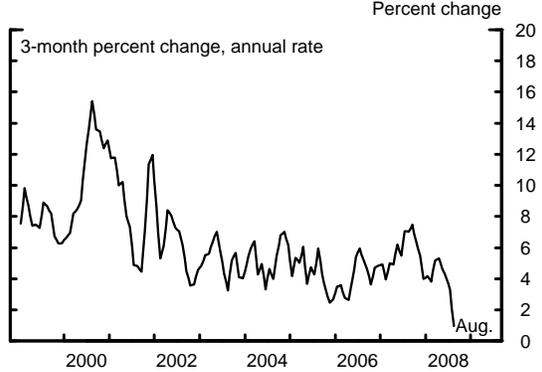
Consumer Credit and Household Wealth

Delinquencies on Consumer Loans



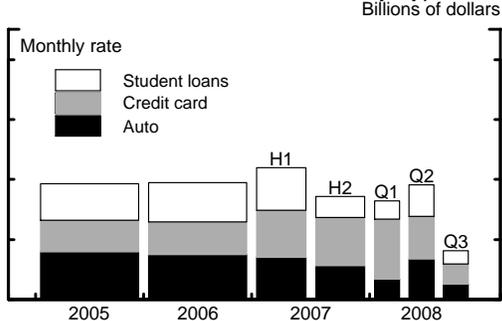
Source: For auto loans, Federal Reserve; for credit cards, Moody's; for nonrevolving consumer loans, Call Report.

Consumer Credit



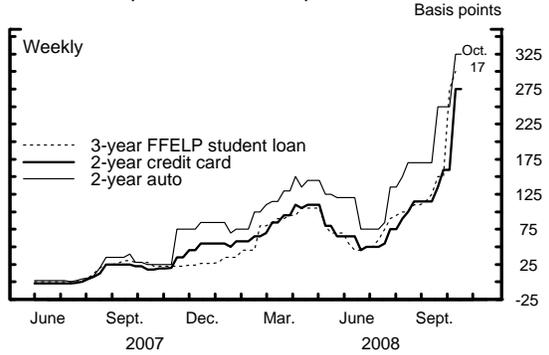
Source: Federal Reserve.

Gross Issuance of Consumer ABS by Type



Note: Auto includes car loans, leases, and financing for buyers of motorcycles, trucks, and other vehicles.
Source: Inside Mortgage Finance; Merrill Lynch.

AAA ABS Spreads over Swaps



Note: For 3-year FFELP student loan, last observation is for Oct. 10.
Source: For credit cards and auto, Citigroup Global Markets; for student loans, Merrill Lynch.

Net Flows into Mutual Funds

(Billions of dollars, monthly rate)

Fund type	2007		2008		Aug.	Sept. ^e	Assets Aug.
	H1	H2	Q1	Q2			
Total long-term funds	31.5	5.8	1.7	22.6	-12.0	-66.0	8,057
Equity funds	14.3	1.1	-14.9	7.8	-19.5	-57.2	5,628
Domestic	0.8	-8.4	-13.4	3.3	-1.9	-35.7	4,263
International	13.5	9.6	-1.5	4.4	-17.5	-21.5	1,366
Hybrid funds	2.6	1.1	0.7	2.0	-0.4	-6.8	663
Bond funds	14.6	3.5	16.0	12.9	7.9	-2.0	1,766
High-yield	0.2	-0.7	-1.3	0.9	0.1	-0.8	148
Other taxable	12.0	4.8	15.2	8.2	5.4	-0.4	1,227
Municipals	2.4	-0.6	2.1	3.7	2.4	-0.8	391
Money market funds	26.3	98.8	126.9	-14.8	43.1	-179.0	3,578

Note: Excludes reinvested dividends.

e Staff estimate.

Source: Investment Company Institute.

Delinquency rates for securitized revolving credit card debt ticked up in August, while delinquencies on auto loans at the domestic captive finance companies changed little. Both series have moved up considerably over the past few years but remain below the peak levels reached in the late 1990s. Broadly consistent with reports from some finance companies, results from the October Senior Loan Officer Opinion Survey revealed that many lenders have further tightened terms and standards for consumer loans. Sizable net fractions of Domestic banks reported lowering credit limits on existing credit card accounts to both prime and nonprime borrowers, citing a less favorable or more uncertain economic outlook, reduced tolerance for risk, and declines in customer credit scores as important reasons for the decreases. Although most students appear to have successfully obtained government-guaranteed student loans for the fall semester, lenders continue to tighten underwriting standards on non-government-guaranteed loans, and some major providers of these loans have exited the market. Restrictive supply conditions and weak demand have weighed on consumer credit, which, over the three months ending in August, increased at the slowest pace in more than fifteen years. In secondary markets, spreads on asset-backed securities (ABS) collateralized by consumer credit were at historically high levels and issuance in the third quarter was considerably below the robust pace earlier this year.

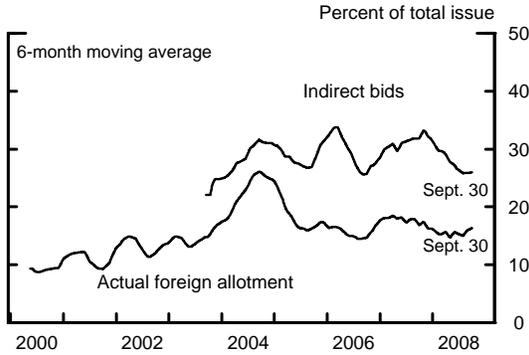
With asset prices falling steeply, investors, on net, withdrew substantial amounts from long-term mutual funds in September and early October. September's net outflows, which were the largest on record in nominal terms, were concentrated in equity mutual funds, but this month's redemptions have been more widespread among asset classes.

Treasury Finance

Over the intermeeting period, the Treasury conducted several auctions for nominal and inflation-indexed coupon securities. In addition, issuance of Treasury bills amounted to about \$1.2 trillion, including \$645 billion of cash management bills under the temporary Supplementary Financing Program. Demand for the Treasury bills was extremely strong—despite the large volume of issuance, yields in secondary markets were frequently near 0 percent. In addition, to address the high level of fails to deliver in the Treasury market, the Treasury re-opened several issues in the 7- to 9-year sector that had experienced acute shortages in secondary markets. Demand for the regularly scheduled coupon auctions was generally in line with, or somewhat greater than, demand in prior auctions. Foreign participation at Treasury auctions increased a little last month, while another indication of demand from foreign official institutions—foreign custody holdings at the Federal Reserve Bank of New York—rose notably.

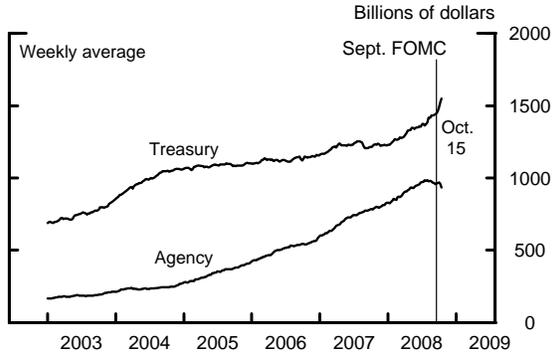
Treasury Finance

Foreign Participation in Treasury Auctions



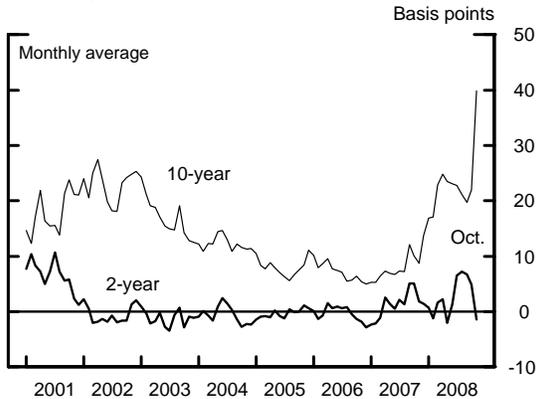
Note: Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2-, 5-, and 10-year original auctions and reopenings.
Source: Federal Reserve Board.

Foreign Custody Holdings



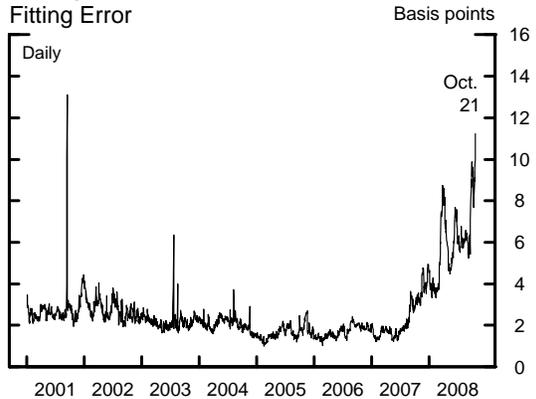
Note: Securities held in custody at the Federal Reserve Bank of New York on behalf of foreign official institutions.
Source: Federal Reserve Bank of New York.

Treasury On-the-Run Premiums



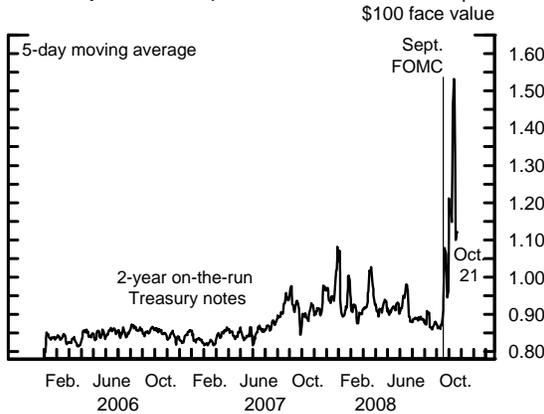
Note: Computed as the spread of the yield read from an estimated off-the-run yield curve over the on-the-run Treasury yield. October observation is the month-to-date average.
Source: Federal Reserve Bank of New York.

Average Absolute Nominal Yield Curve Fitting Error



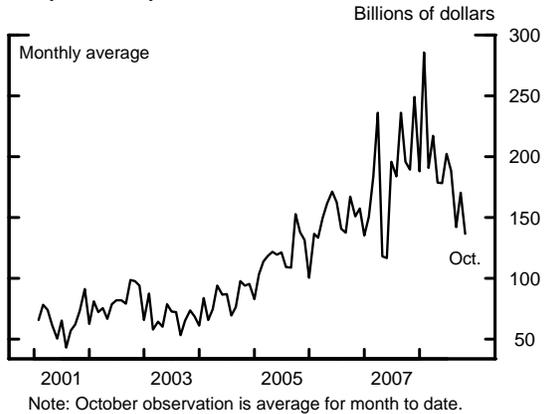
Note: Calculated from securities with 2 to 10 years until maturity, excluding on-the-run and first off-the-run securities.
Source: Federal Reserve Board.

Treasury Bid-Ask Spread



Source: BrokerTec Interdealer Market Data.

Daily Treasury Market Volume



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

Extremely high demand for Treasury bills and near-dated coupon securities contributed to strained conditions in the Treasury market. Bid-asked spreads on on-the-run coupon securities surged and are now near their previous high levels in mid-March. Meanwhile, yield-curve fitting errors increased as investors apparently remained reluctant to arbitrage price differences across similar securities. The market's preference for relatively liquid securities pushed to new highs the spread between yields on the on-the-run and off-the-run ten-year notes. In October, daily average volume in secondary Treasury markets fell to about 20 percent below year-earlier levels.

State and Local Government Finance

Conditions in the municipal bond market deteriorated substantially over most of the intermeeting period. Issuance of long-term municipal bonds for both advance refundings and new capital projects slowed markedly in September and early October. A number of planned issues were scaled down or pulled altogether, as tax-exempt yields rose to a record high level relative to Treasuries. Last week, however, the market showed signs of stabilization—California and New York City were able to issue about \$5½ billion of short-term debt, although both issues carried very high interest rates.

The credit quality of municipal bonds deteriorated in the third quarter, as the number of rating downgrades far outpaced the number of upgrades. In addition, last month, markets for municipal securities came under substantial pressure as concerns about liquidity led investors to pull back from structured short-term securities that were backed by long-term bonds. The resulting flood of the underlying long-term securities into the secondary market caused yields to jump to their highest levels in recent years and ratios of yields to Treasuries to soar well beyond previous record levels.

Money and Bank Credit

M2 surged at an annual rate of 15½ percent in September and is on track to accelerate to a 17 percent pace this month. Liquid deposits surged in September, in part because of a large expansion of accounts held by broker-dealers, trusts, and corporate customers at a few large banks. Small time deposits increased sharply in September and skyrocketed in early October, as banks and thrifts reportedly continued to bid aggressively for these deposits; in addition, the acceleration in October may reflect a shift in some funds away from liquid deposits, which, on the basis of available data, are expected to essentially hold steady this month. Growth of currency picked up notably, on balance, over September and October, with the available indicators suggesting stronger foreign and

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. ^p
Total	34.7	38.4	36.1	40.4	41.4	36.0	25.5	19.0
Long-term ¹	29.8	34.2	32.5	35.5	37.9	29.6	21.2	11.0
Refundings ²	10.8	15.6	10.6	12.6	17.9	13.1	9.6	5.0
New capital	19.0	18.6	21.9	22.9	20.0	16.6	11.6	6.0
Short-term	4.9	4.2	3.7	4.9	3.5	6.4	4.3	8.0
Memo: Long-term taxable	2.0	2.1	2.5	2.4	2.7	2.1	.9	.2

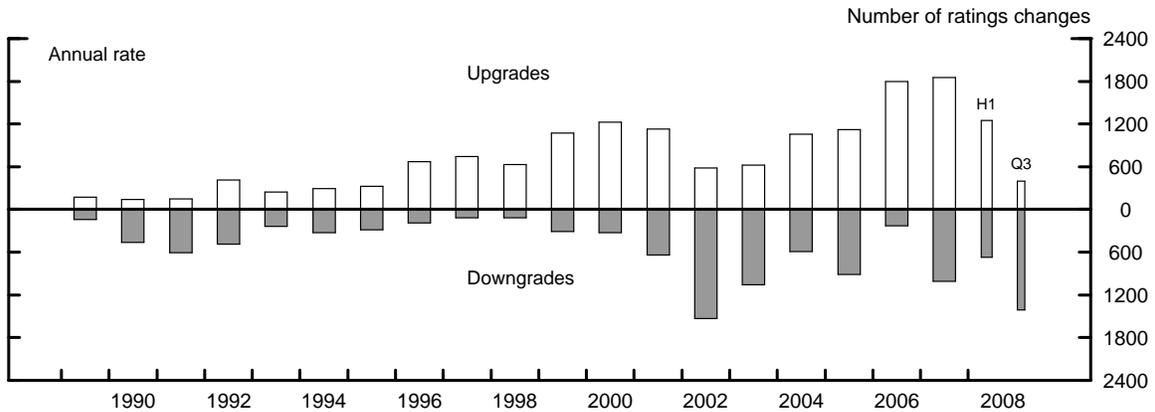
1. Includes issues for public and private purposes.

2. All issues that include any refunding bonds.

p Forecast based on preliminary data through October 16, 2008.

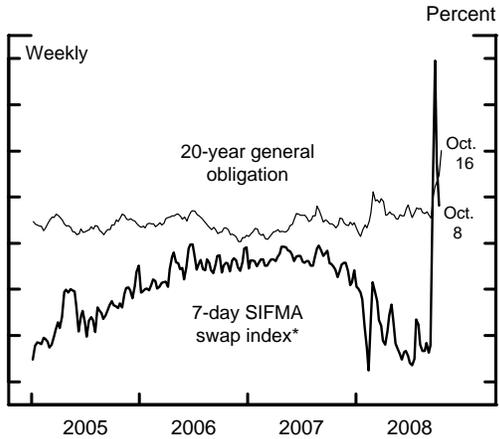
Source: Thomson Financial.

Ratings Changes



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

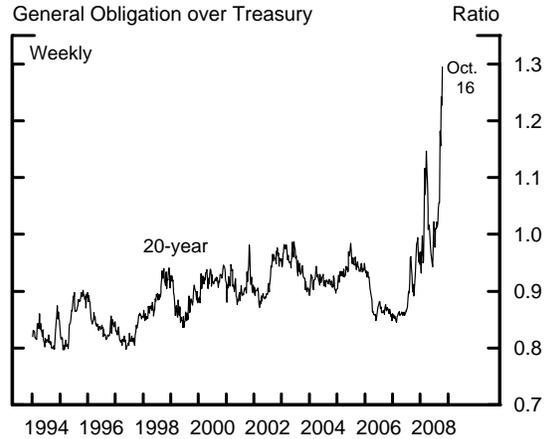
Municipal Bond Yields



* 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) ¹						Level (billions of dollars), Oct. (e)
	2006	2007	2008				
			H1	Q3	Sep.	Oct. (e)	
M2	5.1	5.7	7.2	3.6	15.6	17.1	7,880
Components ²							
Currency	3.5	2.0	.9	6.8	6.7	20.5	793
Liquid deposits ³	1.0	4.1	7.4	3.7	20.1	1.0	4,706
Small time deposits	18.6	4.3	-1.4	9.3	17.6	52.8	1,311
Retail money market funds	13.1	20.3	22.4	-5.5	-5	44.2	1,064
Memo:							
Institutional money market funds	15.8	39.3	41.8	2.2	-48.9	-27.5	2,148
Monetary base	3.1	2.0	.8	16.1	88.2	-8.5	897

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

2. Nonbank traveler's checks are not listed.

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

e Estimated.

Source: Federal Reserve.

Commercial Bank Credit

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

Type of credit	2006	2007	H1 2008	Q3 2008	Aug. 2008	Sept. 2008	Level ¹ Sept. 2008
Total	10.3	11.1	2.8	3.8	5.2	14.8	9,405
<i>Loans</i> ²							
Total	12.0	12.1	5.1	2.4	5.4	11.5	7,138
To businesses							
Commercial and industrial	14.3	19.2	14.2	6.1	-2	19.5	1,541
Commercial real estate	13.6	10.4	9.7	1.5	5.1	-3	1,710
To households							
Residential real estate	9.9	8.4	2.0	-4.9	6.8	-6.0	2,078
Revolving home equity	3.1	7.1	13.7	12.0	6.3	16.7	567
Other	12.3	8.8	-1.8	-10.8	6.9	-14.3	1,511
Consumer	2.9	7.9	.2	9.4	10.8	6.1	835
Originated ³	3.7	7.2	-1	6.1	2.9	6.9	1,240
Other ⁴	21.1	17.5	-4.9	8.8	6.8	64.5	974
<i>Securities</i>							
Total	5.4	8.4	-4.6	8.0	4.8	25.4	2,267
Treasury and agency	2.0	-5.7	-1.6	24.3	41.6	29.8	1,251
Other ⁵	10.7	28.9	-7.8	-9.9	-37.2	19.7	1,016

Note. Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FIN 39 and FAS 115), the initial consolidation of certain variable interest entities (FIN 46), the initial adoption of fair value accounting (FAS 159), and the effects of sizable thrift-to-bank and bank-to-thrift structure activity in October 2006, March 2007, October 2007, and September 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.

Source: Federal Reserve.

domestic demand. And, after having been about flat in September, retail money funds have seen very large net inflows so far this month.

The financial turmoil had a noticeable effect on bank credit, which surged in September. The volatile “other loans” category saw a marked increase in unplanned overdrafts by a wide range of customers, including money fund complexes, and in draws on lines of credit by financial companies, consistent with strains in funding markets. Last month, banks acquired a large volume of non-agency, nongovernment securities, with purchases of commercial paper under the AMLF program reportedly accounting for some of the activity. Bank credit was also boosted by a surge in commercial and industrial loans, much of which can be attributed to drawdowns on existing bank lines by a broad range of nonfinancial business borrowers. In contrast, commercial real estate loans held by banks were flat over the period. On the household side, residential mortgage loans held by banks remained on a downtrend in recent weeks, while home equity and consumer loans continued to grow robustly.

The October 2008 Senior Loan Officer Opinion Survey on Bank Lending Practices found that a large fraction of domestic institutions continued to tighten their lending standards and terms on all major loan categories over the previous three months. Half of domestic banks reported being less willing to make consumer installment loans, a net percentage that approaches historical highs. Demand for loans from both businesses and households at domestic institutions continued to weaken, on net, over the past three months.

Appendix

Senior Loan Officer Opinion Survey on Bank Lending Practices

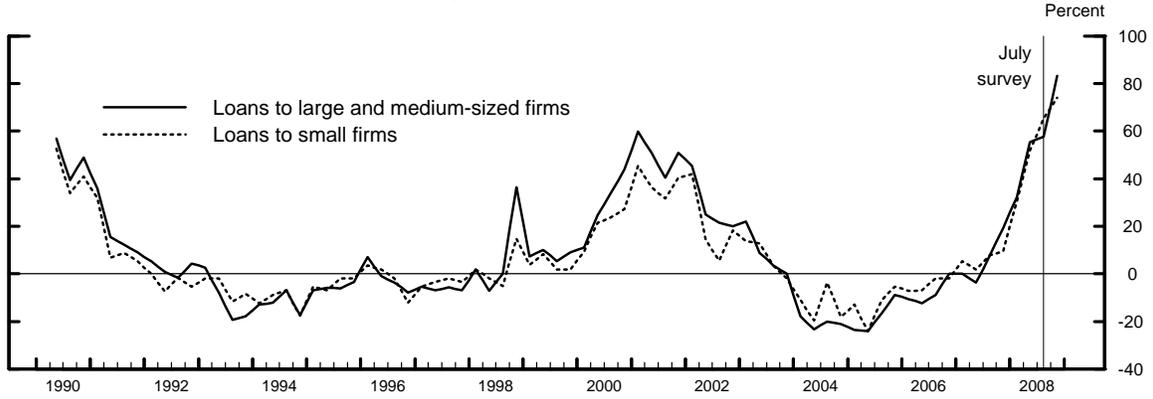
The October 2008 Senior Loan Officer Opinion Survey on Bank Lending Practices addressed changes in the supply of, and demand for, bank loans to businesses and households over the past three months.¹ The survey included two sets of special questions: The first set asked domestic and foreign banks about changes in the dollar amount of commercial and industrial (C&I) loans according to whether they were drawn under preexisting commitments or not; the second set asked domestic banks about changes in credit limits on existing credit card accounts for prime and nonprime borrowers. This appendix is based on responses from 54 domestic banks and 21 U.S. branches and agencies of foreign banks.

In the current survey, large net fractions of domestic institutions reported having continued to tighten their lending standards and terms on all major loan categories over the previous three months. The net percentages of respondents that reported tightening standards increased relative to the July survey for both C&I and commercial real estate loans, as did the fractions reporting tightening for all price and nonprice terms on C&I loans. Considerable fractions of foreign institutions also tightened credit standards and terms on loans to businesses over the past three months. Demand for loans from both businesses and households at domestic institutions continued to weaken, on net, over the past three months. Modest fractions of both large and smaller institutions reported, on net, increases in the dollar amount of C&I loans not drawn under preexisting commitments over the past three months; both small and large banks also reported increases in the amounts of C&I loans drawn under commitment over the same period, though the net percentage reporting an increase was significantly higher for large institutions. Large fractions of domestic banks also reported tightening standards on loans to households and decreased demand for such loans. Domestic banks reported reducing credit limits on existing credit card accounts to both prime and nonprime borrowers, citing a less favorable or more uncertain economic outlook, reduced tolerance for risk, and declines in customer credit scores as important reasons for the decreases.

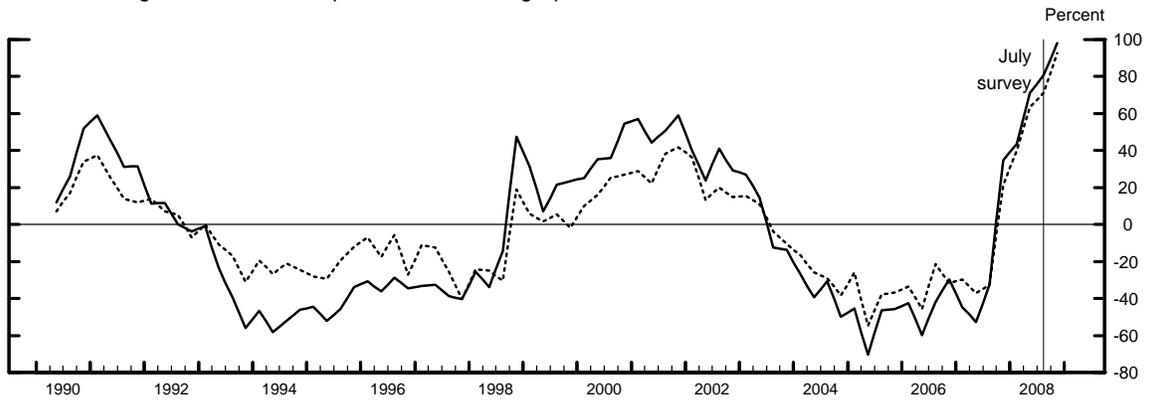
¹ Banks received the survey on or after October 2, and their responses were due on October 16.

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

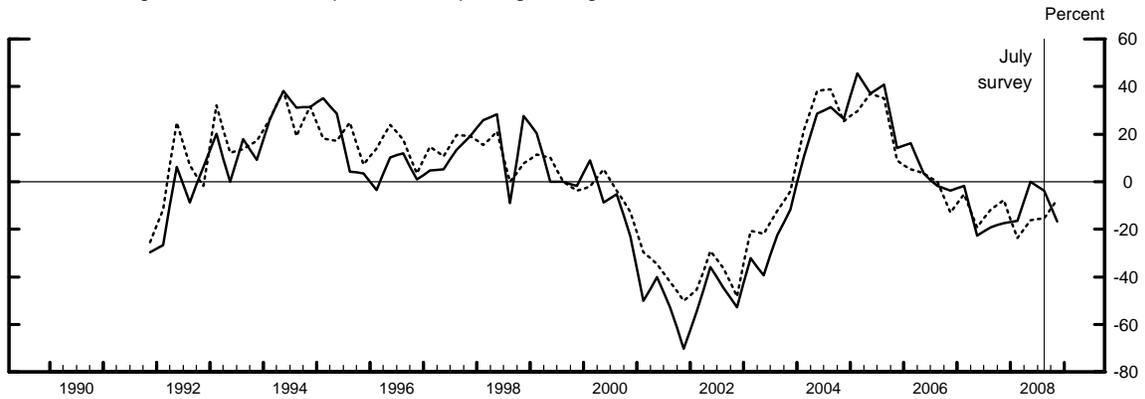
Net Percentage of Domestic Respondents Tightening Standards for C&I Loans



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



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



Business Lending

Questions on C&I lending. About 85 percent of domestic banks—up substantially from 60 percent in the July survey—reported having tightened lending standards on C&I loans to large and middle-market firms over the past three months. About 75 percent of such respondents—up slightly from the fraction in the July survey—also indicated that they had tightened their lending standards on C&I loans to small firms over the same period. Significant majorities of domestic respondents indicated that they had tightened price terms on C&I loans to firms of all sizes. On net, about 95 percent of such respondents reported having tightened the costs of credit lines to large and medium-sized firms, while nearly 90 percent reported such tightening for smaller firms. Nearly all banks—up from roughly 80 percent in the July survey—noted that they had increased spreads of loan rates over their cost of funds on C&I loans to large and middle-market firms, while about 95 percent of respondents—a higher fraction than the 70 percent in the July survey—reported having widened spreads on loans to small firms. In addition, the fraction of domestic respondents that reported having tightened non-price-related lending terms on C&I loans to firms of all sizes over the survey period increased significantly relative to the July survey: Higher fractions of large banks reported having reduced both the size and the maximum maturity of loans or credit lines to large and middle-market firms. Additionally, roughly 75 percent of large bank respondents reported having tightened loan covenants on loans to large and middle-market firms, and about 70 percent reported having tightened covenants on loans to small firms.

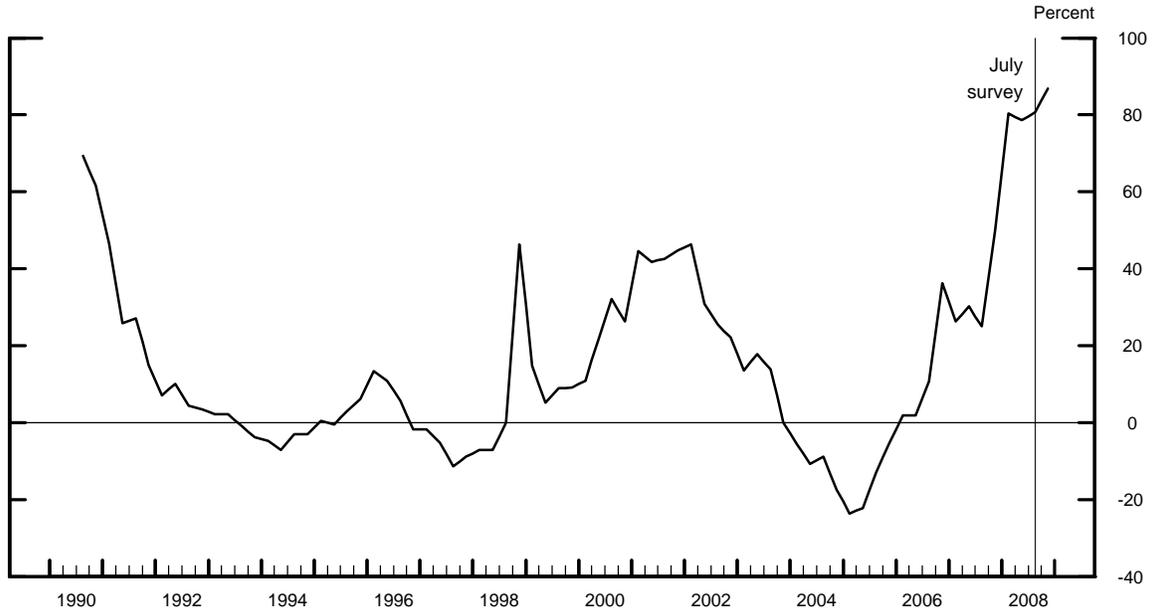
U.S. branches and agencies of foreign banks also had tightened their business lending stance. About 70 percent of the branches and agencies—up substantially from about 35 percent in the July survey—indicated that they had tightened their lending standards on C&I loans over the past three months. Large fractions of foreign respondents reported that they had tightened loan terms, including premiums charged on riskier loans, cost of credit lines, and the maximum size of credit lines.

Almost all domestic and foreign respondents pointed to a less favorable or more uncertain economic outlook as a reason for tightening their lending standards and terms on C&I loans over the past three months. Large majorities of respondents indicated that their bank's reduced tolerance for risk and a worsening of industry-specific problems were factors in their decision. Roughly 75 percent of foreign respondents and about 40 percent of domestic respondents noted that a deterioration in their bank's current or expected capital position had contributed to the more stringent lending policies over the past three months, higher fractions than cited that factor in the July survey.

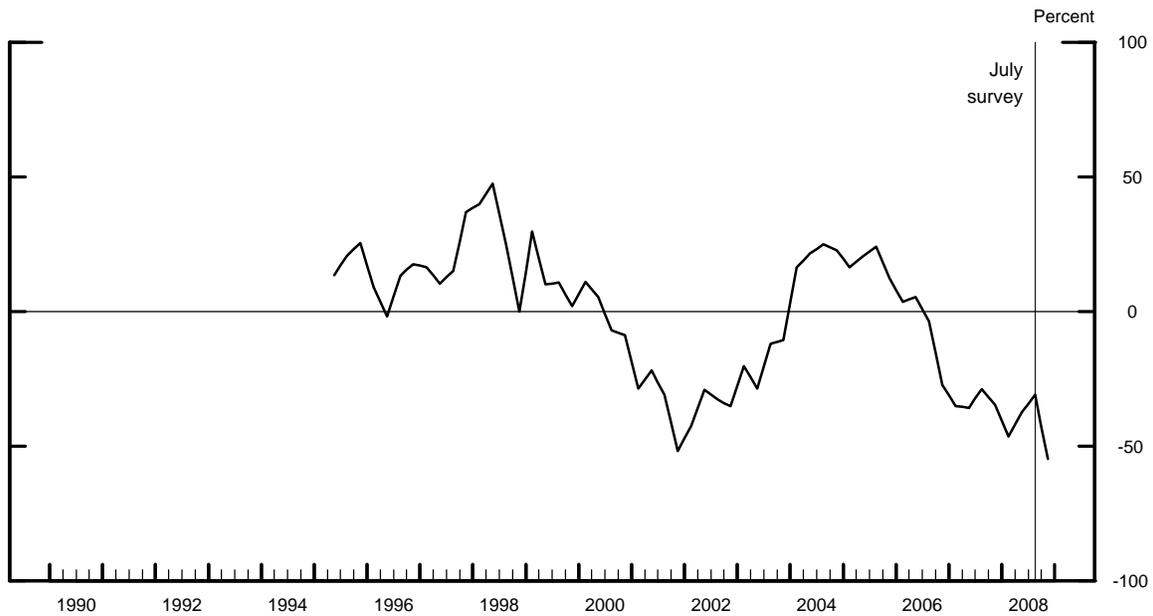
The October survey of domestic banks points to a slight further weakening of C&I loan demand over the past three months. On balance, 15 percent of domestic respondents reported a weakening of demand for C&I loans from large and middle-market firms, with about 5 percent

Measures of Supply and Demand for Commercial Real Estate Loans

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



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



reporting a weakening in demand from smaller firms. On net, 5 percent of the U.S. branches and agencies of foreign banks responding to the survey reported an increase in demand for C&I loans.

Substantial majorities of the domestic institutions that experienced weaker loan demand over the past three months pointed to decreases in customers' needs to finance investment in plant and equipment, to finance inventories, and to finance customer accounts receivable as reasons for the weaker demand. In addition, all foreign and a large fraction of domestic respondents pointed to a decrease in customers' needs for merger and acquisition financing as a reason for the lower demand for C&I loans. Among banks that reported an increase in demand, nearly all domestic respondents reported that customer borrowing had shifted to their bank from other bank or nonbank sources because these other sources had become less attractive. In addition, both domestic and foreign respondents indicated that customers' internally generated funds had decreased. About 5 percent of domestic institutions, on net, reported that inquiries from potential business borrowers had increased during the survey period; in contrast, about 25 percent of foreign respondents, on net, reported a decrease.

Special questions on changes in the dollar amount of outstanding C&I loans. About 35 percent, on net, of domestic respondents reported an increase in the dollar amount of C&I loans drawn under preexisting commitments. Responses, however, differed substantially by bank size, with nearly 60 percent of large banks reporting such an increase, on net, compared with 5 percent of smaller banks. With respect to C&I loans that were not drawn under previous commitment, roughly 25 percent of large banks reported an increase in the dollar volume of outstanding loans, only slightly lower than the corresponding net percentage of smaller banks, 35 percent. In the foreign survey, about 65 percent of respondents indicated that the dollar amount of outstanding C&I loans that were drawn under commitment had increased on net. Forty percent of respondents to the foreign survey reported such an increase in C&I loans not drawn under preexisting commitments.

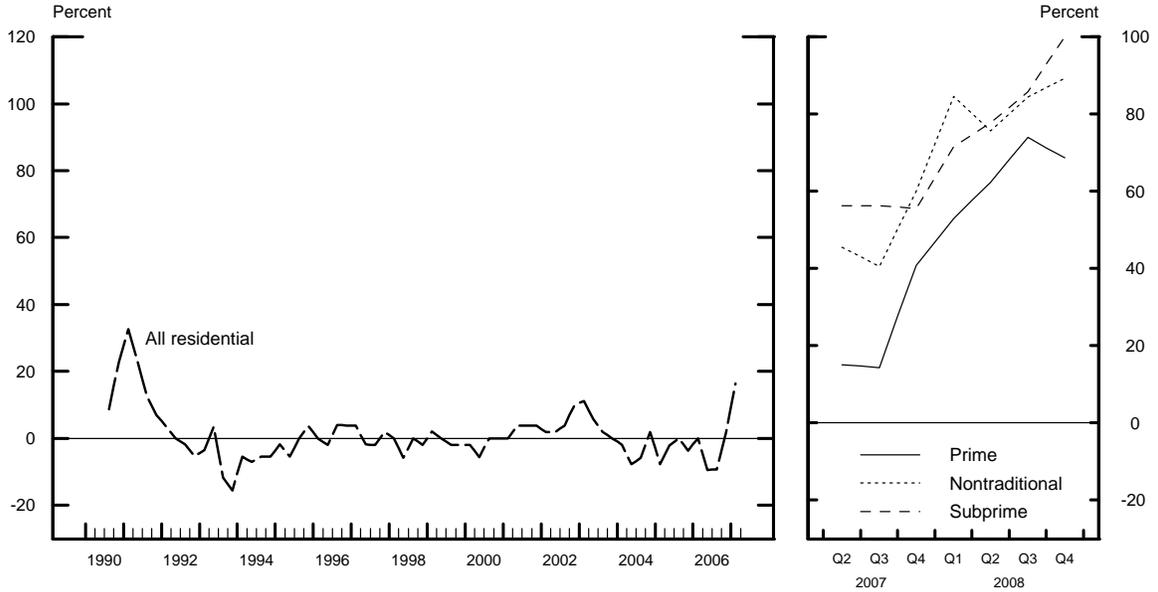
Questions on commercial real estate lending. On balance, about 85 percent of domestic banks—slightly higher than the 80 percent reported in the July survey—had tightened their lending standards on commercial real estate loans (CRE) over the past three months. About 65 percent of foreign banks—up from about 35 percent in the July survey—also indicated that they had tightened their lending standards on CRE loans. On net, about 55 percent of domestic banks and 40 percent of foreign banks reported weaker demand for such loans.

Lending to Households

Questions on residential real estate lending. Large majorities of domestic respondents reported having tightened their lending standards on prime, nontraditional, and subprime residential mortgages over the previous three months. About 70 percent of domestic respondents—down

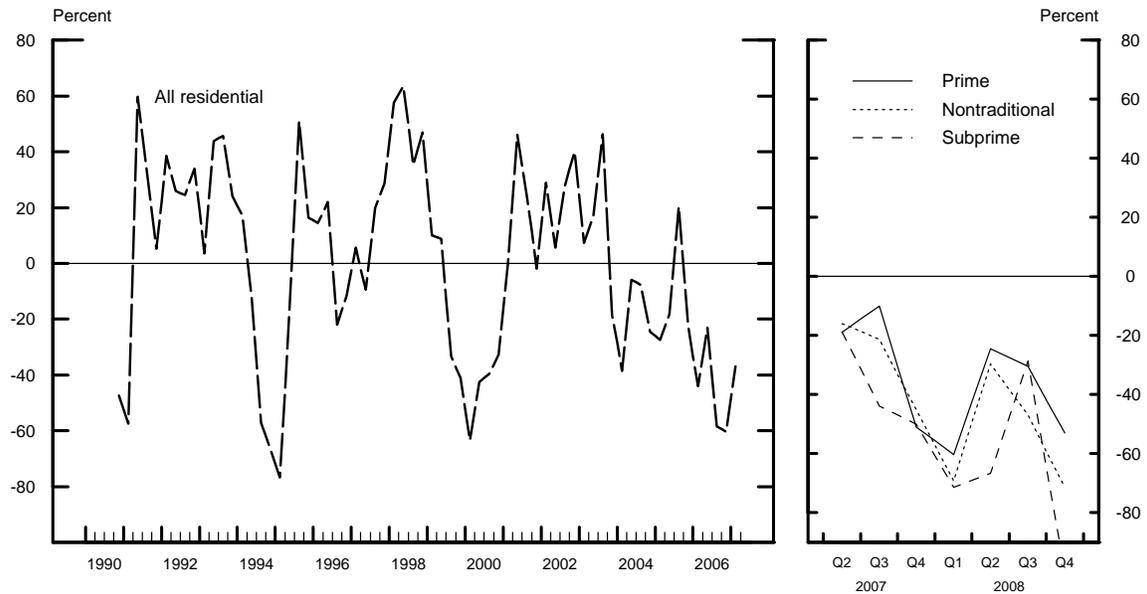
Measures of Supply and Demand for Residential Mortgage Loans

Net Percentage of Domestic Respondents Tightening Standards for Residential Mortgage Loans



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

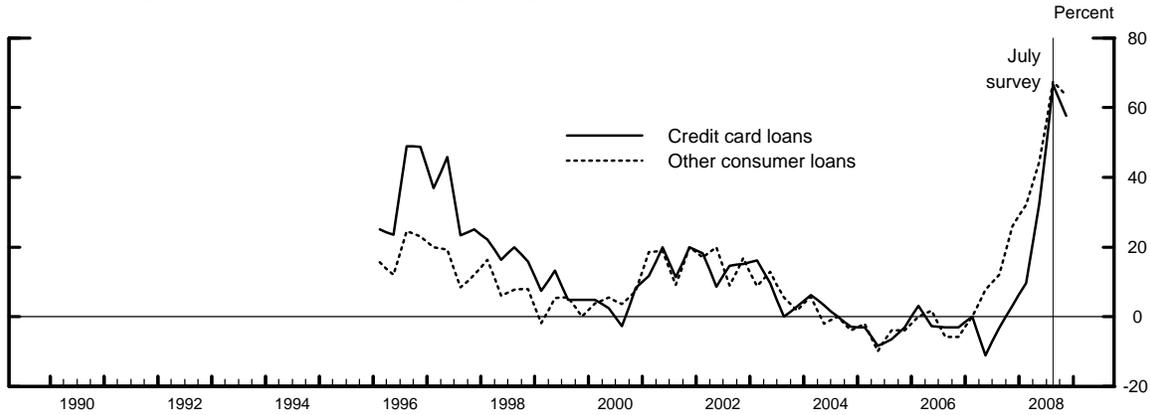
Net Percentage of Domestic Respondents Reporting Stronger Demand for Residential Mortgage Loans



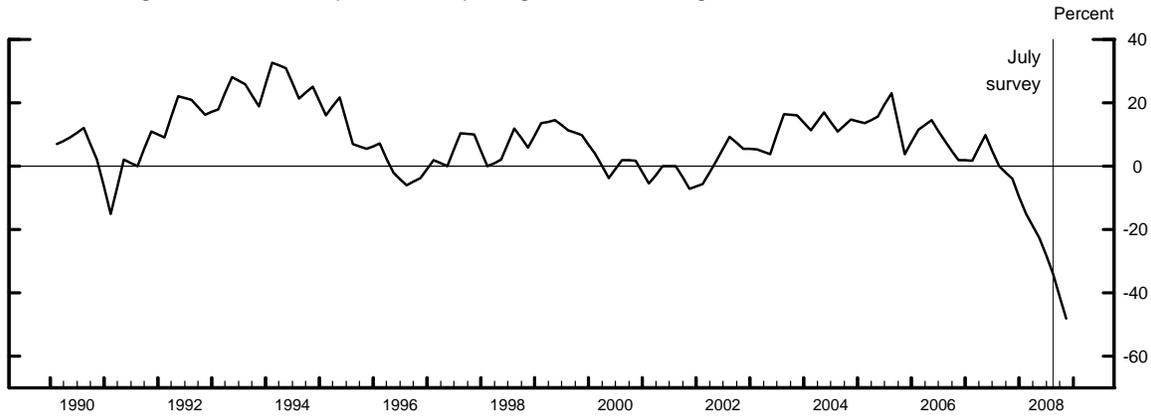
Note: For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately.

Measures of Supply and Demand for Consumer Loans

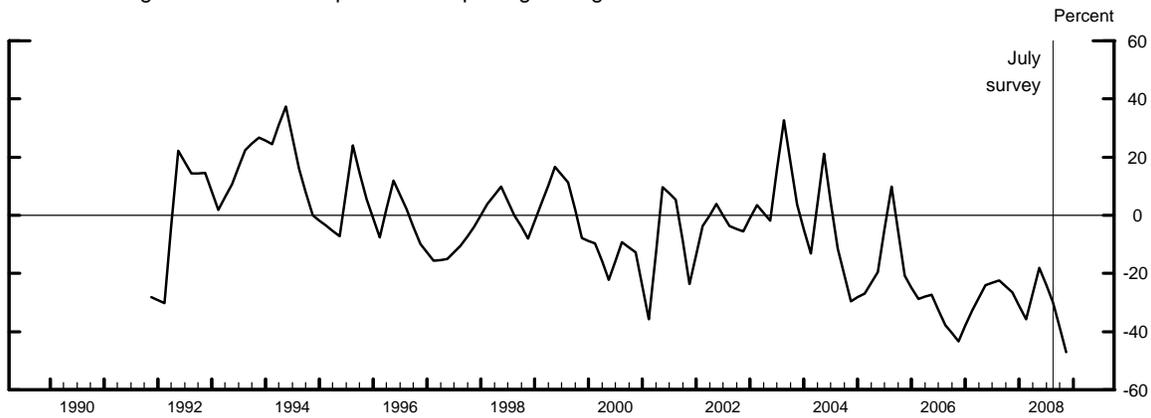
Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans



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



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



from about 75 percent in the previous survey—indicated that they had tightened their lending standards on prime mortgages.² Responses differed importantly by bank size, with about 80 percent of the largest banks, but only 55 percent of the smaller banks, reporting tighter standards for prime borrowers. One smaller bank reported having eased standards somewhat. About 90 percent—up slightly from July—of the 28 banks that originated nontraditional residential mortgage loans reported having tightened considerably their lending standards on such loans.³ All 4 of the banks that responded to the survey’s question about lending standards on subprime loans indicated that they had tightened their lending standards on such loans over the past three months.⁴ Three banks that had reported providing subprime mortgages in the July survey no longer were doing so in October.

About 55 percent of domestic respondents—a somewhat higher fraction than the roughly 30 percent reported in the July survey—experienced weaker demand, on net, for prime residential mortgage loans over the past three months. A higher net fraction of large banks than smaller banks reported a decline in demand. About 70 percent—up from roughly 45 percent in the July survey—indicated weaker demand for nontraditional mortgage loans over the same period. All 4 of the domestic banks that originated subprime mortgage loans reported weaker demand for such loans over the survey period, compared with 4 of the 7 in the July survey.

On net, about 75 percent of domestic respondents—down slightly from about 80 percent in the July survey—noted that they had tightened their lending standards for approving applications for revolving home equity lines of credit (HELOCs) over the past three months. About 20 percent of domestic banks, on net, reported weaker demand for HELOCs over the past three months, double the fraction that had reported weaker demand in the July survey.

Questions on consumer lending. Down slightly from the July survey, large fractions of domestic banks reported tightening standards on consumer loans. Nearly 60 percent of respondents indicated that they had tightened lending standards on credit card loans, while nearly 65 percent of respondents indicated that they had tightened lending standards on other consumer loans over the past three months. Large banks reported a stronger tightening than other banks on both categories of consumer loans. About 50 percent of banks reported having raised minimum required credit scores on credit card loans over the past three months, and 60 percent reported having raised minimum scores on other consumer loans over the same period, responses that were little changed from the July survey. About 55 percent of respondents also reported having

² A total of 51 institutions reported that they had originated prime residential mortgages. According to the Call Reports, these 51 banks accounted for about 77 percent of residential real estate loans on the books of all commercial banks as of June 30, 2008.

³ According to the Call Reports, these 28 institutions accounted for about 61 percent of residential real estate loans on the books of all commercial banks as of June 30, 2008.

⁴ According to the Call Reports, these 4 institutions accounted for about 11 percent of residential real estate loans on the books of all commercial banks as of June 30, 2008.

reduced the extent to which credit card loans were granted to customers who did not meet their bank's credit-scoring thresholds, while about 60 percent of respondents reported a reduction in granting other kinds of consumer loans for that reason. Also, significant net fractions of respondents reportedly raised minimum required down payments, as well as spreads of loan rates, on consumer loans other than credit card loans. Half of domestic banks indicated that they had become less willing to make consumer installment loans over the past three months, a response approaching historical record levels and more extreme than the 35 percent in the July survey. About 45 percent of respondents, on net, indicated that they had experienced weaker demand for consumer loans of all types over the past three months, up from 30 percent in the July survey.

Special questions on existing credit card limits. Two special questions asked domestic banks to indicate whether they had raised or lowered credit limits on existing card accounts and, if they had lowered limits, to give possible reasons for the change. About 25 percent of domestic banks reported having lowered credit limits on existing credit card accounts to prime borrowers on net; about 30 percent of larger banks and 10 percent of smaller banks had lowered such limits. Roughly 60 percent of banks had lowered limits on existing accounts of nonprime borrowers; no banks reported raising limits to those borrowers. About 95 percent of banks that had lowered limits cited a less favorable or more uncertain economic outlook and reduced tolerance for risk as reasons for lowering limits. Large majorities of respondents also cited a decline in customer credit scores and missed payment(s) by customers on credit card loan(s) and other loan(s) at their bank.

International Developments

International Developments

U.S. International Transactions

Trade in Goods and Services

The U.S. international trade deficit narrowed to \$59.1 billion in August, as a large decline in the value of petroleum imports more than offset a fall in exports of goods and services.

Trade in Goods and Services

	2007	Annual rate			Monthly rate		
		2008			2008		
		Q1	Q2	Q3 ^e	June	July	Aug.
Percent change							
<i>Nominal BOP</i>							
Exports	14.5	15.7	22.2	22.2	3.7	3.3	-2.0
Imports	9.7	13.4	18.0	15.8	2.1	3.5	-2.4
<i>Real NIPA</i>							
Exports	8.9	5.1	12.3	n.a.	...	...	...
Imports	1.1	-0.8	-7.3	n.a.	...	...	...
Billions of dollars							
<i>Nominal BOP</i>							
Net exports	-700.3	-708.4	-722.2	-722.7	-58.8	-61.3	-59.1
Goods, net	-819.4	-844.1	-865.3	-870.1	-71.3	-74.1	-70.9
Services, net	119.1	135.7	143.1	147.4	12.4	12.8	11.8

^e Estimate as BOP data are two months at an annual rate.

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

BOP Balance of Payments.

NIPA National Income and Product Accounts.

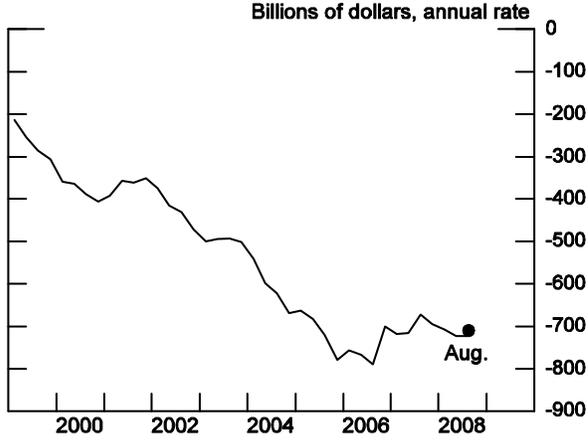
Source: U.S. Department of Commerce, Bureau of Economic Analysis (BEA);
Census Bureau.

In August, the value of exports of goods and services declined 2 percent, led by a fall in exports of automotive products that followed a surge in July. Exports of consumer goods, industrial supplies, and services also moved down after strong increases in previous months. Exports of capital goods moved up strongly, but this primarily reflected record exports of aircraft, while other categories were weak.

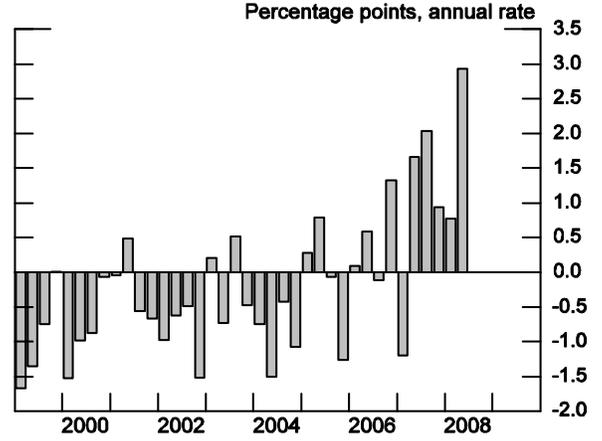
Notwithstanding the August decrease, the average value of exports in July and August rose 22.2 percent at an annual rate from the second quarter, the same pace recorded in the second quarter. The increase was supported by strong exports of petroleum products and other industrial supplies, although all other major categories of exports also exhibited large gains.

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

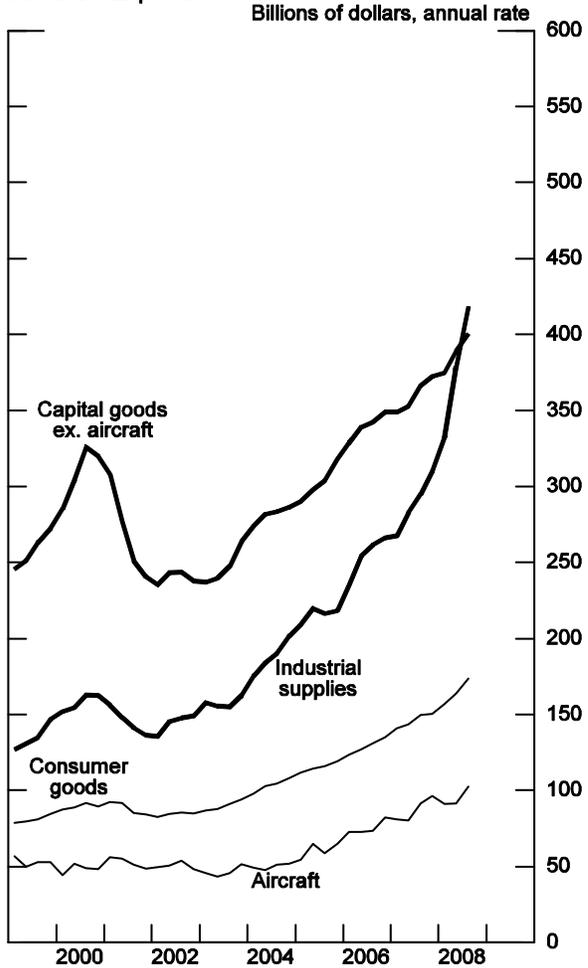
Trade Balance



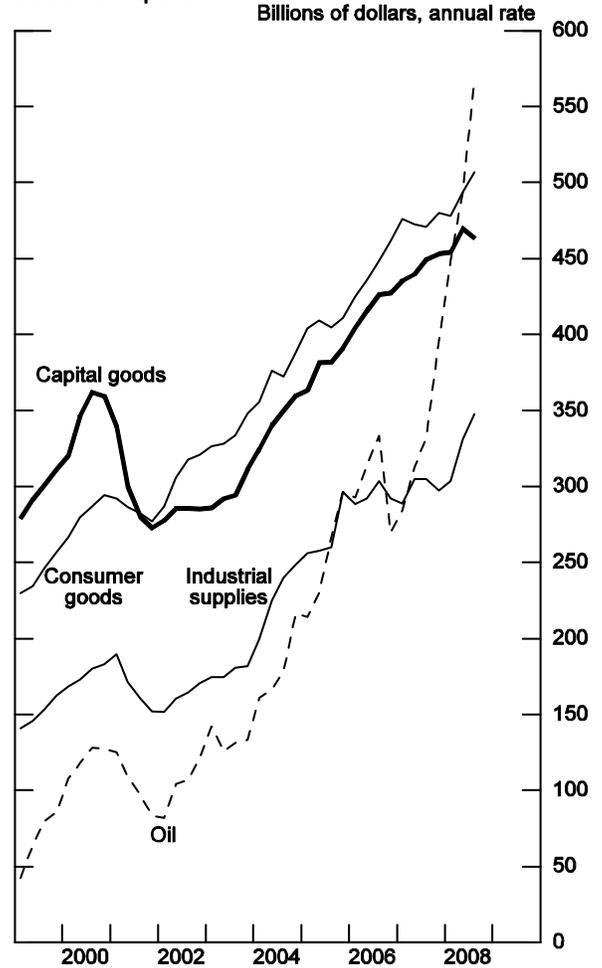
Contribution of Net Exports to Growth of Real Gross Domestic Product



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 ¹			
	2008		2008		2008		2008	
	Q2	Q3 ^e	July	Aug.	Q2	Q3 ^e	July	Aug.
Exports of Goods and Services	1899.3	1996.8	2017.1	1976.6	92.7	97.6	63.6	-40.5
Goods exports	1349.2	1430.9	1450.0	1411.7	78.0	81.6	54.9	-38.3
Gold	19.0	16.7	22.2	11.3	-5.6	-2.3	8.9	-10.9
Other goods	1330.2	1414.1	1427.8	1400.4	83.6	83.9	46.0	-27.4
Capital goods	480.6	503.0	498.0	507.9	14.4	22.4	10.8	9.9
Aircraft & parts	91.3	102.6	94.1	111.0	.0	11.2	3.0	16.8
Computers & accessories	47.2	48.7	50.7	46.6	3.9	1.5	3.9	-4.1
Semiconductors	51.3	53.4	53.3	53.5	-1.0	2.1	-.1	.2
Other capital goods	290.8	298.4	299.9	296.8	11.5	7.5	4.0	-3.0
Automotive	124.2	135.8	145.9	125.7	1.8	11.6	16.4	-20.2
Ind. supplies (ex. ag., gold)	379.0	418.4	420.6	416.1	46.4	39.4	10.8	-4.5
Consumer goods	163.9	173.3	178.6	168.0	7.0	9.4	9.0	-10.6
Agricultural	129.8	133.0	133.8	132.1	12.0	3.1	-1.9	-1.7
All other goods	52.7	50.7	50.9	50.5	1.9	-2.0	10.7	-.3
Services exports	550.0	566.0	567.1	564.9	14.7	15.9	8.7	-2.2
Imports of Goods and Services	2621.5	2719.5	2752.7	2686.2	106.5	98.0	93.2	-66.5
Goods imports	2214.6	2301.0	2339.4	2262.5	99.2	86.4	89.1	-76.9
Oil	494.5	567.9	611.9	523.9	45.8	73.4	69.1	-87.9
Gold	12.6	10.2	13.5	6.9	-5.3	-2.4	4.1	-6.6
Other goods	1707.5	1722.8	1714.0	1731.6	58.7	15.3	15.9	17.6
Capital goods	469.3	463.5	468.1	458.9	14.9	-5.8	6.9	-9.2
Aircraft & parts	38.1	33.9	35.2	32.7	1.1	-4.2	-4.2	-2.4
Computers & accessories	109.4	105.4	107.3	103.5	5.1	-4.0	1.0	-3.8
Semiconductors	26.8	26.1	27.0	25.1	.6	-.8	1.3	-1.9
Other capital goods	295.0	298.1	298.7	297.6	8.2	3.1	8.7	-1.1
Automotive	249.9	237.9	245.3	230.5	-7.4	-12.0	-1.0	-14.8
Ind. supplies (ex. oil, gold)	331.0	347.3	340.1	354.6	27.4	16.3	8.5	14.4
Consumer goods	493.5	506.6	492.9	520.4	15.2	13.2	-3.1	27.5
Foods, feeds, beverages	90.1	92.0	90.5	93.4	4.7	1.9	.5	2.9
All other goods	73.7	75.4	77.0	73.8	3.8	1.7	4.1	-3.2
Services imports	406.9	418.5	413.3	423.7	7.3	11.6	4.1	10.4
Memo:								
Oil quantity (mb/d)	12.47	12.76	13.44	12.08	-1.59	.28	.91	-1.35
Oil import price (\$/bbl)	108.65	121.69	124.67	118.71	21.06	13.04	6.05	-5.96

1. Change from previous quarter or month.

e Estimate based on average of two months.

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

The value of imports of goods and services fell 2.4 percent in August, as a large decline in oil imports (both on account of lower volumes as well as a decrease in prices) more than offset increases in non-oil goods and services. The gain in non-oil goods reflected a jump in imports of consumer goods, particularly pharmaceutical products, as well as strong imports of industrial supplies. In contrast, imports of capital goods and automotive products fell. Imports of services surged on account of royalty payments associated with the 2008 Summer Olympics.

The average value of imports in July and August increased 15.8 percent at an annual rate relative to the second quarter. The increase largely reflected increased imports of oil, which stemmed from both higher prices and higher volumes. Industrial supplies, consumer goods, and services also recorded sizable gains. In contrast, imports of capital goods, particularly aircraft, and automobiles fell off sharply.

Prices of Internationally Traded Goods

Non-oil imports. In September, prices of core imports fell 0.5 percent, the largest one-month decline in over 8 years. The decline reflected falling prices for material-intensive goods, automotive products, and consumer goods. The 0.1 percent price declines for automotive products and consumer goods were the first declines recorded for these categories since early 2006. However, most of the decline in the core import price index was due to lower prices for material-intensive goods, which fell 1.5 percent in September, driven by lower prices for metals and some types of food. The only major category of core goods with higher prices was capital goods (excluding computers and semiconductors), for which prices rose 0.2 percent in September.

In the third quarter, core import prices rose $6\frac{1}{4}$ percent at an annual rate, a sharp step down from the $13\frac{1}{4}$ percent increase observed in the second quarter. After increasing $31\frac{1}{2}$ percent in the second quarter, prices for material-intensive goods rose $14\frac{1}{4}$ percent. Prices for finished goods increased $2\frac{1}{4}$ percent, less than half the pace recorded in the second quarter. Prices decelerated for both consumer goods and capital goods (excluding computers and semiconductors).

Oil. The Bureau of Labor Statistics price index of imported oil declined for the second consecutive month, falling 9 percent in September. The drop marked the largest monthly decline in two years. Similarly, the spot price of West Texas intermediate (WTI) crude oil continued to decline in September, falling 11 percent to an average of \$104 per barrel for the month as a whole. Smoothing through highly volatile price movements in recent

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

	Annual rate			Monthly rate		
	2008			2008		
	Q1	Q2	Q3	July	Aug.	Sept.
	----- BLS prices -----					
Merchandise imports	15.4	36.6	6.7	1.4	-2.6	-3.0
Oil	44.3	152.1	14.8	3.4	-8.2	-9.0
Non-oil	8.4	12.9	3.6	.7	-.5	-.9
Core goods ¹	9.6	13.3	6.3	.8	.2	-.5
Finished goods	4.2	5.3	2.3	.3	.1	-.0
Cap. goods ex. comp. & semi.	4.1	8.7	4.9	.7	.2	.2
Automotive products	3.9	2.3	.7	.1	.1	-.1
Consumer goods	4.5	4.9	1.4	.2	.1	-.1
Material-intensive goods	21.8	31.4	14.3	1.7	.3	-1.5
Foods, feeds, beverages	17.7	19.1	12.1	1.5	.6	-1.7
Industrial supplies ex. fuels	23.1	35.0	14.9	1.7	.3	-1.5
Computers	-10.6	-3.9	-9.9	-.5	-1.4	-1.1
Semiconductors	-7.3	-4.9	-8.0	-1.6	.3	-.4
Natural gas	88.2	149.9	-15.8	5.3	-18.8	-15.6
Merchandise exports	12.6	10.2	3.3	1.5	-1.7	-1.0
Core goods ²	15.8	12.5	4.7	1.9	-2.0	-1.0
Finished goods	4.3	3.2	2.5	.4	.2	.0
Cap. goods ex. comp. & semi.	5.8	4.0	3.4	.4	.3	.1
Automotive products	1.6	1.8	1.2	.3	.1	.1
Consumer goods	2.8	2.1	1.4	.4	.0	-.3
Material-intensive goods	30.1	23.2	6.9	3.5	-4.2	-2.1
Agricultural products	58.1	14.4	4.7	6.5	-9.6	-.3
Industrial supplies ex. ag.	21.9	26.8	7.9	2.6	-2.3	-2.7
Computers	-10.3	-9.1	-9.9	-.8	-.9	-1.5
Semiconductors	.6	-.8	-5.2	-2.5	-.4	.0
	----- NIPA prices -----					
Chain price index						
Imports of goods & services	12.8	28.8	n.a.	...	...	...
Non-oil merchandise	8.0	11.2	n.a.	...	...	...
Core goods ¹	8.5	10.6	n.a.	...	...	...
Exports of goods & services	9.1	10.8	n.a.	...	...	...
Total merchandise	10.0	12.3	n.a.	...	...	...
Core goods ²	12.0	13.9	n.a.	...	...	...

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.

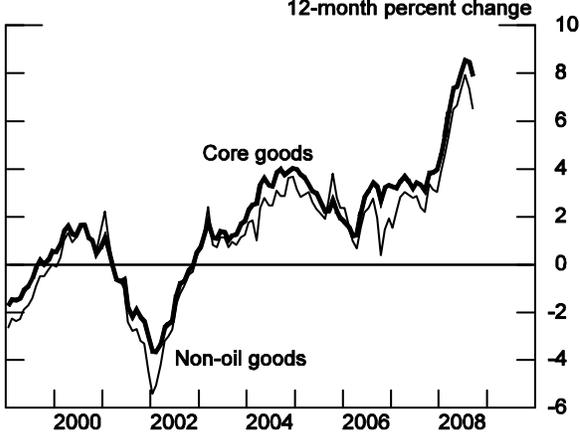
weeks, spot WTI has continued to fall through mid-October, closing most recently on October 21 at \$70.89 per barrel. The steep fall in oil prices appears to reflect the rapidly deteriorating prospects for growth in global oil demand stemming from recent macroeconomic and financial market developments. Oil prices have moved lower despite significant supply disruptions stemming from hurricane damage to oil infrastructure in the U.S. Gulf of Mexico as well as outages of a major pipeline that transports oil from Azerbaijan.

Exports. Following a 2 percent decline in August, prices of exported core goods fell 1 percent in September. Prices of agricultural goods fell only 0.3 percent in September, after a 9.6 percent decline in August. Prices of nonagricultural industrial supplies fell 2.7 percent in September, reflecting lower prices for metals and fuel oil. Overall, prices for finished goods were flat in September. A 0.3 percent decline in the prices of exported consumer goods offset small price increases for capital goods (excluding computers and semiconductors) and automotive products.

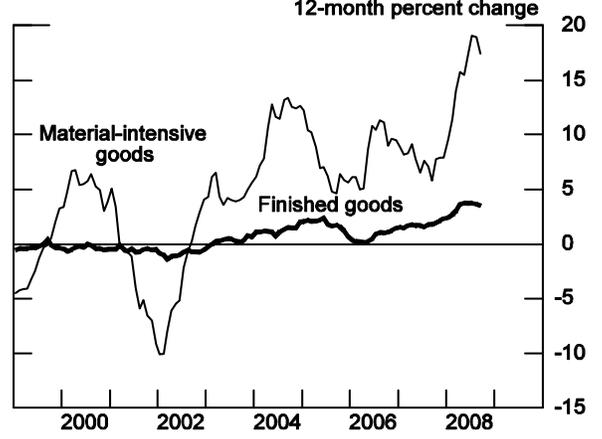
After increasing 12½ percent in the second quarter, core export prices rose 4¾ percent in the third quarter. The slowdown was concentrated within material-intensive goods, which increased only 7 percent in the third quarter, following a 23¼ percent increase in the second quarter. Prices of agricultural products and nonagricultural industrial supplies rose 4¾ and 8 percent respectively. Prices of exported finished goods were up 2½ percent.

Prices of U.S. Imports and Exports

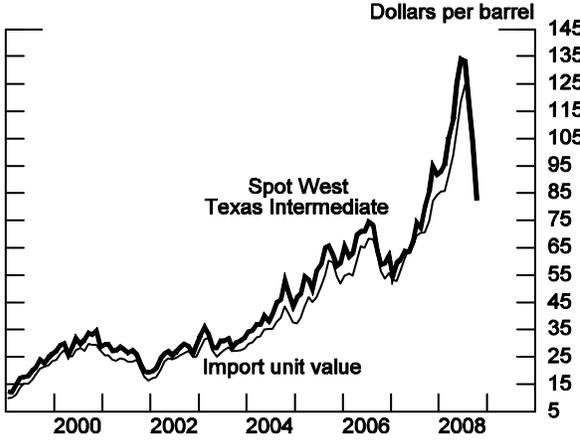
Merchandise Imports



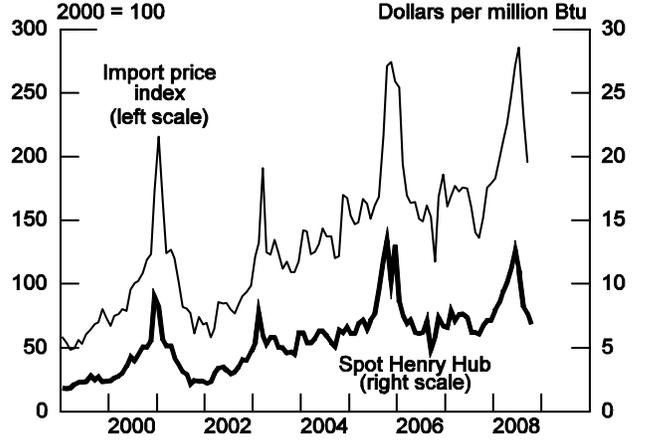
Categories of Core Imports



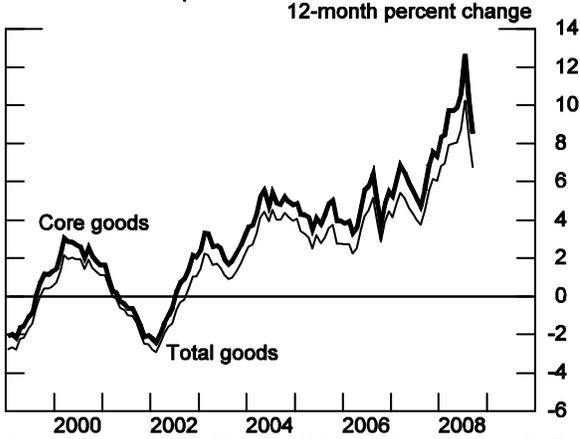
Oil



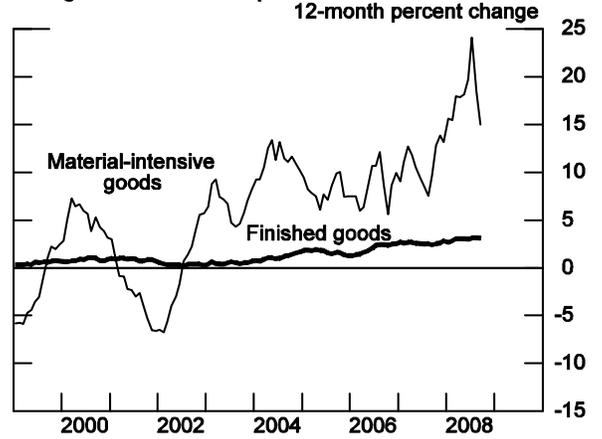
Natural Gas



Merchandise Exports



Categories of Core Exports



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

U.S. Current Account

The U.S. current account deficit was \$733 billion (annual rate) in the second quarter of 2008, \$30 billion wider than in the first quarter (revised). The widening resulted primarily from payments associated with increased earnings on foreign direct investment in the United States. In addition, increased imports of petroleum more than offset higher goods exports and widened the deficit on goods and services.

U.S. Current Account

(Billions of dollars, seasonally adjusted annual rate)

Period	Goods and services, net	Investment income, net	Other income and transfers, net	Current account balance
<i>Annual</i>				
2006	-753.3	63.8	-98.6	-788.1
2007	-700.3	88.8	-119.7	-731.2
<i>Quarterly</i>				
2007:Q3	-672.5	98.9	-118.3	-691.8
Q4	-695.1	152.6	-126.4	-669.0
2008:Q1	-708.4	140.0	-134.2	-702.6
Q2	-722.2	116.5	-126.9	-732.6
<i>Change</i>				
Q3-Q2	42.8	53.1	-11.4	84.6
Q4-Q3	-22.7	53.7	-8.2	22.8
Q1-Q4	-13.3	-12.6	-7.7	-33.6
Q2-Q1	-13.8	-23.5	7.3	-30.0

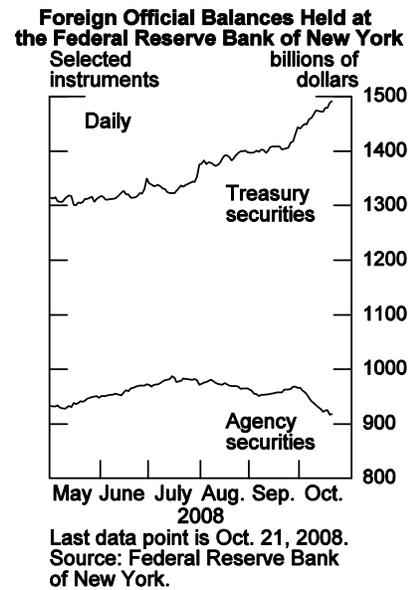
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

U.S. International Financial Transactions

Since the September Greenbook, we have received U.S. balance of payments data for the second quarter of 2008, data on U.S. international financial transactions for August, and partial and confidential data on custody accounts at the Federal Reserve Bank of New York (FRBNY) through mid-October.

Starting with the most recent data, foreign official inflows (line 1 of the Summary of U.S. International Financial Transactions table and the chart on Foreign Official Financial Flows) slowed noticeably in August, despite strong inflows from OPEC countries as oil prices surged.

Partial and confidential data on custody accounts at FRBNY indicate that official inflows moved higher in September. Over half of these inflows represented net purchases of Treasury securities; remarkably, the remaining inflows were *not* used to purchase other securities; rather, they took the form of increased deposits in the “RP Pool”—a special cash account at FRBNY. Although deposits in this account earn very little income—the yield is close to the overnight rate on general collateral repurchase agreements—this low yield is likely outweighed by a desire to maintain liquid deposits at FRBNY. Partial data for October show strong inflows into Treasury securities by foreign officials that were offset by net sales of agency securities by foreign officials (see inset chart).



In September, the reciprocal swap arrangements with the European Central Bank and Swiss National Bank were extended to other central banks, and the sizes of existing swap facilities were increased. Drawings on these facilities (included in line 2) represent an additional \$224 billion in net outflows in September and \$200 billion in early October.

Recent data on securities transactions show that foreign private investors continued to sell U.S. securities (line 4; see also the chart on Private Securities Flows) in August. Foreign private investors on net purchased Treasury securities (line 4a); however, these purchases were more than offset by net sales of agency and corporate debt (lines 4b and 4c),

resulting in an outflow. Similarly, U.S. private investors on net sold foreign securities (line 5), which resulted in an inflow.

Net banking outflows (line 3) eased a bit in August, following very large net outflows in July and the two previous quarters.

Turning to the latest balance of payments release, flows of U.S. direct investment abroad (line 6) eased a bit in the second quarter, as equity capital and intercompany debt outflows decreased. Foreign direct investment into the United States (line 7) picked up, primarily reflecting an increase in reinvested earnings. Custody data, which are only available quarterly (and included in line 10), show a sizable inflow as U.S. residents decreased their deposits in the Caribbean. This partially offset the huge outflow recorded through interbank transactions (shown in line 3). The statistical discrepancy in the second quarter swung to a sizable positive \$47 billion, indicating some combination of over reporting of the current account deficit or under reporting of net financial inflows.

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

	2006	2007	2007		2008			
			Q3	Q4	Q1	Q2	July	Aug.
Official financial flows	487.2	362.9	6.3	115.8	176.2	101.4	43.6	14.5
1. Change in foreign official assets in the U.S. (increase, +)	484.8	387.0	6.3	139.8	173.5	143.6	43.5	14.5
a. G-10 countries + ECB	26.1	36.8	3.3	11.8	-1.5	0.2	-1.8	-1.5
b. OPEC	45.2	30.9	2.8	16.3	18.1	16.7	6.7	8.6
c. All other countries	413.5	319.3	0.2	111.7	156.9	126.7	38.6	7.4
2. Change in U.S. official assets (decrease, +) ¹	2.4	-24.1	-0.1	-24.0	2.7	-42.3	0.0	0.0
Private financial flows	351.9	411.5	95.7	97.6	14.2	35.4	...	...
Banks								
3. Change in net foreign positions of banking offices in the U.S. ²	111.5	-75.8	-9.9	-53.7	-140.5	-142.1	-52.2	-18.9
Securities³								
4. Foreign net purchases (+) of U.S. securities	634.2	751.0	32.5	191.4	42.5	85.5	-35.7	-14.7
a. Treasury securities	-58.2	157.1	60.5	67.2	62.9	66.9	22.7	28.8
b. Agency bonds	25.8	19.4	-2.6	16.4	-19.6	-33.3	-44.4	-28.8
c. Corporate and municipal bonds	517.8	383.5	-7.3	49.4	-11.9	50.2	-7.3	-15.1
d. Corporate stocks ⁴	148.9	191.1	-18.1	58.4	11.1	1.6	-6.6	0.4
5. U.S. net acquisitions (-) of foreign securities	-362.4	-287.2	-99.2	-4.7	-35.2	-32.3	32.5	21.0
a. Bonds	-224.5	-168.0	-42.6	-13.6	-7.8	-10.4	16.6	19.0
b. Stock purchases	-119.1	-107.9	-52.1	11.5	-26.7	-19.9	15.8	2.0
c. Stock swaps ⁴	-18.8	-11.3	-4.5	-2.6	-0.8	-2.0	0.0	0.0
Other flows⁵								
6. U.S. direct investment (-) abroad	-241.2	-333.3	-62.0	-110.9	-89.1	-65.5	...	...
7. Foreign direct investment in the U.S.	242.0	237.5	105.9	55.7	80.4	93.8	...	...
8. Net derivatives (inflow, +)	29.7	6.5	5.9	-13.5	-8.0	-2.5	...	...
9. Foreign acquisitions of U.S. currency	2.2	-10.7	0.7	-3.5	-0.9	0.2	...	...
10. Other (inflow, +) ⁶	-64.2	123.4	121.8	36.8	165.0	98.4	...	...
U.S. current account balance⁷	-788.1	-731.2	-173.0	-167.2	-175.6	-183.1	...	...
Capital account balance⁸	-3.9	-1.8	-0.6	-0.6	-0.6	-0.7	...	...
Statistical discrepancy⁷	-47.1	-41.3	71.6	-45.6	-14.1	47.1	...	...

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.

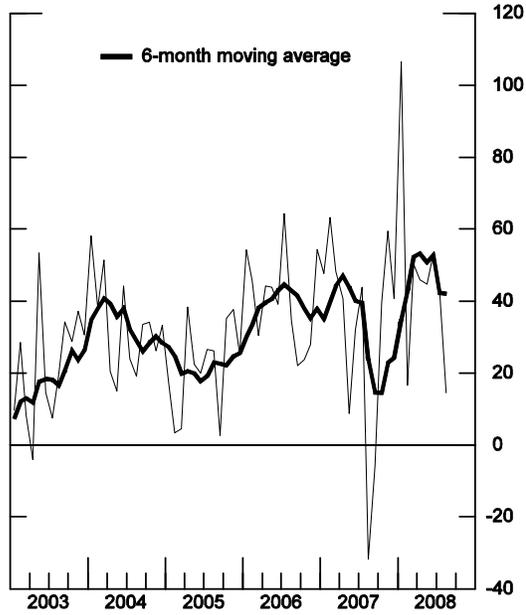
OPEC Organization of the Petroleum Exporting Countries.

... Not applicable.

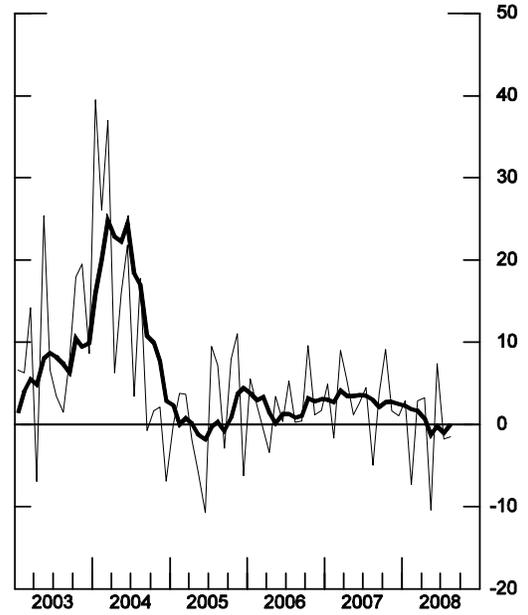
Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

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

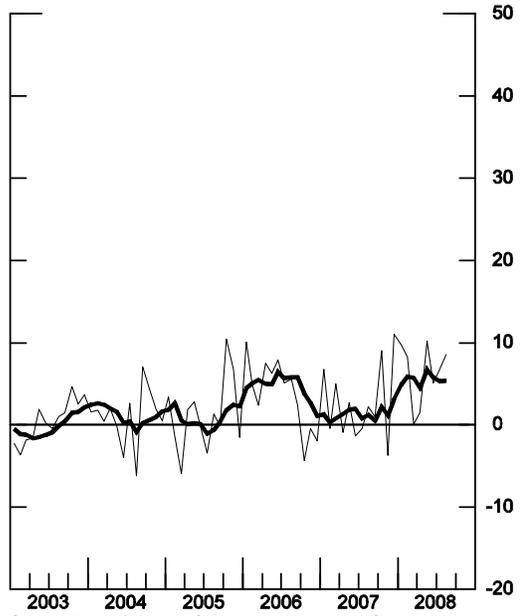
Total



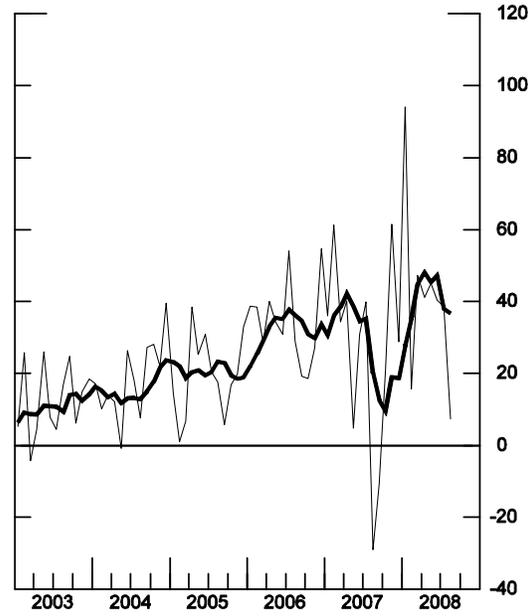
Group of Ten + European Central Bank



Organization of the Petroleum Exporting Countries



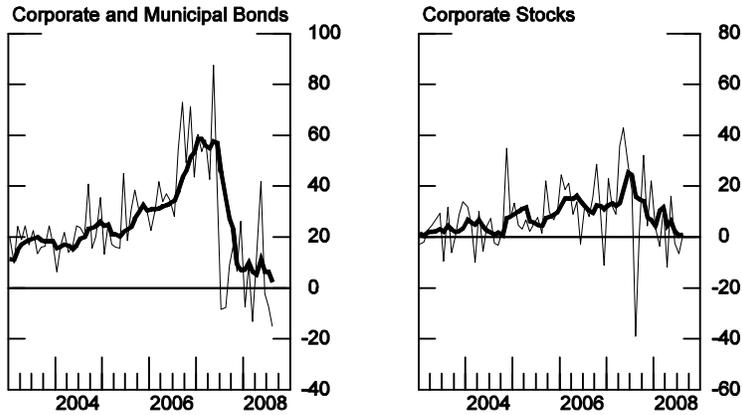
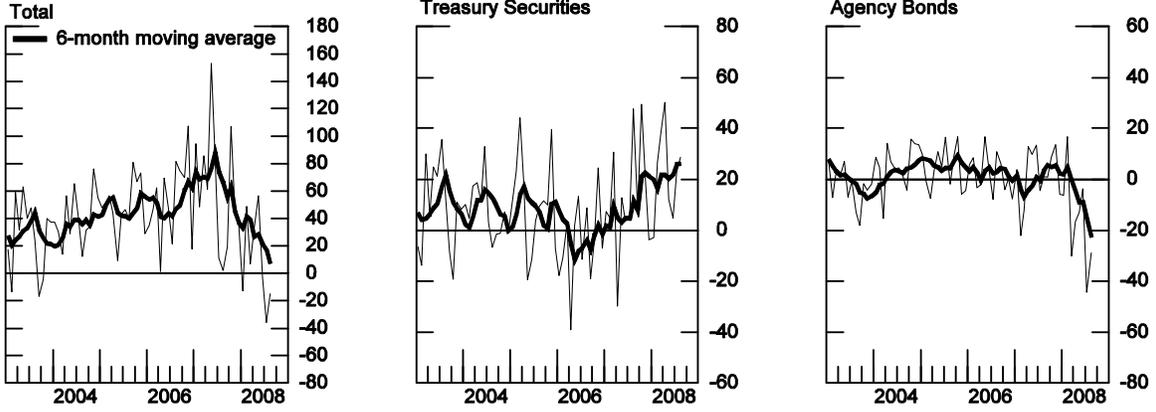
All other countries



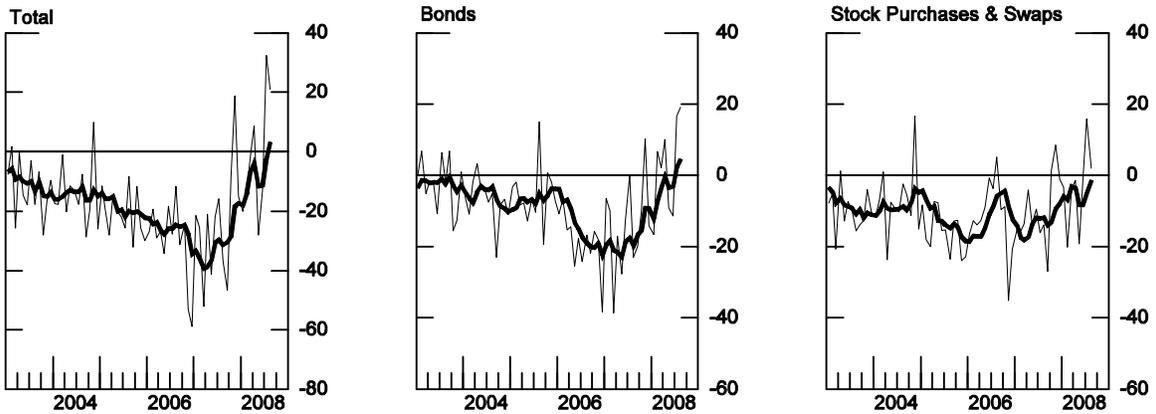
Source: For all figures, U.S. Treasury International Capital reports with staff adjustments.

Private Securities Flows through August 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

The banking and credit crisis has shaken financial markets across the globe since the time of the September Greenbook. Strains have intensified in U.S. and European markets, while markets in the emerging market economies, which until recently had not been hit as hard by the financial storm, have registered sharp downward movements in asset prices and extreme volatility.

Following the collapses of Lehman Brothers and the bailout of AIG, the spreads between term Libor and overnight index swap rates in dollar, euro, and sterling rose from their already-elevated levels, with the increase most pronounced in dollars. The further constriction in interbank lending was soon followed by several high-profile bank failures in Europe. In late September, Bradford and Bingley, Fortis, and Dexia were partially or fully nationalized, and Hypo Real Estate received a large capital injection from the German government, as their access to wholesale funding rapidly deteriorated. In early October, a widespread pullback from risk affected financial markets in virtually all advanced and emerging market economies, with rapid declines in stock prices, sharp movements in exchange rates, large increases in risk spreads, and an almost complete seizure of credit markets.

The deepening of the crisis led many government authorities to announce in the second week of October a series of measures of unprecedented scale and scope designed to support the banking system and to restore the functioning of credit markets. In the days since these announcements, conditions in credit markets have improved somewhat, as evidenced by declining Libor-OIS spreads, and equity prices have risen slightly on net in most markets. However, stock prices have remained extremely volatile amid mounting concerns about the possible impact of the financial crisis on real economic activity around the globe. On balance, since the time of the September Greenbook, equity indexes worldwide have registered very large declines, with headline indexes in Europe and Japan down 20 to 30 percent on net, about as much as in the United States. Banking sector shares fell about 30 percent in Europe, and about 20 percent in Japan.

Beginning in mid-September, to address the growing strain in the global dollar funding market, the Federal Reserve repeatedly expanded its dollar swap lines with foreign central banks. The Federal Reserve increased the size of the swap lines and the number of central bank counterparties (Australia, Canada, Denmark, Japan, Norway, Sweden, and the United Kingdom were added). Late in the period, as part of these swap arrangements, the European Central Bank (ECB), the Bank of England, the Swiss National Bank (SNB),

and the Bank of Japan began to conduct auctions of dollar liquidity with 7-day, 28-day, and 84-day maturities at pre-announced fixed interest rates. Dollar funding was made available in these auctions to fully meet the quantity demanded by borrowers in possession of eligible collateral. The SNB also used funds obtained in its swap arrangement with the Federal Reserve to purchase a large amount of dollar-denominated assets from UBS.

On October 8, in a coordinated announcement, the Federal Reserve, the ECB, the Bank of England, the Bank of Canada, the SNB, and the Riksbank cut their respective policy rates by 50 basis points. At the same time, the ECB announced that it would narrow the bands of its deposit and lending facilities to 50 basis points below and above its target. Central banks in a number of other countries, including Australia, China, Hong Kong, and India, among others, also cut policy rates over the period. As the intermeeting period ended, markets were fully pricing further policy rate cuts within the next few months by major foreign central banks. To facilitate liquidity injections, a number of central banks modified their procedures for open market operations, often accepting a wider array of collateral. The ECB said that it would change its weekly main refinancing operations to fixed-rate auctions for unlimited amounts at its target rate. The ECB also announced that it would accept foreign-currency-denominated debt instruments issued in the euro area as collateral, and that it would provide Swiss-franc-denominated funding acquired via a new swap arrangement with the SNB. The Bank of England, for its part, restructured its discount window operations and made permanent the availability of long-term repurchase agreements against an expanded range of collateral.

The major currencies index of the dollar has risen $7\frac{3}{4}$ percent on net since the time of the September Greenbook, as the dollar appeared to benefit from the global decrease in risk appetite. The dollar appreciated about 16 percent against the Canadian dollar, 9 percent versus the euro, and 7 percent against sterling, but it depreciated 8 percent versus the yen, with the yen's strength apparently tied to a rapid unwinding of carry trade positions. Confirming this view, the dollar appreciated 19 percent against the Australian dollar and 12 percent versus the New Zealand dollar, both currencies that are widely used as investment currencies for yen carry trades. Implied volatilities in most currency pairs rose to multi-year highs, making hedging currency risk far more costly.

Interest rates on sovereign bonds in industrial countries exhibited substantial volatility; nominal yield curves steepened on net, as 2-year yields declined while 10-year yields were mixed. Ten-year indexed yields rose sharply, leading to large decreases in observed

implied inflation compensation in the industrial countries. However, most analysts believed this decrease partially reflected concerns about the liquidity of indexed securities.

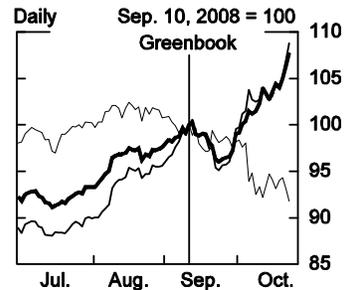
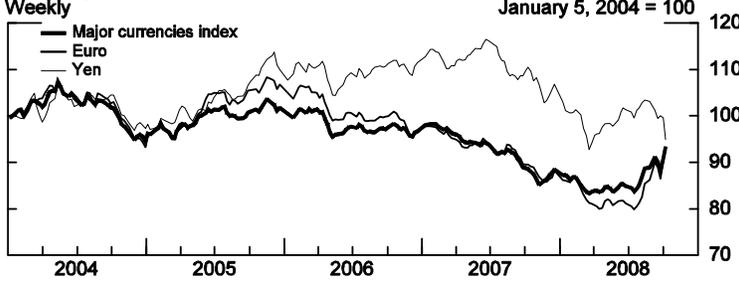
Asset prices in emerging market economies experienced an extremely high level of volatility in the second half of the period. Equity indexes have dropped about 20 percent on net in Brazil and Mexico since the September Greenbook, and almost 30 percent in Hong Kong and Thailand. Sovereign credit default swap premiums rose sharply, leading several countries to postpone scheduled sales of debt. A number of countries introduced or increased guarantees on bank deposits (Hong Kong, for instance, guaranteed all deposits through 2010), injected capital into local institutions, or, like Brazil, provided access to U.S. dollar liquidity via foreign exchange swaps. The dollar appreciated about 10 percent overall against the currencies of our other important trading partners over the period. Most notably, the dollar rose about 30 percent against the Brazilian *real*, the Mexican peso, and the Korean won, despite reports of heavy intervention sales of dollars by the monetary authorities of these countries.

Exchange Value of the Dollar and Stock Market Indexes

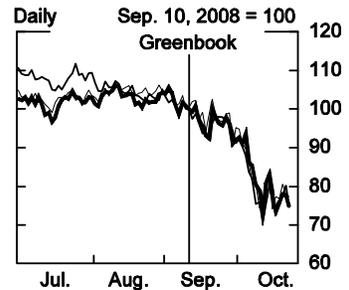
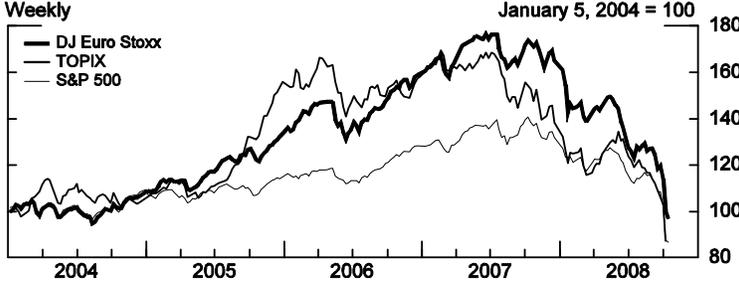
	Latest	Percent change since September Greenbook
<i>Exchange rates*</i>		
Euro (\$/euro)	1.2884	8.8
Yen (¥/\$)	99.0	-8.2
Sterling (\$/£)	1.6441	6.7
Canadian dollar (C\$/\\$)	1.2507	16.5
<i>Nominal dollar indexes*</i>		
Broad index	109.9	8.7
Major currencies index	82.8	7.7
OITP index	138.5	9.7
<i>Stock market indexes</i>		
DJ Euro Stoxx	229.3	-25.2
TOPIX	889.2	-25.4
FTSE 100	4086.8	-23.8
S&P 500	946.5	-22.7

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

Exchange Value of the Dollar



Stock Market Indexes

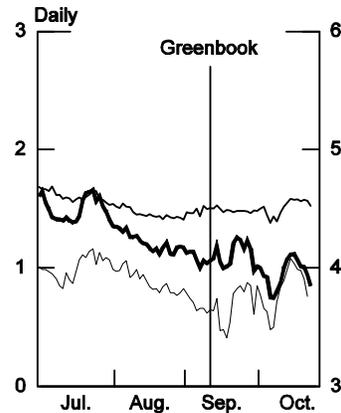
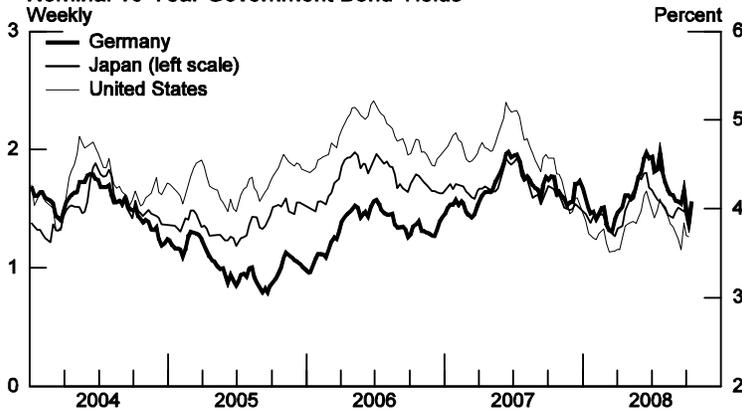


Industrial Countries: Nominal and Real Interest Rates

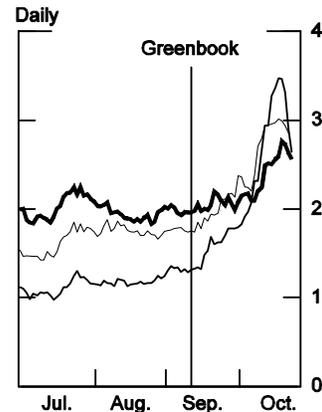
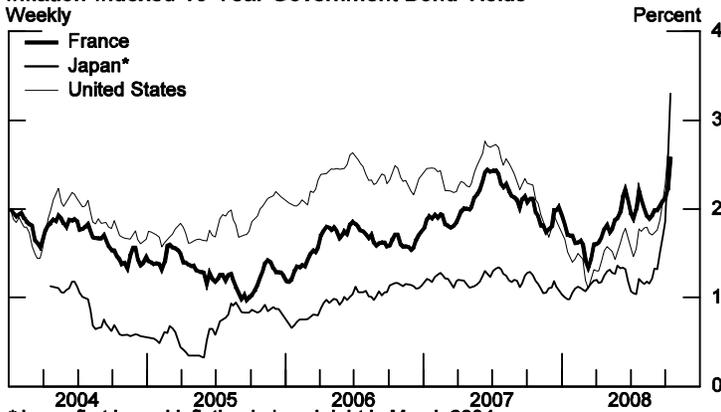
	3-month Libor		10-year nominal		10-year indexed		Percent
	Latest	Change since Sep. Greenbook	Latest	Change since Sep. Greenbook	Latest	Change since Sep. Greenbook	
Germany	4.93	-0.03	3.85	-0.21	2.48	0.54	
Japan	1.03	0.13	1.52	0.02	2.65	1.33	
United Kingdom	6.04	0.32	4.52	0.07	2.30	1.11	
Canada	3.11	-0.34	3.67	0.21	...	...
United States	3.54	0.72	3.76	0.14	2.86	1.12	

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

Nominal 10-Year Government Bond Yields
 Weekly



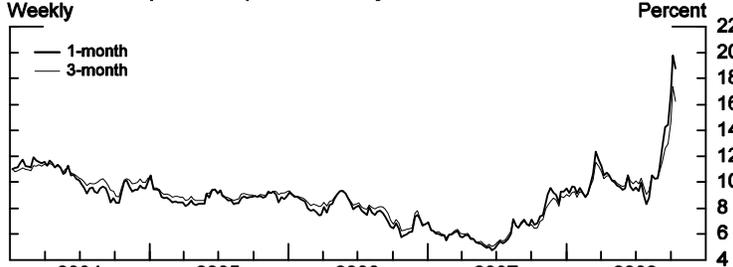
Inflation-Indexed 10-Year Government Bond Yields
 Weekly



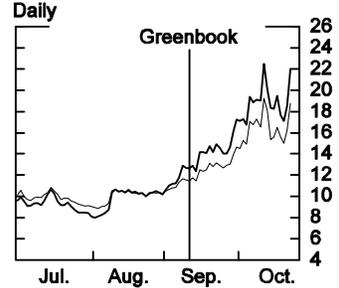
*Japan first issued inflation-indexed debt in March 2004.

Measures of Market Volatility

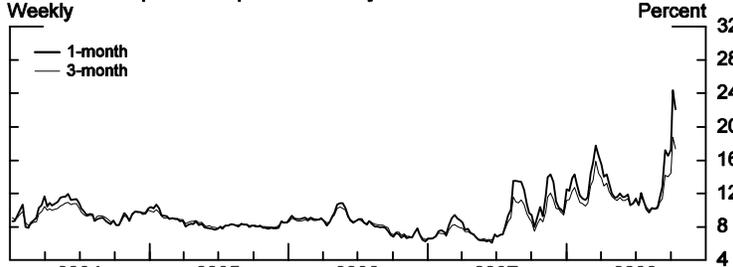
Dollar-Euro Options-Implied Volatility*



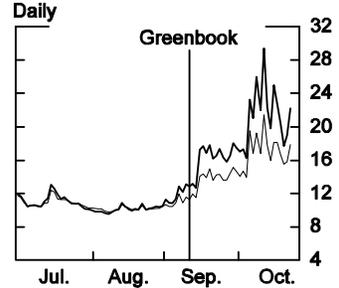
*Derived from at-the-money options.



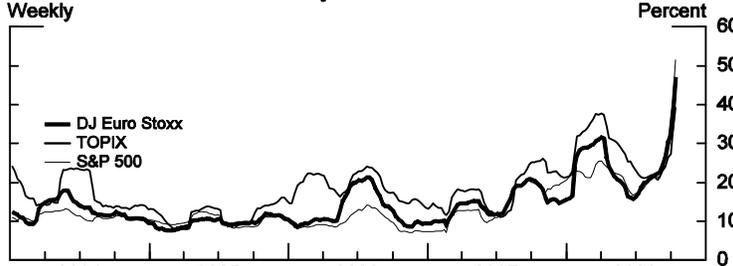
Yen-Dollar Options-Implied Volatility*



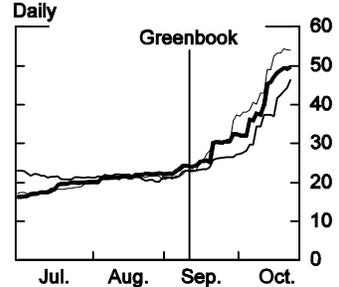
*Derived from at-the-money options.



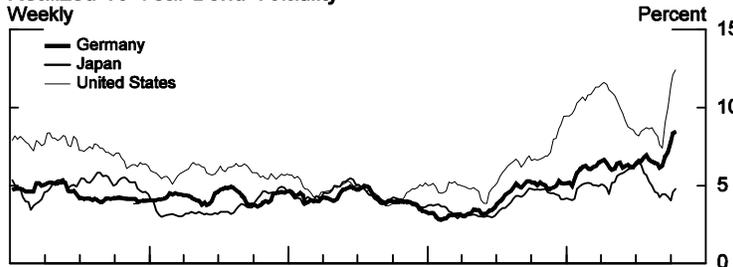
Realized Stock Market Volatility*



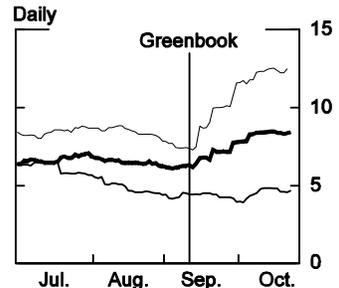
*Annualized standard deviation of 60-day window of daily returns.



Realized 10-Year Bond Volatility*



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

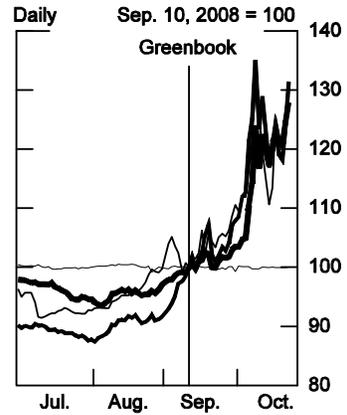
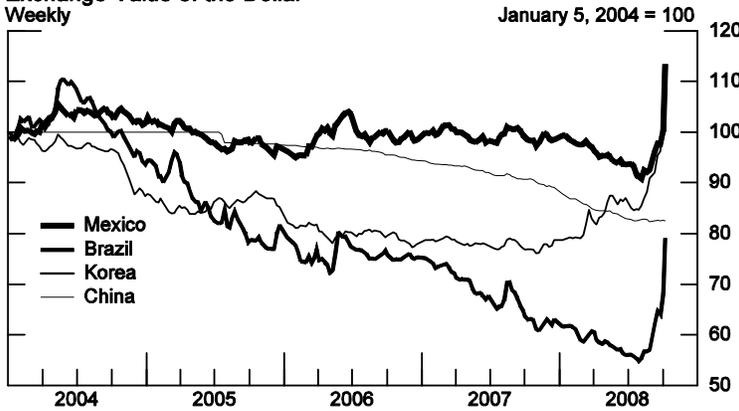


Emerging Markets: Exchange Rates and Stock Market Indexes

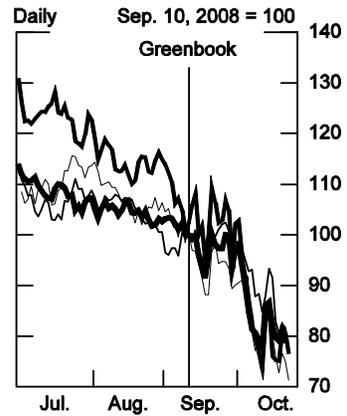
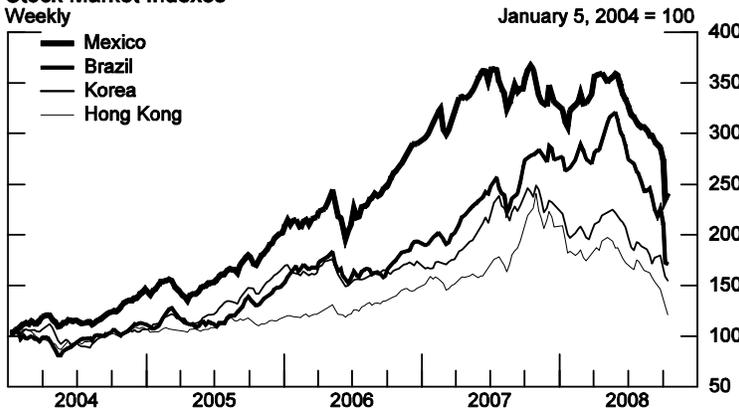
	<u>Exchange value of the dollar</u>		<u>Stock market index</u>	
	Latest	Percent change since Sep. Greenbook*	Latest	Percent change since Sep. Greenbook
Mexico	13.5435	27.7	20203	-21.2
Brazil	2.3418	31.4	37105	-23.4
Venezuela	2.14	-0.0	36152	-11.0
China	6.8345	-0.0	1896	-11.9
Hong Kong	7.7511	-0.6	14267	-28.7
Korea	1407.5	29.0	1135	-22.6
Taiwan	33.10	3.6	4960	-23.2
Thailand	34.43	-0.5	465	-29.0

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

Exchange Value of the Dollar
Weekly



Stock Market Indexes
Weekly

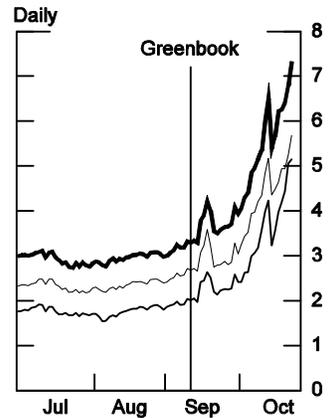
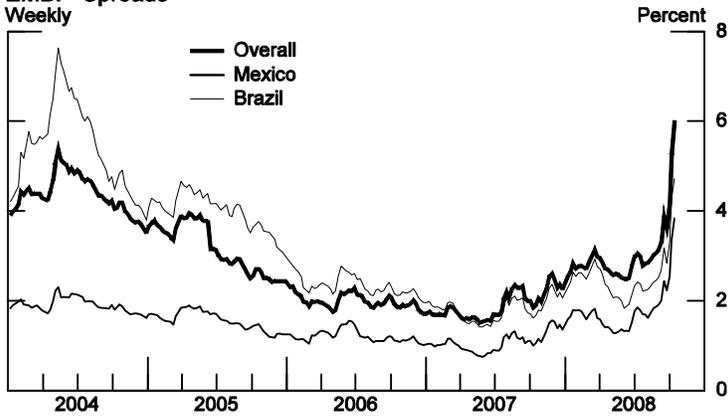


Emerging Markets: Short-Term Interest Rates and Dollar-Denominated Bond Spreads

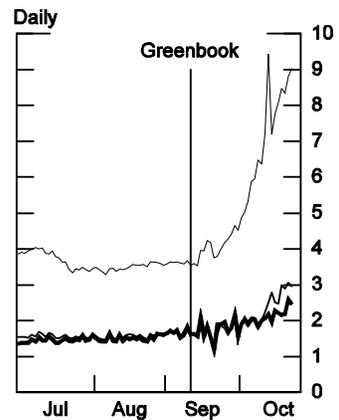
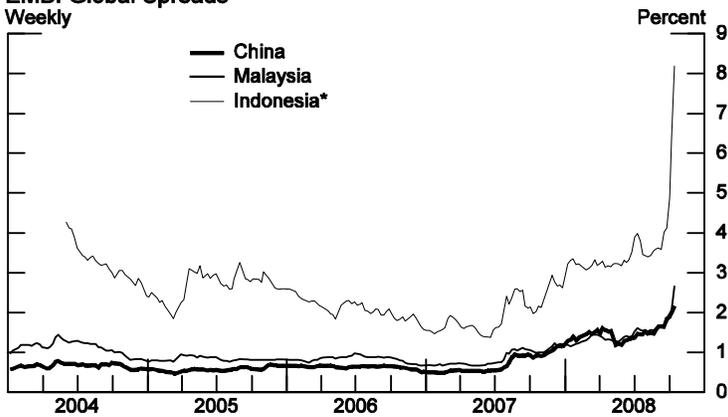
	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Sep. Greenbook	Latest	Change since Sep. Greenbook
Mexico	7.54	-0.65	5.15	3.11
Brazil	14.39	0.34	5.69	2.97
Argentina	15.69	2.69	17.19	9.64
China	...	...	2.46	0.62
Korea	5.35	0.00	...	...
Taiwan	2.43	-0.16	...	...
Singapore	1.00	0.00	...	...
Hong Kong	2.90	1.05	...	...

*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



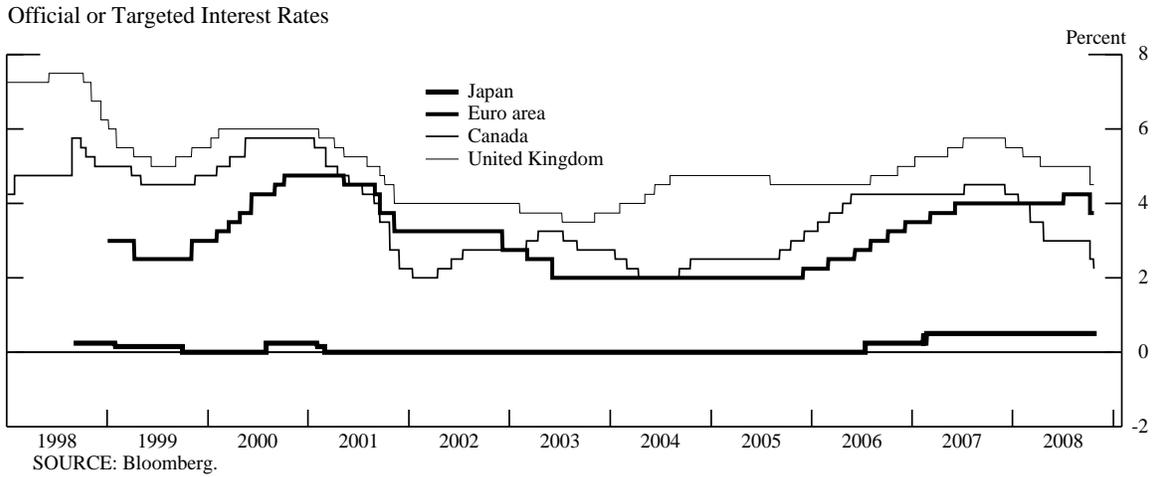
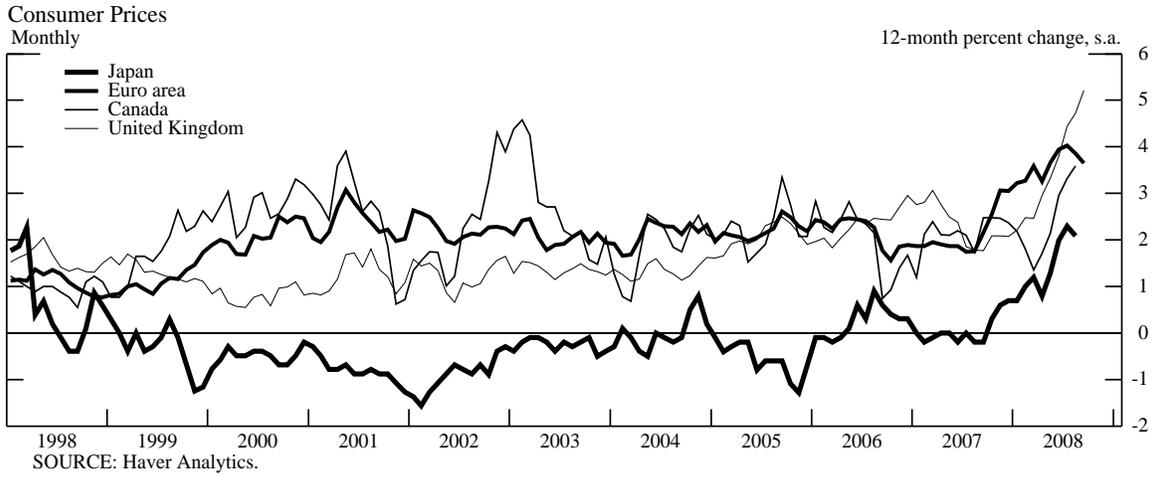
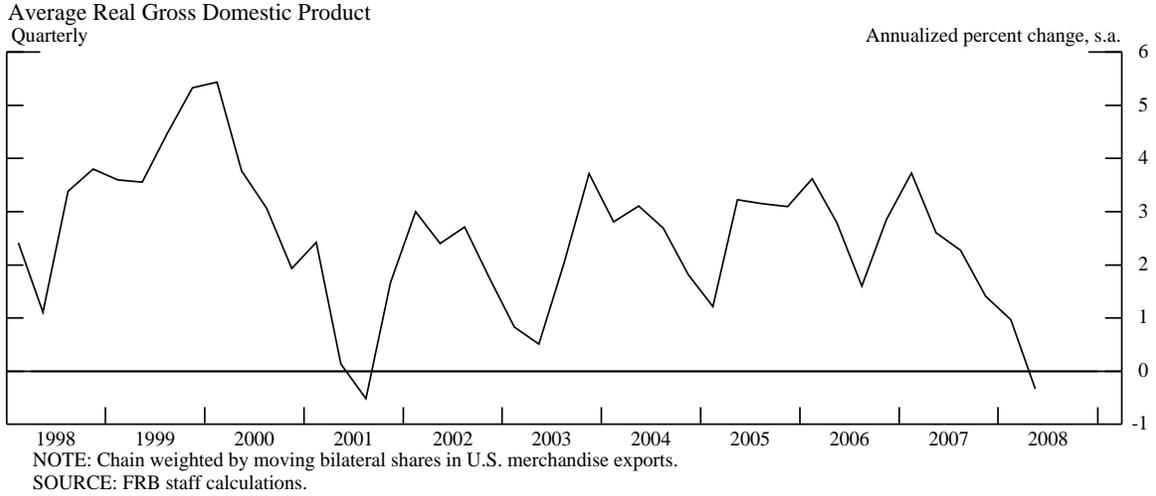
*Begins May 2004.

Developments in Advanced Foreign Economies

Since the last Greenbook, incoming data for the advanced foreign economies have generally surprised on the downside of our already weak expectations. Across the major industrial economies, confidence indicators have dropped dramatically in recent months as the financial crisis and economic prospects have worsened. Indicators of housing markets and credit availability point to further slowing, and labor market conditions, outside of Canada, have worsened. In addition, trade data suggest less support from the export sector in the third quarter for most of the major foreign industrial economies. These developments generally preceded the intensification of the global financial crisis in September, but almost certainly reflected the deterioration in credit and financial conditions ongoing in the months up until then.

Inflation continues to be elevated in the major advanced foreign economies, but the most recent CPI data for Japan and the euro area hint at a deceleration. Excluding all food and energy prices, inflation generally remains well contained, though this measure for the United Kingdom has picked up. Poor incoming economic data, combined with the recent sharp decline in commodity prices and significant worsening of global financial conditions, led to policy rate cuts in all the advanced foreign economies except Japan and to a number of extraordinary measures to support domestic banking institutions.

Advanced Foreign Economies



Since the last Greenbook, **euro area** data have shown further economic slowing. Purchasing managers' indexes fell deeper into contractionary territory in September, credit growth continued to moderate, and net exports weakened. Real retail sales for August rose 0.1 percent, but the trend remains negative. Average industrial production for July-August was 0.3 percent below that in the second quarter, despite a sizable increase in industrial production in August. The August unemployment rate moved up to 7.5 percent. After peaking at 4 percent in July, twelve-month euro-area consumer price inflation fell back further to 3.6 percent in September, as fuel and food prices moderated. Excluding energy and unprocessed food prices (the ECB's core measure), inflation was 2.5 percent. Excluding all food and fuel prices, inflation was below 2 percent.

After keeping policy rates on hold at its October 2 meeting for the third month in a row, the European Central Bank participated in the recent coordinated policy action with other central banks and reduced policy rates 50 basis points, to 3.75 percent. The central bank stated that the downside risks to growth have increased in response to the recent financial developments while the upside risk to inflation had diminished.

Several major European countries have announced measures to strengthen their banking systems. On October 7, the members of the European Union announced an increase in the guarantee on households' bank deposits from €20,000 to €50,000, with a number of countries choosing to raise the guarantee even higher. Moreover, many governments have introduced guarantees on new issuance of debt by credit institutions. Authorities have also instituted funds to provide banks with additional equity. The combined rescue packages provided by France, Germany, and Spain alone amounted to almost €1 trillion.

The smaller euro-area members also came under strain over the intermeeting period. In particular, incoming data for Austria confirmed economic weakness, and the central bank is now expecting flat GDP in the third and fourth quarters. The Austrian banking sector has been under considerable stress recently, largely due to its exposure to emerging European countries and Iceland. On October 17, a consortium of banks together with the government announced a €450 million intervention in favor of the private bank Constantia, which had reported large losses. For the Netherlands, available data indicate that the economy is faring moderately better, however, recent tensions in financial markets have significantly affected the banking sector. Between the partial nationalization of Fortis and the capital injection into ING, the Dutch government has already spent almost €27 billion, or 5 percent of the country's GDP, to support banks. The Belgian government participated with France and Luxemburg in the €6.4 billion

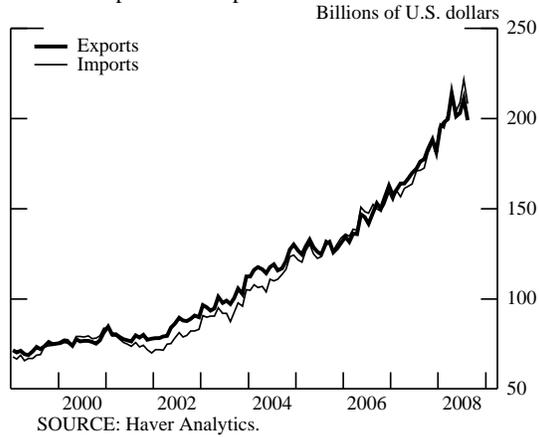
rescue of Dexia SA. Belgian authorities later injected €1.5 billion into a mutual insurance company with large exposure to Dexia SA.

Conditions worsened considerably elsewhere in Europe as well. In Switzerland, the central bank joined the coordinated action on October 8, cutting its policy rates and stating that recent indicators pointed to a more severe economic slowdown. A week later, the central bank announced a rescue plan for Credit Suisse and UBS in order to improve their capitalization. In the Nordic countries, economic growth is at a standstill and financial institutions have come under increasing pressure, in part reflecting their exposure to the Baltic countries. In response, governments have taken a number of measures to support banks, including capital injections, increasing liquidity, and raising deposit guarantees.

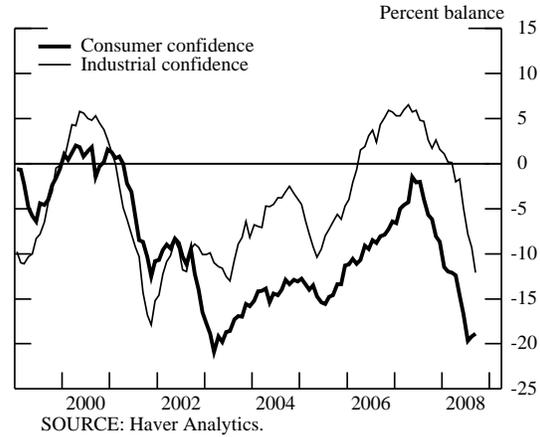
In early October, the government of Iceland was forced to take over the country's three largest banks (with total foreign currency liabilities of roughly nine times GDP). The failure of these institutions contributed to the collapse of Iceland's foreign exchange and stock markets. Iceland is in discussions with the IMF and several foreign governments regarding a rescue package. Hungary, too, came under pressure over concerns about its ability to finance its considerable foreign currency liabilities, and in the past week has negotiated a €5 billion repo facility with the European Central Bank, hiked its policy rate 3 percentage points to support the currency, and entered into discussions with the IMF. Credit default swaps have risen significantly for Romania, Bulgaria, and the Baltic countries reflecting their reliance on Western European parent bank funding and their very large external financing requirements in the face of weakening global demand and tightening credit conditions.

Euro Area

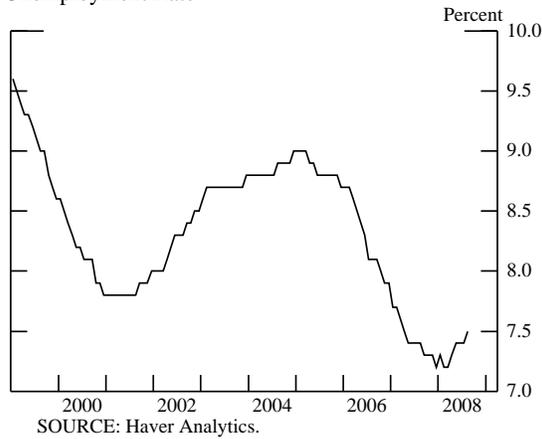
Nominal Exports and Imports



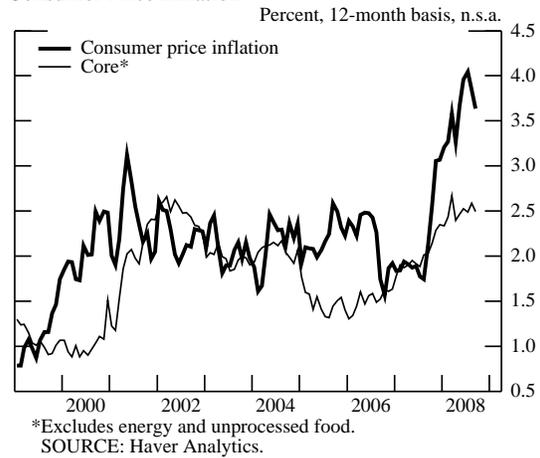
Economic Sentiment



Unemployment Rate



Consumer Price Inflation



Economic Indicators

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

Indicator	2007	2008		2008			
	Q4	Q1	Q2	May	June	July	Aug.
Industrial production ¹	-0.2	0.4	-0.5	-1.8	-0.1	-0.2	1.0
Retail sales volume ²	-0.8	-0.1	-0.8	0.6	-0.8	0.3	0.1
New car registrations	-0.2	-3.1	-1.1	-5.2	-1.6	-1.8	-0.7
Employment	0.3	0.3	0.2	...	...	...	...
Producer prices ³	4.0	5.4	7.1	7.1	8.1	9.2	8.5
M3 ³	11.5	9.9	9.5	10.0	9.5	9.3	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.

In the **United Kingdom**, real GDP growth in the second quarter was revised down to zero, and incoming data suggest a contraction of activity in the third quarter. Industrial production declined for a sixth consecutive month in August. The labor market, which had been resilient until a few months ago, is deteriorating rapidly. The number of persons employed fell 72,000 in July, a monthly drop last matched during the 1991 recession. Although the volume of retail sales grew in July and August, it remained near its second-quarter average.

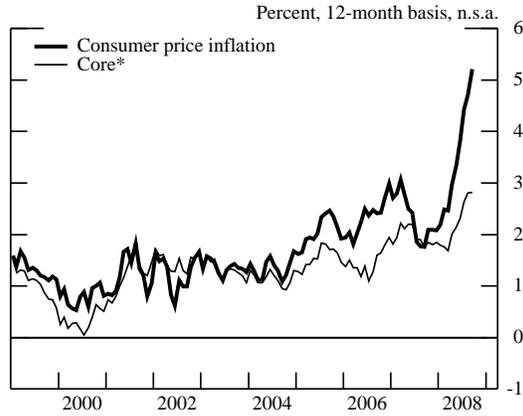
Banks and building societies have retrenched considerably from mortgage lending over the past few months. In August, the value and number of loans approved for house purchases stood at only a quarter of year-earlier levels. House prices fell over 12 percent in the 12 months ended September.

The 12-month rate of headline inflation climbed to 5.2 percent in September, pushed up by hikes in natural gas and electricity prices. Inflation excluding food and energy rose to 2.2 percent, its fastest pace since 1996. Core inflation has been pushed up by the prices of some imported goods, such as computers, clothing, and footwear. Although inflation expectations have increased noticeably, wage inflation remains subdued; the index of earnings including bonuses rose 3.2 percent in the 12 months ended August.

On October 8, along with other major central banks, the Bank of England cut the official interest rate 50 basis points to 4.5 percent. U.K. authorities have also announced a series of measures to strengthen their banking system. On October 7, deposit insurance coverage was expanded to 100 percent of the first £50,000 of claim. The next day, the government announced a program to guarantee new bank debt issued by U.K.-incorporated banks with a substantial presence in the United Kingdom as well as by building societies. The government also made available £50 billion to assist banks in increasing their Tier 1 capital through the sale of equity. On October 13, the government announced capital injections into the Royal Bank of Scotland, Lloyds TSB and HBOS totaling £37 billion.

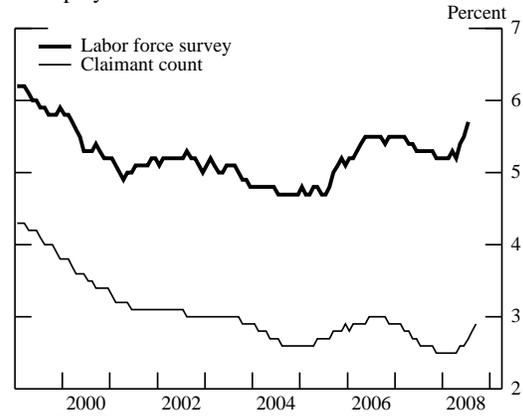
United Kingdom

Consumer Price Inflation



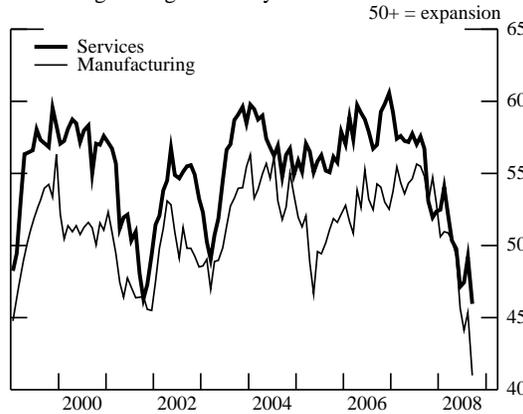
*Excludes energy and unprocessed food.
SOURCE: Haver Analytics.

Unemployment Rates



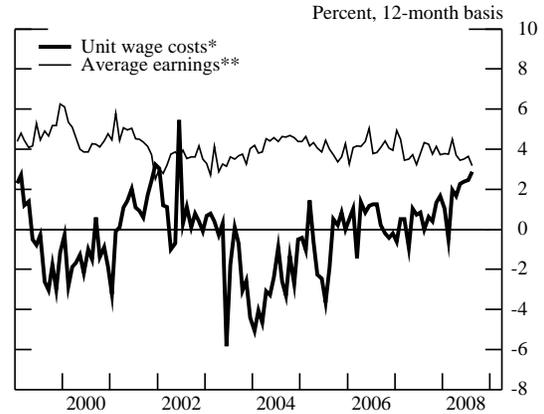
SOURCE: Haver Analytics.

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	July	Aug.	Sept.	Oct.
Real GDP	1.1	0.0	n.a.	...	...	...	...
PMI services ¹	52.9	49.1	47.5	47.4	49.2	46.0	n.a.
Industrial production	-0.4	-0.7	n.a.	-0.5	-0.5	n.a.	n.a.
Business confidence ²	12.7	0.7	-12.0	-7.0	-13.0	-16.0	-31.0
Consumer confidence ²	-8.6	-16.0	-24.2	-26.0	-23.9	-22.6	n.a.
Trade balance ³	-23.9	-23.7	n.a.	-9.5	-8.9	n.a.	n.a.

1. 50+ indicates expansion.
2. Percent balance.
3. Level in billions of U.S. dollars.
n.a. Not available. ... Not applicable.
GDP Gross Domestic Product.
PMI Purchasing Managers' Index.
SOURCE: Haver Analytics; Reuters.

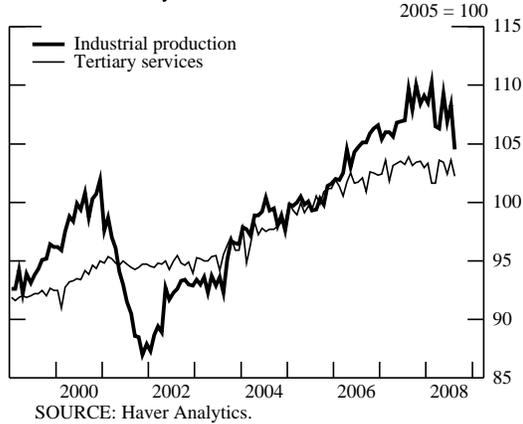
Recent **Japanese** indicators point to continued weakness in the third quarter, after a downwardly revised 3 percent (annual rate) decline in second-quarter GDP. Third-quarter survey measures suggest that household spending has generally been anemic, and consumer and business sentiment posted further sharp declines. Industrial production plummeted in August as did new manufacturing orders, and real export growth fell sharply as well. The unemployment rate rose to 4.2 percent in August, and the job openings-to-applicants ratio (the number of officially posted job openings relative to the number of officially registered job seekers) for June hit its lowest level in over three years.

Japanese consumer prices rose 2.1 percent over the 12 months ended August, a touch down from the July figure, reflecting a slight moderation in food and energy price inflation. Consumer prices, excluding food and energy prices, were unchanged from last year.

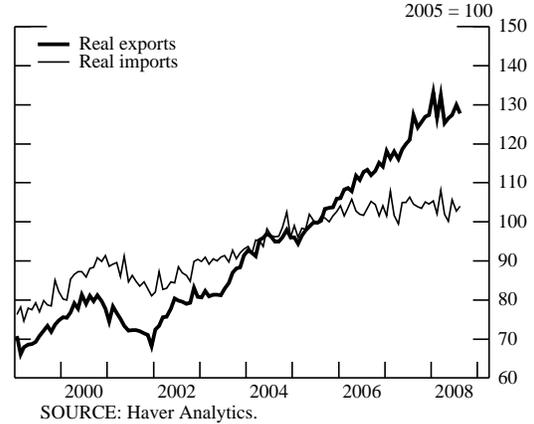
In the face of the recent financial turmoil, the Bank of Japan held its policy rate at 0.5 percent but announced a series of steps on October 14 to alleviate liquidity pressures in short-term funding markets in coordination with the finance ministry. The Bank expanded the list of Japanese government bonds it will accept as collateral in repurchase operations; the list now includes floating-rate, inflation-indexed, and 30-year government bonds. It also halved the minimum-fee rates to 0.5 percent for these operations and will also increase the frequency and size of commercial paper repo operations in an effort to facilitate corporate financing. Finally, the Bank announced it will conduct biweekly auctions of U.S. dollar funds at a fixed rate against pooled collateral through the end of 2008.

Japan

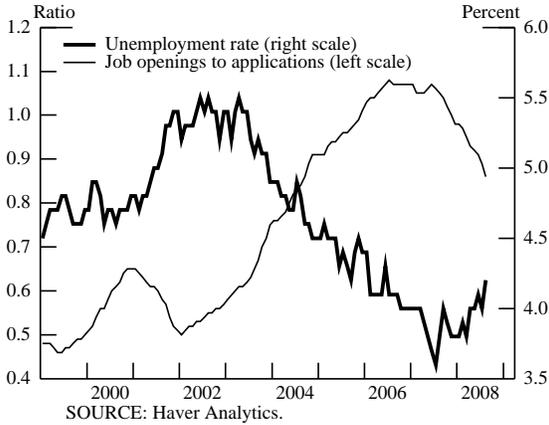
Economic Activity



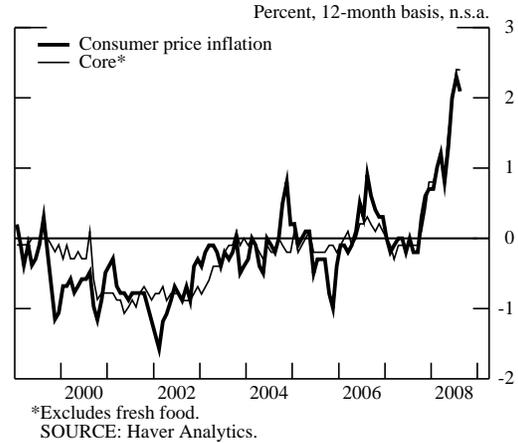
Real Trade



Labor Market



Consumer Price Inflation



Economic Indicators

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

Indicator	2008			2008			
	Q1	Q2	Q3	June	July	Aug.	Sept.
Housing starts	19.6	-2.1	n.a.	5.4	1.2	-1.2	n.a.
Machinery orders ¹	2.2	0.6	n.a.	-2.6	-3.9	-14.5	n.a.
Household expenditures	0.7	-3.3	n.a.	1.5	0.9	-3.4	n.a.
New car registrations	-1.6	-2.3	-2.9	0.4	7.9	-10.9	2.0
Business sentiment ²	-4.0	-7.0	-14.0	...	...	...	...
Wholesale prices ³	3.5	4.9	7.1	5.8	7.3	7.2	6.8

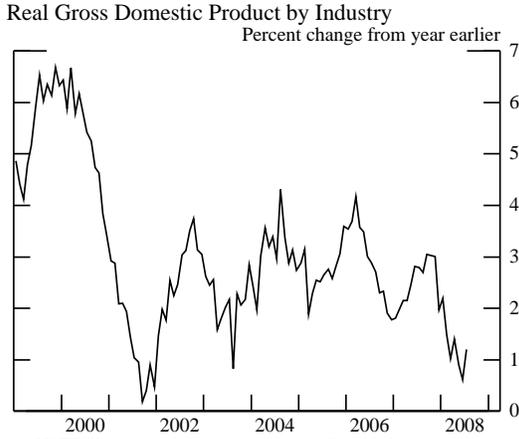
1. Private sector excluding ships and electric power.
 2. Tankan survey, diffusion index. Level.
 3. Percent change from year earlier; not seasonally adjusted.
 n.a. Not available. ... Not applicable.
 SOURCE: Haver Analytics.

In **Canada**, indicators suggest GDP might have contracted in the third quarter. Although real GDP by industry advanced a robust 0.7 percent in July, consumer spending was flat after falling in the two previous months. Manufacturing shipments collapsed in August, and retail sales fell slightly. Housing starts dropped 8 percent in September and were down 22 percent over the past year. Exports continued their trend decline in August, and imports plunged, suggesting weakening domestic demand. On the positive side, data through September indicate an ongoing broad-based expansion in Canadian employment.

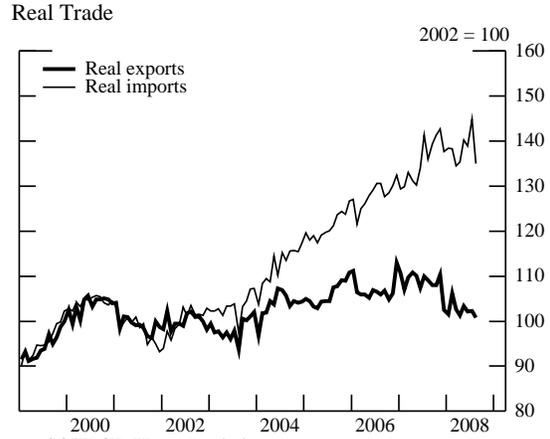
Canadian consumer price inflation edged up further to 3.6 percent over the 12 months ended August, supported by still-strong gains in food and energy prices. Inflation, excluding all food and energy, was lower at 1.1 percent.

The Bank of Canada lowered its overnight target interest rate from 3 percent to 2.5 percent on October 8 as part of the coordinated rate reduction by several advanced economies, and an additional 25 basis points at its scheduled policy meeting on October 21. Also in October, Canadian officials announced plans to purchase C\$25 billion of mortgages (insured by the government-owned Canada Mortgage and Housing Corporation) from banks for the stated purpose of maintaining available longer-term credit. The Bank of Canada also increased the size of its term lending facility from C\$8 billion to C\$20 billion and widened the range of acceptable assets for collateral.

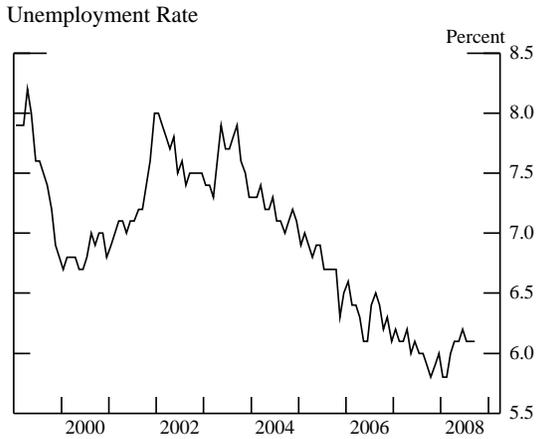
Canada



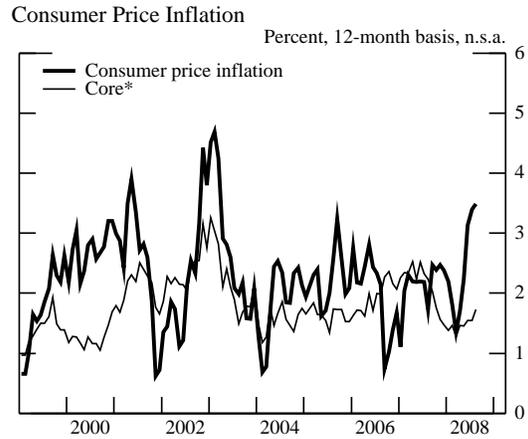
NOTE: Constructed from various Statistics Canada surveys and supplements to the quarterly income and expenditure-based estimates.
SOURCE: Haver Analytics.



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	June	July	Aug.	Sept.
Industrial production	-1.7	-0.6	n.a.	-0.2	2.2	n.a.	n.a.
New manufacturing orders	-3.2	-1.5	n.a.	-0.1	-0.3	0.2	n.a.
Retail sales	1.0	0.4	n.a.	-0.3	0.0	-0.3	n.a.
Employment	0.5	0.3	-0.1	-0.0	-0.3	0.1	0.6
Consumer attitudes ¹	92.8	79.6	n.a.	...	...	...	...
Business confidence ¹	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

Since the time of the September Greenbook, the financial market crisis has engulfed the emerging market economies, causing sharp falls in equity prices, depreciations of their currencies, and increases in credit spreads. In addition to pressures from liquidation of emerging market assets by global investors, currencies of some countries suffered from increased demand from local residents to meet their foreign currency-denominated obligations. Most central banks around the emerging market world joined efforts to ease financial strains either by loosening monetary policy or by deploying their reserves to provide funding: China, Korea, Taiwan, and Hong Kong cut interest rates; India lowered banks' reserve requirements; and Brazil, Mexico, and Russia increased dollar sales. In addition, Korea announced a bank rescue plan, and several governments increased guarantees on bank deposits.

Recent economic indicators—which predate the most recent period of intensified turmoil—show continued slowing in emerging market economies. Industrial production contracted in many economies, including Mexico, Brazil, China, and Korea in July and August. In many emerging economies, external balances have deteriorated significantly, as a result of slowdowns in exports to advanced economies. In China, however, the trade surplus has increased sharply. The latest data indicate that the headline inflation in the developing world has begun to ease, reflecting falling oil and food prices.

In **China**, economic activity slowed sharply in the third quarter. China reported that real GDP was 9 percent higher in the third quarter than a year earlier, and the staff estimates that real GDP expanded 4.3 percent (seasonally adjusted annual rate), down about 5½ percentage points from the second quarter. Industrial production contracted considerably as heavy industry around Beijing was shut down to lessen pollution during the Olympics and steel production slowed, reflecting weakness in the construction sector. The trade surplus, however, widened significantly in the third quarter as exports grew robustly and imports were roughly flat. Domestic demand continues to grow at a rapid pace, with retail sales in August up 23 percent from a year earlier. Headline inflation in China fell to 4.6 percent in September on a 12-month basis after peaking at nearly 9 percent in February. The rise and fall in headline inflation mainly reflects the pattern of food prices; nonfood price inflation has only risen to about 2 percent.

As inflation has fallen and concerns regarding the global economy have increased, China has shifted its focus from containing price pressures to encouraging growth and ensuring financial stability. Since the time of the September Greenbook, the central bank has

lowered the one-year lending rate 54 basis points, the one-year deposit rate 27 basis points, and the required reserve ratio 150 basis points for all except the largest banks. The government has also intervened to stem the fall in the stock market, which is down about 65 percent from its peak last October and is down about 12 percent since the September Greenbook. Unlike in some other countries of developing Asia, China's foreign reserves have continued to increase, reaching \$1.9 trillion in September.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	10.6	11.3	9.9	4.3	...	...	...
Industrial production	14.6	18.6	3.3	.1	-1.0	-.7	-.1
Consumer prices ²	2.8	6.5	7.8	5.3	6.3	4.9	4.6
Merch. trade balance ³	177.5	262.2	215.1	297.9	295.0	327.6	271.0

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.

Source: CEIC.

... Not applicable.

In **India** economic activity continued to slow in the third quarter. Industrial production contracted sharply in August, reflecting an unexpected slowdown in manufacturing. The current account deficit widened to an all-time high of \$43 billion in the second quarter because of a worsening trade deficit. The trade deficit widened further through August, as import growth considerably outpaced export growth. Both consumer and wholesale price inflation (WPI) increased in August, although September's wholesale prices decreased for the first time in a year, suggesting that inflation pressure is waning.

The Bombay Stock Exchange has fallen 31 percent since the September Greenbook and is down about 50 percent this year; the rupee depreciated 9 percent against the dollar since the September Greenbook. On October 10, the Reserve Bank of India decreased the reserve requirement for banks by 150 basis points, which was followed by an additional 100 basis point reduction on October 15. The central bank will also allow banks to use certificate of deposits as collateral and will hold 15-day repurchase agreement auctions. In addition, On October 17, the government took a preemptive step to increase confidence in the banking system by agreeing to provide an undefined amount

of capital to banks in order to ensure that they meet the capital adequacy ratio (CAR) of 12 percent. Currently, nearly all banks have CARs of at least 10 percent.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	9.3	8.8	5.4	n.a.	...	...	...
Industrial production	10.5	9.9	.1	n.a.	1.7	-3.5	n.a.
Consumer prices ²	6.5	5.5	7.8	n.a.	7.4	8.1	n.a.
Wholesale prices ²	5.7	3.8	9.6	12.3	12.4	12.6	12.0
Merch. trade balance ³	-51.8	-69.7	-111.5	n.a.	-135.2	-158.0	n.a.
Current account ⁴	-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.

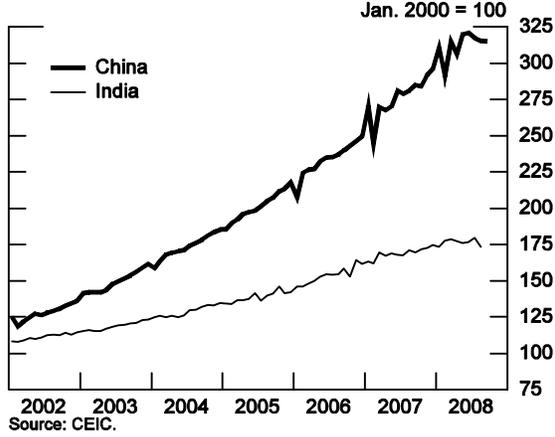
4. Billions of U.S. dollars, not seasonally adjusted, annual rate.

Source: CEIC.

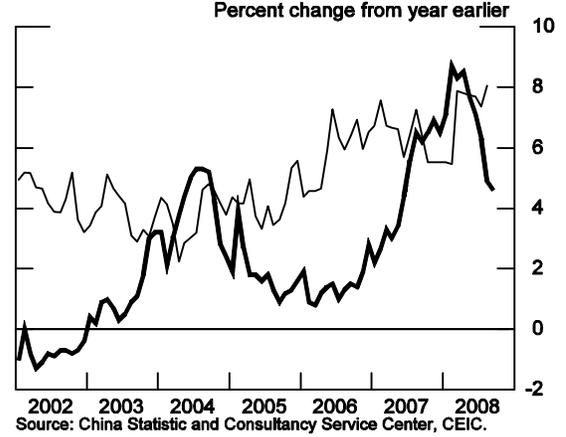
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China and India

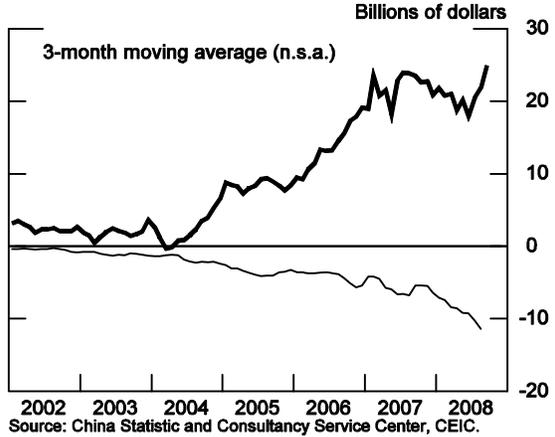
Industrial Production



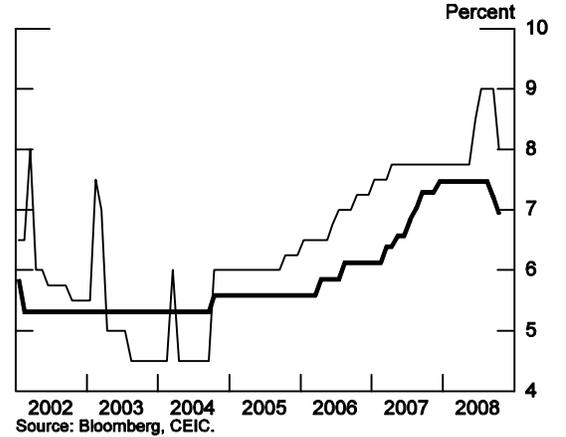
Consumer Prices



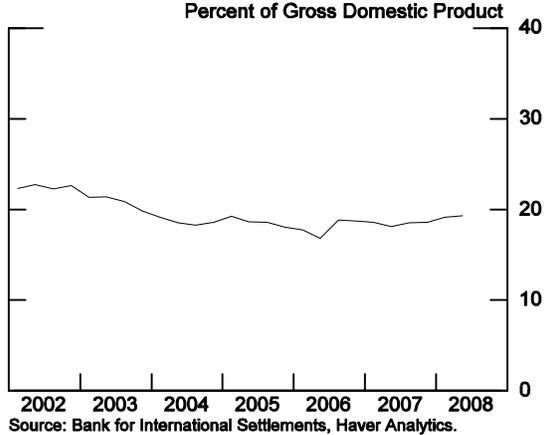
Merchandise Trade Balances



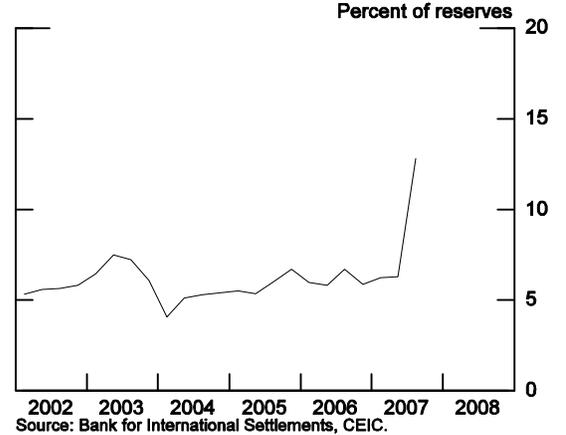
Benchmark Interest Rates



Gross External Debt



Short-Term External Debt



In the NIEs¹, economic activity appears to have slowed significantly, reflecting both weaker external demand from the advanced economies and disruptions in global financial markets. Through the first two months of the third quarter, industrial production contracted in Korea and Taiwan and was about flat in Singapore. The preliminary GDP release for Singapore indicated that the economy continued to contract in the third quarter. In Taiwan and Korea, trade balances worsened significantly, with both economies moving from sizable surpluses in the second quarter to deficits. The trade balance remained about flat in Singapore in recent months. Inflation appears to have peaked in the NIEs, with all four economies registering declines. Hong Kong's 12-month inflation fell to 4.5 percent in August, and Taiwanese inflation fell to 3.1 percent in September.

The financial market turmoil has affected stock markets in these economies considerably. Taiwan has announced several measures, including direct intervention in the market, to help support equity prices. In addition, there have been reports of tightening liquidity in the interbank lending markets. Hong Kong, following a run on the Bank of East Asia, instituted several measures designed to increase inter-bank liquidity. Also, Singapore increased guarantees on bank deposits. In response to their slowing economies and to help relieve credit pressures, the economies have loosened monetary policy. Since the previous Greenbook, Korea lowered its base rate 25 basis points, Hong Kong lowered its rate 150 basis points, and Taiwan lowered its rate 37½ basis points.

Korean markets have come under intensified pressure after Standard and Poor's announced that it may lower credit ratings for major Korean banks, reflecting the banks facing a currency funding pressures and concerns about asset quality. Since September Greenbook, the won has depreciated about 29 percent against the dollar, despite reports of heavy foreign exchange intervention, and the stock market has fallen 23 percent. Officials in Korea announced on October 18 that the government will guarantee \$100 billion of foreign currency debt and that it will inject \$30 billion into banks by drawing on its \$240 billion of foreign exchange reserves. This rescue package, which is the largest announced so far in Asia, amounts to 14 percent of Korea's GDP. According to the official announcement, all new external debt issued by Korean banks through June 30, 2009 will be guaranteed for 3 years by the government. The plan also called for the investment of a trillion won (about \$758 million) into the Industrial Bank of Korea, which aims to make approximately 12 trillion won (about \$9 billion) in loans to small-

¹ Newly-industrialized economies: Hong Kong, South Korea, Singapore, and Taiwan

and mid-sized businesses. Additionally, the government will provide about \$4 billion in aid to the country's troubled real estate sector.

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

Indicator	2006	2007	2008				
			Q1	Q2	June	July	Aug.
<i>Real GDP¹</i>							
Hong Kong	6.5	7.0	8.2	-5.5	...	...	...
Korea	4.2	5.9	3.3	3.4	...	...	...
Singapore	7.0	5.5	15.7	-6.0	...	...	...
Taiwan	4.0	6.5	2.4	1.0	...	...	...
<i>Industrial production</i>							
Hong Kong	2.4	-1.6	-3.6	-1.1	...	...	...
Korea	8.9	6.9	2.1	1.3	.1	-4	-2.2
Singapore	11.9	5.9	11.7	-14.8	1.3	4.0	-3.9
Taiwan	4.7	7.8	.9	.1	.7	-1.5	.3

1. Gross Domestic Product. Annual rate. Annual data are Q4/Q4.

Sources: CEIC; Reuters.

... Not applicable.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Hong Kong	-17.9	-23.5	-31.4	n.a.	-42.5	-4.2	n.a.
Korea	27.9	29.4	24.6	n.a.	-2.9	-21.0	n.a.
Singapore	33.1	36.2	24.9	19.5	25.0	29.5	3.8
Taiwan	11.6	16.8	14.5	-6.6	-2.3	-16.5	-1.0

Source: CEIC.

n.a. Not available.

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

Indicator	2006 ¹	2007 ¹	2008				
			Q2	Q3	July	Aug.	Sept.
Hong Kong	2.3	3.8	5.7	n.a.	6.3	4.5	n.a.
Korea	2.1	3.6	4.8	5.5	5.9	5.6	5.1
Singapore	.8	4.4	7.5	n.a.	6.5	6.4	n.a.
Taiwan	.7	3.3	4.2	4.5	5.8	4.7	3.1

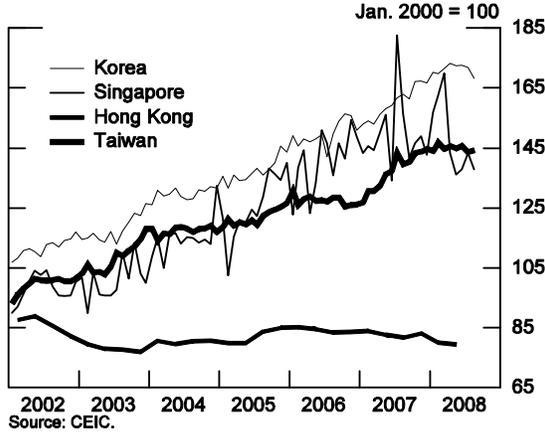
1. Percent change from year-earlier period, except annual data, which are Dec./Dec.

Source: CEIC.

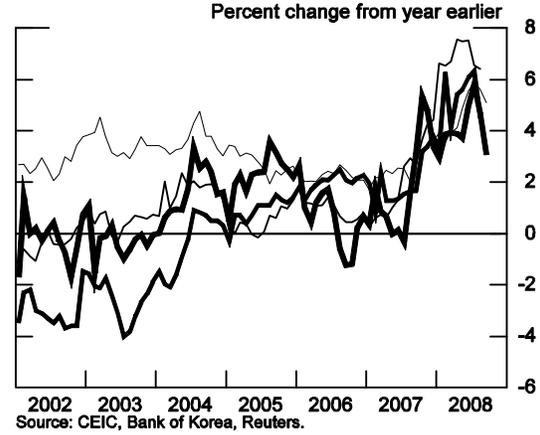
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Newly Industrialized Economies

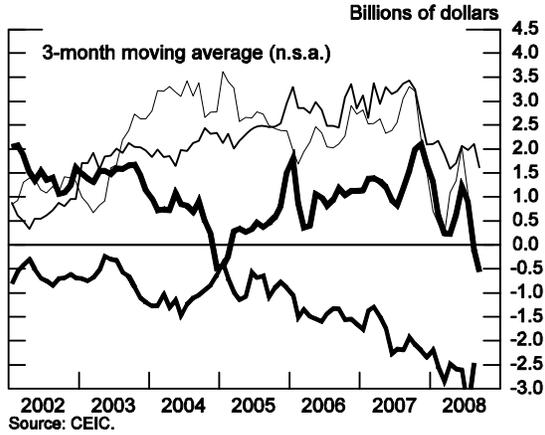
Industrial Production



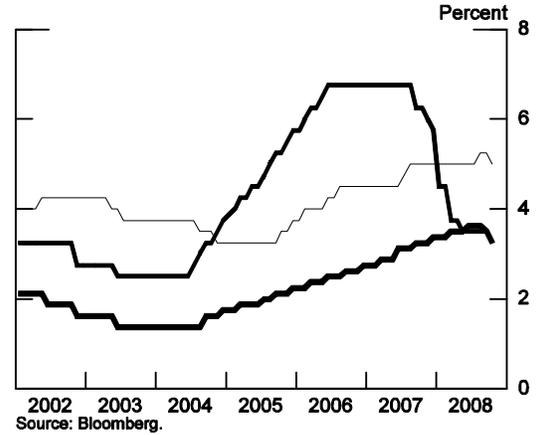
Consumer Prices



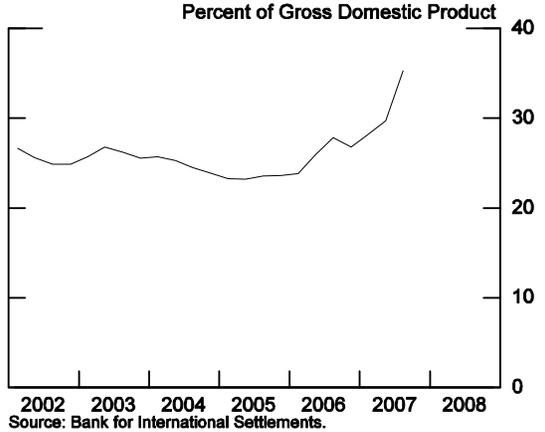
Merchandise Trade Balances



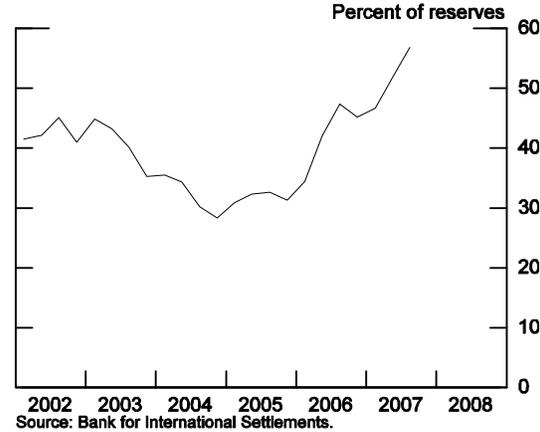
Benchmark Interest Rates



Gross External Debt



Short-Term External Debt



Data from the **ASEAN-4** region indicate that economic growth softened in the third quarter. Industrial production fell in Indonesia and Malaysia but remained relatively robust for the Philippines and Thailand. Exports have declined in the region, accompanied by a buildup of inventories. Twelve-month inflation decreased significantly in the Philippines and Thailand but rose in Indonesia and Malaysia. In response, Bank Indonesia raised policy rates 25 basis points to 9.5 percent on October 6 despite the ongoing financial turmoil.

To alleviate liquidity constraints on banks stemming from the financial turmoil, Bank Indonesia doubled the amount of deposits guaranteed by the government and began allowing commercial banks to use performing loans as collateral for loans from the central bank. Both the Philippines and Malaysia have indicated that their banks do not have insolvency problems. EMBI spreads have increased markedly in both Indonesia and the Philippines since the September Greenbook. Equity prices fell sharply in all countries. Indonesia halted share trading on Wednesday, October 8, and did not reopen trading until the following Monday.

ASEAN-4¹ Economic Indicators: Growth
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2006	2007	2008					
			Q1	Q2	June	July	Aug.	
<i>Real GDP</i> ²								
Indonesia	5.8	6.1	3.2	11.1	...	...	...
Malaysia	5.4	7.4	6.0	3.7	...	...	...
Philippines	5.6	6.5	1.3	8.4	...	...	...
Thailand	4.3	5.8	5.5	2.9	...	...	...
<i>Industrial production</i> ³								
Indonesia ⁴	-1.6	5.6	2.0	-7	.5	-2.0	n.a.	
Malaysia	4.5	2.0	1.6	-9	-1.7	1.0	-2.3	
Philippines	-8.5	-2.7	-1.5	2.6	.1	4.2	n.a.	
Thailand	7.3	8.2	1.7	.0	1.1	2.1	.0	

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.

Source: CEIC.

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

ASEAN-4¹ Economic Indicators: Merchandise Trade Balance
(Billions of U.S. dollars; seasonally adjusted annualized rate)

Indicator	2006	2007	2008				
			Q1	Q2	June	July	Aug.
Indonesia	39.7	39.6	44.9	31.9	34.5	21.3	36.1
Malaysia	29.5	29.2	33.9	56.0	50.9	57.6	42.2
Philippines	-4.4	-5.0	-10.6	-5.0	-5.9	-17.9	n.a.
Thailand	1.0	11.6	.3	12.7	18.5	-8.9	-7.6

1. Association of Southeast Asian Nations.

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

n.a. Not available.

ASEAN-4¹ Economic Indicators: Consumer Price Inflation
(Percent change from year earlier except as noted)

Indicator	2006 ²	2007 ²	2008				
			Q2	Q3	July	Aug.	Sept.
Indonesia	6.6	5.8	10.1	12.0	11.9	11.8	12.2
Malaysia	3.1	2.4	4.9	n.a.	8.5	8.5	n.a.
Philippines	4.3	3.9	9.7	12.2	12.3	12.5	11.9
Thailand	3.5	3.2	7.5	7.2	9.2	6.4	6.0

1. Association of Southeast Asian Nations.

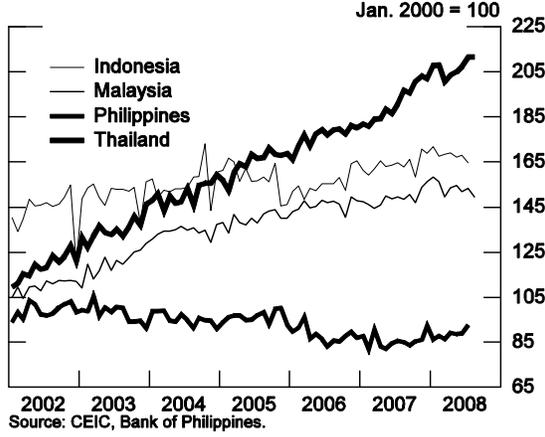
2. Dec./Dec.

Sources: CEIC; IMF International Financial Statistics database.

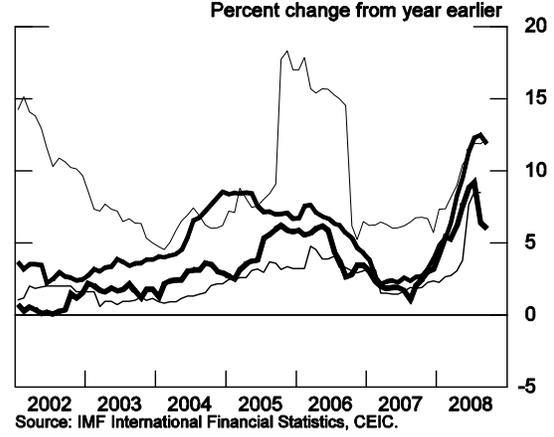
n.a. Not available.

ASEAN-4

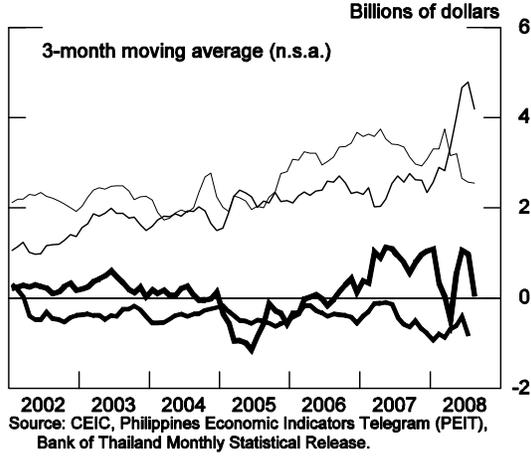
Industrial Production



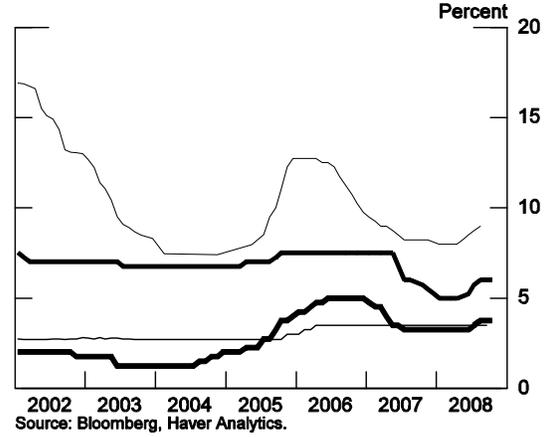
Consumer Prices



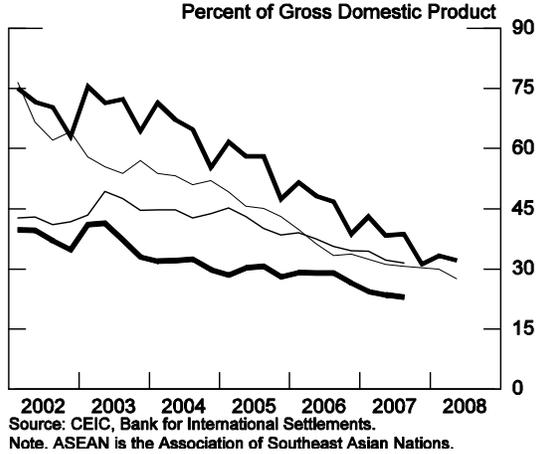
Merchandise Trade Balances



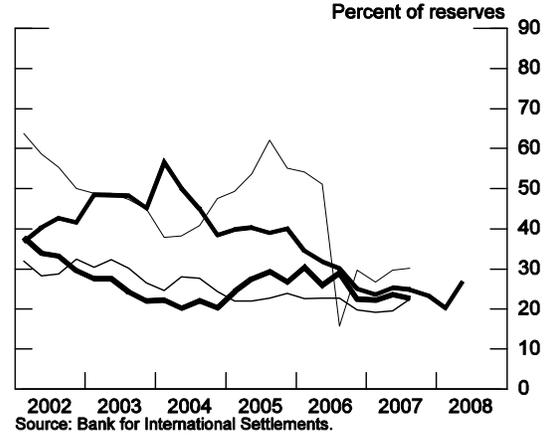
Benchmark Interest Rates



Gross External Debt



Short-Term External Debt



In **Mexico**, data point to a continued slowing of real activity. Industrial production fell in July, and auto production declined 4.7 percent in August. Automobile exports fell 14.7 percent in August as demand weakened in the United States. Retail sales have slowed considerably in the first two months of the third quarter. Headline and core inflation had remained elevated, reflecting high food and energy price inflation. However, recent declines in commodity prices, rising unemployment, and weakening domestic demand began to lessen inflationary pressures in September.

The Mexican peso and the stock market have lost significant value since the September Greenbook. Reports suggest that in addition to global investors' broader-based liquidation of emerging market assets, Mexico's currency came under strong pressure by increasing demand from local investors and companies in need of dollars to meet dollar-denominated payments. Some companies had large losses on foreign exchange derivatives. On October 8, the Bank of Mexico (BOM) auctioned \$2.5 billion to stabilize the peso after it fell nearly 14 percent, the biggest intraday drop since the 1994 devaluation. With BOM's aggressive attempt to shore up the peso, Mexico's foreign exchange reserves have fallen 13.3 percent to \$73 billion since the September Greenbook.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	3.7	4.2	.6	n.a.	...	...	...
Overall economic activity	5.1	3.1	.5	n.a.	1.1	n.a.	n.a.
Industrial production	5.4	1.8	-.9	n.a.	-.4	1.0	n.a.
Unemployment rate ²	3.6	3.7	3.8	3.9	3.8	3.9	4.0
Consumer prices ³	4.1	3.8	4.9	5.5	5.4	5.6	5.5
Merch. trade balance ⁴	-6.1	-10.1	-7.6	n.a.	-10.9	-27.9	n.a.
Merchandise imports ⁴	256.1	281.9	315.1	n.a.	343.0	333.3	n.a.
Merchandise exports ⁴	249.9	271.9	307.5	n.a.	332.1	305.5	n.a.
Current account ⁵	-2.1	-5.7	-8.1	n.a.	...	...	...

1. Gross Domestic Product. Annual rate. Annual data are Q4/Q4.

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

3. 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.

Source: Haver Analytics; Bank of Mexico.

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

In **Brazil**, incoming data have been mixed, but anecdotal evidence points to a sharp deterioration in economic conditions in recent weeks. In August, formal unemployment declined and capacity utilization rates remained high. However, August industrial production declined, reversing the rise in July. August retail sales were 10 percent above their year-earlier level, but auto sales declined in the third quarter after two quarters of rapid growth. Monthly consumer price inflation continued to decline, reflecting the waning of food price pressures.

Brazil has been hit especially hard by the recent deterioration in financial conditions. The Bovespa equity index, which has been very volatile, has declined sharply. Reports suggest that access to dollar interbank funding by Brazilian banks has been severely curtailed, and considerable net capital outflows have occurred through mid-October. Following the sizable depreciation of the *real* in late September, two large companies announced large losses on foreign exchange derivatives, and it is rumored that many firms could be confronting major losses. Small- and medium-size banks have also been facing funding pressures in the local currency interbank market. There have been some signs that the financial pressures have resulted in sharp curtailment of personal and corporate credit, and there have been reports that investment plans have been scaled back considerably.

The Brazilian government and central bank have taken several steps to alleviate dollar and *real* funding pressures. Measures to increase dollar liquidity have included one-month repurchase agreement, dollar swaps, and some intervention sales of foreign exchange. The central bank relaxed reserve requirements several times with the aim of alleviating funding pressures for smaller banks. The central bank has indicated its willingness to acquire credit portfolios of smaller banks, and large banks are reported to have acquired some credit portfolios. Early this morning, (October 22), the Brazilian government granted the central bank the authority to enter into swap agreements with other central banks. The government also approved a number of measures that enable government banks to acquire problem banks and non-bank financial institutions. Despite the financial turmoil, Central Bank President Meirelles indicated that the central bank may continue to raise its policy rate at the next meeting on October 29 to curb inflationary pressures.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	5.0	6.1	6.5	n.a.	...	...	...
Industrial production	2.8	6.0	.8	n.a.	1.4	-1.3	n.a.
Unemployment rate ²	10.0	9.3	7.8	n.a.	8.0	7.4	n.a.
Consumer prices ³	3.1	4.5	5.6	6.3	6.4	6.2	6.3
Merch. trade balance ⁴	46.5	40.0	33.4	23.0	21.3	21.5	26.3
Current account ⁵	13.6	1.7	-26.6	n.a.	-25.3	-13.1	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.

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

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

In **Argentina**, economic activity strengthened in the third quarter following a resolution to the conflict between farmers and the government over a proposal to tax exports. The trade surplus surged owing to a sharp increase in commodity exports. Headline consumer price inflation remained around 9 percent in the third quarter, but the reliability of the official inflation data remains questionable. The Argentinean stock market fell 26 percent since the September Greenbook with an especially large drop occurring on news that government may try to nationalize the nation's private pension assets in an effort to avoid defaulting on external obligations, pending congressional approval. However, the exchange rate was affected only moderately; following increased intervention by the Central Bank of Argentina, the peso depreciated only 5 percent on net against the dollar over the intermeeting period.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	8.5	9.2	8.7	n.a.	...	...	...
Industrial production	8.4	7.5	1.4	n.a.	4.5	1.1	n.a.
Unemployment rate ²	10.2	8.5	8.0	n.a.	...	...	...
Consumer prices ³	9.8	8.5	9.1	8.9	9.1	9.0	8.7
Merch. trade balance ⁴	12.3	11.1	8.8	n.a.	12.4	28.6	n.a.
Current account ⁵	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.

Source: Haver Analytics, IMF International Financial Statistics database;

Ministerio de economía; U.S. State Department.

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

In **Venezuela**, the sharp decline in the price of oil, if it persists, is expected to put considerable stress on public finances and the economy. (Oil accounts for over 90 percent of exports, about 20 percent of GDP, and roughly 50 percent of fiscal revenue.) Inflation remains out of control, with the headline index 34 percent higher than a year earlier. Venezuelan five-year credit default swap spreads have soared over the past month and stand now at over 1,800 bp. The bolivar is pegged to the dollar and is supported by capital controls. The parallel market exchange rate stands at 5,400/dollar versus the official exchange rate of 2,144/dollar.

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

Indicator	2006	2007	2008				
			Q2	Q3	July	Aug.	Sept.
Real GDP ¹	11.4	8.5	14.1	n.a.	...	...	...
Consumer prices ²	17.0	22.5	29.7	33.6	32.6	33.6	34.5
Non-oil trade balance ³	-23.0	-34.6	-34.5	n.a.	...	...	...
Merch. trade balance ³	32.7	23.7	68.2	n.a.	...	...	...
Current account ⁴	27.1	20.0	67.3	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.

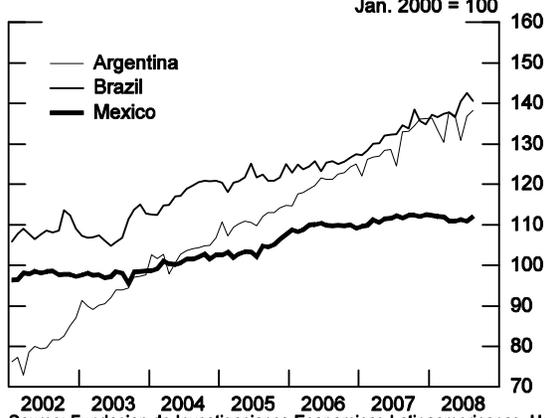
Reuters and Embassy cables.

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

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

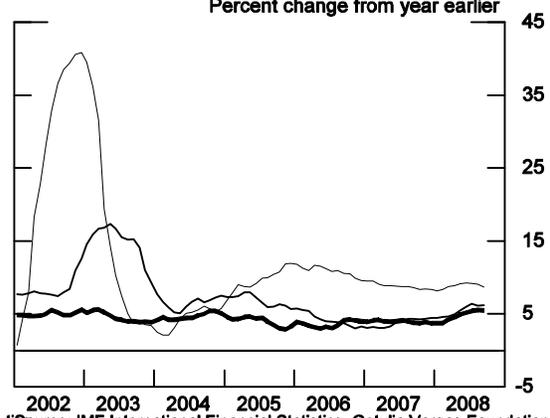
Latin America

Industrial Production



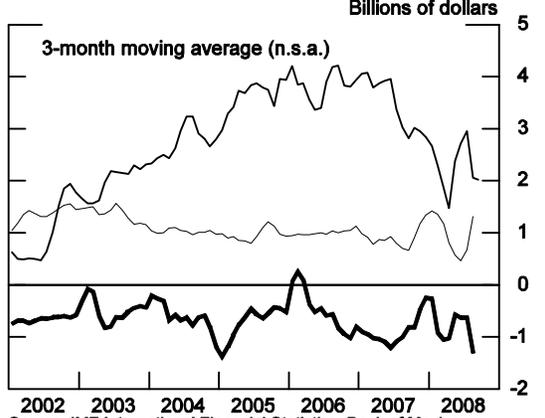
Source: Fundacion de Investigaciones Economicas Latinoamericanas, Haver Analytics

Consumer Prices



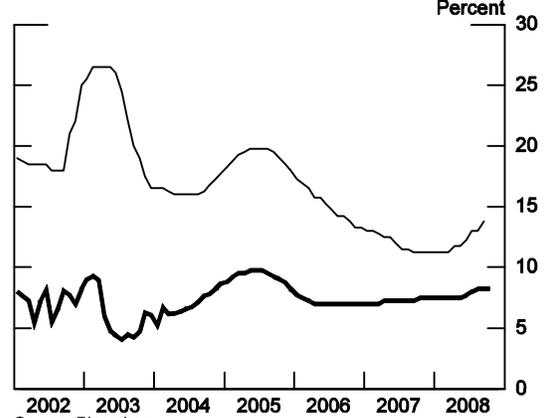
Source: IMF International Financial Statistics, Getulio Vargas Foundation, Haver Analytics, Bank of Mexico.

Merchandise Trade Balances



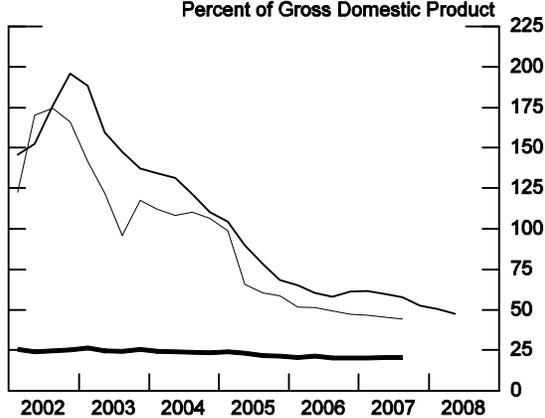
Source: IMF International Financial Statistics, Bank of Mexico.

Benchmark Interest Rates



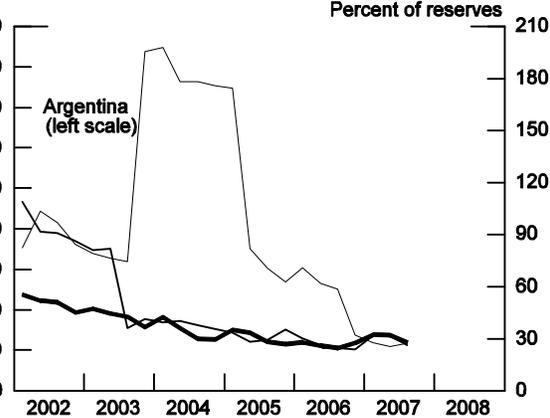
Source: Bloomberg.

Gross External Debt



Source: Haver Analytics, Bank for International Settlements.

Short-Term External Debt



Source: Bank for International Settlements.

In **Russia**, economic activity has slowed considerably. Industrial production growth was 4.7 percent (seasonally adjusted annual rate) in the third quarter, down from 5.5 percent in the second quarter. Growth of fixed investment and construction both approached three-year lows. Meanwhile, inflation in Russia remains elevated; twelve-month inflation in September was 14.9 percent. Wages continue to soar; August nominal wages rose 33.1 percent while real wages rose 15.7 percent. Unemployment remains historically low at 5.3 percent as of August, adding to inflationary pressures.

Russia's financial system has been under considerable stress, as the international crisis highlighted the corporate sector's dependence on foreign borrowing. The Russian RTS stock exchange fell about 48 percent since the September Greenbook. The Central Bank of Russia (CBR) is believed to have sold around \$33 billion in reserves since August 8 to support the ruble, bringing reserves down to \$530 billion from a peak of \$600 billion last summer. The Mosprime overnight interbank rate (for the largest banks) spiked to 21 percent on October 20 before coming down below 8 percent in recent days, and interbank lending to smaller banks appears to have dried up. In response, the Russian government made funds available for the large government-owned banks (which account for over half of system retail deposits) to lend to smaller banks, but as of October 10, only an estimated \$90 billion of the pledged \$245 billion has reached the banking sector. The CBR plans to compensate large banks for losses incurred in the interbank market.

A number of **other emerging economies** have also come under significant pressure as their access to international capital markets has become significantly impaired. These include Kazakhstan, Pakistan, South Africa, Ukraine, and United Arab Emirates. For some countries, political uncertainties have exacerbated the impact of the financial turmoil.