Prefatory Note

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

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

Content last modified 04/01/2015.

Class II FOMC - Restricted (FR)

Part 1

September 16, 2009

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Summary and Outlook

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

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Domestic Developments

The information received since the time of the August Greenbook seems to be pointing to a more noticeable upturn in economic activity than we had been expecting. Both sales and starts of single-family homes have continued the rise that began in the spring, providing stronger evidence that housing activity is firming. Data on orders and shipments of capital goods, together with indicators of business sentiment, suggest that investment in equipment and software is bottoming out earlier than we had anticipated. And the increase in retail sales in August provides at least a tentative sign that consumer spending may be picking up. To be sure, commercial construction remains moribund; and, as expected, improvement in labor markets continues to lag behind that of production and sales. But overall, we now see evidence that production increases in the second half of this year will stem not only from firms' desire to curtail the pace of inventory drawdowns, but also from rising final sales.

In addition to the stronger incoming data, the conditioning assumptions in this projection have become more favorable than they were at the time of the August Greenbook. Equity prices have moved higher, interest rates on both corporate bonds and fixed-rate mortgages have declined, and foreign growth is projected to be stronger. We also revised up our projection for the change in house prices going forward, a reflection of the incoming news on housing activity and a pop-up in several measures of house prices in recent months. Together, these conditioning assumptions led us to revise up our medium-term projection.

We now project that real GDP will rise at an annual rate of 2¾ percent in the second half of this year—1½ percentage points above the pace we projected in the August Greenbook—and 3½ percent in 2010 (versus 3 percent in August). In 2011, which we added to the medium-term projection for the first time, we expect real GDP to accelerate further and rise 4½ percent. Nevertheless, because this forecast begins from a starting point of substantial slack in resources, even after two years of solid economic expansion, we expect the level of real activity to be well below its potential. In particular, although the stronger rebound in GDP in this forecast generates somewhat larger employment gains than in the August Greenbook, the unemployment rate only falls from nearly 10 percent at the end of this year to 9¼ percent at the end of 2010 and to roughly 8 percent at the end of 2011—rates well above the NAIRU.

Note: A list of abbreviations is available at the end of Part 1.

The stronger outlook for real activity in this projection led us to shade up our forecast for core PCE inflation next year to 1.1 percent—still a noticeable slowing from this year's anticipated inflation rate of 1.4 percent. In 2011, with resource slack remaining substantial, we look for core inflation to edge down to 1.0 percent. As before, the magnitude of the decline in our projection for core inflation is greatly tempered by the relative stability of inflation expectations. With energy prices trending up into next year, we expect overall consumer price inflation to be a bit higher than core next year at 1¼ percent but to be the same as core in 2011.

Key Background Factors

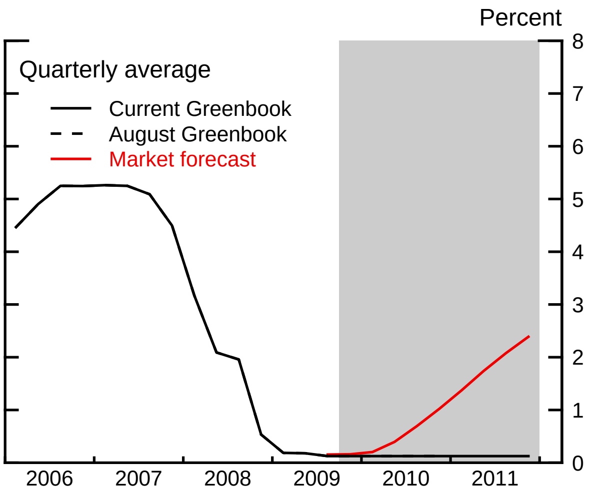
We continue to assume that the FOMC will hold the target federal funds rate in the current range of 0 to ¼ percent through 2011. We have also left our assumptions for nontraditional policy actions mostly unchanged. As in the August forecast, we assume that the Federal Reserve's purchases of long-term securities will total $1.7 trillion—$300 billion of Treasury debt, $150 billion of agency debt, and $1.25 trillion of agency mortgage-backed securities (MBS), with the purchases of Treasury debt to be completed by October. However, we have delayed the assumed completion of the agency debt and MBS purchases by one quarter, to the end of the first quarter of 2010, to allow for a tapering of purchase activity before the program ends. Holdings of these long-term securities are assumed to run off gradually thereafter, declining to a total of $1.4 trillion by the end of 2011.

The 10-year Treasury rate has fallen about 30 basis points since the time of the August Greenbook. We assume that some part of this decline reflects a lower expected path for the federal funds rate, which implies that market participants will be less surprised as they see our policy path unfold than was the case in August. Accordingly, we now project a somewhat larger increase in Treasury rates from here forward than in the last Greenbook. As before, the main factor pushing up Treasury rates is the movement of the 10-year valuation window through and eventually beyond the period of very low short-term rates.

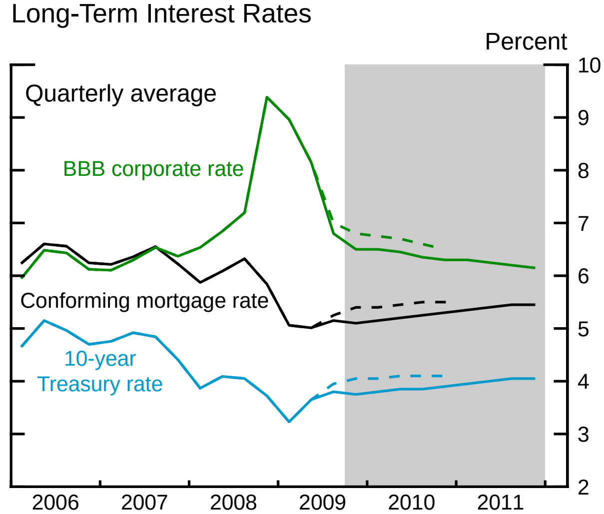
The BBB corporate bond rate has declined about in line with long-term Treasury rates, and we have adjusted our assumed bond rate path down commensurately. We still expect the BBB rate to move down from its current level even as Treasury rates increase, on the assumption that risk premiums in the bond market will continue to recede. Mortgage rates have also declined since early August, though in this case, the spread to Treasury securities has widened a bit. The conforming mortgage rate now stands just above

Key Background Factors Underlying the Baseline Staff Projection

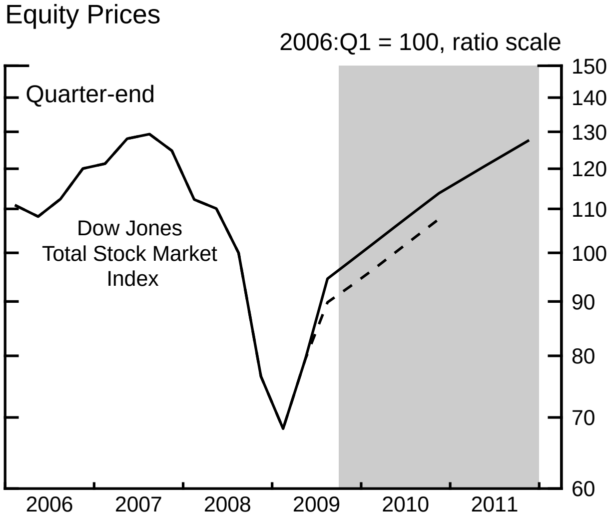
Federal Funds Rate



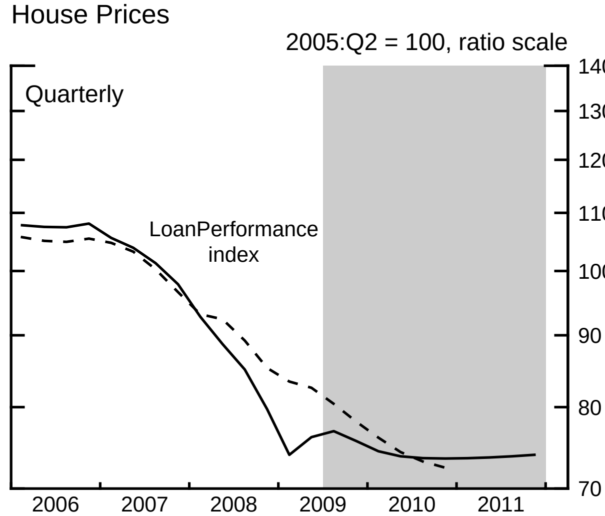
Long-Term Interest Rates



Equity Prices

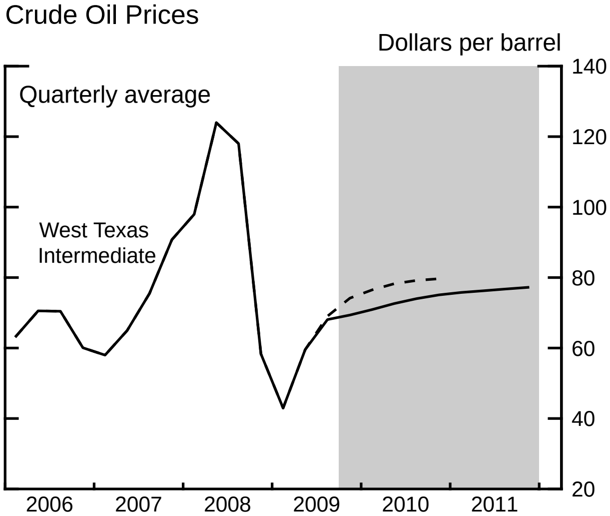


House Prices

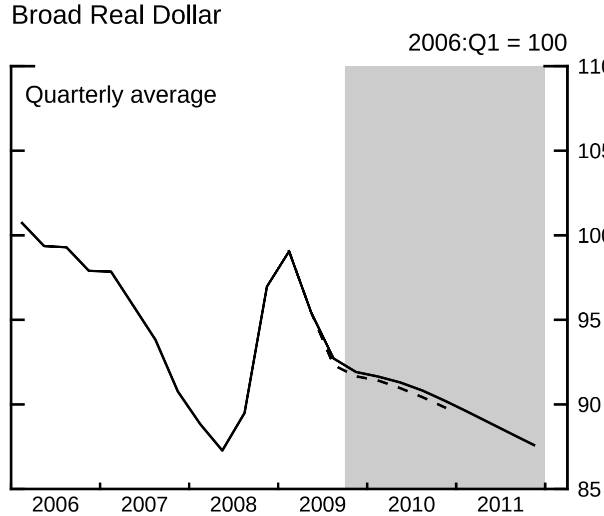


Note: The projection period begins in 2009:Q3.

Crude Oil Prices



Broad Real Dollar



Note: In each panel, shading represents the projection period, which begins in 2009:Q4, except where noted. In the upper-left panel that reports the federal funds rate, the dashed line is not apparent because the paths of the federal funds rate in the August and current Greenbooks are the same.

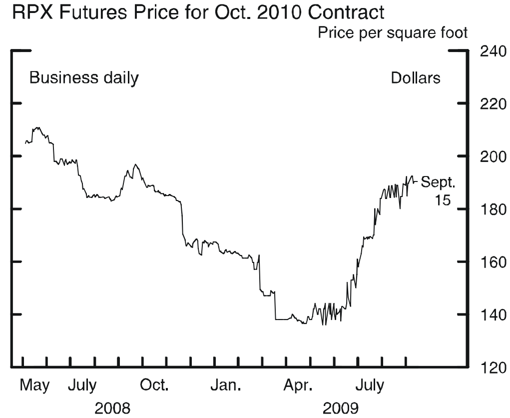
Revisions to the Staff Forecast of Residential House Prices

A variety of house price measures (shown in the figure “House Price Appreciation”) have turned positive in recent months after having fallen at double-digit annual rates for the past two years. For the second quarter as a whole, the LoanPerformance price index—our preferred measure— rose at an annual rate of 12.3 percent, in contrast to the decline of 4.0 percent shown in the August Greenbook.

Based on futures prices, financial market participants have also become more optimistic about the house price outlook: The implied level of the RadarLogic RPX (one of the more liquid futures markets tied to house prices) for October 2010 has risen more than one-third from its low during the spring (see the figure “RPX Futures Price for Oct. 2010 Contract”). Households appear to share this recent optimism. The percentage of respondents to the Reuters/University of Michigan Surveys of Consumers who reported that they expected house prices to decline over the next year has fallen from about 25 percent at the start of this year to 15 percent in the latest survey, roughly where it was when we added the question to the survey in March 2007 (see the figure “Home Value Expectations over Next Year”). The share expecting an increase has rebounded from its low earlier this year, although it remains well below its March 2007 level.

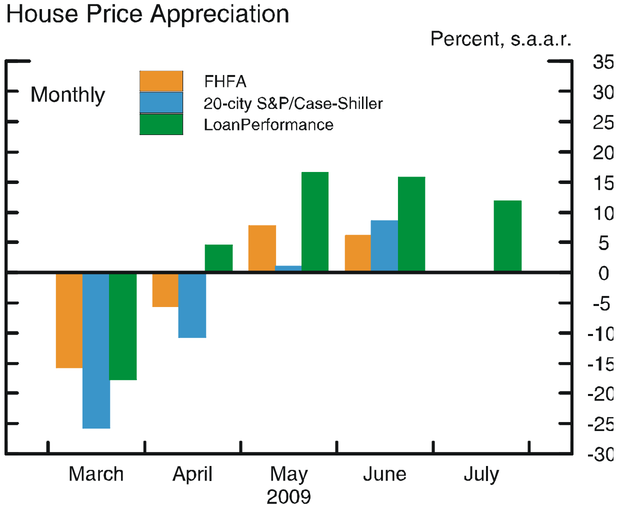
In addition to a surprisingly strong second-quarter reading, we also received a significant revision to historical values of the LoanPerformance index. As shown by the difference between the red and the

RPX Futures Price for Oct. 2010 Contract



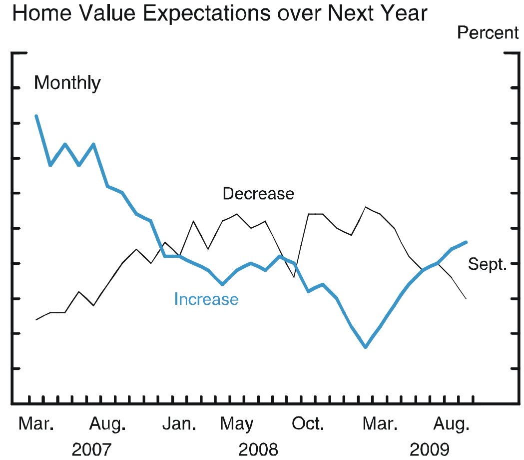
Source: RadarLogic.

House Price Appreciation



Note: For July, only LoanPerformance data are available.
Source: For FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor’s; for LoanPerformance, First American CoreLogic.

Home Value Expectations over Next Year



Source: Reuters/University of Michigan Surveys of Consumers.

black lines in the figure titled “House Prices” on the next page, LoanPerformance revised up the level of house prices at the peak in 2006, but it now shows a significantly sharper decline going into this year. In particular, the revised index shows prices in 2008 falling much faster than we had previously thought; the level as of the end of the first quarter of this year was revised down about 10 percent.

In putting together our forecast, we use deviations of house prices from their long-run relationship to rents to measure housing’s over- or undervaluation (see the figure “Over/Under Valuation of Single-Family Homes”). In this regard, the downward revision to the LoanPerformance index in history is a positive influence on the house price projection: With more of the downward adjustment to house prices behind us, all else equal, prices would need to fall less to hit the same undervaluation. Moreover, given households’ rosier outlooks, we now think that prices need to fall less relative to rents to entice buyers; we thus no longer believe that housing valuations will fall as far as we did as of the last Greenbook.

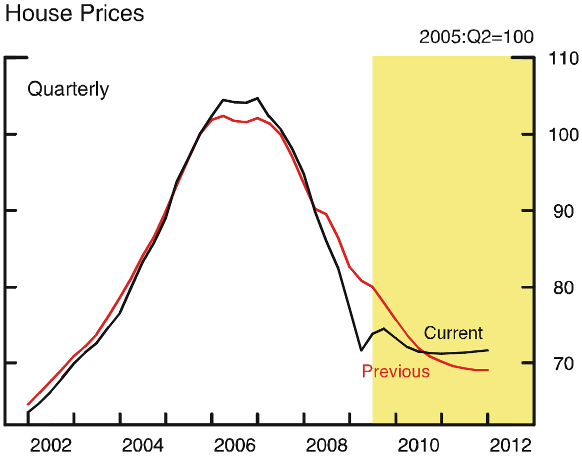
Change in House Prices
Percent change at annual rate
from end of preceding period

	2009		2010	2011
	Q2	H2		
Current	12.3	-1.2	-2.8	0.6
Aug. GB	-4.0	-11.0	-7.3	-1.5

That said, we expect house prices to begin falling again late in 2009 and in 2010, with only sluggish nominal growth in 2011. We anticipate that foreclosure-related sales and tighter-than-normal credit supply conditions will push down prices as the effects of the dramatic jump in foreclosures started in the first half of 2009 begin to be felt in the housing market this fall. We now expect prices to fall 1.2 percent at an annual rate in the second half of this year and 2.8 percent in 2010.

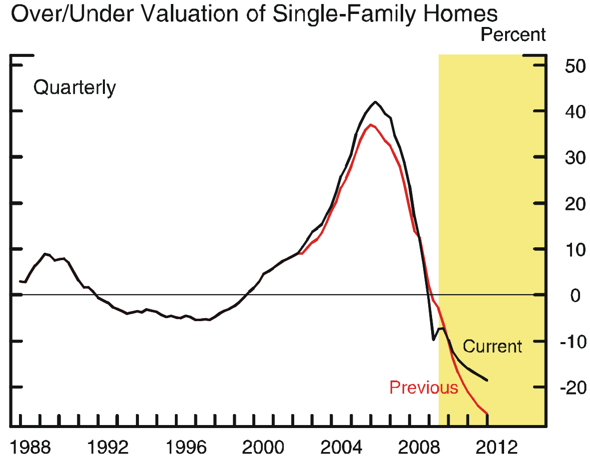
Under our revised forecast, combining the downward revision to the index’s level with the shallower trajectory of house price declines going forward leaves house prices at the end of 2011 3.7 percent above the level implied by the August Greenbook forecast.

House Prices



Source: First American CoreLogic.

Over/Under Valuation of Single-Family Homes



Source: First American CoreLogic.

5 percent, and we project it to drift up with Treasury yields over the forecast period to reach 5½ percent at the end of 2011.

Broad indexes of equity prices currently stand about 5 percent above the level assumed in the August Greenbook; we have raised the projected path for stock prices accordingly. As in prior forecasts, we assume that the equity risk premium will trend down over the forecast period, and as a result, we have equity prices rising 16 percent in 2010 and 12 percent in 2011.

The incoming information on changes in house prices has been to the high side of our expectations in recent months even as revised data point to sharper declines last year (see the box titled "Revisions to the Staff Forecast of Residential House Prices").[1] This information, together with a further strengthening of the outlook for housing demand, has led us to revise up significantly our projection for the change in house prices. We now expect house prices to decline at an annual rate averaging 2¼ percent through the end of 2010, compared with 8½ percent in the August Greenbook. In 2011, house prices are projected to edge up slightly.

Our assumptions for fiscal policy through 2010 are essentially unchanged from the August Greenbook. We continue to assume that no new stimulus packages will be enacted and that there will be no additional funding for financial stabilization programs beyond the TARP and the conservatorship for the mortgage-related GSEs. We look for the unified budget deficit to be about $1.4 trillion (10 percent of GDP) in both fiscal 2009 and fiscal 2010; the deficit for fiscal 2010 is a little less than in the August Greenbook, reflecting the faster pace of economic recovery in this projection.

In 2011, we expect the deficit to narrow to $1.1 trillion (7½ percent of GDP). This decline stems both from the effects of the strengthening pace of economic activity on revenues and outlays and from a drop in the costs associated with the 2009 fiscal stimulus package and financial stabilization programs. We assume that most provisions of current tax law will be extended in 2011 but that some of the 2001–03 tax cuts for high-income households will be allowed to expire, resulting in a small boost in revenues in that fiscal year. As for expenditures, we expect that emergency unemployment benefits will be extended, but that grants to state and local governments from the stimulus package will start to phase out; meanwhile, defense spending is projected to remain flat in real terms in

[1] As discussed in the box, LoanPerformance has revised its historical data. These revised data are confidential.

2011 after rising modestly in 2010. In all, we expect fiscal impetus to be a roughly neutral factor in 2011 after contributing about 1 percentage point to the change in real GDP in both 2009 and 2010.

The foreign exchange value of the dollar on a trade-weighted basis is little changed since the time of the last Greenbook. We project the real trade-weighted dollar to depreciate 2 percent next year and 3 percent in 2011. Meanwhile, the incoming data on economic activity abroad have again been somewhat stronger than we had anticipated, and we have strengthened our projection for foreign growth over the forecast period. We now expect foreign real GDP to rise at an annual rate of 3½ percent in the second half of this year and in 2010, and to move up 4 percent in 2011.

The spot price of West Texas Intermediate (WTI) crude oil has moved down, on net, in recent weeks and now stands around $69 per barrel, about $2.50 below its level at the time of the August Greenbook. Consistent with futures prices, we expect WTI to drift up to about $75 by the end of next year and to edge up slightly further in 2011 to about $77. In the near term and in 2010, this path is about $5 per barrel below that in the August Greenbook.

Recent Developments and the Near-Term Outlook

In response to the better-than-expected tone of the incoming spending data, we now project that real GDP will increase at an annual rate averaging 2¾ percent this quarter and next, up from a forecast of 1¼ percent in August.[2] As before, we expect that firms will boost output into closer alignment with sales now that inventories seem to be less burdensome. But we also expect final sales to post a small increase in the second half, an upward adjustment from our forecast in August, when we projected the improvement in final sales to be delayed until early next year. The upward adjustment to our near-term projection is prominent for each of household spending, housing activity, and business investment in equipment and software.

Labor market conditions have evolved about as we had been expecting, with the latest data showing a slower pace of deterioration but not yet an improvement. Declines in

[2] We also now estimate that real GDP declined at an annual rate of 1 percent in the second quarter, a little less negative than the 1½ percent rate of decline we projected in August.

Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

Measure	2009:Q2		2009:Q3		2009:Q4	
	Aug. GB	Sept. GB	Aug. GB	Sept. GB	Aug. GB	Sept. GB
Real GDP	**-1.5**	-1.0	**.8**	**2.5**	**1.7**	**3.2**
Private domestic final purchases	-3.5	-2.8	-1.0	1.6	-.7	-.5
Personal consumption expenditures	-1.2	-.9	.9	2.3	1.2	.8
Residential investment	-30.1	-22.9	-9.8	3.0	-6.8	4.0
Business fixed investment	-10.7	-10.3	-11.9	-3.8	-12.5	-11.3
Government outlays for consumption and investment	6.1	6.5	2.9	1.8	3.2	4.3
	Contribution to growth (percentage points)					
Inventory investment	-.9	-1.5	1.4	1.0	1.5	2.8
Net exports	1.1	1.6	-.3	-.2	.1	-.1

private payrolls averaged 223,000 per month in July and August, down from an average loss of 425,000 per month in the second quarter; we expect to see job losses slow further to 100,000 in September and then to end by the turn of the year. This employment path is close to that in the August Greenbook. Although we have revised up our projection for real activity this quarter and next, we have tempered our projected employment response because unemployment insurance claims, while off their peaks, have not yet declined to levels that would be consistent with a stabilization of employment. Given our projection for payrolls, we expect the unemployment rate to edge up from 9.7 percent in August to 9.9 percent by the end of the year.

Industrial production (IP) posted large gains in both July and August. The increases were driven in part by a rebound in motor vehicle assemblies from exceptionally low levels earlier in the year and the associated effects on upstream industries. Production outside of the motor vehicle sector has also firmed, and forward-looking indicators such as durable goods orders and the various manufacturing surveys have improved substantially. With vehicle assemblies expected to step up further in September, we project another sizable gain in manufacturing IP this month and moderate increases in the following months. On a quarterly average basis, this pattern translates into increases in manufacturing output at annual rates of 6¼ percent in the current quarter and 5 percent in the fourth quarter.

In the housing sector, the incoming data on both home sales and starts have surprised us to the upside, and a gradual recovery now seems to be under way. Single-family starts registered their fifth consecutive monthly increase in July, and with demand evidently improving—likely reflecting both low mortgage interest rates and a perception by potential homebuyers that purchase prices are nearing their bottom—we expect that starts will continue to move higher in coming months. We now project that single-family starts will average an annual pace of 550,000 units in the fourth quarter, about 60,000 higher than we projected in the August Greenbook. Meanwhile, we expect multifamily starts, which have been depressed by high vacancy rates, falling prices, and tight credit conditions, to remain near current exceptionally low levels. In all, we now project that real residential investment will rise at an annual rate of 3½ percent in the second half of this year; in the August projection, we had projected an 8 percent rate of decline.

Consumer spending has been supported by the "cash for clunkers" program. Excluding motor vehicles, real PCE appears to have flattened out earlier in the summer after falling sharply in late 2008 and early 2009, and the jump in retail sales in August hints that spending may now be turning upward. With the labor market beginning to stabilize and with the drag from the earlier declines in wealth gradually waning, the negative forces that have been restraining household spending should diminish further as we move forward. Our projection calls for real PCE to rise at annual rates of 2¼ percent in the third quarter and ¾ percent in the fourth quarter, with that quarterly pattern reflecting swings in vehicle sales associated with cash for clunkers. On average, the rate of increase over the second half of this year is about ½ percentage point higher than that projected in the last Greenbook.

The outlook for business investment in equipment and software (E&S) appears better than it did in August. Spending on transportation equipment is no longer falling sharply, and the demand for high tech and other types of equipment seems to be stabilizing. In particular, orders and shipments of nondefense capital goods excluding aircraft have recovered somewhat in recent months, readings on business sentiment from the monthly manufacturing surveys have improved, and corporate bond yields have continued to ease. In light of this news, we now project that E&S will start to turn up in the second half—two quarters earlier than in the August Greenbook—rising at an annual rate of ¾ percent.

In contrast, the near-term outlook for nonresidential construction remains about as bleak as we had expected. Although real spending on nonresidential buildings rose in the second quarter, nominal construction outlays dropped considerably in July, suggesting that the second-quarter increase was transitory. And in the drilling and mining sector, spending still appears to be falling in response to low prices for natural gas. With vacancy rates rising and property prices falling, and with credit conditions for this sector extremely tight, we expect to see further sharp declines in real outlays for nonresidential structures in the second half of this year.

We do not yet have much data on inventory investment in the third quarter outside of motor vehicles, where the cash-for-clunkers program reduced inventories to very low levels. Outside of the motor vehicles sector, the sizable drawdown in stocks in the first half of the year has improved inventory positions, and we expect a diminishing pace of liquidation in the period ahead. Folding in the anticipated increase in motor vehicle inventories in the fourth quarter, we expect that, after having subtracted about 2 percentage points from the annual rate of change in real GDP over the first half of this year, nonfarm inventory investment will add that same amount in the second half.

Real federal expenditures for consumption and gross investment are projected to increase appreciably over the second half of this year, reflecting the appropriated funding for defense spending and the continued boost to nondefense spending from the stimulus plan. Although the incoming data on defense spending have been below our expectations, we think this pattern represents shifts in the timing of expenditures and have not changed projected spending for the second half of the year as a whole. In the state and local sector, purchases are projected to edge up this quarter and next as the stimulus grants help these governments maintain their spending in the face of weak revenues.

After sharp declines earlier in the year, exports appear to be rebounding strongly in the current quarter, reflecting both an improvement in activity abroad and a bounceback in exports of automotive products. At the same time, we also expect a sharp rebound in imports. Overall, we project that net exports will make a small negative contribution to the change in real GDP this quarter, and we look for a similar contribution in the fourth quarter.

The incoming data on consumer prices have been a little above our expectations but continue to show smaller increases in core prices this quarter than were evident in the spring, when price measures were boosted by a jump in excise taxes on cigarettes. We continue to project that core PCE prices will rise at an annual rate of 1¼ percent on average in the second half of this year, down from a 1½ percent rate of increase in the first half.[3] Meanwhile, because of a jump in energy prices, total PCE prices are expected to rise at a faster pace of 2 percent in the second half.

The Medium-Term Outlook

The pace of economic activity is expected to strengthen gradually over the next two years as financial stresses continue to diminish, the negative effects of earlier declines in income and wealth fade, and the housing sector continues to recover. We project the change in real GDP to step up to gains of 3½ percent next year and 4½ percent in 2011. The further acceleration of activity in 2011 occurs despite the decline in the impetus to growth from fiscal policy. Even with the projected pickup in real activity, the level of real GDP only returns to its previous peak in late 2010, and output is still projected to be 3½ percent below the level of potential output at the end of the forecast period.

Household sector. We expect the modest recovery in household spending that begins in the second half of this year to gain strength over the remainder of the forecast period. Although the impetus to growth in consumer spending from the fiscal stimulus package is expected to be smaller next year, growth of spending should be supported by a waning of the sizable drag from earlier declines in wealth as well as by rising labor income, low interest rates, and a gradual improvement in credit availability. In all, we expect consumer spending to post increases of 3 percent next year and 3½ percent in 2011. Given a similar projected acceleration in real disposable income, this path of spending leaves the personal saving rate roughly flat near 4 percent. Relative to the last Greenbook, our projection for next year's increase in real PCE is revised up ¼ percentage point, with the effect of the higher path for household wealth contributing importantly to that revision.

We have raised our projection for the housing sector noticeably in this Greenbook. This upward revision reflects both the incoming data on activity, which indicate that demand has started to strengthen more quickly than we had expected, and the revised path of house prices, which implies greater optimism on the part of potential homebuyers about future price gains. As before, we anticipate that demand will continue to improve as incomes pick up and lower prices and favorable mortgage rates enhance affordability; these factors, together with a diminishing overhang of unsold new homes, are projected to contribute to the uptrend in construction activity. We now project that single-family

[3] The cash-for-clunkers rebates are being recorded as lower vehicle prices in the PCE price index, but, in part because the lower prices and the subsequent rebound both occur within the third quarter, we estimate the rebates' effect on the core PCE index for the quarter as a whole to be very small.

Projections of Real GDP
(Percent change at annual rate from end of preceding period except as noted)

Measure	2009 H1	2009 H2	2010	2011
Real GDP	**-3.8**	**2.8**	**3.5**	**4.5**
Previous Greenbook	-4.0	1.2	3.1	
Final sales	-1.8	.9	2.9	4.1
Previous Greenbook	-2.3	-.2	2.6	
Personal consumption expenditures	-.2	1.6	2.9	3.6
Previous Greenbook	-.3	1.0	2.6	
Residential investment	-31.0	3.5	12.9	25.3
Previous Greenbook	-34.3	-8.3	9.3	
Business fixed investment	-26.1	-7.6	5.0	9.9
Previous Greenbook	-26.3	-12.2	3.5	
Government purchases	1.9	3.1	1.6	1.0
Previous Greenbook	1.7	3.1	1.6	
Exports	-18.2	14.3	8.2	8.6
Previous Greenbook	-18.7	7.3	5.3	
Imports	-26.3	12.7	8.0	8.0
Previous Greenbook	-25.4	6.8	4.8	
	Contribution to growth (percentage points)			
Inventory change	-1.9	1.9	.6	.4
Previous Greenbook	-1.6	1.4	.5	
Net exports	2.1	-.2	-.2	-.2
Previous Greenbook	1.9	-.1	-.1	

starts will reach an annual pace of almost 800,000 units by the end of 2010—70,000 above our projection in August—and will move up to a pace of 1.12 million units by the end of 2011. Meanwhile, we expect multifamily starts to pick up only modestly from their recent low levels because credit conditions and the returns to investment in this sector remain highly unfavorable. In total, we project real residential expenditures to rise 13 percent next year and 25 percent in 2011. Of course, these large percentage increases are from a very low level, and the pace of spending that we project for late 2011 remains more than one-third below the pace of activity in 2005.

Business investment. We have revised up our projection for investment in equipment and software in response to both the incoming data and the upward revisions to business output over the forecast period. After flattening out in the second half of this year, real E&S spending is now projected to rise 10 percent next year and almost 15 percent in 2011. This acceleration reflects an easing of credit conditions, the strengthening of business output, and some purchases of equipment that had been deferred during the recession.

By contrast, our projection for business investment in structures remains quite downbeat. Demand for such large-scale and long-lived assets typically takes longer to improve after a downturn, and with vacancy rates high and rising and with credit conditions in this sector likely to remain quite restrictive for some time, we expect recovery in nonresidential construction to be slow to emerge. To be sure, we expect investment in the drilling and mining sector to turn back up over the next two years given our projected path for energy prices. But outside that area, we project real outlays to fall another 8½ percent next year and to edge down further in 2011.

Because we expect inventory positions to be much improved going into 2010, we expect the drawdowns in inventories outside the motor vehicle industry to end around the middle of next year. Thereafter, we project a modest restocking that picks up speed as firms become increasingly confident about the durability of demand. (Given the currently low level of motor vehicle stocks, we expect automakers to start boosting inventories immediately.) All told, we expect overall inventory investment to contribute about ½ percentage point to real GDP growth in each of 2010 and 2011.

Government spending. Given the fiscal policy assumptions discussed earlier, we expect federal government purchases to decelerate over the projection period. The rise in real federal expenditures for consumption and investment is projected to slow from about 5 percent this year to 2½ percent in 2010 and less than 1 percent in 2011, primarily reflecting the assumed deceleration in defense spending. States and localities likely will continue to face considerable budget pressures in 2010, but we expect real purchases by these governments to rise 1 percent—the same pace as this year—as federal grants from the stimulus bill remain sizable and tax receipts start to pick up with the economic recovery. In 2011, we project another 1 percent increase in real state and local purchases as the ongoing improvement in revenues offsets the restraint from the winding down of the federal stimulus grants.

The NAIRU in the Staff Projection

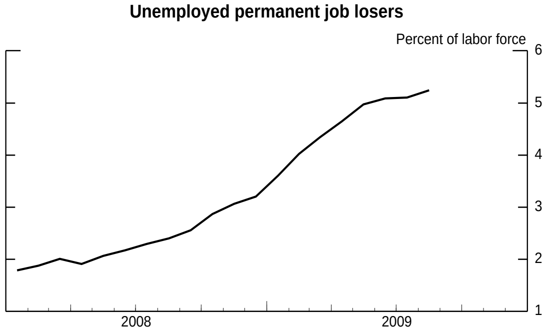
The severe contraction in employment in this recession has been associated with a strikingly large number of workers who lost their jobs through permanent layoffs. Such workers typically take longer to become reemployed than do workers who lose their jobs through temporary layoffs or who become unemployed upon entering or reentering the labor force. In recognition of the higher level of frictional unemployment that this process may entail, we raised our estimate of the NAIRU from 4¾ percent to 5 percent in the June Greenbook forecast.

Since that time, the number of permanent job losers who remain unemployed has risen further, as can be seen in the lower-left figure.

Another indicator of frictional unemployment that has informed our assumption for the NAIRU is the relationship between the unemployment rate and the job vacancy rate, known as the Beveridge curve. One version of this relationship is shown in the lower-right figure. As indicated by the open square, the most recent observation appears to have moved further to the right of the line implied by the earlier years of this decade (the dots), suggesting that frictional unemployment may have risen more than we had assumed in June.

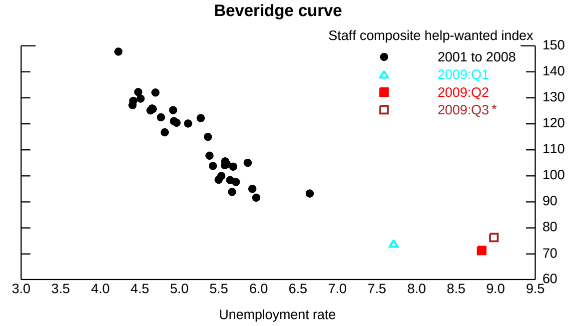
These considerations have led us to raise our estimate of the NAIRU by another ¼ percentage point, to 5¼ percent, in the current forecast. We assume that the NAIRU will remain at this level through the medium term and then begin to edge back down as the labor market tightens and reemployment opportunities become more abundant.

Unemployed permanent job losers



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

Beveridge curve



Note: The unemployment rate is adjusted to remove the staff estimate of the influence of the Emergency Unemployment Compensation program.
* Average of July and August.
Source: For unemployment rate, U.S. Department of Labor, Bureau of Labor Statistics; for help-wanted index, Conference Board and staff calculations.

Net exports. Over the next two years, as imports and exports both recover, we expect net exports to continue to make small negative contributions to the change in real GDP, about on par with those projected for the second half of this year. This projected contribution is not much changed from the August Greenbook, as the dollar is little revised and the stronger growth forecasts for both the U.S. and foreign economies imply a larger rebound in both imports and exports. *(The International Developments section provides more detail on the outlook for the external sector.)*

Aggregate Supply, the Labor Market, and Inflation

We have made no material changes to our estimates of structural productivity and potential GDP through 2010.[4] Structural productivity is still assumed to rise about 1¾ percent per year, on average, this year and next while potential GDP is assumed to increase 2 percent per year. In 2011, we expect the growth of structural productivity and potential GDP to step up to 2 percent and 2¼ percent, respectively, reflecting the anticipated rebound in capital spending, which boosts the contribution of capital deepening to potential output growth. As discussed in the box titled "The NAIRU in the Staff Projection," we have also revised our estimate of the NAIRU slightly higher, to 5¼ percent.

Given the upward revisions to our projection for the change in real GDP, we now expect the GDP gap to narrow somewhat more than in the August Greenbook. We estimate that GDP stood 7¼ percent below its potential in the second quarter, and we project that this gap will narrow to 5½ percent by the end of 2010 (1¼ percentage points smaller than in August) and to 3½ percent by the end of 2011.

Productivity and the labor market. Productivity in the nonfarm business sector soared in the second quarter, and we project another large increase in the current quarter. Productivity had fallen well below our estimate of its structural level during the preceding few quarters as demand fell faster than firms were able or willing to cut hours, but the jumps in output per hour in the second and third quarters are expected to bring the level of productivity back above trend. We anticipate that firms will remain somewhat cautious in their hiring until the recovery gains more steam, and as a result, the level of

[4] In the August Greenbook, we made a tentative decision to leave unchanged our estimate of potential output growth over the past few years even as real GDP was revised down in the comprehensive revision of the NIPA. We therefore allowed our estimate of the GDP gap to become more negative in the first half of this year. That interpretation still seems correct to us, so we have maintained that assumption in the current Greenbook.

Decomposition of Structural Labor Productivity
Nonfarm Business Sector
(Percent change, Q4 to Q4, except as noted)

Measure	1974-95	1996-2000	2001-07	2008	2009	2010	2011
Structural labor productivity	**1.5**	**2.5**	**2.8**	**2.0**	**1.8**	**1.6**	**1.9**
Previous Greenbook	1.5	2.5	2.8	2.0	1.6	1.6	
Contributions[1]							
Capital deepening	.7	1.4	.7	.5	.0	-.1	.4
Previous Greenbook	.7	1.4	.7	.5	-.2	-.1	
Multifactor productivity	.5	.7	1.6	1.3	1.7	1.6	1.4
Previous Greenbook	.5	.7	1.6	1.3	1.6	1.5	
Labor composition	.3	.3	.3	.2	.2	.1	.1
MEMO							
Potential GDP	3.0	3.4	2.8	2.4	2.0	2.1	2.3
Previous Greenbook	3.0	3.4	2.8	2.4	2.0	2.0	

Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points.

The Outlook for the Labor Market
(Percent change, Q4 to Q4, except as noted)

Measure	2008	2009	2010	2011
Output per hour, nonfarm business	.9	3.7	1.3	1.4
Previous Greenbook	1.0	2.3	1.7	
Nonfarm private payroll employment	-2.1	-4.1	2.1	3.3
Previous Greenbook	-2.1	-4.1	1.5	
Household survey employment	-1.5	-3.0	1.7	2.3
Previous Greenbook	-1.5	-3.0	1.2	
Labor force participation rate[1]	65.9	65.5	65.4	65.3
Previous Greenbook	65.9	65.6	65.3	
Civilian unemployment rate[1]	6.9	9.9	9.2	7.9
Previous Greenbook	6.9	10.0	9.6	
MEMO				
GDP gap[2]	-4.6	-6.9	-5.6	-3.6
Previous Greenbook	-4.6	-7.8	-6.8	

1. Percent, average for the fourth quarter.

2. Actual less potential GDP in the fourth quarter of the year indicated as a percent of potential GDP. A negative number thus indicates that the economy is operating below potential.

productivity is projected to return only gradually to trend. We project private payroll employment to rise an average of almost 200,000 per month next year and about 300,000 per month in 2011 when output is rebounding more sharply. Given this pace of hiring, the unemployment rate is projected to edge down from a peak of just under 10 percent in the fourth quarter to 9¼ percent by the end of 2010, and to fall to 8 percent by the end of 2011.

Prices and labor costs. Given the substantial amount of slack in resource utilization in our forecast, we project that core PCE inflation will slow from 2 percent in 2008 to 1.4 percent this year, and that it will decline further to 1.1 percent in 2010. In 2011, when slack is expected to be diminished but still sizable, we look for core inflation to edge down to 1.0 percent. As in previous Greenbooks, the extent of the deceleration in this projection is considerably less than would be predicted by many reduced-form models of inflation; this relatively small deceleration is because of the stability in inflation expectations in recent years and our anticipation that inflation expectations will only edge slightly lower over the next couple of years. Relative to the August Greenbook, we nudged up our projection for core inflation next year 0.1 percentage point because the downward revision to the unemployment rate in this forecast, together with our higher estimate of the NAIRU, implies somewhat less slack than we had earlier projected. Meanwhile, overall consumer price inflation is projected to be just a little above core inflation in 2010 and in line with core in 2011.

Hourly compensation costs have decelerated sharply this year. The productivity and cost measure of compensation per hour is now reported to have declined at an annual rate of 2¼ percent in the first half of this year after rising 2½ percent in 2008. The employment cost index has decelerated considerably this year as well. To a large extent, we think that the steep deceleration in hourly compensation reflects a drop in bonuses and other one-time adjustments to the level of compensation in an extremely weak labor market. Thus, with the labor market gradually improving, we project that hourly compensation will post moderate increases in the period ahead, rising 1¾ percent next year and 2 percent in 2011.

Financial Flows and Conditions

We project that domestic nonfinancial debt will expand at an average annual rate of about 5 percent through the end of 2011, reflecting a combination of rapid growth in federal government debt, a moderate rise in state and local government debt, and modest increases in household and nonfinancial business debt.

Inflation Projections
(Percent change, Q4 to Q4, except as noted)

Measure	2008	2009	2010	2011
PCE chain-weighted price index	1.7	1.0	1.3	1.0
Previous Greenbook	1.7	1.1	1.3	
Food and beverages	6.8	-1.1	1.5	.7
Previous Greenbook	6.8	-.3	1.6	
Energy	-9.1	-2.4	5.0	2.1
Previous Greenbook	-9.1	-1.3	5.4	
Excluding food and energy	2.0	1.4	1.1	1.0
Previous Greenbook	2.0	1.4	1.0	
Consumer price index	1.5	1.1	1.5	1.1
Previous Greenbook	1.5	1.3	1.5	
Excluding food and energy	2.0	1.7	1.2	1.1
Previous Greenbook	2.0	1.7	1.1	
GDP chain-weighted price index	1.9	.9	1.2	1.1
Previous Greenbook	1.9	1.0	1.1	
ECI for compensation of private industry workers[1]	2.4	1.2	1.8	2.0
Previous Greenbook	2.4	1.0	1.2	
Compensation per hour, nonfarm business sector	2.6	-.3	1.8	2.1
Previous Greenbook	2.6	-.4	1.2	
Prices of core goods imports[2]	3.8	-1.4	1.3	1.0
Previous Greenbook	3.8	-1.6	1.2	

1. December to December.
2. Core goods imports exclude computers, semiconductors, oil, and natural gas.

Household debt contracted at an annual rate of about 1½ percent in the first half of the year, and we anticipate a further slight contraction in the second half. We expect that the growth of mortgage debt and nonmortgage consumer credit will be held down thereafter by the relatively low levels of spending for housing and consumer durables and by constricted credit availability. Although we anticipate that household debt will begin to expand again next year as the economy improves, the pace of borrowing through 2011 is expected to be tepid because of the elevated unemployment rate, continued deleveraging by households, and lending standards that remain relatively tight.

Nonfinancial business debt is expected to be little changed on net in the second half of this year after having declined in the first half. Firms with access to credit markets continued to borrow in volume in August, as investment-grade bond issuance remained robust and speculative-grade issuance picked up significantly. However, we anticipate that the rise in debt for nonfinancial businesses overall will strengthen slowly during the forecast period, as banks' terms and standards for business loans are expected to ease only gradually and the commercial real estate market is projected to remain very weak.

Federal government debt is expected to balloon further over the forecast period as deficits remain extremely large. All told, we anticipate net federal borrowing of about $1½ trillion in 2009 and 2010, and about $1 trillion in 2011. In the state and local government sector, borrowing rebounded in the first half of the year as earlier strains in the municipal bond market eased. We expect state and local government borrowing to slow to a more sustainable pace over the projection period, in part because infrastructure stimulus grants will finance some of the projected rise in the sector's capital outlays.

M2 is projected to contract over the second half of this year as households continue to reallocate some of their wealth toward riskier assets. In 2010 and 2011, M2 is forecast to increase less rapidly than nominal GDP, as improvements in economic and financial market conditions continue to reduce demand for M2 assets.

The Long-Term Outlook

We have extended the staff forecast to 2014, using the FRB/US model and staff assessments of long-run supply-side conditions, fiscal policy, and other factors. The contour of the long-run outlook depends on the following key assumptions:

- Monetary policy aims to stabilize PCE inflation at 2 percent in the long run, consistent with the majority of longer-term inflation projections provided by the FOMC participants in June.

- No further nontraditional monetary policy actions are undertaken beyond those that have already been announced. This assumption implies a gradual shrinking of the Federal Reserve's balance sheet over time.

- Risk premiums on corporate bonds and equity, which are expected to be just a little above historically normal levels at the end of 2011, only edge down thereafter. Banks ease their lending terms and standards somewhat further as well.

- The fiscal stimulus package continues to boost the level of government purchases through 2012, but spending associated with these funds is essentially complete by 2013. Government budget deficits continue to narrow. This improvement reflects both the effects of the economic recovery on tax receipts and transfer payments as well as further policy actions after 2011 aimed at reducing the deficit.

- From 2012 to 2014, the foreign exchange value of the dollar is assumed to depreciate 2 percent per year in real terms. The price of WTI crude oil rises gradually to nearly $85 per barrel by the end of 2014, consistent with futures prices. Under these assumptions, movements in the prices of energy and imports have only minor implications for domestic inflation. Foreign real GDP expands 3¾ percent per year, on average, such that foreign output gaps continue to narrow.

- As discussed in the box on the NAIRU, the factors that the staff sees as having raised the NAIRU during the recession are expected to slowly fade; we also assume that the effect of emergency unemployment compensation on the unemployment rate will diminish after 2011. Finally, potential GDP is assumed to expand 2¾ percent per year, on average, over the 2012–14 period.

The unemployment rate enters 2012 still at a very high level, and inflation is noticeably below the assumed long-run target. Under the assumptions used to construct the baseline extension, the federal funds rate begins to rise in early 2012, reaching 2½ percent by the

The Long-Term Outlook
(Percent change, Q4 to Q4, except as noted)

Measure	2009	2010	2011	2012	2013	2014
Real GDP	-.5	3.5	4.5	4.9	4.3	2.8
Civilian unemployment rate[1]	9.9	9.2	7.9	5.9	4.7	4.6
PCE prices, total	1.0	1.3	1.0	1.2	1.5	1.7
Core PCE prices	1.4	1.1	1.0	1.1	1.4	1.7
Federal funds rate[1]	.1	.1	.1	2.4	3.8	4.1

1. Percent, average for the final quarter of the period.

end of that year and 3¾ percent in 2013.[5] The recovery in investment spending helps to boost GDP growth to 5 percent in 2012 and 4¼ percent in 2013. As a result, the unemployment rate dips slightly below the NAIRU by the end of 2013. By 2014, the slow recovery in investment shares toward historical norms is largely complete, so output growth moves down toward its potential rate and unemployment stabilizes. Core PCE inflation moves up modestly after 2011 as economic activity recovers and long-run inflation expectations are assumed to remain reasonably well anchored.

Alternative Scenarios

In this section, we consider risks to the baseline projection using simulations of the FRB/US model. In the first scenario, we consider the possibility that real activity will recover more rapidly than we anticipate. The next scenario combines this more robust expansion with an increase in inflation expectations, leading to a much earlier increase in the federal funds rate than in the baseline projection. The third scenario examines a downside risk to activity—the possibility that households boost their saving appreciably relative to baseline. The next scenario examines another downside risk to activity and assumes that the recent strength in demand is short-lived as impaired balance sheets exert greater restraint on economic activity and some of the improvement in financial conditions since early spring is given back. The final two scenarios address risks to aggregate supply: first, the possibility that inflation expectations may fall more significantly in response to economic slack than in our baseline, and second, the possibility that the recession will have larger adverse effects on labor market functioning. In each of these scenarios, the federal funds rate is assumed to follow the prescriptions of a version of the Taylor rule (subject to an effective lower bound of 12½ basis points), and nontraditional policy is assumed to follow the baseline path.

V-shaped recovery. Incoming production and spending data, including upward surprises in business and household investment, have led us to mark up the baseline projection appreciably. But even with this revision, household and business outlays on durable goods and structures remain remarkably low by historical standards relative to replacement demand, suggesting a risk of a greater-than-anticipated rebound in spending

[5] In the long-run outlook, the federal funds rate (R) follows the prescriptions of a Taylor rule of the form $R = 2.5 + \pi + 0.5y + 0.5(\pi - 2)$, subject to the zero lower bound constraint. In this expression, π denotes the four-quarter rate of core PCE inflation and y is a measure of the output gap. The latter is defined using labor market data; it equals the difference between the staff estimate of the NAIRU and the unemployment rate divided by the Okun's Law coefficient (0.45). The same policy rule is used to set the federal funds rate in the alternative scenarios discussed below.

Alternative Scenarios

(Percent change, annual rate, from end of preceding period except as noted)

Measure and scenario	2009 H2	2010	2011	2012	2013-14
Real GDP					
Extended Greenbook baseline	2.8	3.5	4.5	4.9	3.5
V-shaped recovery	4.0	5.0	5.4	4.6	2.8
Earlier liftoff	4.0	5.3	5.2	4.0	2.4
Higher saving rate	1.6	.9	4.1	4.8	4.3
Greater financial headwinds	1.3	.8	4.2	5.3	4.7
Greater disinflation	2.8	3.4	4.2	4.9	4.2
Labor market damage	2.5	2.6	4.3	5.8	3.8
Unemployment rate[1]					
Extended Greenbook baseline	9.9	9.2	7.9	5.9	4.6
V-shaped recovery	9.8	8.6	7.0	5.2	4.6
Earlier liftoff	9.8	8.5	6.9	5.3	5.0
Higher saving rate	10.0	10.4	9.3	7.3	5.2
Greater financial headwinds	10.1	10.4	9.3	7.1	4.7
Greater disinflation	9.9	9.2	8.0	6.1	4.2
Labor market damage	10.1	10.3	9.2	6.0	4.4
Core PCE inflation					
Extended Greenbook baseline	1.3	1.1	1.0	1.1	1.5
V-shaped recovery	1.3	1.1	1.0	1.1	1.7
Earlier liftoff	1.2	1.6	1.9	2.2	2.8
Higher saving rate	1.3	.9	.5	.6	1.0
Greater financial headwinds	1.3	.9	.5	.7	1.2
Greater disinflation	1.0	.4	.1	-.1	.0
Labor market damage	1.4	1.1	1.2	1.5	1.9
Federal funds rate[1]					
Extended Greenbook baseline	.1	.1	.1	2.4	4.1
V-shaped recovery	.1	.1	1.0	3.2	4.4
Earlier liftoff	.1	.6	2.4	4.6	5.5
Higher saving rate	.1	.1	.1	.2	2.6
Greater financial headwinds	.1	.1	.1	.6	3.5
Greater disinflation	.1	.1	.1	.5	2.4
Labor market damage	.1	.1	.3	3.0	4.9

1. Percent, average for the final quarter of the period.

that in turn might spark stronger activity in other sectors. In this scenario, a pronounced snapback in investment leads to private outlays on durable goods and structures that are 12 percent above baseline by the end of 2011. In the more favorable economic environment created by this additional demand, we assume that risk spreads on equities, corporate bonds, and residential mortgages fall faster than expected; consumer sentiment also improves more quickly, further stimulating overall spending. As a result, real GDP returns to its previous peak by early next year and expands at an annual rate of about 5¼ percent, on average, over the next two years. This V-shaped recovery puts unemployment on a more pronounced downward trajectory: The unemployment rate drops to 8½ percent by the end of 2010 and then continues to move steadily down. With less slack in this scenario but little change in long-run price expectations and faster capital-driven productivity growth, inflation is little changed from baseline. In response to the more robust economy, the federal funds rate moves up from the zero bound in early 2011.

Earlier liftoff. In this scenario, the rapidly improving economy of the V-shaped recovery is assumed to be accompanied by an increase in long-run inflation expectations, perhaps reflecting concerns over the ability or willingness of monetary policymakers to restrain inflationary pressures given strong output growth and the expansion of the Federal Reserve's balance sheet. Specifically, we assume that long-run inflation expectations rise to 3 percent later this year, an expectation that becomes partially self-fulfilling. Core PCE inflation averages 1½ percent in 2010 and then climbs steadily, reaching 3 percent by 2014. The combination of falling unemployment and rising inflation brings forward the liftoff in the federal funds rate to the end of next year. Relative to the V-shaped scenario, real activity is a bit stronger in 2010 but rises less rapidly thereafter, reflecting the earlier and sharper rise in the federal funds rate.

Higher saving rate. The personal saving rate has moved up considerably in recent quarters from what had been a very low level by historical standards. In the baseline, we expect the saving rate to hover near 4 percent through 2011, as the drag on consumer spending from the decline in wealth over the past two years is offset by low interest rates, increasing consumer confidence, and improved credit availability. However, the baseline projection may underestimate the extent to which households' desired saving has moved up in response to the decline in net worth and the heightened economic uncertainty of the past two years. In addition, we may have overstated the degree to which credit conditions for households will ease. In this scenario, the saving rate moves up to 7 percent by next year and remains elevated through 2014. As a result, real GDP rises less rapidly than in the baseline in the second half of this year and over the next two years. The unemployment rate rises to nearly 10½ percent by the end of 2010 and inflation slows noticeably, delaying the liftoff of the federal funds rate until the end of 2012.

Greater financial headwinds. The strength in demand suggested by the positive tone of the data received in recent months could easily prove short-lived, particularly given some of the factors weighing on the economy. For example, the baseline may understate the restraint on spending that will be exerted by impaired balance sheets at banks, many households, and some nonfinancial firms. In this scenario, we assume that these factors directly damp demand more significantly and also lead to greater restraint on credit availability, more-elevated external finance premiums for borrowers, and a renewed decline in consumer and business sentiment. As a result, the stock market falls 35 percent while the spread of BBB-rated corporate bonds over 10-year Treasury securities widens 150 basis points, both relative to baseline. Real GDP rises at an annual rate of only about 1¼ percent in the second half of 2009 and about ¾ percent next year. The unemployment rate peaks at 10½ percent next year while core PCE inflation falls to ½ percent in 2011.

Greater disinflation. Inflation slows only modestly in the baseline projection despite a very high level of unemployment, in contrast with earlier episodes in which elevated levels of slack led to more marked and persistent decelerations in prices. The modest slowing in the baseline reflects our assessment that inflation expectations are now reasonably well anchored, which greatly attenuates the degree to which economic slack reduces long-run inflation expectations and hence the persistent element in actual inflation. In this scenario, we assume that inflation expectations instead fall more significantly in response to economic slack in a manner that is implicit in many accelerationist Phillips curve models. As a result, core PCE inflation drops to 1 percent in the second half of this year and to about zero in 2011 and remains roughly unchanged thereafter. With the nominal funds rate constrained by the zero lower bound initially, the decline in inflation causes real interest rates to rise above baseline, weakening real activity a bit. In the longer run, however, monetary policy is able to respond to the unwelcome disinflation by holding the nominal federal funds rate below baseline. As a result, both nominal and real long-term interest rates are lower, and the resulting stimulus causes the unemployment rate to decline noticeably below baseline by 2014.

Labor market damage. The unusual depth and breadth of the downturn could well impair labor market efficiency by more than in the baseline projection, perhaps through unusually large and costly intersectoral adjustments or the adverse effects of prolonged unemployment on workers' skills. This scenario considers the possibility that these factors have been boosting the NAIRU more than anticipated in the baseline and will continue to do so, such that it reaches 6½ percent in 2010 and remains there through 2011 before drifting back down. Because this unfavorable supply-side development has adverse implications for household income and corporate profits, consumption and investment are weaker than in the baseline. As a result, real GDP rises at an annual rate of 2½ percent in the second half of this year and 2010. The unemployment rate peaks at about 10¼ percent in 2010. Over the course of this scenario, the average increase in the unemployment rate, relative to baseline, is somewhat less than that of the NAIRU, implying less slack. Hence, inflationary pressures are greater than in the staff forecast.

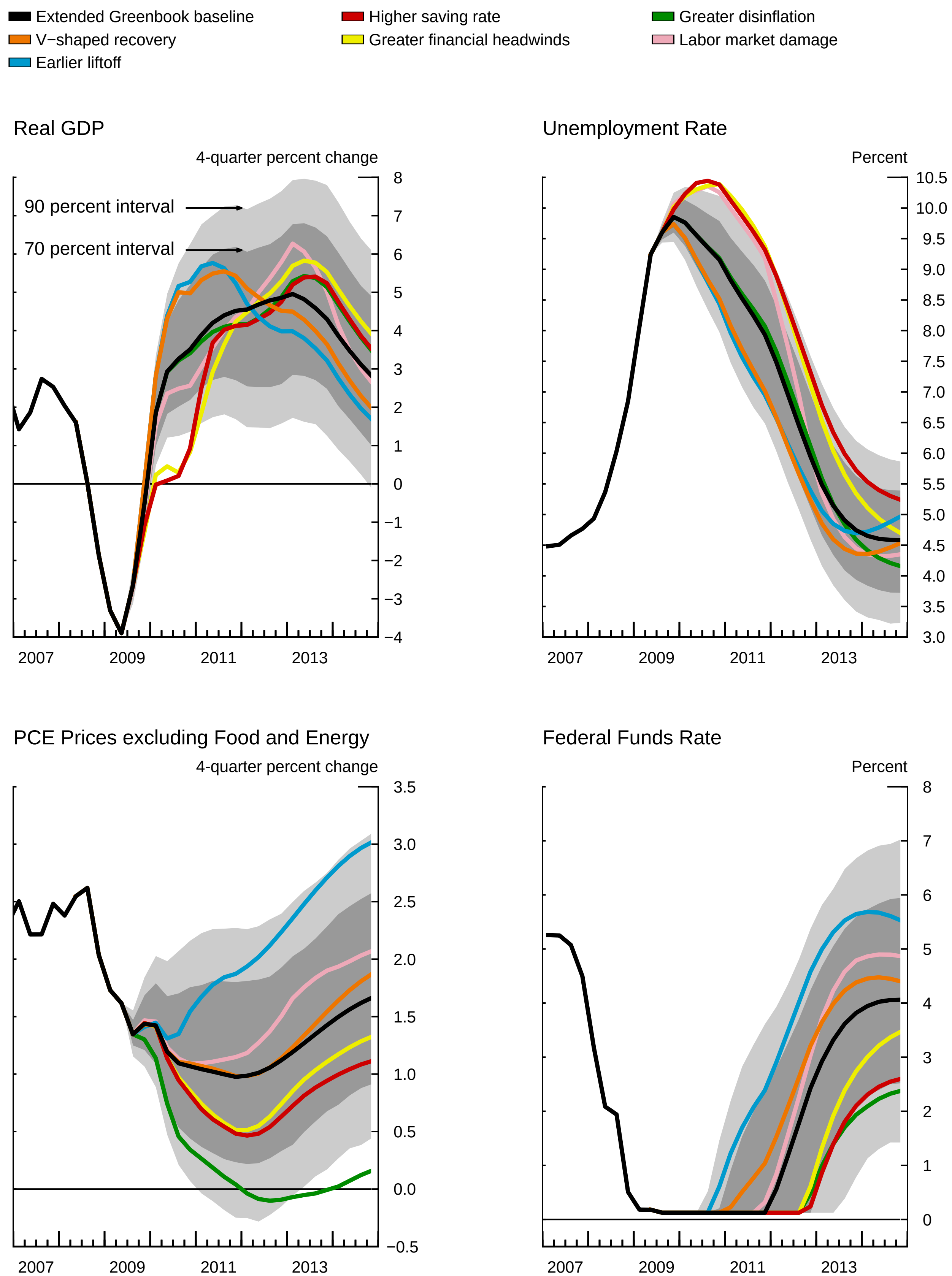
Selected Greenbook Projections and 70 Percent Confidence Intervals Derived from Historical Greenbook Forecast Errors and FRB/US Simulations

Measure	2009	2010	2011	2012	2013	2014
Real GDP						
(percent change, Q4 to Q4)						
Projection	-.5	3.5	4.5	4.9	4.3	2.8
Confidence interval						
Greenbook forecast errors	-1.4±.3	1.7±5.3	2.8±6.3	. . .	. . .	. . .
FRB/US stochastic simulations	-1.2±.1	2.2±5.2	2.7±6.2	2.6±6.5	2.5±6.5	1.0±4.9
Civilian unemployment rate						
(percent, Q4)						
Projection	9.9	9.2	7.9	5.9	4.7	4.6
Confidence interval						
Greenbook forecast errors	9.5±10.2	8.4±10.0	6.8±9.0	. . .	. . .	. . .
FRB/US stochastic simulations	9.6±10.1	8.4±9.8	7.0±8.8	5.1±7.0	3.9±5.6	3.7±5.4
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	1.0	1.3	1.0	1.2	1.5	1.7
Confidence interval						
Greenbook forecast errors	.5±1.5	.2±2.4	-.3±2.3	. . .	. . .	. . .
FRB/US stochastic simulations	.7±1.4	.5±2.3	.0±2.1	.1±2.2	.5±2.5	.7±2.8
PCE prices excluding food and energy						
(percent change, Q4 to Q4)						
Projection	1.4	1.1	1.0	1.1	1.4	1.7
Confidence interval						
Greenbook forecast errors	1.1±1.8	.4±1.8	.0±2.0	. . .	. . .	. . .
FRB/US stochastic simulations	1.2±1.7	.4±1.8	.2±1.8	.3±1.9	.7±2.3	.9±2.6
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.1	2.4	3.8	4.1
Confidence interval						
FRB/US stochastic simulations	.1±.1	.1±.2	.1±2.4	.1±4.2	2.1±5.6	2.5±5.9

Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2008 set of model equation residuals.
Intervals derived from Greenbook forecast errors are based on projections made from 1979-2008, except for PCE prices excluding food and energy, where the sample is 1981-2008.
. . . Not applicable. The Greenbook forecast horizon has typically extended about two years.

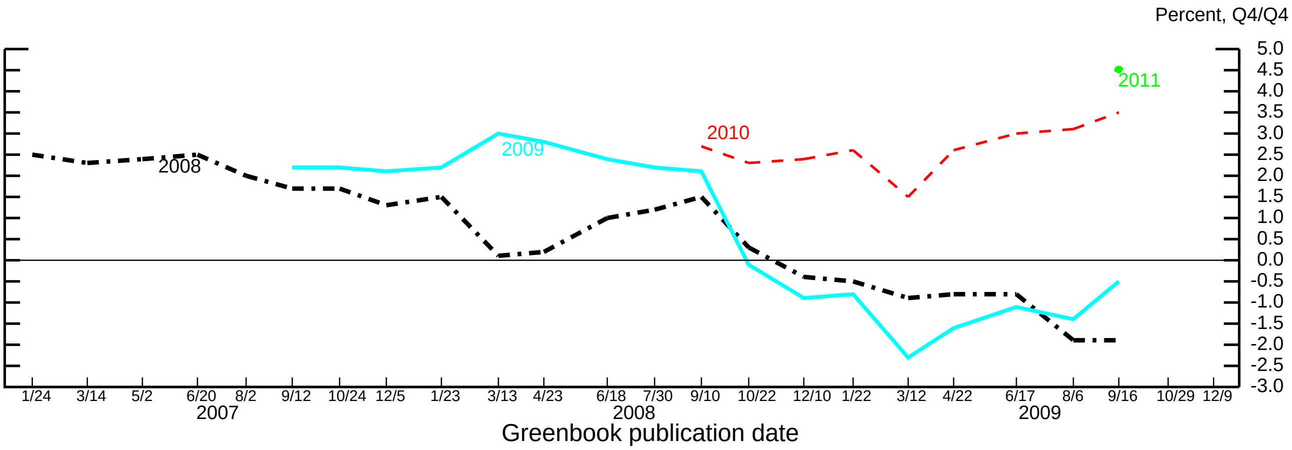
Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

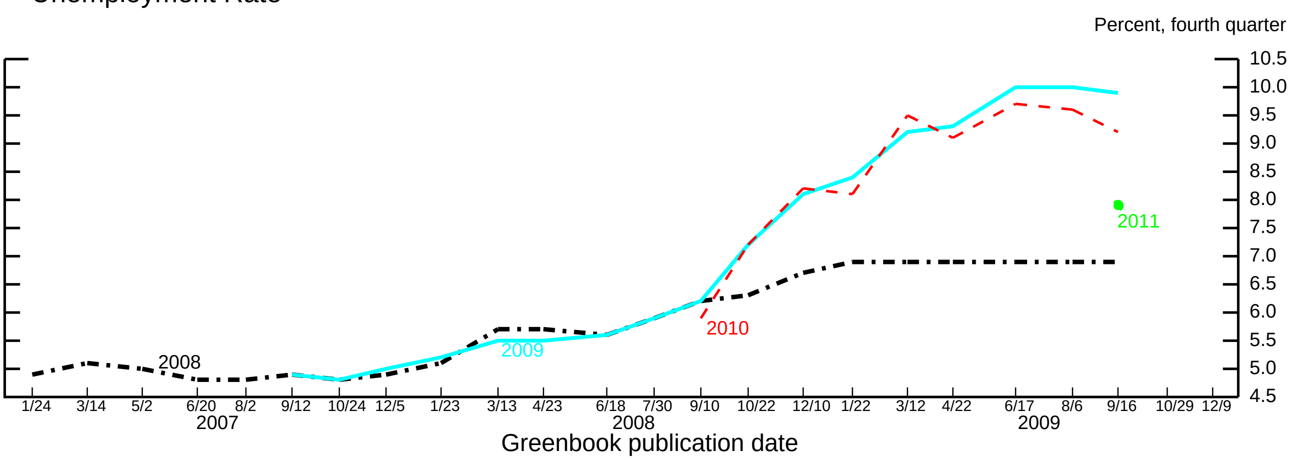


Evolution of the Staff Forecast

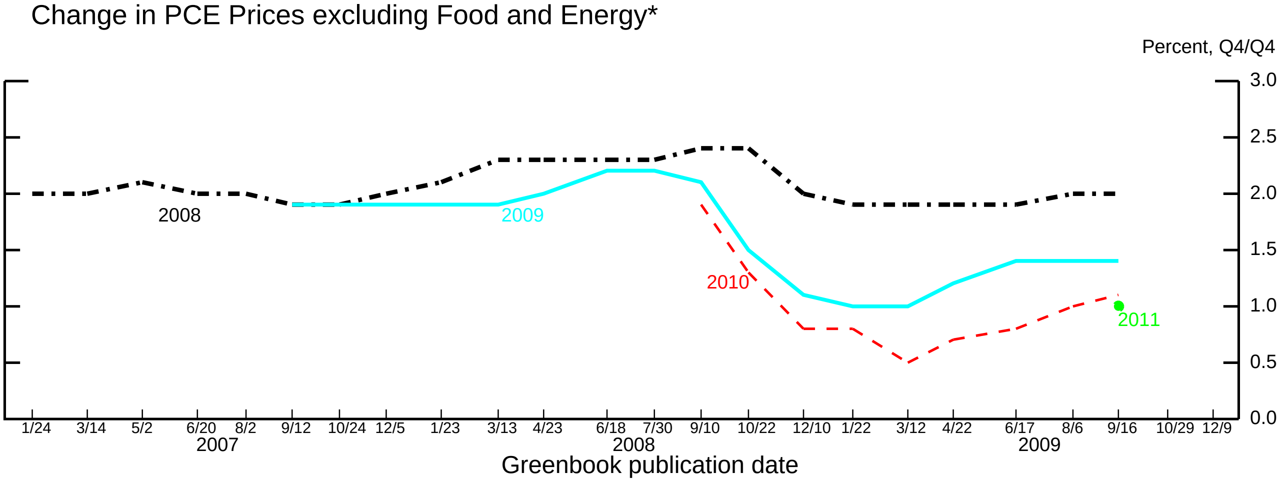
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy*



*Because the core PCE price index was redefined as part of the comprehensive revisions to the NIPA, projections prior to the August 2009 Greenbook are not strictly comparable with more recent projections.

Changes in GDP, Prices, and Unemployment
(Percent, annual rate except as noted)

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate[1]	
	08/06/09	09/16/09	08/06/09	09/16/09	08/06/09	09/16/09	08/06/09	09/16/09	08/06/09	09/16/09
Quarterly										
2009:Q1	-4.6	-4.6	-6.4	-6.4	-1.5	-1.5	1.1	1.1	8.1	8.1
Q2	-1.2	-1.0	-1.5	-1.0	1.3	1.3	2.0	2.0	9.2	9.2
Q3	1.6	3.1	.8	2.5	2.4	2.9	1.2	1.5	9.8	9.6
Q4	2.9	4.2	1.7	3.2	2.2	1.4	1.2	1.2	10.0	9.9
2010:Q1	3.7	4.3	2.5	2.8	1.5	1.4	1.0	1.1	10.0	9.8
Q2	4.2	4.4	3.0	3.2	1.3	1.4	1.0	1.1	9.9	9.6
Q3	4.6	5.0	3.4	3.8	1.1	1.3	1.0	1.1	9.8	9.4
Q4	4.6	5.3	3.6	4.2	1.0	1.2	1.0	1.1	9.6	9.2
2011:Q1	...	5.6	...	4.4	...	1.1	...	1.0	...	8.8
Q2	...	5.6	...	4.5	...	1.0	...	1.0	...	8.5
Q3	...	5.6	...	4.6	...	1.0	...	1.0	...	8.2
Q4	...	5.6	...	4.6	...	1.0	...	1.0	...	7.9
Two-quarter[2]										
2009:Q2	-3.0	-2.9	-4.0	-3.8	-.1	-.1	1.6	1.6	2.3	2.3
Q4	2.2	3.7	1.2	2.8	2.3	2.1	1.2	1.3	.8	.7
2010:Q2	4.0	4.4	2.8	3.0	1.4	1.4	1.0	1.1	-.1	-.3
Q4	4.6	5.1	3.5	4.0	1.1	1.2	1.0	1.1	-.3	-.4
2011:Q2	...	5.6	...	4.4	...	1.0	...	1.0	...	-.7
Q4	...	5.6	...	4.6	...	1.0	...	1.0	...	-.6
Four-quarter[3]										
2008:Q4	.1	.1	-1.9	-1.9	1.7	1.7	2.0	2.0	2.1	2.1
2009:Q4	-.4	.4	-1.4	-.5	1.1	1.0	1.4	1.4	3.1	3.0
2010:Q4	4.3	4.7	3.1	3.5	1.3	1.3	1.0	1.1	-.4	-.7
2011:Q4	...	5.6	...	4.5	...	1.0	...	1.0	...	-1.3
Annual										
2008	2.6	2.6	.4	.4	3.3	3.3	2.4	2.4	5.8	5.8
2009	-1.7	-1.4	-3.0	-2.6	.1	.2	1.5	1.5	9.3	9.2
2010	3.2	4.0	2.2	2.9	1.6	1.5	1.1	1.2	9.8	9.5
2011	...	5.4	...	4.3	...	1.1	...	1.0	...	8.4

1. Level, except for two-quarter and four-quarter intervals.
2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.
3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

Changes in Real Gross Domestic Product and Related Items
(Percent, annual rate except as noted)

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
Real GDP	-6.4	-1.0	2.5	3.2	2.8	3.2	3.8	4.2	4.4	4.5	4.6	4.6	-.5	3.5	4.5
Previous Greenbook	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	...	...	...	...	-1.4	3.1	...
Final sales	-4.1	.5	1.5	.3	2.2	3.1	2.9	3.4	3.6	4.1	4.2	4.6	-.5	2.9	4.1
Previous Greenbook	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	...	...	...	...	-1.3	2.6	...
Priv. dom. final purch.	-7.2	-2.8	1.6	-.5	2.3	3.3	3.7	4.3	4.4	4.9	5.0	5.4	-2.3	3.4	5.0
Previous Greenbook	-7.2	-3.5	-1.0	-.7	1.5	2.7	3.4	4.1	...	...	...	...	-3.1	2.9	...
Personal cons. expend.	.6	-.9	2.3	.8	2.5	2.8	2.9	3.3	3.3	3.6	3.6	3.8	.7	2.9	3.6
Previous Greenbook	.6	-1.2	.9	1.2	2.1	2.4	2.8	3.2	...	...	...	...	.4	2.6	...
Durables	3.9	-5.5	15.9	-7.0	10.0	9.9	7.5	10.7	9.8	11.9	11.5	13.0	1.4	9.5	11.6
Nondurables	1.9	-2.1	.6	1.9	2.0	2.2	2.7	2.9	2.9	3.0	3.1	3.2	.6	2.5	3.1
Services	-.3	.2	.9	1.7	1.6	1.9	2.3	2.3	2.4	2.5	2.6	2.6	.6	2.0	2.5
Residential investment	-38.2	-22.9	3.0	4.0	7.0	12.4	15.4	17.0	20.2	23.9	26.8	30.5	-15.5	12.9	25.3
Previous Greenbook	-38.2	-30.1	-9.8	-6.8	-3.1	10.4	13.0	18.1	...	...	...	...	-22.4	9.3	...
Business fixed invest.	-39.2	-10.3	-3.8	-11.3	-.3	4.8	7.2	8.7	9.2	10.3	9.8	10.3	-17.4	5.0	9.9
Previous Greenbook	-39.2	-10.7	-11.9	-12.5	-2.3	2.8	6.0	8.0	...	...	...	...	-19.5	3.5	...
Equipment & software	-36.4	-6.2	4.8	-3.0	5.2	10.2	11.8	12.3	12.8	15.0	14.4	14.9	-11.7	9.8	14.3
Previous Greenbook	-36.4	-8.3	-5.7	-4.2	2.7	7.7	10.5	12.0	...	...	...	...	-14.8	8.2	...
Nonres. structures	-43.6	-17.1	-18.0	-25.9	-11.0	-5.9	-2.3	.7	1.1	-.2	-.9	-.8	-27.0	-4.7	-.2
Previous Greenbook	-43.6	-14.6	-22.1	-26.6	-11.6	-6.8	-3.2	-.6	...	...	...	...	-27.6	-5.7	...
Net exports[2]	-386	-332	-339	-342	-351	-351	-359	-367	-374	-379	-385	-387	-350	-357	-381
Previous Greenbook[2]	-386	-347	-357	-355	-357	-358	-362	-364	...	...	...	...	-362	-360	...
Exports	-29.9	-4.6	20.9	8.1	7.4	7.9	8.4	8.9	8.6	8.4	8.3	9.0	-3.3	8.2	8.6
Imports	-36.4	-14.8	18.4	7.2	8.1	6.4	8.7	8.9	8.6	7.8	8.0	7.6	-8.9	8.0	8.0
Gov't. cons. & invest.	-2.6	6.5	1.8	4.3	3.1	2.0	.7	.6	1.0	1.0	1.0	1.0	2.5	1.6	1.0
Previous Greenbook	-2.6	6.1	2.9	3.2	3.3	2.1	.7	.5	...	...	...	...	2.4	1.6	...
Federal	-4.3	11.0	3.5	9.6	6.2	3.5	.1	-.2	.8	.9	.8	.8	4.8	2.4	.8
Defense	-5.1	13.3	2.7	10.2	3.5	2.2	1.3	.7	.0	.1	-.1	.0	5.0	1.9	.0
Nondefense	-2.5	6.2	5.3	8.3	12.0	6.2	-2.2	-2.0	2.5	2.5	2.5	2.5	4.2	3.3	2.5
State & local	-1.5	3.8	.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1
Change in bus. inventories[2]	-114	-165	-134	-45	-25	-20	7	33	58	71	85	87	-114	-1	75
Previous Greenbook[2]	-114	-145	-103	-55	-32	-18	0	8	...	...	...	...	-104	-10	...
Nonfarm[2]	-115	-169	-138	-48	-28	-23	4	30	55	69	83	85	-117	-4	73
Farm[2]	0	3	4	4	4	3	3	3	3	3	3	3	3	3	3

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
2. Billions of chained (2005) dollars.

Changes in Real Gross Domestic Product and Related Items
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real GDP	3.8	3.1	2.7	2.4	2.5	-1.9	-.5	3.5	4.5
Previous Greenbook	3.8	3.1	2.7	2.4	2.5	-1.9	-1.4	3.1	. . .
Final sales	3.8	2.8	2.7	2.8	2.7	-1.4	-.5	2.9	4.1
Previous Greenbook	3.8	2.8	2.7	2.8	2.7	-1.4	-1.3	2.6	. . .
Priv. dom. final purch.	4.2	4.2	3.1	2.5	1.4	-3.2	-2.3	3.4	5.0
Previous Greenbook	4.2	4.2	3.1	2.5	1.4	-3.2	-3.1	2.9	. . .
Personal cons. expend.	3.4	3.5	2.7	3.3	2.0	-1.8	.7	2.9	3.6
Previous Greenbook	3.4	3.5	2.7	3.3	2.0	-1.8	.4	2.6	. . .
Durables	8.9	5.5	2.1	6.3	4.6	-11.8	1.4	9.5	11.6
Nondurables	3.9	3.0	3.3	3.2	1.5	-2.9	.6	2.5	3.1
Services	2.2	3.4	2.6	2.8	1.7	.3	.6	2.0	2.5
Residential investment	11.5	6.6	5.3	-15.7	-20.5	-21.0	-15.5	12.9	25.3
Previous Greenbook	11.5	6.6	5.3	-15.7	-20.5	-21.0	-22.4	9.3	. . .
Business fixed invest.	5.9	7.0	4.4	7.8	7.9	-6.0	-17.4	5.0	9.9
Previous Greenbook	5.9	7.0	4.4	7.8	7.9	-6.0	-19.5	3.5	. . .
Equipment & software	7.5	8.8	6.1	6.0	3.2	-10.7	-11.7	9.8	14.3
Previous Greenbook	7.5	8.8	6.1	6.0	3.2	-10.7	-14.8	8.2	. . .
Nonres. structures	1.3	1.7	-.1	13.0	18.9	3.2	-27.0	-4.7	-.2
Previous Greenbook	1.3	1.7	-.1	13.0	18.9	3.2	-27.6	-5.7	. . .
Net exports[1]	-604	-688	-723	-729	-648	-494	-350	-357	-381
Previous Greenbook[1]	-604	-688	-723	-729	-648	-494	-362	-360	. . .
Exports	6.2	7.1	6.7	10.2	10.2	-3.4	-3.3	8.2	8.6
Imports	5.1	10.9	5.2	4.1	.9	-6.8	-8.9	8.0	8.0
Gov't. cons. & invest.	1.6	.6	.7	1.5	2.5	3.0	2.5	1.6	1.0
Previous Greenbook	1.6	.6	.7	1.5	2.5	3.0	2.4	1.6	. . .
Federal	5.7	2.3	1.2	2.2	3.4	8.9	4.8	2.4	.8
Defense	8.4	2.4	.4	4.4	2.6	9.5	5.0	1.9	.0
Nondefense	.7	2.3	2.6	-2.3	5.2	7.5	4.2	3.3	2.5
State & local	-.5	-.4	.4	1.2	1.9	-.3	1.0	1.1	1.1
Change in bus. inventories[1]	17	66	50	59	19	-26	-114	-1	75
Previous Greenbook[1]	17	66	50	59	19	-26	-104	-10	. . .
Nonfarm[1]	17	58	50	63	20	-20	-117	-4	73
Farm[1]	0	8	0	-4	-1	-5	3	3	3

1. Billions of chained (2005) dollars.

Contributions to Changes in Real Gross Domestic Product
(Percentage points, annual rate except as noted)

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
Real GDP	-6.4	-1.0	2.5	3.2	2.8	3.2	3.8	4.2	4.4	4.5	4.6	4.6	-.5	3.5	4.5
Previous Greenbook	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	. . .	. . .	. . .	. . .	-1.4	3.1	. . .
Final sales	-4.1	.5	1.5	.4	2.2	3.1	3.0	3.4	3.6	4.1	4.2	4.6	-.5	2.9	4.1
Previous Greenbook	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	. . .	. . .	. . .	. . .	-1.3	2.7	. . .
Priv. dom. final purch.	-6.1	-2.4	1.3	-.4	1.9	2.7	3.1	3.5	3.6	4.0	4.1	4.4	-1.9	2.8	4.1
Previous Greenbook	-6.1	-2.9	-.8	-.6	1.2	2.2	2.8	3.3	. . .	. . .	. . .	. . .	-2.6	2.4	. . .
Personal cons. expend.	.4	-.6	1.6	.6	1.8	2.0	2.1	2.3	2.3	2.5	2.6	2.7	.5	2.0	2.5
Previous Greenbook	.4	-.9	.6	.8	1.5	1.7	2.0	2.2	. . .	. . .	. . .	. . .	.2	1.9	. . .
Durables	.3	-.4	1.1	-.5	.7	.7	.5	.7	.7	.8	.8	.9	.1	.7	.8
Nondurables	.3	-.3	.1	.3	.3	.4	.4	.5	.5	.5	.5	.5	.1	.4	.5
Services	-.1	.1	.5	.8	.8	.9	1.1	1.1	1.2	1.2	1.3	1.3	.3	1.0	1.2
Residential investment	-1.3	-.7	.1	.1	.2	.3	.4	.4	.5	.6	.7	.8	-.5	.3	.7
Previous Greenbook	-1.3	-.9	-.2	-.2	-.1	.2	.3	.4	. . .	. . .	. . .	. . .	-.7	.2	. . .
Business fixed invest.	-5.3	-1.1	-.4	-1.1	.0	.4	.6	.8	.8	.9	.9	.9	-2.0	.5	.9
Previous Greenbook	-5.3	-1.1	-1.2	-1.2	-.2	.3	.5	.7	. . .	. . .	. . .	. . .	-2.2	.3	. . .
Equipment & software	-3.0	-.4	.3	-.2	.3	.6	.7	.8	.8	.9	.9	1.0	-.8	.6	.9
Previous Greenbook	-3.0	-.6	-.4	-.3	.2	.5	.6	.7	. . .	. . .	. . .	. . .	-1.0	.5	. . .
Nonres. structures	-2.3	-.7	-.7	-.9	-.3	-.2	-.1	.0	.0	.0	.0	.0	-1.1	-.1	.0
Previous Greenbook	-2.3	-.6	-.9	-1.0	-.4	-.2	-.1	.0	. . .	. . .	. . .	. . .	-1.2	-.2	. . .
Net exports	2.6	1.6	-.2	-.1	-.3	.0	-.3	-.2	-.2	-.2	-.2	-.1	1.0	-.2	-.2
Previous Greenbook	2.6	1.1	-.3	.1	-.1	.0	-.1	-.1	. . .	. . .	. . .	. . .	.9	-.1	. . .
Exports	-4.0	-.5	2.1	.9	.8	.9	1.0	1.0	1.0	1.0	1.0	1.1	-.4	.9	1.0
Imports	6.6	2.1	-2.3	-1.0	-1.1	-.9	-1.2	-1.3	-1.3	-1.1	-1.2	-1.1	1.4	-1.1	-1.2
Gov't. cons. & invest.	-.5	1.3	.4	.9	.6	.4	.2	.1	.2	.2	.2	.2	.5	.3	.2
Previous Greenbook	-.5	1.2	.6	.7	.7	.4	.2	.1	. . .	. . .	. . .	. . .	.5	.3	. . .
Federal	-.3	.8	.3	.8	.5	.3	.0	.0	.1	.1	.1	.1	.4	.2	.1
Defense	-.3	.7	.1	.5	.2	.1	.1	.0	.0	.0	.0	.0	.3	.1	.0
Nondefense	-.1	.2	.1	.2	.3	.2	-.1	-.1	.1	.1	.1	.1	.1	.1	.1
State & local	-.2	.5	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Change in bus. inventories	-2.4	-1.5	1.0	2.8	.6	.1	.8	.8	.8	.4	.4	.1	.0	.6	.4
Previous Greenbook	-2.4	-.9	1.4	1.5	.7	.4	.6	.2	. . .	. . .	. . .	. . .	-.1	.5	. . .
Nonfarm	-2.4	-1.6	1.0	2.8	.6	.2	.8	.8	.8	.4	.4	.1	-.1	.6	.4
Farm	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0

1. Change from fourth quarter of previous year to fourth quarter of year indicated.

Changes in Prices and Costs
(Percent, annual rate except as noted)

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
GDP chain-wt. price index	1.9	.0	.7	1.0	1.4	1.2	1.1	1.1	1.2	1.1	1.0	1.0	.9	1.2	1.1
Previous Greenbook	1.9	.2	.8	1.2	1.1	1.2	1.1	1.0	...	...	...	...	1.0	1.1	...
PCE chain-wt. price index	-1.5	1.3	2.9	1.4	1.4	1.4	1.3	1.2	1.1	1.0	1.0	1.0	1.0	1.3	1.0
Previous Greenbook	-1.5	1.3	2.4	2.2	1.5	1.3	1.1	1.0	...	...	...	...	1.1	1.3	...
Energy	-36.7	-2.2	39.5	4.9	6.0	6.2	4.5	3.5	2.8	2.0	1.9	1.8	-2.4	5.0	2.1
Previous Greenbook	-36.7	-2.2	27.7	20.1	10.1	6.4	3.5	1.9	...	...	...	...	-1.3	5.4	...
Food	-1.1	-3.6	-1.5	1.8	1.7	1.6	1.5	1.0	.7	.7	.7	.7	-1.1	1.5	.7
Previous Greenbook	-1.1	-3.6	1.5	2.2	2.1	1.9	1.5	1.0	...	...	...	...	-.3	1.6	...
Ex. food & energy	1.1	2.0	1.5	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.4	1.1	1.0
Previous Greenbook	1.1	2.0	1.2	1.2	1.0	1.0	1.0	1.0	...	...	...	...	1.4	1.0	...
CPI	-2.4	1.3	3.6	1.8	1.6	1.7	1.5	1.3	1.2	1.1	1.1	1.1	1.1	1.5	1.1
Previous Greenbook	-2.4	1.3	3.6	2.7	1.9	1.6	1.3	1.1	...	...	...	...	1.3	1.5	...
Ex. food & energy	1.5	2.4	1.5	1.5	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.7	1.2	1.1
Previous Greenbook	1.5	2.4	1.5	1.3	1.1	1.0	1.0	1.0	...	...	...	...	1.7	1.1	...
ECI, hourly compensation[2]	.7	.7	1.7	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.1	1.2	1.8	2.0
Previous Greenbook[2]	.7	.7	1.3	1.3	1.3	1.2	1.1	1.1	...	...	...	...	1.0	1.2	...
Nonfarm business sector															
Output per hour	.3	6.6	5.2	2.9	1.4	1.4	1.1	1.3	1.1	1.6	1.6	1.5	3.7	1.3	1.4
Previous Greenbook	.3	5.3	2.2	1.3	1.8	1.4	1.9	1.9	...	...	...	...	2.3	1.7	...
Compensation per hour	-4.7	.4	1.8	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	-.3	1.8	2.1
Previous Greenbook	-2.6	-.8	.8	1.0	1.2	1.2	1.2	1.2	...	...	...	...	-.4	1.2	...
Unit labor costs	-5.0	-5.8	-3.2	-1.2	.3	.3	.7	.6	.9	.4	.5	.6	-3.8	.5	.6
Previous Greenbook	-2.8	-5.9	-1.3	-.3	-.6	-.2	-.7	-.7	...	...	...	...	-2.6	-.5	...
Core goods imports chain-wt. price index[3]	-9.4	-2.4	3.5	3.5	2.0	1.3	1.0	1.0	1.0	1.0	1.0	1.0	-1.4	1.3	1.0
Previous Greenbook[3]	-9.4	-2.3	3.1	2.7	1.6	1.1	1.0	.9	...	...	...	...	-1.6	1.2	...

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
2. Private-industry workers.
3. Core goods imports exclude computers, semiconductors, oil, and natural gas.

Changes in Prices and Costs
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP chain-wt. price index	2.1	3.2	3.5	2.9	2.7	1.9	.9	1.2	1.1
Previous Greenbook	2.1	3.2	3.5	2.9	2.7	1.9	1.0	1.1	. . .
PCE chain-wt. price index	1.9	3.0	3.3	1.9	3.6	1.7	1.0	1.3	1.0
Previous Greenbook	1.9	3.0	3.3	1.9	3.6	1.7	1.1	1.3	. . .
Energy	8.6	18.6	21.5	-3.7	19.7	-9.1	-2.4	5.0	2.1
Previous Greenbook	8.6	18.6	21.5	-3.7	19.7	-9.1	-1.3	5.4	. . .
Food	3.2	2.7	1.5	1.7	4.7	6.8	-1.1	1.5	.7
Previous Greenbook	3.2	2.7	1.5	1.7	4.7	6.8	-.3	1.6	. . .
Ex. food & energy	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.1	1.0
Previous Greenbook	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.0	. . .
CPI	2.0	3.4	3.8	1.9	4.0	1.5	1.1	1.5	1.1
Previous Greenbook	2.0	3.4	3.8	1.9	4.0	1.5	1.3	1.5	. . .
Ex. food & energy	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.2	1.1
Previous Greenbook	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.1	. . .
ECI, hourly compensation[1]	4.0	3.8	2.9	3.2	3.0	2.4	1.2	1.8	2.0
Previous Greenbook[1]	4.0	3.8	2.9	3.2	3.0	2.4	1.0	1.2	. . .
Nonfarm business sector									
Output per hour	5.0	1.5	1.4	.9	2.8	.9	3.7	1.3	1.4
Previous Greenbook	5.0	1.5	1.4	.9	2.8	1.0	2.3	1.7	. . .
Compensation per hour	5.7	3.4	3.5	4.5	3.6	2.6	-.3	1.8	2.1
Previous Greenbook	5.6	3.3	3.5	4.4	3.6	2.6	-.4	1.2	. . .
Unit labor costs	.6	1.9	2.0	3.5	.7	1.6	-3.8	.5	.6
Previous Greenbook	.6	1.8	2.0	3.5	.7	1.6	-2.6	-.5	. . .
Core goods imports chain-wt. price index[2]	1.6	3.6	2.2	2.5	3.5	3.8	-1.4	1.3	1.0
Previous Greenbook[2]	1.6	3.6	2.2	2.5	3.5	3.8	-1.6	1.2	. . .

1. Private-industry workers.
2. Core goods imports exclude computers, semiconductors, oil and natural gas.

Other Macroeconomic Indicators

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
Employment and production															
Nonfarm payroll employment[2]	-2.1	-1.5	-.9	-.2	.3	.7	.5	.7	1.0	.9	.9	1.0	-4.6	2.4	3.7
Unemployment rate[3]	8.1	9.2	9.6	9.9	9.8	9.6	9.4	9.2	8.8	8.5	8.2	7.9	9.9	9.2	7.9
Previous Greenbook[3]	8.1	9.2	9.8	10.0	10.0	9.9	9.8	9.6	. . .	. . .	. . .	. . .	10.0	9.6	. . .
GDP gap[4]	-6.6	-7.3	-7.2	-6.9	-6.8	-6.5	-6.1	-5.6	-5.2	-4.7	-4.2	-3.6	-6.9	-5.6	-3.6
Previous Greenbook[4]	-6.6	-7.4	-7.7	-7.8	-7.7	-7.4	-7.1	-6.8	. . .	. . .	. . .	. . .	-7.8	-6.8	. . .
Industrial production[5]	-19.0	-10.5	4.3	5.0	5.3	5.1	5.5	6.2	6.0	5.8	7.0	8.7	-5.6	5.5	6.9
Previous Greenbook[5]	-19.1	-11.6	3.0	3.4	3.9	4.7	5.2	5.5	. . .	. . .	. . .	. . .	-6.6	4.8	. . .
Manufacturing industr. prod.[5]	-22.0	-9.0	6.3	4.9	5.1	5.2	5.6	6.7	6.6	6.5	7.9	9.9	-5.7	5.6	7.7
Previous Greenbook[5]	-22.1	-10.5	4.4	3.5	3.8	4.8	5.1	6.0	. . .	. . .	. . .	. . .	-6.8	4.9	. . .
Capacity utilization rate - mfg.[3]	66.7	65.3	66.6	67.7	68.8	70.0	71.2	72.7	74.0	75.4	77.0	79.0	67.7	72.7	79.0
Previous Greenbook[3]	66.7	65.1	66.0	66.9	67.8	68.9	70.1	71.5	. . .	. . .	. . .	. . .	66.9	71.5	. . .
Housing starts[6]	.5	.5	.6	.7	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	.6	.9	1.2
Light motor vehicle sales[6]	9.5	9.6	11.3	10.0	11.1	12.0	12.5	13.1	13.6	14.3	15.0	16.0	10.1	12.2	14.7
Income and saving															
Nominal GDP[5]	-4.6	-1.0	3.1	4.2	4.3	4.4	5.0	5.3	5.6	5.6	5.6	5.6	.4	4.7	5.6
Real disposable pers. income[5]	.2	3.9	-3.4	1.0	1.9	2.6	3.4	3.7	1.8	3.9	4.2	4.3	.4	2.9	3.6
Previous Greenbook[5]	1.1	3.2	-2.5	.5	1.6	1.4	2.7	2.3	. . .	. . .	. . .	. . .	.6	2.0	. . .
Personal saving rate[3]	3.7	5.0	3.8	3.9	3.8	3.8	4.0	4.1	3.8	3.9	4.0	4.1	3.9	4.1	4.1
Previous Greenbook[3]	4.0	5.2	4.5	4.4	4.3	4.1	4.0	3.9	. . .	. . .	. . .	. . .	4.4	3.9	. . .
Corporate profits[7]	22.8	19.2	25.2	16.8	6.9	6.7	14.5	9.5	8.1	8.5	11.2	6.9	21.0	9.4	8.7
Profit share of GNP[3]	8.3	8.7	9.1	9.4	9.4	9.5	9.7	9.8	9.8	9.9	10.0	10.1	9.4	9.8	10.1
Net federal saving[8]	-969	-1,307	-1,263	-1,286	-1,287	-1,277	-1,289	-1,285	-1,175	-1,140	-1,126	-1,106	-1,206	-1,285	-1,137
Net state & local saving[8]	-37	-11	-13	11	35	40	47	55	7	5	0	-1	-12	44	3
Gross national saving rate[3]	11.2	10.2	10.1	10.4	10.3	10.5	10.7	11.0	11.2	11.6	11.9	12.1	10.4	11.0	12.1
Net national saving rate[3]	-2.5	-3.1	-3.3	-2.8	-2.9	-2.6	-2.3	-1.9	-1.6	-1.1	-.7	-.4	-2.8	-1.9	-.4

1. Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated.
2. Change, millions.
3. Percent, annual values are for the fourth quarter of the year indicated.
4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Annual values are for the fourth quarter of the year indicated.
5. Percent change, annual rate.
6. Level, millions, annual values are annual averages.
7. Percent change, annual rate, with inventory valuation and capital consumption adjustments.
8. Billions of dollars, annual values are annual averages.

Other Macroeconomic Indicators

(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
Employment and production									
Nonfarm payroll employment[1]	-.1	2.0	2.4	2.1	1.2	-2.3	-4.6	2.4	3.7
Unemployment rate[2]	5.8	5.4	4.9	4.4	4.8	6.9	9.9	9.2	7.9
Previous Greenbook[2]	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.6	. . .
GDP gap[3]	-1.7	-.8	-.4	-.4	-.5	-4.6	-6.9	-5.6	-3.6
Previous Greenbook[3]	-1.7	-.8	-.4	-.4	-.5	-4.6	-7.8	-6.8	. . .
Industrial production[4]	1.6	3.0	2.6	1.8	1.8	-6.7	-5.6	5.5	6.9
Previous Greenbook[4]	1.6	3.0	2.6	1.8	1.8	-6.7	-6.6	4.8	. . .
Manufacturing industr. prod.[4]	1.8	3.6	3.8	1.2	1.9	-8.7	-5.7	5.6	7.7
Previous Greenbook[4]	1.8	3.6	3.8	1.2	1.9	-8.7	-6.8	4.9	. . .
Capacity utilization rate - mfg.[2]	74.6	77.3	79.2	79.0	78.7	70.9	67.7	72.7	79.0
Previous Greenbook[2]	74.6	77.3	79.2	79.0	78.7	70.9	66.9	71.5	. . .
Housing starts[5]	1.8	2.0	2.1	1.8	1.4	.9	.6	.9	1.2
Light motor vehicle sales[5]	16.6	16.8	16.9	16.5	16.1	13.1	10.1	12.2	14.7
Income and saving									
Nominal GDP[4]	6.0	6.4	6.3	5.4	5.3	.1	.4	4.7	5.6
Real disposable pers. income[4]	3.9	3.5	.6	4.6	1.0	.3	.4	2.9	3.6
Previous Greenbook[4]	3.9	3.5	.6	4.6	1.0	.3	.6	2.0	. . .
Personal saving rate[2]	3.6	3.6	1.5	2.5	1.5	3.8	3.9	4.1	4.1
Previous Greenbook[2]	3.6	3.6	1.5	2.5	1.5	3.8	4.4	3.9	. . .
Corporate profits[6]	12.2	21.9	19.6	3.7	-5.7	-25.1	21.0	9.4	8.7
Profit share of GNP[2]	9.1	10.5	11.8	11.6	10.3	7.8	9.4	9.8	10.1
Net federal saving[7]	-376	-379	-283	-204	-236	-643	-1206	-1285	-1137
Net state & local saving[7]	-39	-8	26	51	22	-40	-12	44	3
Gross national saving rate[2]	14.3	14.3	15.5	16.3	13.8	12.2	10.4	11.0	12.1
Net national saving rate[2]	2.5	2.7	3.5	4.2	1.6	-.7	-2.8	-1.9	-.4

1. Change, millions.
2. Percent, values are for the fourth quarter of the year indicated.
3. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Values are for the fourth quarter of the year indicated.
4. Percent change.
5. Level, millions, values are annual averages.
6. Percent change, with inventory valuation and capital consumption adjustments.
7. Billions of dollars,values are annual averages.

Staff Projections of Federal Sector Accounts and Related Items
(Billions of dollars except as noted)

Item	Fiscal year				2009				2010				2011			
	2008[a]	2009	2010	2011	Q1[a]	Q2[a]	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2524	2109	2202	2470	442	599	520	502	475	665	561	557	527	757	628	597
Outlays[1]	2983	3540	3621	3619	891	904	865	925	931	893	873	910	922	893	894	914
Surplus/deficit[1]	-459	-1431	-1419	-1149	-449	-305	-345	-423	-455	-228	-313	-352	-395	-136	-266	-317
Previous Greenbook	*-459*	*-1437*	*-1467*	*-1268*	*-449*	*-305*	*-351*	*-405*	*-485*	*-247*	*-329*	*-388*	*-422*	*-170*	*-287*	*-334*
On-budget	-642	-1572	-1532	-1280	-468	-382	-337	-468	-459	-300	-305	-402	-401	-213	-263	-366
Off-budget	183	141	113	131	19	77	-8	45	4	72	-7	50	6	77	-2	48
Means of financing																
Borrowing	768	1727	1469	1169	465	338	363	276	648	218	328	342	385	161	281	307
Cash decrease	-296	89	33	0	98	-49	35	198	-170	15	-10	15	15	-20	-10	15
Other[2]	-13	-385	-83	-20	-114	16	-52	-50	-23	-5	-5	-5	-5	-5	-5	-5
Cash operating balance, end of period	372	283	250	250	269	318	283	85	255	240	250	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2534	2285	2355	2580	2251	2203	2238	2261	2355	2385	2419	2457	2578	2619	2666	2710
Expenditures	3074	3338	3640	3762	3220	3510	3501	3547	3643	3662	3708	3742	3753	3759	3793	3816
Consumption expenditures	914	970	1047	1083	954	980	991	1016	1048	1061	1064	1067	1082	1088	1094	1100
Defense	620	655	699	719	643	662	668	684	699	705	709	712	719	721	723	725
Nondefense	294	315	348	364	311	318	323	332	349	356	356	355	363	367	371	375
Other spending	2160	2368	2593	2679	2266	2530	2510	2531	2595	2601	2644	2676	2672	2671	2698	2715
Current account surplus	-540	-1053	-1285	-1182	-969	-1307	-1263	-1286	-1287	-1277	-1289	-1285	-1175	-1140	-1126	-1106
Gross investment	141	157	166	168	152	157	159	164	166	167	168	168	168	168	168	168
Gross saving less gross investment[3]	-563	-1087	-1324	-1219	-999	-1340	-1297	-1324	-1326	-1316	-1328	-1324	-1212	-1177	-1162	-1140
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-495	-659	-751	-762	-611	-845	-736	-740	-744	-745	-774	-793	-732	-742	-781	-823
Change in HEB, percent of potential GDP	1.7	1.0	0.5	-0.1	1.1	1.5	-0.7	-0.0	-0.0	-0.0	0.1	0.1	-0.4	0.0	0.2	0.2
Fiscal impetus (FI), percent of GDP	0.8	1.0	0.9	-0.0	0.0	0.7	0.2	0.3	0.2	0.2	0.1	0.1	-0.1	-0.0	-0.1	-0.2
Previous Greenbook	*0.9*	*1.0*	*0.9*	*-0.2*	*0.0*	*0.7*	*0.2*	*0.3*	*0.4*	*0.1*	*0.1*	*-0.0*	*-0.1*	*-0.1*	*-0.1*	*-0.1*

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff’s measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2005) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus.
a--Actual

Class II FOMC
Restricted (FR)

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

September 16, 2009

Period[1]	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
2004	8.9	11.1	13.6	5.6	6.3	7.4	9.0	6.4
2005	9.5	11.1	13.2	4.5	8.7	10.2	7.0	6.3
2006	9.0	10.0	11.0	4.1	10.5	8.2	3.9	5.4
2007	8.7	6.6	6.6	5.7	13.5	9.3	4.9	5.3
2008	6.0	.3	-.6	1.6	5.4	1.9	24.2	.1
2009	4.2	-.9	-.2	-4.8	-.6	7.6	22.7	.4
2010	5.7	.9	.5	.8	2.2	4.1	19.7	4.7
2011	5.0	2.3	.8	7.2	2.9	3.9	12.1	5.6
Quarter								
2008:1	5.4	3.0	2.4	4.5	7.8	3.6	8.1	1.0
2	3.3	.3	-.5	4.1	6.4	.9	5.9	3.5
3	8.2	-.5	-2.5	.6	5.1	3.3	39.2	1.4
4	6.4	-1.7	-1.7	-2.9	1.8	-.2	37.0	-5.4
2009:1	4.1	-1.1	-.1	-3.7	-.2	4.9	22.6	-4.6
2	4.8	-1.7	-1.4	-6.5	-1.8	8.3	28.2	-1.0
3	4.1	-.3	.4	-4.9	-1.5	8.4	19.8	3.1
4	3.6	-.4	.2	-4.7	1.1	7.9	13.4	4.2
2010:1	7.1	.3	.4	-1.9	1.7	4.1	27.8	4.3
2	5.1	.8	.5	.0	2.0	4.0	16.9	4.4
3	5.0	1.1	.5	1.7	2.6	4.0	14.7	5.0
4	5.1	1.4	.5	3.6	2.4	3.9	14.2	5.3
2011:1	4.7	1.8	.6	5.1	2.6	3.9	11.9	5.6
2	5.2	2.1	.7	6.5	3.2	3.9	12.3	5.6
3	4.8	2.4	.8	7.7	2.7	3.8	11.0	5.6
4	5.0	2.7	.9	8.8	2.8	3.8	11.2	5.6

Note. Quarterly data are at seasonally adjusted annual rates.
1. Data after 2009:Q2 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

2.6.3 FOF

Class II FOMC
Restricted (FR)

September 16, 2009

Flow of Funds Projections: Highlights

(Billions of dollars at seasonally adjusted annual rates except as noted)

Category	2008	2009	2010	2011	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1553.3	1429.0	1913.6	1768.3	1470.4	1264.3	2456.6	1733.8	1715.2	1748.7	1653.1	1842.6	1740.1	1837.7
Net equity issuance	-334.9	8.7	-85.0	-100.0	69.6	0.0	-40.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Net debt issuance	1888.2	1420.3	1998.6	1868.3	1400.8	1264.3	2496.6	1833.8	1815.2	1848.7	1753.1	1942.6	1840.1	1937.7
Borrowing indicators														
Debt (percent of GDP) [1]	226.1	240.9	243.3	243.2	242.3	242.1	242.8	243.9	244.0	243.9	243.6	243.2	242.9	242.6
Borrowing (percent of GDP)	13.1	10.0	13.5	12.0	9.8	8.8	17.2	12.5	12.2	12.3	11.5	12.5	11.7	12.2
Households														
Net borrowing [2]	35.6	-123.7	121.9	310.9	-47.4	-58.3	39.3	105.4	147.7	195.3	243.3	289.8	334.6	376.0
Home mortgages	-59.5	-24.1	52.2	80.7	38.0	19.0	38.0	57.0	57.0	57.0	66.5	76.0	85.5	95.0
Consumer credit	40.2	-125.6	20.8	178.9	-123.9	-116.3	-46.1	0.0	41.3	88.0	126.0	162.9	197.7	229.2
Debt/DPI (percent) [3]	127.5	126.2	122.3	119.0	125.8	124.9	123.8	122.8	121.7	120.6	120.2	119.3	118.4	117.7
Business														
Financing gap [4]	228.9	-176.0	-151.2	-50.2	-233.9	-219.1	-176.6	-165.6	-146.5	-116.1	-80.7	-57.2	-39.8	-23.2
Net equity issuance	-334.9	8.7	-85.0	-100.0	69.6	0.0	-40.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Credit market borrowing	571.8	-68.2	243.8	326.0	-168.1	121.4	192.7	220.0	287.7	275.0	296.1	371.0	313.3	323.6
State and local governments														
Net borrowing	41.7	169.0	97.8	97.8	193.8	185.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
Current surplus [5]	212.7	212.7	262.3	225.9	201.2	226.5	251.5	257.5	265.5	274.6	228.1	227.7	223.7	223.9
Federal government														
Net borrowing	1239.2	1442.3	1535.0	1133.7	1422.5	1015.5	2166.9	1410.6	1282.0	1280.6	1115.9	1184.1	1094.5	1140.3
Net borrowing (n.s.a.)	1239.2	1442.3	1535.0	1133.7	362.6	275.9	647.7	217.7	327.5	342.2	385.0	161.0	280.6	307.1
Unified deficit (n.s.a.)	680.5	1521.9	1347.9	1113.7	345.0	423.0	455.2	228.0	312.5	352.2	395.0	136.0	265.6	317.1
Depository institutions														
Funds supplied	415.1	-444.0	-351.1	1133.3	-794.8	36.1	160.0	11.3	88.4	-1664.0	-1805.7	1974.6	1993.3	2371.1

Note. Data after 2009:Q2 are staff projections.
1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
2. Includes change in liabilities not shown in home mortgages and consumer credit.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. For corporations, excess of capital expenditures over U.S. internal funds.
5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
n.s.a. Not seasonally adjusted.

2.6.4 FOF

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International Developments

The foreign economies appear to have gained a firmer footing on the path to recovery. Economic growth turned positive in the second quarter in some key advanced foreign economies—including Japan, Germany, and France—as well as in emerging Asia and parts of Latin America, most notably Brazil. However, real GDP continued to contract in Canada, the United Kingdom, and Mexico. Indicators from the current quarter reaffirm the robustness of activity in emerging Asia and suggest the recovery has become more widespread in other regions of the global economy. There is further evidence that global trade is picking up, although it remains at levels well below pre-crisis peaks.

Financial markets have continued to improve since the time of the August Greenbook, with foreign equity markets generally remaining on an upward trend and financing conditions easing further. The broad nominal dollar index is little changed.

Summary of Staff Projections
(Percent change from end of previous period, annual rate, except as noted)

Indicator	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Foreign output	-8.6	1.7	3.8	3.2	3.5	4.1
Previous Greenbook	-8.7	.6	2.8	2.6	3.3	…
Foreign CPI	-1.0	1.0	1.7	1.7	1.6	1.8
Previous Greenbook	-1.0	1.0	1.7	1.7	1.7	…
	Contribution to growth (percentage points)					
U.S. net exports	2.6	1.6	-.2	-.1	-.2	-.2
Previous Greenbook	2.6	1.1	-.3	.1	-.1	…

Note: Changes for years measured as Q4/Q4.
… Not applicable.

Based on the improvement in financial markets and on recent indicators of activity, we estimate that growth abroad will register nearly 4 percent in the third quarter, more than double the rate observed in the previous quarter. Although activity in emerging Asia likely decelerated, this is expected to be more than offset by the strength of output in the advanced foreign economies and in Latin America. Looking ahead, we expect foreign growth to slow a bit in the next two quarters as the pace of expansion in the developing world moderates. Thereafter, with the recovery in the advanced foreign economies gaining traction, total foreign growth should pick up again, rising to more than 4 percent by 2011. The projections through the end of next year are somewhat higher than those in the August Greenbook, particularly in the near term, reflecting upside surprises from the incoming data, further improvement in consumer and business sentiment, and a stronger recovery in the United States.

The spot price of West Texas Intermediate (WTI) crude oil is down a bit since the time of the August Greenbook, and the prices of futures contracts have eased by somewhat more, amid some favorable supply developments. Prices of nonfuel commodities have firmed, and futures markets suggest small further increases over the forecast period. Based on the futures path of commodity prices and continued recovery abroad, we expect foreign inflation to pick up a bit, to 1¾ percent by the end of the forecast period.

The pace of decline for U.S. real exports and imports moderated significantly in the second quarter, but imports continued to fall faster than exports. Accordingly, real net exports added 1½ percentage points to the change in U.S. GDP, ½ percentage point more than in the August Greenbook. Trade data for July point to a strong rebound in both exports and imports in the current quarter, and we expect the contribution of net exports to swing to negative ¼ percentage point, about unchanged from the August Greenbook. Over the next two years, we forecast net exports to continue to make small negative contributions to GDP growth, as imports and exports both recover with the global economy.

International Financial Markets

Since the August Greenbook, the dollar's moves against foreign currencies have been largely offsetting on a trade-weighted basis. Most notably, the dollar has firmed against the U.K. pound and the Mexican peso but has declined against the euro and the yen. Accordingly, the starting point for the projected path of the staff's broad real index of the dollar is about that envisaged in the August Greenbook. We project that the broad real value of the dollar will depreciate 2 percent next year, as forecast in the previous Greenbook, and then about 3 percent in 2011. The faster decline in the dollar in 2011 partly reflects a step-up in the rate of appreciation of the renminbi, as China allows upward movements in its currency to resume after the global recovery becomes entrenched.

Equity markets have generally moved up in both the advanced economies and the developing world, although Japan and China are two exceptions. Share prices in the euro area and the United Kingdom increased 7-to-8 percent over the period, partly reflecting the improved economic outlook. China's A-shares declined 13 percent, amid concerns that authorities will continue to take actions to moderate the pace of loan growth in China. However, China's A-shares have not historically had a strong link with the real economy and are more susceptible to speculative activity than many equity markets elsewhere in the world, as linkages to outside markets are limited due to restrictions on foreign ownership and trading. H-shares, which are shares of some Chinese enterprises that are traded in Hong Kong and open to global investors, declined only about 2 percent.

Despite the more positive tone of recent economic indicators, sovereign yields in the major foreign economies declined over the period, as central banks reinforced their intentions to maintain accommodative policies. The Bank of England (BOE) surprised markets by expanding its asset purchase program £50 billion at its August meeting, and the minutes showed some support for further expansion. In mid-August, the BOE released its quarterly inflation report, which market participants interpreted as relatively pessimistic on the outlook for recovery. The European Central Bank (ECB) left its main policy rate unchanged at 1 percent, as expected, but surprised markets by announcing that it will again offer banks 12-month funds at only 1 percent at its upcoming long-term refinancing operation.

Advanced Foreign Economies

Economic performance in the advanced foreign economies (AFEs) improved notably in the second quarter, with positive growth recorded in a number of countries. Japanese GDP grew 2¼ percent at an annual rate, boosted by a sharp rebound in exports to emerging Asia and solid growth in private consumption. The German and French economies also expanded, supported by some improvement in export performance and a strong but short-term boost to consumption from government incentives for automobile purchases. In contrast, real GDP in the United Kingdom and Canada continued to contract. In Canada, a sizable drawdown in inventories and a continued sharp decline in exports masked a recovery in consumption, while in the United Kingdom, weakness in consumption and investment overwhelmed positive contributions from trade and inventories.

We project aggregate AFE growth to come in at just over 2 percent in the second half of this year, as the recovery becomes more broad-based. Supporting this return to positive growth are pickups in the U.K. housing market, North American auto production, and the contributions of exports and inventories across the AFEs. Further out, we expect AFE growth to rise to 2½ percent next year and then to 3¼ percent in 2011. Relative to the previous Greenbook, our forecast is up 1 percentage point in the second half and about ¼ percentage point next year. The upward revisions reflect extrapolation of incoming data, greater than previously anticipated strengthening of demand from the emerging market economies and the United States, and rebounding business and consumer sentiment.

After having dropped at an annual rate of ¾ percent in the first half of this year, consumer prices in the AFEs are expected to rise around 1 percent in the second half, following a contour shaped by the path of commodity prices. Thereafter, we project AFE inflation to hover around 1 percent for the remainder of the forecast period. Despite significant slack, we have not put in a substantial deceleration in prices as core inflation has so far been relatively stable outside of Japan and inflation expectations have remained well-anchored.

We assume that major central banks hold their policy rates unchanged at very low levels through the remainder of this year and most of next year. The Bank of Canada reiterated its conditional commitment to keep its policy rate at 25 basis points through 2010:Q2, and we expect it to begin raising its policy rate late next year. The BOE begins tightening soon thereafter, in early 2011. The ECB is expected to guide overnight rates, currently at around 35 basis points, back up toward its 1 percent policy rate during the next year and to begin raising the policy rate in 2011.

Fiscal stimulus programs across the AFEs appear to have boosted growth in the second quarter, as suggested by improved final sales, particularly for automobiles. We expect these programs to remain sizable in the second half of this year. For the year as a whole, fiscal stimulus should add roughly 1 percentage point to AFE growth. We expect the fiscal impact next year to be minimal in most countries. We forecast a withdrawal of the stimulus in 2011, which is likely to subtract about ½ percentage point from AFE growth. In the United Kingdom, the reversal of the value-added tax cut and other temporary measures should reduce growth in 2010 by about 1 percentage point.

Staff Projections for Foreign GDP Growth by Region
(Percent change from end of previous period, annual rate)

Indicator	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Advanced Foreign Economies	-7.8	-1.5	2.1	2.1	2.5	3.2
Previous Greenbook	-7.8	-2.2	.7	1.4	2.2	…
Emerging Market Economies	-9.6	6.0	6.2	4.5	4.7	5.2
Previous Greenbook	-9.8	4.4	5.5	4.2	4.6	…

Note: Changes for years measured as Q4/Q4.
… Not applicable.

Emerging Market Economies

Incoming data from the emerging market economies (EMEs) reaffirm the robustness of growth in emerging Asia, although growth has stepped down from the red-hot pace of the second quarter. Activity in Asia has been supported by a resurgence in manufacturing activity. At the same time, the recovery of exports—particularly to the advanced economies—has been comparatively weak, which we interpret as indicating that domestic demand has so far been the main force behind the rebound in output. Although credit growth in China moderated in July and August, financial conditions remain accommodative. Chinese monthly indicators point to robust growth; industrial production in July and August was 4½ percent higher than the second-quarter average, and real retail sales were 18 percent higher than their year-earlier level. Given the positive momentum and improved outlook for the advanced economies, we raised our forecast for real GDP growth in emerging Asia in the current quarter by about ½ percentage point to an annual rate of 7½ percent.

The outlook for Latin America has also improved. Brazil came out of recession in the second quarter, growing at an 8 percent rate. In contrast, Mexico’s GDP contracted 4½ percent in the second quarter, pulled down by the economic drag associated with the H1N1 influenza virus and the slump in the U.S. auto sector. In the third quarter, as these factors reverse, we expect Mexican GDP to rebound, increasing 6½ percent. This boosts overall growth in Latin America to 5¼ percent, a bit higher than in the August Greenbook.

For the EMEs as a whole, we now project real GDP growth of 6¼ percent in the third quarter. This pace is slightly higher than that observed in the second quarter, with the step-down in Asian growth offset by the return to growth in Latin America. We project that the pace of activity in the EMEs will ease to 5 percent over the forecast period as policy stimulus wanes and growth settles at more sustainable rates. The projection through next year is slightly higher than in the August Greenbook.

In recent months, consumer price inflation has been increasing in many emerging Asian economies, generally from very low or negative rates, and receding in Latin America from relatively high rates. We expect these trends to continue and project that aggregate quarterly inflation in the EMEs will hover at an annual rate of about 2¼ percent over the forecast period. This projection is little changed from the August Greenbook.

Commodity Prices

The spot price of West Texas Intermediate (WTI) crude oil has traded in a fairly narrow range around $70 per barrel in recent weeks, closing most recently on September 15 at $70.93 per barrel, a bit lower than at the time of the August Greenbook. The futures curve has declined more. While the reasons behind the decline in futures prices are not entirely clear, some market commentators have pointed to favorable supply-side developments. Russian production has exceeded expectations by climbing back over 10 million barrels per day in recent months. In addition, BP announced a major oil discovery in the U.S. Gulf of Mexico; although production from the field is many years away, the news may have assuaged pessimism regarding future oil supply prospects. Consistent with the futures path, we project that the spot price of WTI will rise to about $77 per barrel by the end of 2011. Relative to the August Greenbook, this projection is about $5 lower, on average, over the forecast period.

Since the previous Greenbook, prices for nonfuel commodities generally have increased. Metals prices rose briskly in the weeks following the close of the August Greenbook but have stabilized more recently amid elevated inventory levels. Food prices are also up, on balance; sugar and soybean prices increased, whereas prices for wheat and corn declined. We expect further small increases in our index of nonfuel commodity prices over the forecast period, consistent with readings from futures markets. On net, the current projection is somewhat higher than in the August Greenbook.

Prices of Internationally Traded Goods

Having declined for the past several quarters, core import prices are projected to increase 3½ percent at an annual rate in the current quarter, reflecting the effects of recent dollar depreciation and upward movements in nonfuel commodity prices. As commodity prices flatten out and the dollar depreciates at a more modest pace, core import price inflation is projected to decline to about 1 percent by 2011. Compared with the August Greenbook, this forecast has been revised up ½ percentage point in the second half of this year, reflecting the recent strength in commodity prices, but is little changed for next year.

Staff Projections of Selected Trade Prices
(Percent change from end of previous period, annual rate, except as noted)

Trade category	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Imports						
Core goods	-9.4	-2.4	3.5	3.5	1.3	1.0
Previous Greenbook	-9.4	-2.3	3.1	2.7	1.2	…
Oil (dollars per barrel)	41.58	53.71	64.56	64.68	70.58	72.72
Previous Greenbook	41.58	53.52	64.21	69.48	75.17	…
Exports						
Core goods	-12.5	2.6	4.0	3.2	1.9	1.2
Previous Greenbook	-15.3	3.0	4.0	2.2	1.4	…

Note: Prices for core exports exclude computers and semiconductors. Prices for core imports exclude computers, semiconductors, oil, and natural gas. Both prices are on a national income and product account chain-weighted basis.

The price of imported oil for multiquarter periods is the price for the final quarter of the period. Imported oil includes both crude oil and refined products.

. . . Not applicable.

Core export prices are also estimated to increase in the third quarter, by 4 percent, driven by recent upward movements of prices for metals and petroleum products. In the following two quarters, core export price inflation should ease only gradually, supported by firming prices for metals and intermediate goods. Thereafter, we project further deceleration in core export prices to a rate of 1 percent by the end of 2011, as commodity prices level out. Relative to the August Greenbook, the projection for next year is up about ½ percentage point.

Trade in Goods and Services

Real exports of goods and services contracted in the second quarter, although the pace of decline slowed significantly as nominal exports rose in both May and June. In July, exports again rose sharply, reflecting in part a bounceback in exports of automotive products. For the current quarter, we now estimate that real export growth will surge to an annual rate of 21 percent, a significantly faster rebound than we wrote down in August. The upward revision is mainly driven by the trajectory of incoming data and stronger estimates of foreign growth.

Thereafter, we expect export growth to average a little above 8 percent, driven by the recovery in foreign growth and the recent and prospective depreciation of the dollar. Relative to the August Greenbook, this forecast has been revised up nearly 3 percentage points in 2010. Part of this upward revision reflects the improved outlook for the foreign economies, but, with the path of the dollar little changed, the bulk of it reflects our judgment that trade will recover somewhat more quickly from its precipitous decline than we had projected earlier.

Staff Projections for
Trade in Goods and Services
(Percent change from end of previous period, annual rate)

Measure	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Real imports	-36.4	-14.8	18.4	7.2	8.0	8.0
Previous Greenbook	-36.4	-12.5	10.5	3.2	4.8	…
Real exports	-29.9	-4.6	20.9	8.1	8.2	8.6
Previous Greenbook	-29.9	-5.6	10.1	4.6	5.3	…

Note: Changes for years are measured as Q4/Q4.

Real imports continued to contract in the second quarter at a double-digit pace, but recent data point to a rebound in the third quarter. Nominal imports rose sharply in July; as with exports, a good part of the rise resulted from a recovery in automotive trade, although increases in imports of capital and consumer goods were also noteworthy. Based on the strength of incoming data, as well as the more favorable outlook for U.S. activity, we have marked up our estimate of import growth about 8 percentage points in the current quarter to an annual rate of 18 percent.

For the remainder of the forecast period, we estimate that real imports will grow at an average pace of about 8 percent. For 2010, this growth rate is about 3 percentage points higher than in the previous Greenbook. Part of this upward revision reflects the stronger path for U.S. GDP growth. The remainder can be attributed to our judgment, as noted above, that trade will recover from its downturn more quickly than previously projected.

Alternative Simulation

Although our baseline forecast assumes a modest depreciation of the dollar, any number of factors could precipitate more rapid declines: a sharper revival in risk appetite, concerns about the sustainability of the U.S. fiscal or external balance positions, or a faster-than-expected recovery abroad. To investigate this possibility, we use the SIGMA model to examine the effects of a dollar risk-premium shock that causes a 10 percent depreciation of the broad real dollar. In the simulation, we assume that U.S. monetary policy follows a Taylor rule subject to the zero lower bound constraint on nominal interest rates.[1]

The dollar risk-premium shock occurs in 2009:Q4 and causes the dollar to depreciate 10 percent below baseline after a year, before the shock recedes. The decline in the dollar boosts the growth of U.S. real GDP 0.3 percentage point above baseline in the second half of 2009 and about 1¼ percentage points in 2010. Output rises because U.S. exports become more competitive abroad and because U.S. consumers substitute away from imports toward domestically produced goods. Core PCE price inflation rises

[1]We use a two-country variant of SIGMA consisting of the United States and an aggregate foreign sector. In the simulation, we assume that the foreign sector has the latitude to reduce policy rates in response to the shock. However, even if the entire foreign sector were constrained from reducing policy rates because of the zero bound, the effects on the United States would not differ appreciably from those reported in the table: Although foreign output would decline more in this case, the higher foreign interest rate path would induce a somewhat weaker dollar, with offsetting effects on U.S. exports.

gradually in response to higher import prices and greater resource utilization and peaks at 0.6 percentage point above baseline in 2010:H1. Because the federal funds rate remains near zero through 2010, higher expected inflation causes short-term real interest rates to decline, which boosts domestic demand and hence amplifies the rise in output. Policy rates begin rising in 2011:Q2, well before the 2012 liftoff embedded in our baseline. With higher policy rates and some waning of the shock, the level of output gradually reverts toward baseline beginning in mid-2011.

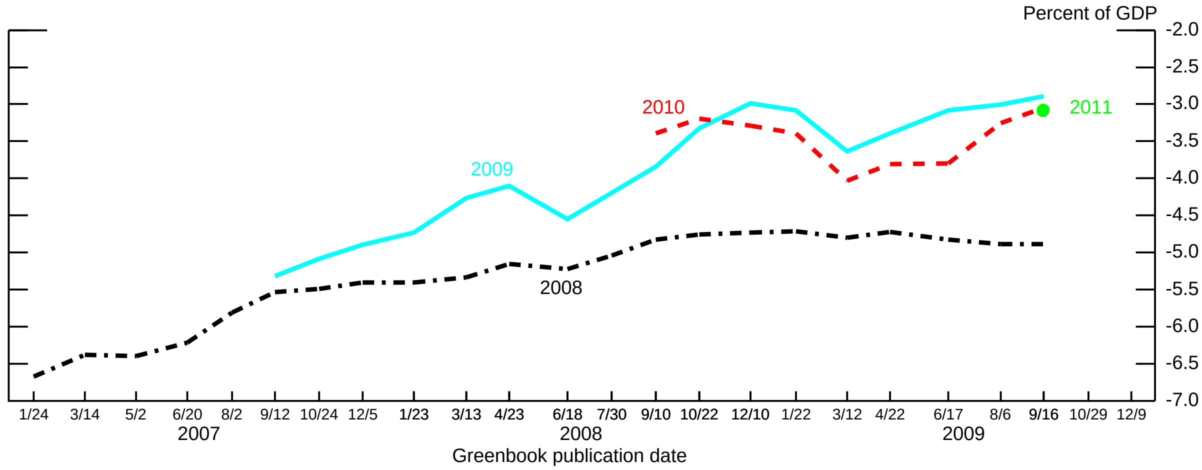
Alternative Scenario:
Dollar Depreciation
(Percent change from previous period, annual rate, except as noted)

Indicator and simulation	2009	2010		2011	2012-13
	H2	H1	H2		
U.S. real GDP					
Baseline	2.8	3.0	4.0	4.5	4.6
Dollar Depreciation	3.1	4.1	5.2	4.1	4.4
U.S. PCE prices excluding food and energy					
Baseline	1.3	1.1	1.1	1.0	1.3
Dollar Depreciation	1.6	1.7	1.4	.9	1.3
U.S. federal funds rate (percent)					
Baseline	.1	.1	.1	.1	3.8
Dollar Depreciation	.1	.1	.1	.5	3.9
U.S. trade balance (percent share of GDP)					
Baseline	-2.8	-2.9	-3.0	-3.0	-2.8
Dollar Depreciation	-2.4	-1.8	-1.8	-2.4	-2.8

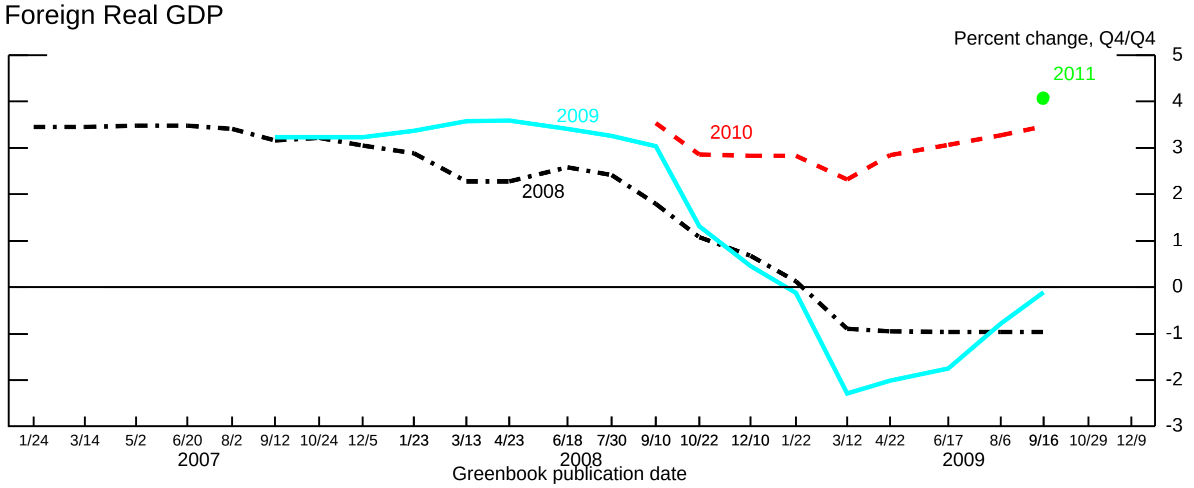
Note: H1 is Q2/Q4; H2 is Q4/Q2. U.S. real GDP and U.S. PCE prices are the average rates over the period. The federal funds rate and the trade balance are the values for the final quarter of the period.

Evolution of the Staff Forecast

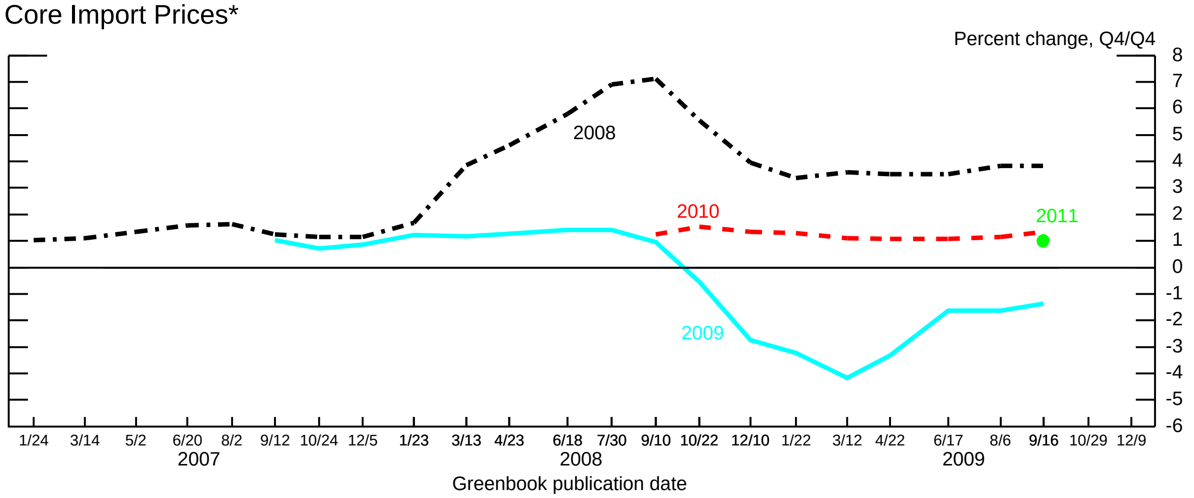
Current Account Balance



Foreign Real GDP



Core Import Prices*



*Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.

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Restricted (FR)

September 16, 2009

OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES
(Percent changes)

Measure and country	2009 Q1	2009 Q2	2009 Q3	2009 Q4	Projected 2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4
REAL GDP (1)	Quarterly changes at an annual rate											
Total Foreign	-8.6	1.7	3.8	3.2	3.1	3.4	3.6	3.8	4.0	4.1	4.1	4.1
Advanced Foreign Economies	-7.8	-1.5	2.1	2.1	2.0	2.4	2.7	2.9	3.1	3.2	3.3	3.3
of which:												
Canada	-6.1	-3.4	2.3	2.7	2.5	2.7	3.2	3.3	3.8	3.8	3.9	3.9
Japan	-12.4	2.3	3.9	2.4	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1
United Kingdom	-9.3	-2.6	1.4	2.0	1.8	2.4	2.7	3.0	3.0	3.1	3.2	3.2
Euro Area (2)	-9.5	-0.5	1.6	1.4	1.6	2.0	2.3	2.6	2.7	2.9	3.0	3.1
Germany	-13.4	1.3	2.7	2.2	2.1	2.2	2.4	2.7	2.8	3.0	3.5	3.6
Emerging Market Economies	-9.6	6.0	6.2	4.5	4.4	4.7	4.9	5.0	5.1	5.2	5.2	5.2
Asia	-2.7	14.3	7.4	6.1	5.7	5.7	5.9	6.0	5.9	6.0	6.0	6.0
Korea	0.5	11.0	4.0	3.8	3.8	4.4	4.5	4.5	4.4	4.4	4.4	4.4
China	6.5	18.5	12.1	10.2	8.8	8.0	8.2	8.4	8.5	8.6	8.7	8.8
Latin America	-16.7	-1.9	5.3	3.1	3.3	3.8	4.0	4.1	4.4	4.4	4.4	4.4
Mexico	-21.2	-4.4	6.5	3.2	3.3	4.0	4.2	4.4	4.5	4.5	4.5	4.5
Brazil	-3.8	7.8	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
CONSUMER PRICES (3)	Four-quarter changes											
Total Foreign	1.8	0.9	0.3	0.8	1.5	1.7	1.6	1.6	1.7	1.7	1.7	1.8
Advanced Foreign Economies	1.0	0.0	-0.6	0.2	0.8	1.1	1.1	1.0	1.0	1.1	1.1	1.1
of which:												
Canada	1.2	0.1	-0.6	0.5	1.1	1.4	1.4	1.5	1.6	1.7	1.7	1.8
Japan	-0.1	-1.0	-1.8	-1.2	-0.5	-0.2	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
United Kingdom (4)	3.0	2.1	1.5	1.9	2.5	2.3	1.7	1.5	1.1	1.3	1.6	1.8
Euro Area (2)	1.0	0.2	-0.3	0.3	1.0	1.3	1.3	1.2	1.2	1.2	1.3	1.3
Germany	0.8	0.2	-0.2	0.5	0.9	1.2	1.1	1.1	1.1	1.1	1.1	1.1
Emerging Market Economies	2.7	1.6	1.1	1.5	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4
Asia	1.0	-0.3	-0.6	0.3	1.4	1.8	1.8	1.8	1.9	2.0	2.0	2.1
Korea	3.9	2.8	2.0	2.3	2.4	2.2	2.2	2.2	2.2	2.3	2.3	2.3
China	-0.6	-1.5	-1.4	-0.5	0.8	1.1	1.3	1.3	1.4	1.5	1.6	1.6
Latin America	6.3	5.9	5.0	4.0	3.6	3.0	2.9	2.9	3.0	3.0	3.0	3.0
Mexico	6.2	6.0	5.2	4.1	3.6	2.7	2.5	2.5	2.5	2.5	2.5	2.5
Brazil	5.9	5.3	4.4	4.2	3.9	3.5	3.6	3.7	3.7	3.7	3.7	3.7

1. Foreign GDP aggregates calculated using shares of U.S. exports.
2. Harmonized data for euro area from Eurostat.
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
4. CPI excluding mortgage interest payments, which is the targeted inflation rate.

OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES
(Percent, Q4 to Q4)

Measure and country	2003	2004	2005	2006	2007	2008	2009 (Projected)	2010 (Projected)	2011 (Projected)
REAL GDP (1)									
Total Foreign	2.9	3.8	4.1	4.0	4.2	-1.0	-0.1	3.5	4.1
Advanced Foreign Economies	1.8	2.6	2.8	2.5	2.5	-1.6	-1.4	2.5	3.2
of which:									
Canada	1.5	3.7	3.1	1.9	2.8	-1.0	-1.2	2.9	3.8
Japan	2.4	1.1	2.9	2.1	1.9	-4.5	-1.2	1.9	2.1
United Kingdom	3.2	2.4	2.4	2.8	2.4	-1.8	-2.2	2.5	3.1
Euro Area (2)	1.2	1.8	2.2	3.5	2.2	-1.7	-1.8	2.1	2.9
Germany	0.1	0.2	1.6	4.3	1.6	-1.8	-2.1	2.3	3.2
Emerging Market Economies	4.5	5.5	5.9	5.9	6.4	-0.1	1.5	4.7	5.2
Asia	6.9	6.0	7.7	7.2	8.2	0.2	6.1	5.8	6.0
Korea	3.7	2.6	5.2	4.6	5.7	-3.4	4.8	4.3	4.4
China	10.3	9.9	10.3	10.8	12.3	6.9	11.7	8.3	8.6
Latin America	1.8	5.0	4.0	4.7	4.5	-0.8	-2.9	3.8	4.4
Mexico	1.3	4.5	3.5	4.0	3.7	-1.7	-4.6	4.0	4.5
Brazil	1.0	4.7	3.7	4.6	6.1	1.2	3.0	4.0	4.0
CONSUMER PRICES (3)									
Total Foreign	2.1	2.8	2.3	2.1	3.7	3.3	0.8	1.6	1.8
Advanced Foreign Economies	1.3	1.8	1.6	1.4	2.2	2.0	0.2	1.0	1.1
of which:									
Canada	1.7	2.3	2.3	1.4	2.5	1.9	0.5	1.5	1.8
Japan	-0.3	0.5	-1.0	0.3	0.5	1.0	-1.2	-0.5	-0.6
United Kingdom (4)	1.3	1.4	2.1	2.7	2.1	3.8	1.9	1.5	1.8
Euro Area (2)	2.0	2.3	2.3	1.8	2.9	2.3	0.3	1.2	1.3
Germany	1.1	2.1	2.2	1.3	3.1	1.7	0.5	1.1	1.1
Emerging Market Economies	3.1	3.9	3.0	2.9	5.1	4.6	1.5	2.2	2.4
Asia	2.3	3.1	2.6	2.4	5.5	3.7	0.3	1.8	2.1
Korea	3.5	3.4	2.5	2.1	3.4	4.5	2.3	2.2	2.3
China	2.7	3.3	1.4	2.1	6.7	2.7	-0.5	1.3	1.6
Latin America	4.9	5.6	3.8	4.1	4.2	6.5	4.0	2.9	3.0
Mexico	3.9	5.3	3.1	4.1	3.8	6.2	4.1	2.5	2.5
Brazil	11.5	7.2	6.1	3.2	4.3	6.2	4.2	3.7	3.7

1. Foreign GDP aggregates calculated using shares of U.S. exports.
2. Harmonized data for euro area from Eurostat.
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
4. CPI excluding mortgage interest payments, which is the targeted inflation rate.

Class II FOMC
Restricted (FR)

September 16, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2003	2004	2005	2006	2007	2008	------ Projected 2009	2010	2011 ------
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-0.1	-0.9	-0.2	0.4	1.0	0.7	1.0	-0.2	-0.2
Exports of G&S	0.6	0.7	0.7	1.1	1.2	-0.4	-0.4	0.9	1.0
Imports of G&S	-0.7	-1.6	-0.8	-0.7	-0.2	1.2	1.4	-1.1	-1.2
Percentage change, Q4/Q4									
Exports of G&S	6.2	7.1	6.7	10.2	10.2	-3.4	-3.3	8.2	8.6
Services	4.3	9.1	3.6	12.0	13.0	-3.5	-1.3	5.8	6.0
Computers	11.3	5.8	14.2	8.4	1.3	-2.4	9.0	9.5	9.5
Semiconductors	38.3	-6.0	17.6	2.1	29.1	-12.7	15.8	11.0	11.0
Core Goods 1/	4.8	7.2	7.2	9.9	8.4	-3.1	-5.5	9.3	9.9
Imports of G&S	5.1	10.9	5.2	4.1	0.9	-6.8	-8.9	8.0	8.0
Services	3.3	8.8	2.3	7.1	2.0	0.2	-2.8	4.0	6.1
Oil	1.3	10.7	1.3	-8.2	0.0	0.3	-12.7	-0.4	-2.1
Natural Gas	1.3	4.9	13.7	-10.1	13.4	-24.0	-0.6	18.6	0.6
Computers	17.1	23.2	12.5	14.3	8.8	-11.3	16.4	15.5	15.5
Semiconductors	-0.1	9.8	7.5	-0.8	3.6	-9.7	2.2	5.0	5.0
Core Goods 2/	5.3	10.9	5.8	5.8	0.2	-9.8	-11.7	10.6	10.4
Billions of Chained 2000 Dollars									
Net Goods & Services	-603.9	-688.0	-722.7	-729.2	-647.7	-494.3	-349.7	-356.9	-381.4
Exports of G&S	1116.8	1222.8	1305.1	1422.0	1546.1	1629.3	1463.7	1589.8	1725.8
Imports of G&S	1720.7	1910.8	2027.8	2151.2	2193.8	2123.5	1813.4	1946.7	2107.2
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-412.4	-450.7	-480.3
Current Acct as Percent of GDP	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-2.9	-3.0	-3.1
Net Goods & Services (BOP)	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-370.2	-426.7	-461.0
Investment Income, Net	51.0	73.4	78.8	54.7	97.9	125.5	86.6	105.4	110.1
Direct, Net	112.7	150.9	173.2	174.0	236.7	249.9	208.1	231.7	249.5
Portfolio, Net	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-121.5	-126.4	-139.4
Other Income & Transfers,Net	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-128.8	-129.4	-129.4

1. Merchandise exports excluding computers and semiconductors.
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2006				2007				2008			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	0.4	0.0	-0.7	1.9	-0.3	0.7	1.4	2.2	0.4	2.4	-0.1	0.5
Exports of G&S	1.6	0.7	0.1	1.8	0.4	0.6	2.0	1.6	-0.0	1.5	-0.5	-2.7
Imports of G&S	-1.2	-0.7	-0.8	0.1	-0.7	0.1	-0.6	0.6	0.4	0.9	0.4	3.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	16.5	6.9	0.6	17.8	3.5	5.2	18.5	14.5	-0.1	12.1	-3.6	-19.5
Services	13.6	5.6	1.5	29.1	4.7	2.8	27.2	19.2	-9.0	7.8	-7.7	-4.3
Computers	18.1	8.9	-9.6	19.0	11.6	-15.4	11.5	0.0	8.7	33.5	1.3	-38.3
Semiconductors	22.1	19.5	-14.2	-13.3	23.7	26.3	4.7	69.9	15.0	-3.8	6.5	-50.7
Core Goods 1/	17.6	6.7	1.6	14.5	1.5	6.4	15.4	10.8	3.5	14.3	-2.2	-23.7
Imports of G&S	7.8	4.5	4.9	-0.5	4.3	-0.5	3.7	-3.6	-2.5	-5.0	-2.2	-16.7
Services	16.1	1.8	1.3	10.0	0.4	2.1	8.6	-2.9	3.0	-7.1	6.1	-0.9
Oil	-20.8	5.0	22.1	-30.1	0.8	14.7	-3.4	-10.4	-1.5	-9.3	2.7	10.3
Natural Gas	-50.2	80.0	26.1	-42.2	52.8	54.0	36.5	-48.5	-5.0	-38.2	12.2	-49.5
Computers	24.8	13.0	17.3	3.1	39.0	-15.4	-2.2	21.6	12.7	8.6	-15.9	-39.9
Semiconductors	2.4	-2.8	17.4	-17.3	7.3	2.6	-0.4	4.9	5.6	8.9	-6.3	-38.2
Core Goods 2/	14.0	3.1	0.6	5.8	3.1	-3.6	4.1	-2.5	-5.1	-3.2	-5.1	-24.2
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-732.6	-732.8	-756.5	-694.9	-705.0	-683.4	-638.4	-564.0	-550.9	-476.0	-479.2	-470.9
Exports of G&S	1388.8	1412.1	1414.1	1473.2	1485.9	1504.8	1569.9	1624.0	1623.4	1670.4	1655.2	1568.0
Imports of G&S	2121.3	2144.9	2170.5	2168.1	2190.8	2188.1	2208.3	2188.0	2174.3	2146.5	2134.4	2038.9
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-794.6	-808.3	-859.2	-752.1	-796.4	-762.1	-686.5	-661.3	-717.2	-750.9	-736.7	-619.5
Current Account as % of GDP	-6.0	-6.1	-6.4	-5.5	-5.8	-5.4	-4.8	-4.6	-5.0	-5.2	-5.1	-4.3
Net Goods & Services (BOP)	-766.5	-764.7	-797.2	-713.1	-712.2	-710.2	-685.9	-697.4	-730.6	-731.4	-743.8	-578.0
Investment Income, Net	62.4	57.7	44.0	54.6	45.8	58.2	120.7	167.0	154.0	112.3	143.7	92.1
Direct, Net	173.9	175.2	163.1	183.9	186.7	204.4	252.7	303.0	284.6	241.9	268.0	205.1
Portfolio, Net	-111.5	-117.5	-119.1	-129.3	-140.9	-146.2	-132.0	-136.0	-130.6	-129.6	-124.2	-113.0
Other Inc. & Transfers, Net	-90.5	-101.3	-106.0	-93.6	-130.0	-110.1	-121.3	-130.9	-140.6	-131.8	-136.7	-133.6

1. Merchandise exports excluding computers and semiconductors.
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

Class II FOMC
Restricted (FR)

September 16, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	Projected											
	2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	2.6	1.6	-0.2	-0.1	-0.3	-0.0	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1
Exports of G&S	-4.0	-0.5	2.1	0.9	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.1
Imports of G&S	6.6	2.1	-2.3	-1.0	-1.1	-0.9	-1.2	-1.3	-1.3	-1.1	-1.2	-1.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	-29.9	-4.6	20.9	8.1	7.4	7.9	8.4	8.9	8.6	8.4	8.3	9.0
Services	-13.6	-0.1	5.1	4.8	4.8	5.5	6.2	6.6	6.3	5.9	5.8	5.9
Computers	-14.0	-10.8	59.6	15.2	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Semiconductors	-17.1	12.6	61.6	19.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Core Goods 1/	-38.3	-7.3	27.7	9.2	8.6	9.0	9.5	10.1	9.8	9.5	9.5	10.6
Imports of G&S	-36.4	-14.8	18.4	7.2	8.1	6.4	8.7	8.9	8.6	7.8	8.0	7.6
Services	-11.5	-7.6	5.3	3.6	6.0	-0.1	4.7	5.5	5.9	6.0	6.1	6.4
Oil	-15.9	-21.9	-6.3	-5.8	0.8	-1.8	0.0	-0.5	-1.6	-4.6	-1.0	-1.4
Natural Gas	5.9	-2.4	-18.2	15.7	57.3	10.2	40.8	-18.9	-9.7	3.3	36.0	-19.3
Computers	-22.3	24.8	61.0	17.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Semiconductors	-47.8	24.7	43.0	17.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Core Goods 2/	-46.7	-18.6	26.5	10.4	9.5	9.7	11.0	12.3	11.7	10.7	9.5	9.9
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-386.5	-332.0	-338.8	-341.5	-350.9	-350.8	-359.2	-366.7	-374.4	-379.3	-385.2	-386.6
Exports of G&S	1434.5	1417.8	1486.6	1515.7	1542.9	1572.5	1604.6	1639.3	1673.7	1707.6	1742.1	1780.0
Imports of G&S	1821.0	1749.8	1825.4	1857.2	1893.8	1923.3	1963.8	2006.1	2048.0	2086.8	2127.3	2166.7
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-410.8	-392.4	-419.2	-427.3	-454.6	-440.0	-451.9	-456.3	-481.1	-471.1	-482.8	-486.4
Current Account as % of GDP	-2.9	-2.8	-2.9	-3.0	-3.1	-3.0	-3.0	-3.0	-3.1	-3.0	-3.1	-3.1
Net Goods & Services (BOP)	-369.6	-332.0	-384.0	-395.1	-414.2	-418.6	-431.2	-442.8	-454.8	-458.0	-464.3	-466.9
Investment Income, Net	84.3	80.4	88.7	92.8	98.6	103.5	107.8	111.6	112.7	111.8	110.1	105.6
Direct, Net	208.0	203.4	207.0	214.0	221.2	228.6	235.6	241.7	246.5	249.5	250.8	251.0
Portfolio, Net	-123.7	-123.0	-118.3	-121.2	-122.6	-125.1	-127.8	-130.0	-133.8	-137.7	-140.7	-145.5
Other Inc. & Transfers, Net	-125.5	-140.9	-123.8	-125.1	-139.0	-124.9	-128.5	-125.1	-139.0	-124.9	-128.5	-125.1

1. Merchandise exports excluding computers and semiconductors.
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

(Page I-58 is intentionally blank.)

Abbreviations

AFE	advanced foreign economy
BOE	Bank of England
E&S	equipment and software
ECB	European Central Bank
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
GSE	government-sponsored enterprise
IP	industrial production
MBS	mortgage-backed securities
NAIRU	non-accelerating inflation rate of unemployment
NIPA	national income and product accounts
PCE	personal consumption expenditures
TARP	Troubled Asset Relief Program
WTI	West Texas Intermediate

<u>**Prefatory Note**</u>

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

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

Class III FOMC - Internal (FR)

Part 2

September 16, 2009

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Recent Developments

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Class III FOMC - Internal (FR)

September 16, 2009

Recent Developments

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Domestic Nonfinancial Developments

Domestic Nonfinancial Developments

The incoming data, on balance, suggest that economic activity is beginning to turn up. While employment continued to contract in July and August, the pace of decline has slowed noticeably from earlier in the year. Factory output, especially motor vehicle production, moved up in July and August, and sales and construction of single-family homes have now risen for several months—though, to be sure, these increases are from very low levels. Consumer spending on motor vehicles was boosted in July and August by the "cash for clunkers" program and increased dealer incentives, and household spending elsewhere appears to have increased in August after having been roughly flat in the May to July period. Meanwhile, investment in equipment and software also appears to be stabilizing after declining sharply in the first half of the year. Core consumer price inflation remained subdued in July and August, though a jump in gasoline prices pushed up overall consumer inflation last month.

Labor Market Developments

Although the labor market continues to deteriorate, the pace of job losses moderated further in July and August. Private nonfarm payroll employment fell by 248,000 in July and 198,000 in August, the smallest monthly declines since last August. Although employment losses have continued to be spread across nearly every major industry, the rate of decline has also diminished in most industries over the past two months. The decline in hours worked has also slowed: The length of the average workweek for production and nonsupervisory workers has remained steady, albeit at a low level, and aggregate hours worked for this group fell 0.2 percent over July and August, the smallest two-month decline in the past year.

In the household survey, the rise in the unemployment rate has slowed, on net, in recent months: The unemployment rate increased 0.3 percentage point in August, to 9.7 percent, after having dipped slightly in July. The labor force participation rate moved down to 65.5 percent in July and remained unchanged in August. In addition, the fraction of workers who are working part time for economic reasons—a measure of the under-utilization of labor—remains high but has not increased further since the spring.

Other indicators of labor demand have been mixed recently. Although the number of individuals receiving unemployment insurance through regular state programs has fallen a bit from its peak, the total number of individuals receiving unemployment insurance—

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

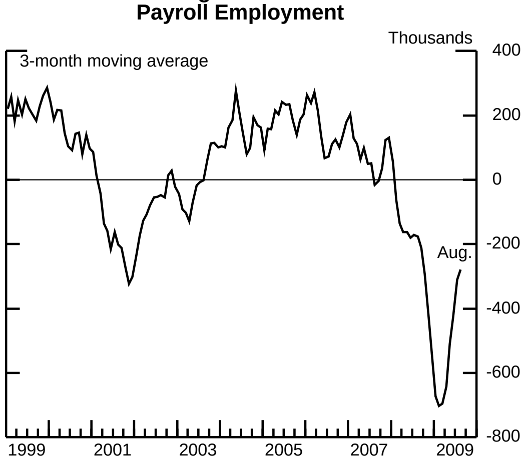
Changes in Employment

(Thousands of employees; seasonally adjusted)

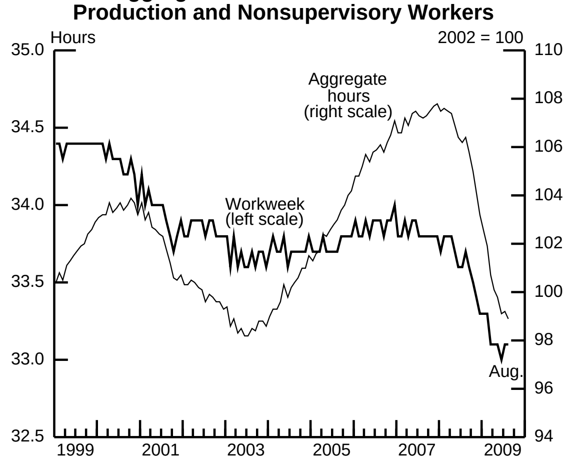
Measure and sector	2008	2008 Q4	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
	Average monthly change				Monthly change		
Nonfarm payroll employment (establishment survey)	-257	-553	-691	-428	-463	-276	-216
Private	-270	-552	-695	-425	-391	-248	-198
Natural resources and mining	4	-2	-12	-11	-10	-6	-8
Manufacturing	-73	-140	-202	-140	-123	-43	-63
Ex. motor vehicles	-58	-121	-176	-117	-102	-74	-48
Construction	-57	-97	-124	-80	-79	-73	-65
Residential	-35	-51	-53	-26	-25	-23	-23
Nonresidential	-22	-45	-71	-54	-54	-50	-43
Wholesale trade	-16	-32	-36	-20	-15	-17	-17
Retail trade	-44	-80	-55	-27	-20	-43	-10
Financial activities	-19	-35	-51	-35	-33	-17	-28
Temporary help services	-44	-70	-73	-28	-30	-8	-7
Nonbusiness services[1]	19	-19	-25	19	18	23	26
Total government	14	-1	4	-3	-72	-28	-18
Federal government	3	2	10	3	-43	9	-5
Total employment (household survey)	-246	-564	-817	-230	-374	-155	-392
Memo:							
Aggregate hours of private production workers (percent change)[2]	-3.3	-7.4	-8.9	-7.8	-.7	.1	-.3
Average workweek (hours)[3]	33.6	33.4	33.2	33.1	33.0	33.1	33.1
Manufacturing (hours)	40.8	40.2	39.6	39.5	39.5	39.8	39.8

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

Changes in Private Payroll Employment



Aggregate Hours and Workweek of Production and Nonsupervisory Workers



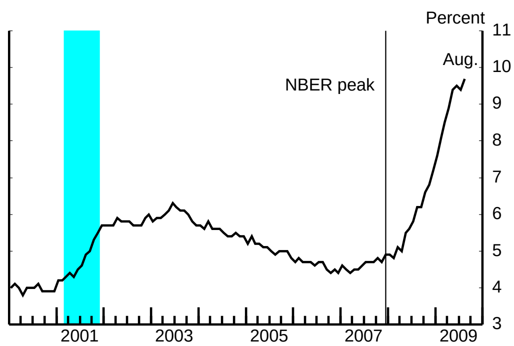
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Selected Unemployment and Labor Force Participation Rates

(Percent; seasonally adjusted)

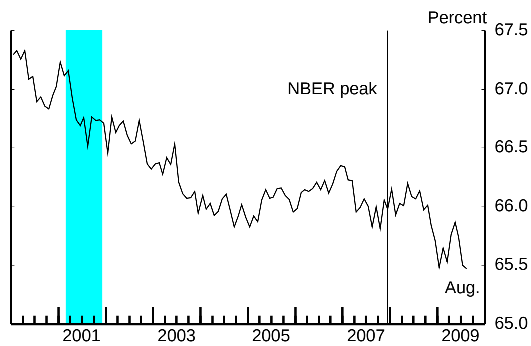
Rate and group	2008	2008 Q4	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
Civilian unemployment rate							
Total	5.8	6.9	8.1	9.2	9.5	9.4	9.7
Teenagers	18.7	20.7	21.3	22.7	24.0	23.8	25.5
20-24 years old	10.2	11.3	13.0	15.0	15.2	15.3	15.1
Men, 25 years and older	4.8	6.0	7.4	8.8	9.2	9.0	9.5
Women, 25 years and older	4.4	5.2	6.2	6.9	7.0	6.9	7.0
Labor force participation rate							
Total	66.0	65.9	65.6	65.8	65.7	65.5	65.5
Teenagers	40.2	38.7	38.3	38.4	38.6	38.0	37.7
20-24 years old	74.4	74.1	73.7	74.1	73.4	73.5	73.0
Men, 25 years and older	75.4	75.2	74.6	74.9	75.0	74.8	75.0
Women, 25 years and older	60.0	60.1	60.0	60.3	60.3	60.1	59.9

Unemployment Rate



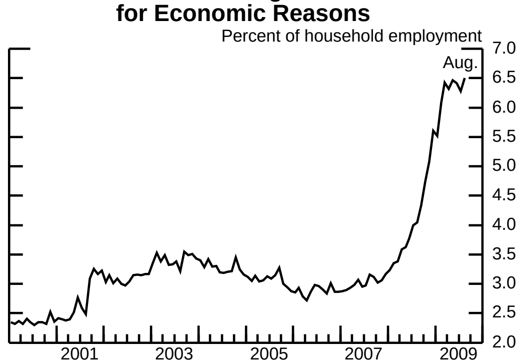
Note: Shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER.

Labor Force Participation Rate

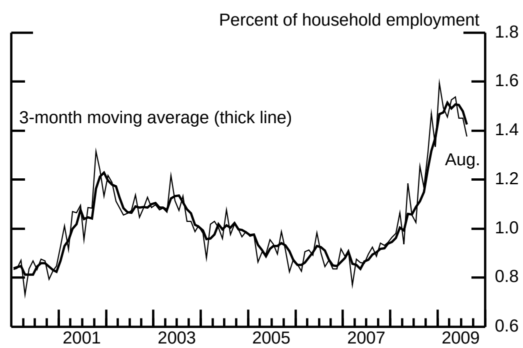


Note: See the note to the figure "Unemployment Rate."

Persons Working Part Time for Economic Reasons



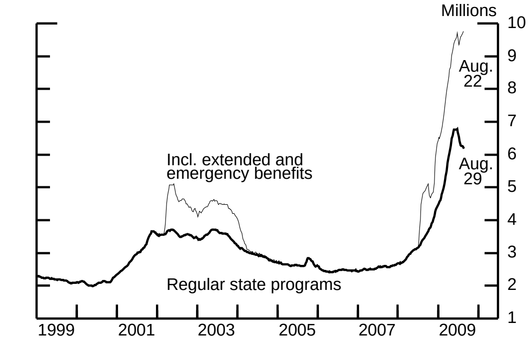
Job Losers Unemployed Less Than 5 Weeks



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

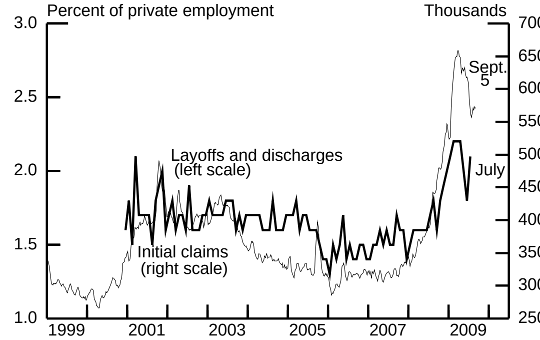
Labor Market Indicators

Insured Unemployment



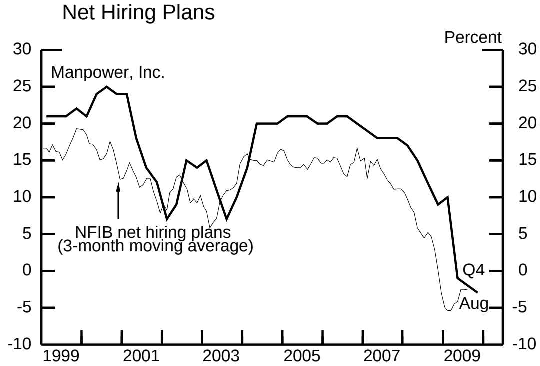
Note: 4-week moving averages.
Source: U.S. Dept. of Labor, Employment and Training Administration.

Layoffs and Initial Claims



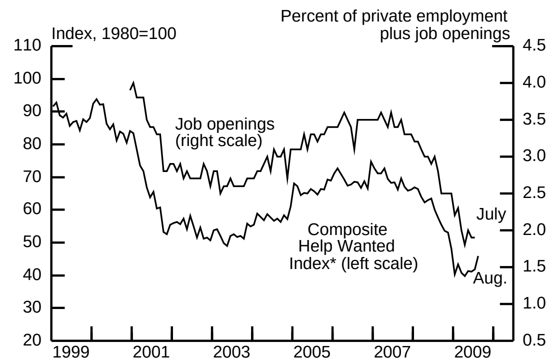
Note: Data for initial claims are 4-week moving averages.
Source: For layoffs and discharges, Job Openings and Labor Turnover Survey; for initial claims, U.S. Dept. of Labor, Employment and Training Administration.

Net Hiring Plans



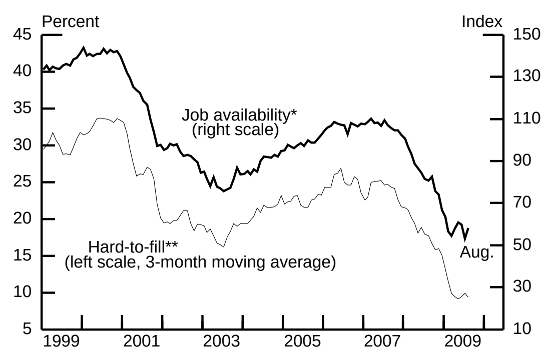
Note: Percent planning an increase in employment minus the percent planning a reduction.
Source: National Federation of Independent Business (NFIB); Manpower, Inc.

Job Openings



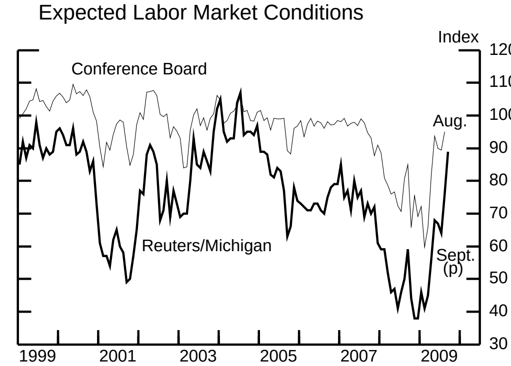
*Index of staff composite help wanted advertising as a percent of payroll employment.
Source: For job openings, Job Openings and Labor Turnover Survey; for Help Wanted Index, Conference Board and staff calculations.

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 Surveys of Consumers.

which includes extended and emergency benefits—has not yet started to decline.[1] In addition, initial claims for unemployment insurance have fallen from their peak earlier in the year, but they have moved sideways since July and are currently at a level consistent with further declines in employment. The layoff rate as measured from the Job Openings and Labor Turnover Survey has also fallen, on net, since the turn of the year, but it moved back up in July—its most recent reading—and is now just a notch below its first-quarter level. Forward-looking indicators of hiring—such as the indexes of hiring plans from the Manpower and NFIB surveys—remain weak. In contrast, some survey measures of job openings and of labor market slack have improved slightly in recent months, and household expectations of labor market conditions over the next 6 to 12 months showed noticeable further improvement in August and September.

Output per Hour
(Percent change from preceding period at an annual rate; seasonally adjusted)

Sector	2007:Q2 to 2008:Q2	2008:Q2 to 2009:Q2[1]	2008		2009	
			Q3	Q4	Q1	Q2[1]
Nonfarm business						
All persons	2.6	1.9	-.1	.8	.3	6.6
All employees[2]	2.1	1.6	-.6	-1.0	1.1	7.3

1. Staff estimates.
2. Assumes that the growth rate of hours of non-employees equals the growth rate of hours of employees.
Source: For output, U.S. Dept. of Commerce, Bureau of Economic Analysis; for hours, U.S. Dept. of Labor, Bureau of Labor Statistics.

With hours having declined much more rapidly than output in the second quarter, the staff estimates that productivity in the nonfarm business sector rose at an annual rate of 6½ percent last quarter. However, this gain followed three quarters of weak productivity performance, and over the four quarters ending in the second quarter of this year, productivity is estimated to have increased 2 percent.

[1] The decline in the number of individuals receiving unemployment insurance through regular state programs is likely due, in part, to an increase in the fraction of unemployed workers exhausting their benefits under these programs.

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

Component	Proportion 2008 (percent)	2008[1]	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
			Annual rate		Monthly rate		
Total	**100.0**	**-6.7**	**-19.0**	**-10.5**	**-.4**	**1.0**	**.8**
Previous	100.0	-6.7	-19.1	-11.4	-.4	.5	...
Manufacturing	79.0	-8.7	-22.0	-9.0	-.3	1.4	.6
Ex. motor veh. and parts	74.5	-7.8	-18.3	-8.8	-.1	.6	.4
Ex. high-tech industries	70.3	-7.8	-18.0	-9.3	-.2	.5	.4
Mining	10.6	.8	-11.7	-21.3	-.9	.6	.5
Utilities	10.4	.3	-4.1	-11.2	-.5	-1.6	1.9
Selected industries							
Energy	23.9	1.3	-6.5	-14.2	-.7	-.7	1.1
High technology	4.2	-6.9	-24.3	.7	.8	2.5	-.5
Computers	1.0	-11.9	-26.5	-22.1	-1.9	-1.2	-1.1
Communications equipment	1.3	10.4	-3.5	-4.1	2.9	.7	.0
Semiconductors[2]	1.8	-15.0	-38.1	22.2	.3	6.1	-.6
Motor vehicles and parts	4.5	-23.3	-69.5	-13.8	-3.6	20.1	5.5
Aircraft and parts	2.3	-13.2	64.6	-18.4	-1.2	2.1	-.7
Total ex. selected industries	65.1	-8.3	-21.1	-9.3	-.1	.4	.5
Consumer goods	20.7	-4.2	-9.2	-5.2	-.1	-.2	1.0
Durables	3.5	-14.7	-25.7	-12.8	-.5	1.4	-.7
Nondurables	17.1	-1.8	-5.7	-3.8	-.1	-.4	1.2
Business equipment	6.6	-4.8	-23.5	-22.0	-.8	.4	.3
Defense and space equipment	1.1	-2.1	-4.9	4.2	.1	1.9	-.3
Construction supplies	4.8	-11.8	-34.1	-10.8	-.1	.7	.0
Business supplies	7.3	-9.8	-24.8	-11.1	.3	.0	.2
Materials	24.6	-11.7	-27.0	-8.9	-.1	1.0	.4
Durables	12.4	-11.4	-37.9	-23.9	-.6	1.9	.0
Nondurables	12.2	-12.0	-14.6	7.1	.4	.2	.8

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	1972-2008 average	1994-95 high	2001-02 low	2008 Q4	2009 Q1	2009 Q2	2009 July	2009 Aug.
Total industry	**80.9**	**84.9**	**73.5**	**74.2**	**70.4**	**68.6**	**69.0**	**69.6**
Manufacturing	79.6	84.5	71.4	70.9	66.7	65.3	66.1	66.6
Mining	87.6	89.1	84.9	89.6	86.8	81.9	81.7	82.2
Utilities	86.8	93.3	84.2	83.6	82.4	79.6	77.3	78.7
Stage-of-process groups								
Crude	86.6	89.9	81.7	83.8	80.9	79.5	80.0	80.7
Primary and semifinished	82.0	87.9	74.3	73.4	68.4	66.2	66.3	66.7
Finished	77.7	80.3	70.0	71.0	68.4	67.1	67.7	68.5

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

Industrial Production

Industrial production (IP) rose in both July and August, led by a bounceback in motor vehicle production from the extraordinarily low assembly rates earlier this year. Aside from a hurricane-related rebound in October 2008, these gains were the first monthly increases in overall IP since December 2007. Manufacturing production moved up at an average rate of 1 percent in July and August; excluding motor vehicles, factory output rose 0.5 percent, on average, in the past two months, likely reflecting rising demand for materials from the motor vehicle sector and a slowing pace of inventory liquidation elsewhere. Despite the recent production gains and favorable indicators of orders, an enormous amount of slack remains in the manufacturing sector; the factory operating rate, at 66.6 percent in August, is only modestly above its recent historical low.

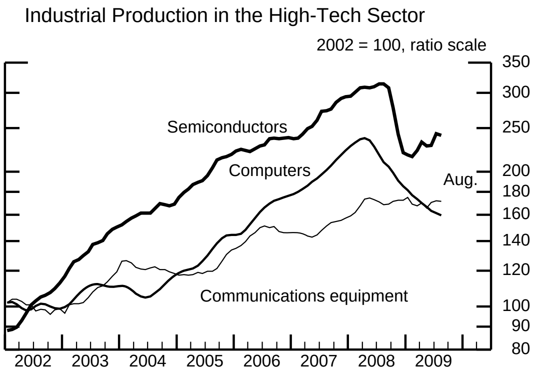
In the transportation sector, the production of motor vehicles and parts jumped 27 percent from June to August. Meanwhile, the output of aircraft and parts has continued to move roughly sideways. Despite the continuing delays in Boeing's 787 program—currently, the first test flight is expected at the end of this year, and the first delivery is expected in late 2010—overall commercial aircraft production probably will remain close to present levels in coming months due to the company's large backlog of orders.

The output of high-tech industries, which turned up in February, increased at an annual rate of about 11 percent between May and August. Semiconductor output has revived modestly in the past six months, as a broad-based increase in the output of chips has been partly offset by declines in circuit board production.[2] Industry anecdotes suggest that these recent gains, in part, reflect inventory restocking after the exceptionally deep production cuts late last year. For computers, production declines moderated in both July and August. Although unit shipments of personal computers moved slightly higher, real output nevertheless decreased as production shifted toward lower-valued machines; in addition, second-quarter shipments of servers fell precipitously. The output of communications equipment edged up, on net, in July and August after jumping in June.

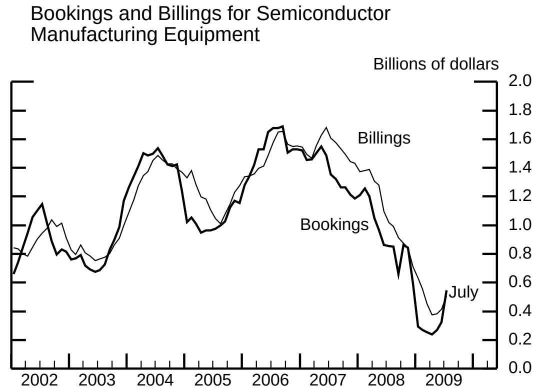
Forward-looking indicators of high-tech production point to some improvement in the near term. Intel and Texas Instruments announced anticipated revenue gains in the third quarter, citing strong demand for some of their chips. For computers, major manufacturers and high-tech consultancies expect demand to stabilize in the second half

[2] In addition, recent projections from consultancies, such as Gartner and iSupply, foresee a relatively dour, albeit improved, outlook for the semiconductor industry.

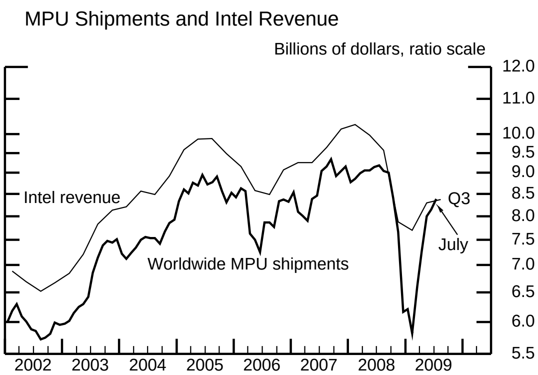
Indicators of High-Tech Manufacturing Activity



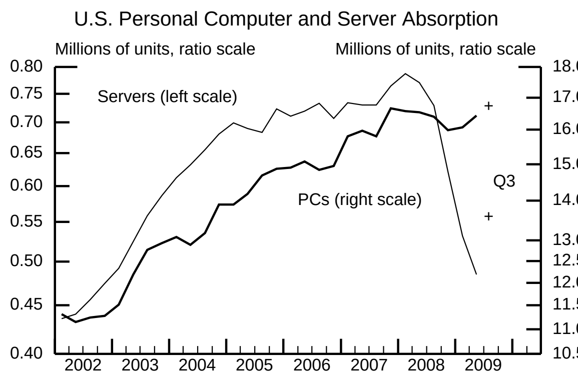
Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."



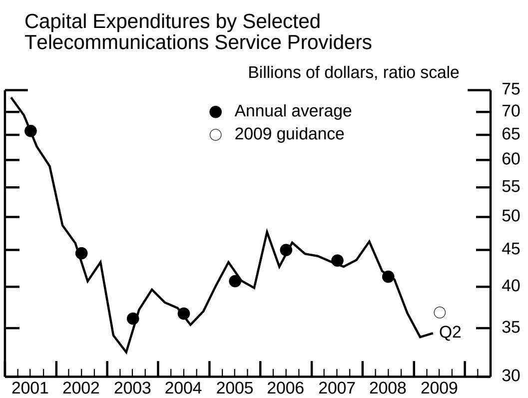
Note: FRB seasonals.
Source: Semiconductor Equipment and Materials International.



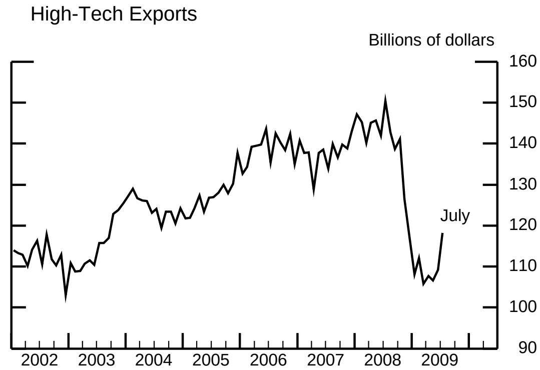
Note: FRB seasonals. MPU is a microprocessor unit. Q3 Intel revenue is the midpoint of the range given by the company's guidance as of August 28, 2009. MPU shipments are a 3-month sum.
Source: Intel; Semiconductor Industry Association.



Note: FRB seasonals. PC and server units represent the most recent U.S. data available from IDC. Q3 PC units are from the PC forecast data release. Q3 server units are from the server forecast data release.
Source: IDC.



Note: FRB seasonals. Includes AT&T, Verizon, Sprint Nextel, and companies related by merger, acquisition, or spinoff.
Source: SEC filings.



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

of 2009 and to begin to increase in 2010. Finally, major U.S. telecommunications service providers recently reiterated that they expect to meet their annual 2009 capital expenditure guidance, suggesting that this market segment will buttress communications equipment production over the remainder of the year.[3] Recent trade data showing sharply rising high-tech exports suggest that the foreign sector, which absorbs the majority of U.S. high-tech IP, will also support production in the near term.

The production of energy stepped up in August. A swing to warmer-than-average temperatures in August from a relatively cool July contributed to a large gain in utilities output last month following a weather-related decline a month earlier. In addition, drilling activity appears to have flattened out recently after plunging by more than half since late last year.

Outside of energy, transportation, and high-technology industries, production rose at an average rate of about 0.5 percent in July and August. Production of consumer goods increased 1.0 percent in August after edging down in July. The output of business equipment rose modestly in both July and August after averaging declines in the first half of the year of about 2 percent per month.

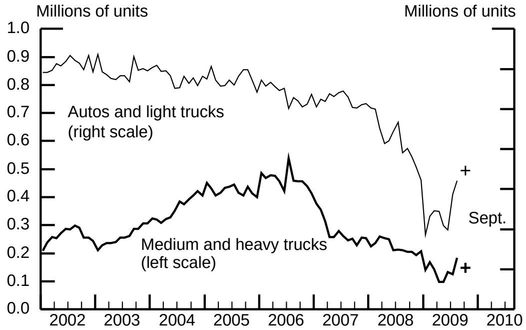
The output of construction supplies increased at an average rate of about 0.3 percent in July and August, though output remains more than 25 percent below its peak in January 2006. Elsewhere, the production of materials averaged gains of ¾ percent in July and August; demand for steel and other materials was likely boosted by the bounceback in motor vehicle assemblies.

The available indicators of near-term manufacturing activity have continued to brighten and point to further gains in factory output. The three-month moving average of the staff's series on real adjusted durable goods orders rose in July for the third straight month. The diffusion index of new orders from the national manufacturing ISM survey jumped 9½ index points to 65 in August. The new orders diffusion indexes from the regional manufacturing surveys also have moved up but by less than the ISM index. In the Empire State survey, the first reading on manufacturing activity in September, new orders rose further and were consistent with solid near-term increases in manufacturing output.

[3] Indeed, Cisco recently reported a rise in orders consistent with normal seasonality for the current quarter, a marked improvement compared with recent quarters.

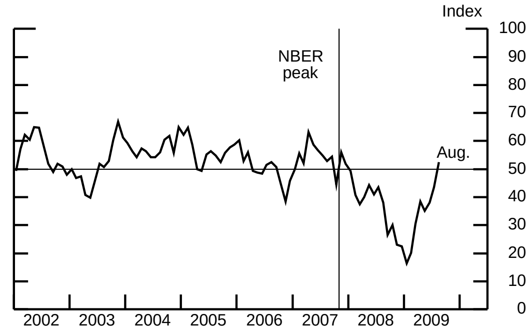
Indicators of Industrial Activity

Motor Vehicle Assemblies



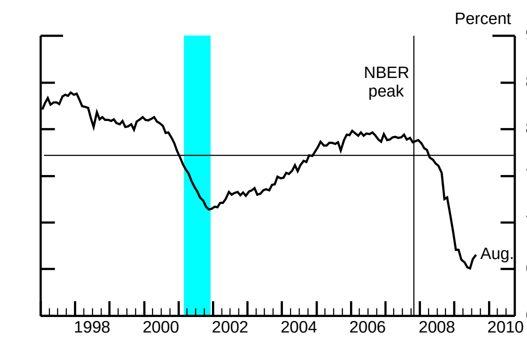
Note: September values are based on latest industry schedules.
Source: Ward's Communications.

IP Diffusion Index



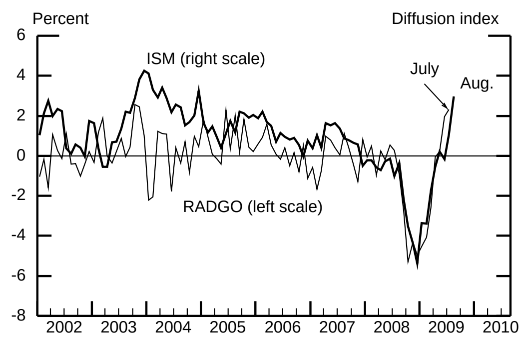
Note: The diffusion index equals the percentage of series that increased relative to 3 months earlier plus one-half the percentage that were unchanged.
Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Manufacturing Capacity Utilization



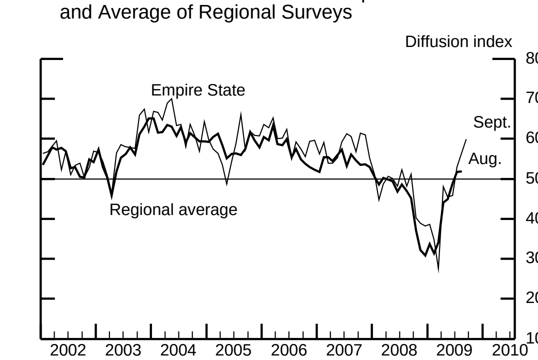
Note: Horizontal line is 1972-2008 average.
Source: Federal Reserve, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

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



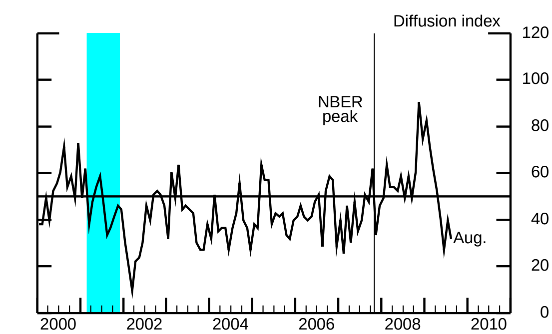
Note: The measure for real adjusted durable goods orders (RADGO) is a 3-month moving average.
Source: Institute for Supply Management (ISM). RADGO is compiled by FRB staff based on data from the Bureau of Labor Statistics and the U.S. Census Bureau.

New Orders Diffusion Indexes: Empire State
and Average of Regional Surveys



Note: Regional average includes new orders indexes from the Chicago, Dallas, Kansas City, New York (Empire State), Philadelphia, and Richmond surveys.
Source: Federal Reserve.

Three-Month Changes in Months' Supply



Note: The diffusion index equals 50 plus one-half of the share of industries whose month's supply is up relative to 3 months earlier minus one-half of the share of industries whose month's supply is down relative to 3 months earlier.
Source: Staff's flow-of-goods system.

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

Category	2008	2008 Q4	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
Total	13.1	10.4	9.5	9.6	9.7	11.2	14.1
Autos	6.7	5.3	4.8	4.9	5.0	6.2	8.0
Light trucks	6.4	5.1	4.7	4.7	4.7	5.1	6.1
North American[1]	9.8	7.7	6.8	7.1	7.2	8.3	10.1
Autos	4.5	3.6	3.1	3.2	3.3	4.2	5.3
Light trucks	5.3	4.2	3.7	3.9	3.9	4.2	4.8
Foreign-produced	3.3	2.7	2.7	2.4	2.5	2.9	4.0
Autos	2.2	1.7	1.7	1.6	1.7	2.0	2.7
Light trucks	1.1	.9	1.0	.8	.8	.9	1.2
Memo: Detroit Three market share (percent)[2]	48.3	48.0	44.1	46.8	46.3	44.8	41.3

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

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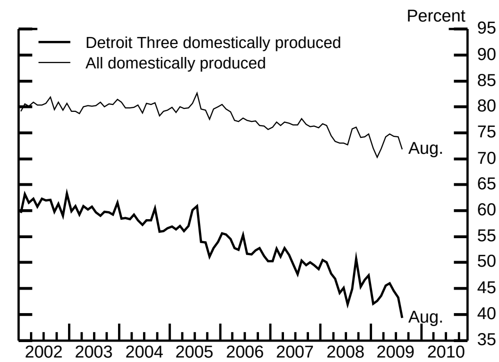
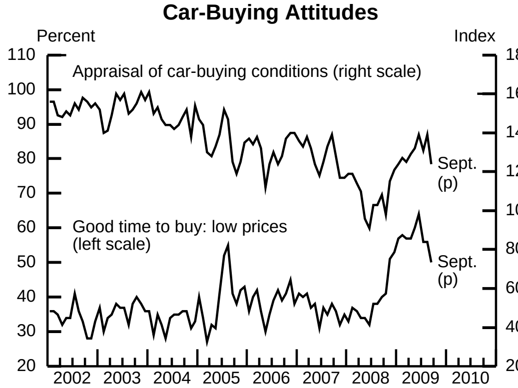
Light Vehicle Market Shares



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

Car-Buying Attitudes



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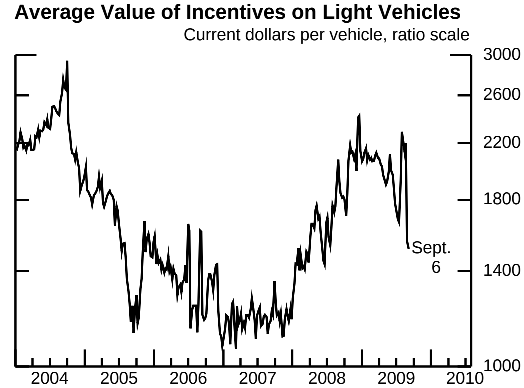
Source: Reuters/University of Michigan Surveys of Consumers.

Average Value of Incentives on Light Vehicles



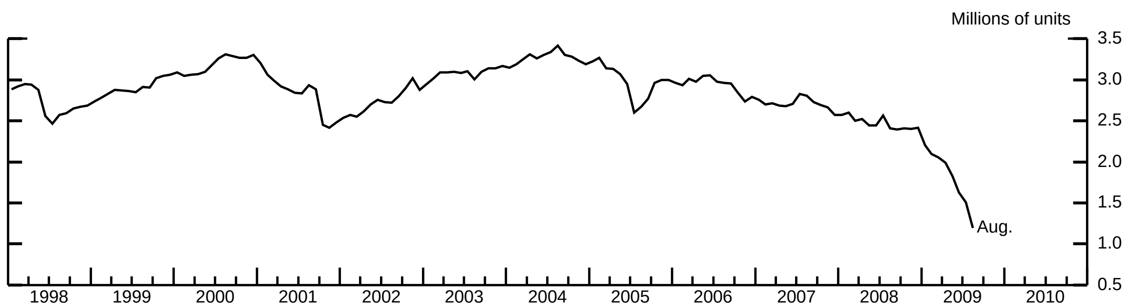
Note: Weekly weighted average of customer cash rebate and the present value of interest rate reduction.
Source: J.D. Power and Associates. Adjusted using FRB seasonals.

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

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2009 May	2009 June	2009 July	2009 Aug.
U.S. production[1]	4.4	4.4	6.3	6.8	4.2	4.0	5.7	6.4
Autos	1.7	1.8	2.6	2.8	1.8	1.8	2.3	2.6
Light trucks	2.8	2.5	3.8	4.0	2.4	2.2	3.5	3.8
Days' supply[2]	93	70	n.a.	n.a.	76	70	55	36
Autos	93	78	n.a.	n.a.	84	76	55	32
Light trucks	93	64	n.a.	n.a.	70	64	55	41
Inventories[3]	2.05	1.63	n.a.	n.a.	1.83	1.63	1.50	1.20
Autos	.92	.82	n.a.	n.a.	.88	.82	.75	.56
Light trucks	1.13	.81	n.a.	n.a.	.95	.81	.75	.64
Memo: U.S. production, total motor vehicles[4]	4.6	4.5	6.5	6.9	4.3	4.1	5.9	6.6

Note: FRB seasonals. Components may not sum to totals because of rounding.
1. Production rates for the third and fourth quarters of 2009 reflect the latest industry schedules.
2. Quarterly values are calculated with end-of-period stocks and average reported sales.
3. End-of-period stocks.
4. Includes medium and heavy trucks.
n.a. Not available.
Source: Ward's Communications.

Inventories of Light Vehicles



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

Days' Supply of Light Vehicles

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

Motor Vehicles

Purchases of light motor vehicles rose again in August, surging almost 3 million units to an annual rate of 14.1 million units. While sales were up for the Detroit Three, imports and vehicles produced by the major transplants accounted for about three-fourths of the August increase. As a result, the market share of domestically produced vehicles fell further, weighed down by a sharp drop in the share of the Detroit Three.

The increase in vehicle sales last month was largely due to the government's cash-for-clunkers program, which officially began on July 27 and ended on August 24.[4] About 690,000 (not at an annual rate) vehicles were sold under the program. Past experience with earlier large-scale automobile incentive programs suggests that most of these purchases were likely pulled ahead from future sales, and indeed, weekly PIN data from J.D. Power and Associates suggest that both light vehicle sales and consumer incentives plummeted in the weeks after the program expired.[5] The end of the cash-for-clunkers program also likely contributed to the early September drop in the index of car-buying attitudes from the Reuters/University of Michigan Surveys of Consumers; this index fell back to its level at the beginning of the year.

Production of light motor vehicles increased ¾ million units in August to an annual rate of 6.4 million units after having jumped 1.7 million units in July.[6] However, the higher

[4] The official name is the Consumer Assistance to Recycle and Save (CARS) Act. Under the act, eligible trade-ins were required to be in drivable condition, to have been continuously insured by the same owner for at least a year prior to trade-in, to have been manufactured in model year 1984 or later, and to have a combined (city and highway) fuel economy rating of 18 miles per gallon (mpg) or less. Trade-ins were to be replaced by a new vehicle priced at $45,000 or less. The new auto had to get at least 22 mpg and be at least 4 mpg more fuel efficient than the old vehicle to qualify for a $3,500 voucher; if the new car got at least 10 mpg more than the old vehicle, the voucher was worth $4,500. New light trucks were required to get at least 18 mpg and be at least 2 mpg more fuel efficient than the old vehicle to qualify for a $3,500 voucher; if the new vehicle got at least 5 mpg more than the old, the voucher was worth $4,500. Dealers had to first provide documentation that the trade-ins had been scrapped before receiving payment from the government.

[5] While cash for clunkers was in effect, many dealers increased their own cash rebates. However, PIN permitted the dealers in its sample to report a cash-for-clunkers voucher as either a cash rebate or a reduction in the vehicle price. As a result, we cannot separate the impact of the program on either of these series. Nonetheless, since the program ended, average cash rebates have fallen sharply, and average vehicle prices have surged.

[6] We believe that the cash-for-clunkers program will have only a small impact on light vehicle production over the long run. Manufacturers had announced a large increase in third-quarter motor vehicle production prior to the announcement of the program, and schedules have actually moved down a little since then.

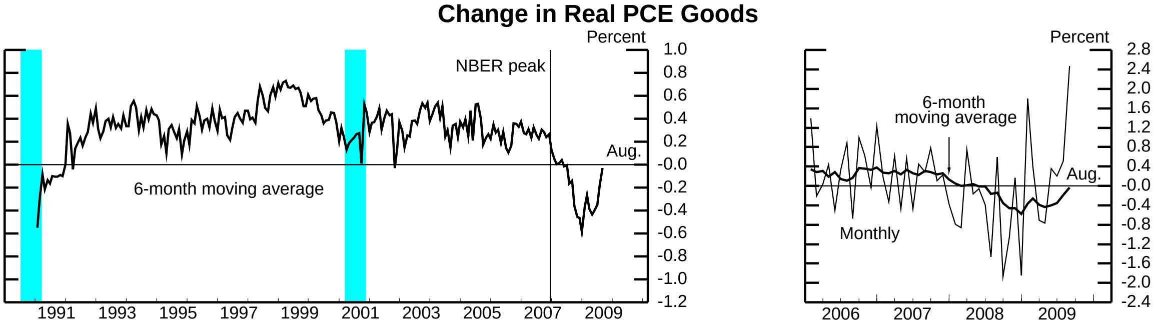
Real Personal Consumption Expenditures

(Percent change from preceding comparable period)

Category	2008	2009		2009		
	H2	Q1	Q2	June	July	Aug.
		Annual rate		Monthly rate		
Total real PCE[1]	**-3.3**	**.6**	**-1.0**	**.1**	**.2**	**n.a.**
Motor vehicles	-31.1	9.6	-6.1	2.4	8.7	18.0
Goods ex. motor vehicles	-6.6	1.9	-2.9	.0	-.2	1.0
Services	-.4	-.3	.2	.1	.1	n.a.
Ex. energy	-.5	-.2	.7	.1	.2	n.a.
Memo:						
Real PCE control[2]	-6.8	1.3	-2.5	.1	.0	.9
Nominal retail control[3]	-4.4	1.9	-2.8	.1	-.3	.7

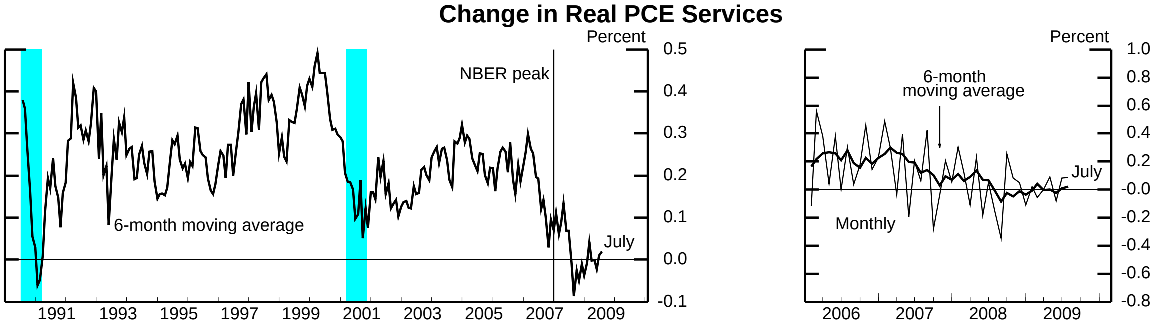
1. The values for Q2, June, July, and August are staff estimates based on available data. The semiannual values are Q4/Q2.
2. Durables excluding motor vehicles, nondurables excluding gasoline, and food services.
3. Total sales less outlays at building material and supply stores, automobile and other motor vehicle dealers, and gasoline stations.
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 (NBER). The NBER peak is the last business cycle peak as defined by the NBER.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Change in Real PCE Services



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

production rates in recent months were insufficient to keep pace with the surge in sales spurred by cash for clunkers, and stocks of domestic vehicles plunged in August to their lowest level in the history of this series, which begins in 1983. Industry schedules call for assemblies to move up again in September and to rise to an annual rate of 6.8 million units in the fourth quarter. Assuming some post-cash-for-clunkers dropback in sales, days' supply should return to more comfortable levels next quarter.

Consumer Spending

As noted, overall consumer spending was boosted temporarily in July and August by the cash-for-clunkers program. On the basis of the latest retail sales release, we estimate that real spending on most other goods and food services (PCE control) jumped 0.9 percent in August after little change in July. This is the first sizable increase in several months for this category, which had drifted down, on average, in the first half of the year after having contracted sharply in the second half of last year.[7] Real spending on services moved up again in July—the latest available data—but only slightly. The saving rate edged down to 4¼ percent in July, 3 percentage points higher than its pre-recession level.

Despite some positive incoming news, the environment for household spending remains challenging. Real disposable income increased moderately over the first half of the year, as the lower taxes and increased transfers included in the stimulus package outweighed a sizable contraction in labor compensation.[8] However, most of the direct effect for households of the stimulus bill was already reflected in the level of disposable income by the end of the second quarter. And although the wealth-to-income ratio ticked up in the second quarter—its first increase since the second quarter of 2007—and likely rose further this quarter, households have lost wealth equivalent to about 1¾ years of income over the past two years and are likely still making the attendant adjustments to their spending. On a more positive note, compensation in July posted its first nominal gain this year, and the various measures of household sentiment—though still at low levels—have improved some in recent months.

Housing

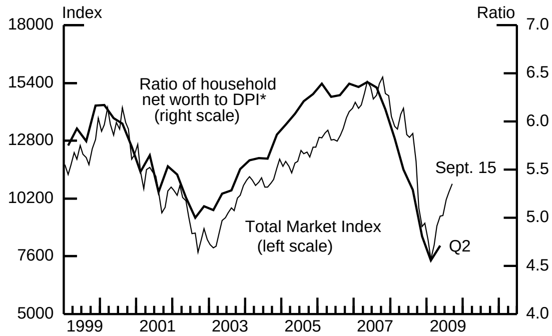
A gradual recovery in housing activity appears to be under way. In July, single-family housing starts registered their fifth consecutive increase, and the level of starts stood

[7] The PCE control category includes durables excluding motor vehicles, nondurables excluding gasoline, and food services.

[8] In the latest GDP release, the BEA revised down its estimate of compensation in the first quarter further on the basis of the UI tax records.

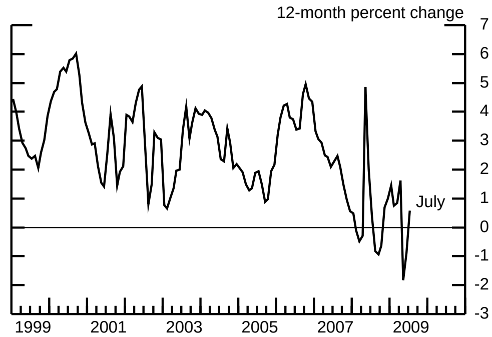
Fundamentals of Household Spending

Household Net Worth and Dow Jones Total Market Index



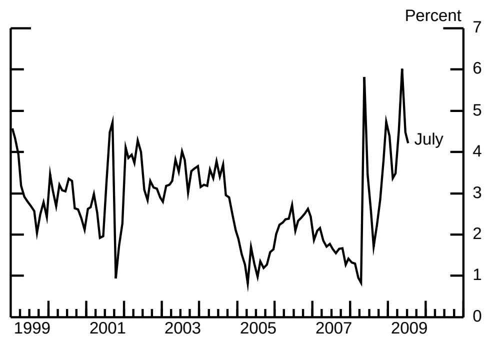
* The value for 2004:Q4 excludes the effect on income of the one-time Microsoft dividend in December 2004.
Source: Federal Reserve Board; U.S. Department of Commerce, Bureau of Economic Analysis; *Wall Street Journal.*

Change in Real Disposable Personal Income



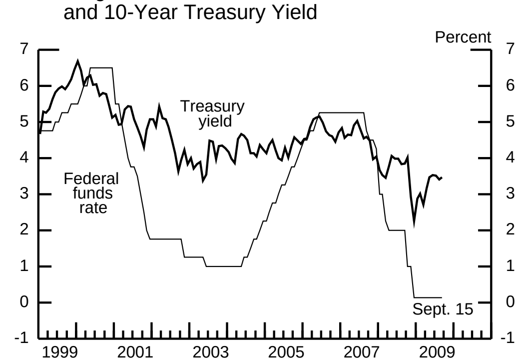
Note: Values for December 2004 and December 2005 exclude the effect on income of the one-time Microsoft dividend in December 2004.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Personal Saving Rate



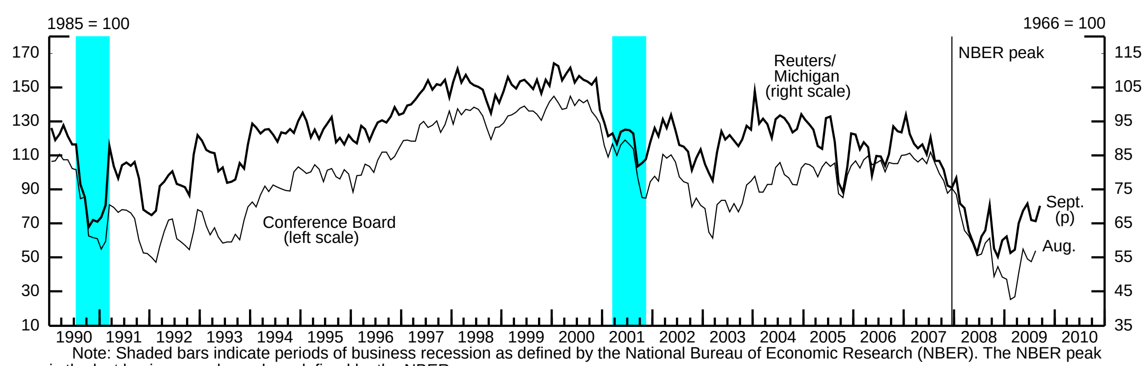
Note: The value for December 2004 excludes the effect on income of the one-time Microsoft dividend in that month.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Target Federal Funds Rate and 10-Year Treasury Yield



Source: Federal Reserve Board.

Consumer Confidence



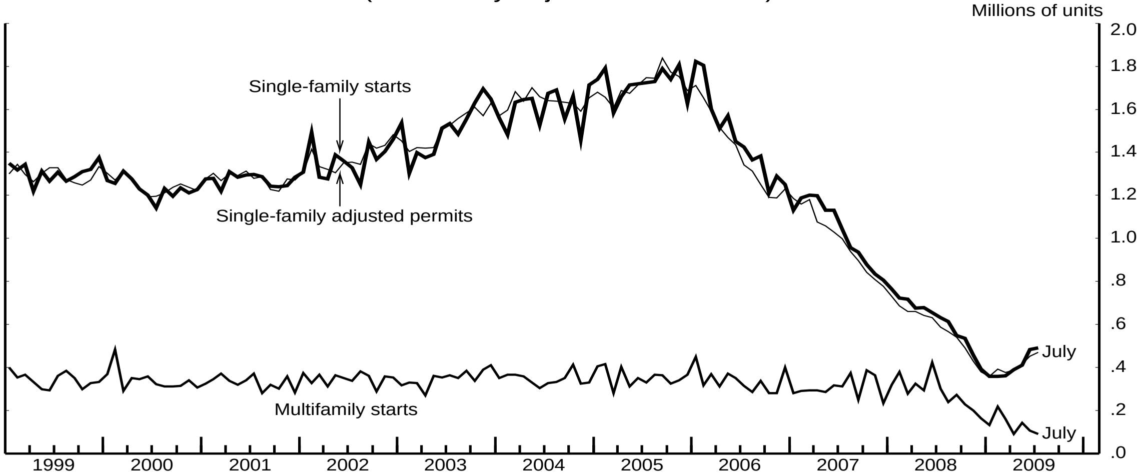
Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER.
(p) Preliminary.
Source: Reuters/University of Michigan Surveys of Consumers; Conference Board.

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

Sector	2008	2009 Q1	2009 Q2	2009 May	2009 June	2009 July
All units						
Starts	.91	.53	.54	.55	.59	.58
Permits	.91	.53	.53	.52	.57	.56
Single-family units						
Starts	.62	.36	.43	.41	.48	.49
Permits	.58	.36	.41	.41	.43	.46
Adjusted permits[1]	.58	.37	.42	.42	.45	.47
New homes						
Sales	.49	.34	.37	.36	.40	.43
Months' supply[2]	10.68	11.61	9.55	9.71	8.51	7.51
Existing homes						
Sales	4.35	4.12	4.24	4.22	4.33	4.61
Months' supply[2]	9.98	9.69	8.80	8.82	8.39	8.03
Multifamily units						
Starts	.28	.17	.11	.14	.11	.09
Built for rent	.22	.14	.10	n.a.	n.a.	n.a.
Built for sale	.07	.03	.02	n.a.	n.a.	n.a.
Permits	.33	.17	.12	.11	.14	.10
Condos and co-ops						
Existing home sales	.56	.47	.52	.50	.56	.63

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

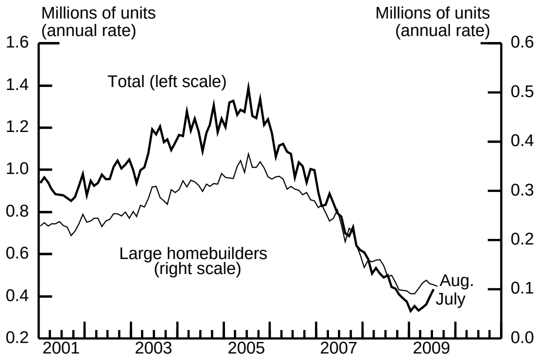
Private Housing Starts and Permits
(Seasonally adjusted annual rate)



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

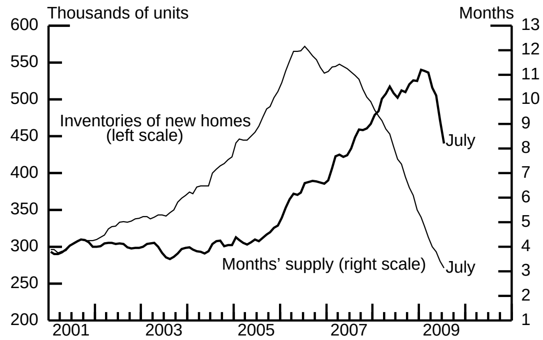
Indicators of Single-Family Housing

New Single-Family Home Sales



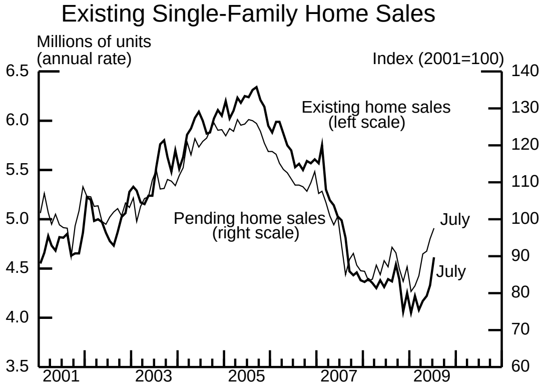
Source: For total, Census Bureau; for large homebuilders, National Association of Home Builders.

Inventories of New Homes and Months' Supply



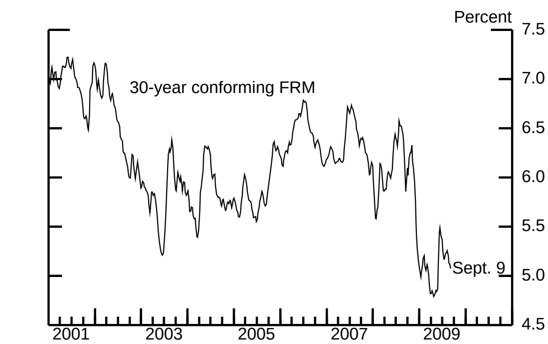
Note: Months' supply is calculated using the 3-month moving average of sales.
Source: Census Bureau.

Existing Single-Family Home Sales



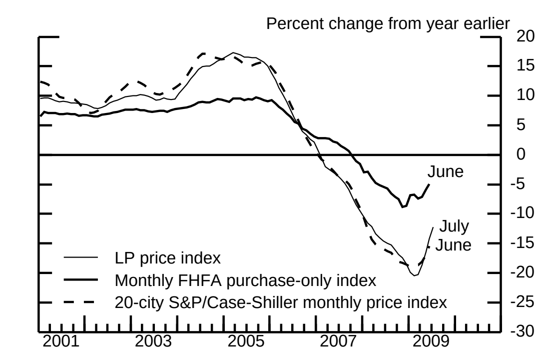
Source: National Association of Realtors.

Mortgage Rates



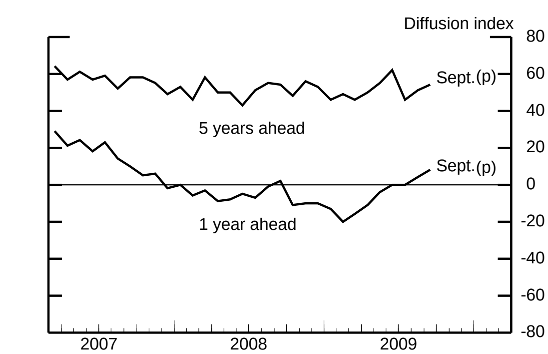
Note: 2-week moving average.
Source: Federal Home Loan Mortgage Corporation.

Prices of Existing Homes



Note: LoanPerformance plans to publish its price index in late September. Data are confidential until then.
Source: For FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor's; for LP, LoanPerformance, a division of First American CoreLogic.

House Price Expectations



Note: Diffusion index is constructed by subtracting expectations of decrease from expectations of increase.
p Preliminary.
Source: Reuters/University of Michigan Surveys of Consumers.

almost 40 percent above the record low reached in the first quarter of this year.[9] Adjusted permit issuance—which often is a more reliable indicator of the underlying pace of new construction activity—has also moved up in recent months, though its level was a touch below the rate of starts in July. In contrast, in the much smaller multifamily sector—where credit conditions have remained especially tight and vacancies have remained high—starts have continued to decline, on net, this year after having plunged in the second half of 2008.

The latest sales data suggest that the demand for new single-family homes has also strengthened after having stabilized in the early part of this year. The Census Bureau's measure of the number of new-home sales agreements jumped to an annual rate of 433,000 units in July, 32 percent above the record low in January.[10]

. Although sales levels are still quite modest, they have been enough, given the very slow pace of production, to pare the overhang of unsold single-family houses: By July, these inventories had fallen to about one-half of their peak level in the summer of 2006, and the months' supply of new homes was down considerably from its record high in January.[11]

Sales of existing single-family houses, which had been fairly flat early in the year, advanced 6.5 percent in July to their highest level since mid-2007, and pending home sales agreements through July suggest that resale activity will climb further in the months ahead.[12] To be sure, sales in the existing-home market have been supported for much of the year by the elevated number of transactions involving bank-owned and other distressed properties. However, the recent rise in resale activity appears to have been driven by a rise in transactions of nondistressed properties: Data from the National Association of Realtors suggest that distressed sales dropped to one-third of all sales transactions for existing homes in the May to July period after reportedly accounting for about 40 to 45 percent of sales between December and April.

[9] The series for single-family housing starts begins in 1959.

[10] The series for new home sales begins in 1963.

[11] The series for months' supply begins in 1963.

[12] However, according to the National Association of Realtors (NAR), the high proportion of distressed sales and the unusually tight credit conditions in the housing market have made pending home sales a less-informative leading indicator of existing home sales than usual. Increases in the shares of cash purchases and of distressed sales have made the timing between contract and closing for existing homes more uncertain.

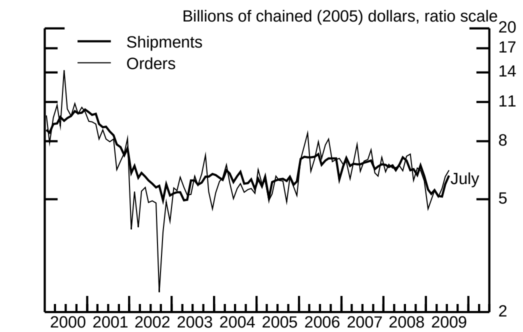
Orders and Shipments of Nondefense Capital Goods

(Percent change; seasonally adjusted current dollars)

Category	2009 Q1	2009 Q2	2009 May	2009 June	2009 July
	Annual rate		Monthly rate		
Shipments	-28.1	-17.5	-1.0	1.1	1.1
Excluding aircraft	-35.4	-14.4	-.4	1.4	.8
Computers and peripherals	-.8	-8.1	-.5	.3	2.7
Communications equipment	-47.3	-3.5	-.7	10.8	6.6
All other categories[1]	-36.7	-15.9	-.4	.7	.1
Orders	-49.1	13.3	9.1	-.2	8.6
Excluding aircraft	-44.2	3.8	4.3	3.8	-.3
Computers and peripherals	-18.4	13.0	15.9	.5	-2.9
Communications equipment	-58.7	48.2	7.2	10.2	5.1
All other categories[1]	-44.7	-.6	2.9	3.5	-.6
Memo: Shipments of complete aircraft[2]	40.3	36.8	35.8	36.0	34.1

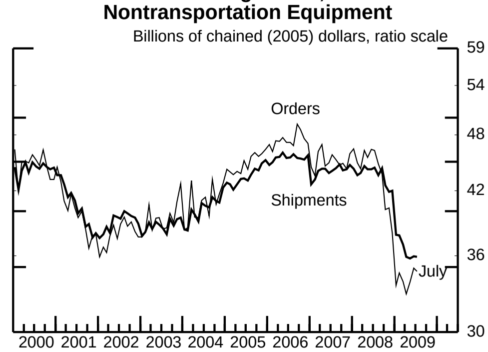
1. Excludes most terrestrial transportation equipment.
2. From Census Bureau, Current Industrial Reports; billions of dollars, annual rate.
Source: Census Bureau.

Communications Equipment



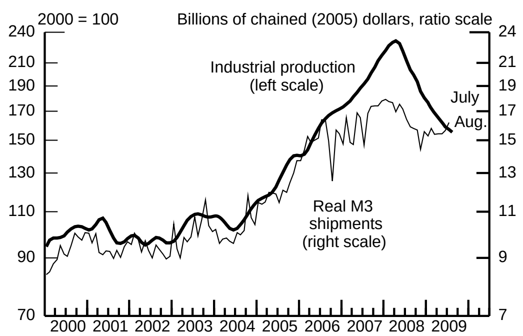
Note: Shipments and orders are deflated by a price index that is derived from the quality-adjusted price indexes of the Bureau of Economic Analysis and uses the producer price index for communications equipment for monthly interpolation.
Source: Census Bureau.

Non-High-Tech, Nontransportation Equipment



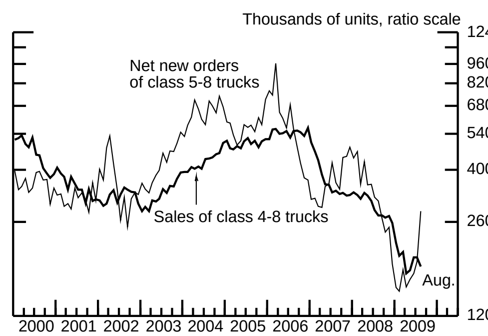
Note: Shipments and orders are deflated by the staff price indexes for the individual equipment types included in this category. Indexes are derived from the quality-adjusted price indexes of the Bureau of Economic Analysis.
Source: Census Bureau.

Computers and Peripherals



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

Medium and Heavy Trucks



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

The apparent modest revival of housing demand seen in recent months is likely due, in part, to improvements in housing affordability stemming from low rates for conforming mortgages and from both the lower level and the slower rate of decline of house prices.[13] Mortgage interest rates for conforming thirty-year fixed-rate mortgages—at about 5 percent—remain very low by historical standards. In addition, although spreads between rates for jumbo and standard conforming loans remain elevated relative to pre-crisis norms, they have continued to narrow in recent months despite the fact that the secondary market for private-label nonconforming mortgages remains closed. As for house prices, the repeat-sales price index for existing single-family homes calculated by LoanPerformance jumped 12 percent at an annual rate in the second quarter; over the 12 months ending in July, the index fell 12 percent, a noticeably slower rate of decline than earlier in the year. Moreover, the Reuters/Michigan survey's diffusion index for year-ahead house price expectations moved up further in September's preliminary read: A greater number of respondents now expect house prices to increase over the next 12 months than expect prices to fall.

Equipment and Software

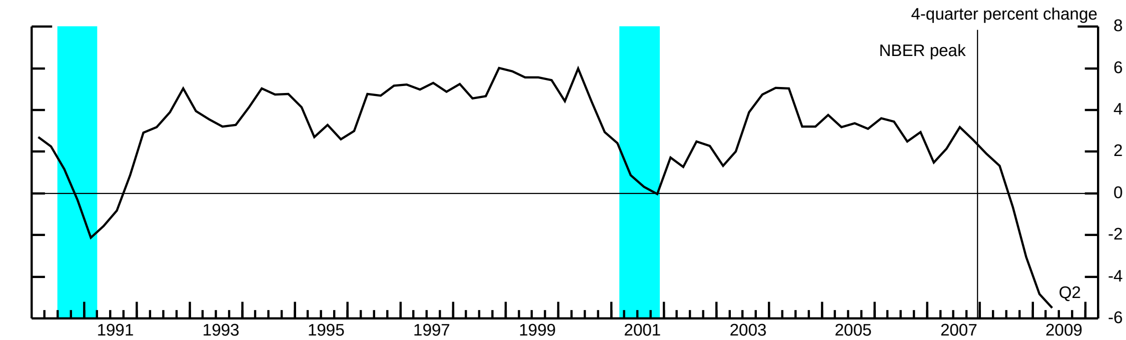
Real spending on equipment and software (E&S) appears to be stabilizing after having dropped steeply for more than a year. Although this leveling out is particularly noticeable in the transportation equipment sector, some signs of stabilization are evident for both high-tech and other types of equipment. Orders for nondefense capital goods excluding aircraft have recovered considerably in recent months and, in July, stood 3½ percent above their second-quarter average. Meanwhile, shipments increased in June and July at an average monthly rate of about 1 percent.

Business purchases of transportation equipment appear to be expanding at a solid clip in the third quarter. Business outlays for light vehicles in July and August rose from their lackluster second-quarter pace. Most of the gain came from rental car companies. Demand for medium and heavy trucks edged higher, on average, in July and August from the extremely low levels that prevailed in the second quarter. As freight shipping has picked up, the pace of new truck orders has begun to move higher, which suggests some additional improvement in medium and heavy truck sales over the next couple of months.

[13] In addition, the first-time homebuyer tax credit may be providing some support to home sales at present. However, the proportion of first-time home purchasers has remained about flat over recent months at around 30 percent—considerably lower than the average proportion seen over the past decade of 40 percent (according to the NAR)—suggesting that other factors have been more important.

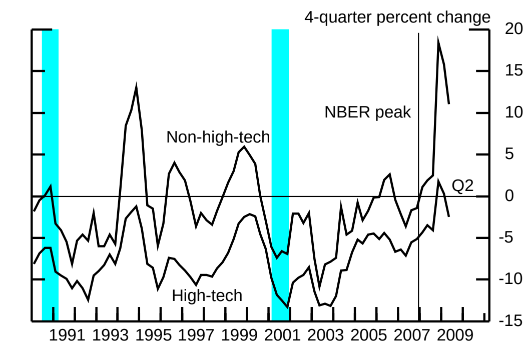
Fundamentals of Equipment and Software Investment

Real Business Output



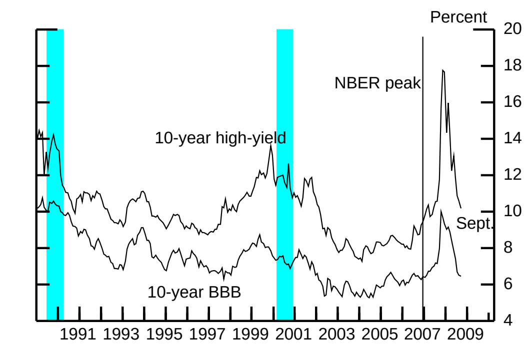
Note: Shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research (NBER). The NBER peak is the last business cycle peak as defined by the NBER.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

User Cost of Capital



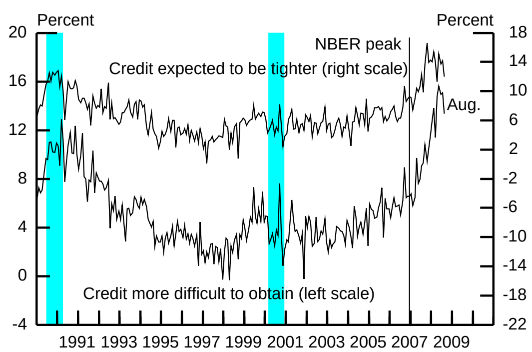
Source: Staff calculation.

Corporate Bond Yields



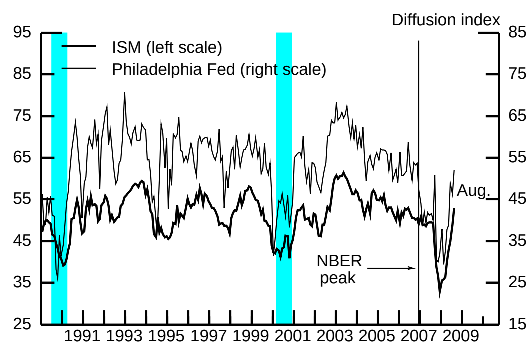
Note: End of month. September value as of September 15.
Source: Merrill Lynch.

NFIB: Survey on Loan Availability



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

Surveys of Business Conditions



Source: Institute for Supply Management (ISM), Manufacturing ISM Report on Business; Philadelphia Fed Business Outlook Survey.

Although aircraft shipments in July were below their second-quarter average, the value of Boeing's airplane deliveries stepped up in August.

After declining steeply for several quarters, real spending on high-tech E&S appears to have turned up. In the second quarter, spending on computers and peripherals and on communications equipment increased, and, as indicated by the recent data from the Quarterly Services Survey, purchases of software weakened less than the BEA had assumed in its earlier estimates of second-quarter real GDP. Early this quarter, investment in high-tech equipment appears to have continued to advance, with the levels of both nominal orders and shipments in July nearly 8 percent above their averages in the second quarter. In addition, a few major producers of high-tech equipment have recently reported that they are seeing some signs of improvement in demand.

Business investment in equipment other than transportation and high-tech, a broad category of goods that accounts for one-half of total E&S outlays, is also showing tenuous hints of stabilization. Orders have recovered markedly in recent months, while shipments edged up, on balance, over June and July.

The fundamental determinants of investment in E&S remain weak, but conditions appear to have become less adverse in recent months. The decline in business output was less pronounced last quarter than in the preceding three quarters, and the four-quarter change in the user cost of capital fell back somewhat in the second quarter after having spiked last year. Monthly surveys of business conditions and sentiment have recently recovered to levels suggesting a modest rise in business spending. Although spreads of corporate bonds over Treasury securities are still somewhat elevated, they have come down considerably from their extremely high levels at the end of last year, likely reflecting a decrease in uncertainty and assessments of better underlying profitability. In addition, the net share of small businesses reporting increased difficulty in obtaining credit moved down a bit in the August NFIB survey, and the July SLOOS reported that the net percentage of banks that tightened standards on commercial and industrial loans receded further. Nevertheless, the levels of these indicators suggest that credit is still tight.

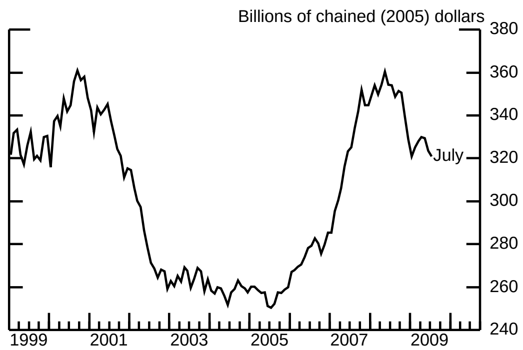
Nonresidential Construction

Conditions in the nonresidential construction sector generally remain dismal. Although outlays on energy-related projects surged in the second quarter, data through July suggest that broader measures of construction spending remain on a steep downward trajectory. The weakness was widespread across categories and likely reflected the drag from a large number of negative fundamentals: Available data show that vacancy rates are rising and

Nonresidential Construction and Indicators

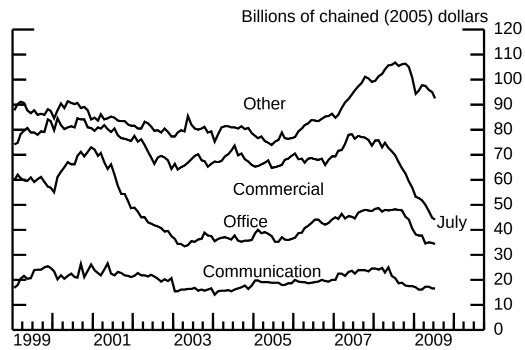
(All spending series are seasonally adjusted at an annual rate; nominal CPIP deflated by BEA prices through Q1 and by staff projection thereafter)

Total Structures



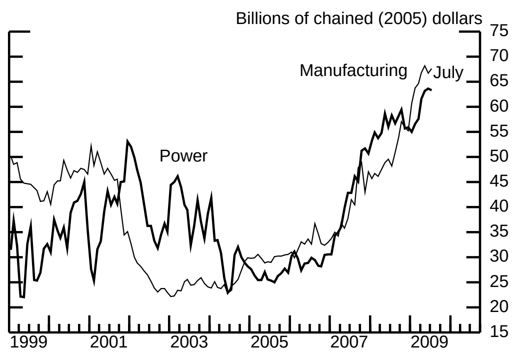
Source: Census Bureau.

Office, Commercial, Communication, and Other



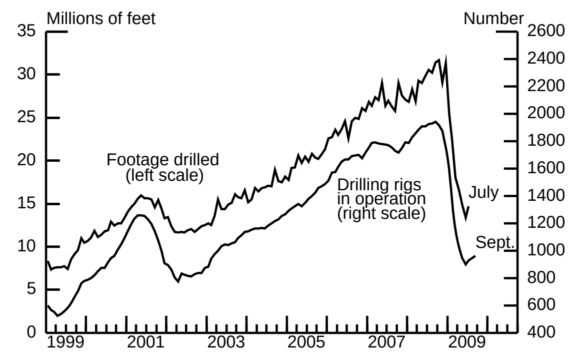
Note: Other consists of structures for religious organizations, education, lodging, amusement and recreation, transportation, and health care.
Source: Census Bureau.

Manufacturing and Power



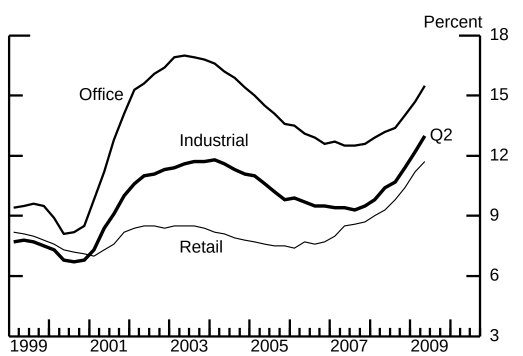
Source: Census Bureau.

Drilling and Mining Indicators



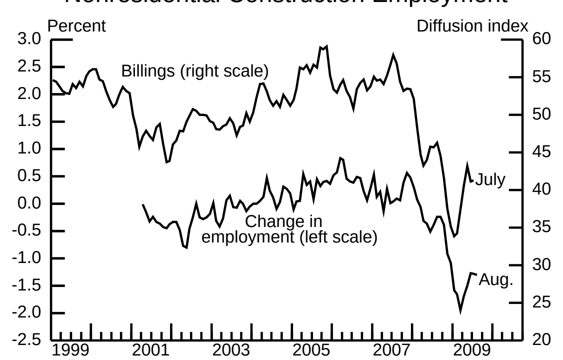
Note: The September readings for drilling rigs are based on data through September 11, 2009. Both series are seasonally adjusted by FRB staff.
Source: For footage drilled, U.S. Department of Energy, Energy Information Agency; for drilling rigs, Baker Hughes.

Vacancy Rates



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

Architectural Billings and Nonresidential Construction Employment



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

that property prices are generally plunging across the sector. In addition, the architectural billings index in July remained at a level consistent with further spending declines, and the nonresidential construction industry has continued to shed workers. Finally, as indicated by the July SLOOS, the financing environment for nonresidential construction projects remains very tight, and available Call Report data show that banks pared back nonresidential construction lending in both the first and second quarters.

Real spending on drilling and mining structures dropped at an annual rate of 70 percent in the second quarter after an even larger decline in the first quarter; available indicators suggest that activity more recently has only edged up from a low level. The steep decline in energy prices in the second half of last year greatly diminished incentives for additional drilling activity. This downward pressure has been particularly pronounced in the natural gas sector—which accounts for most of the rigs in operation—as spot prices have remained near a seven-year low because of weak demand and a glut of new supply from recently developed fields. By contrast, this year's partial rebound in oil prices seems to have led to a modest increase in drilling activity in that sector.

Business Inventories

The sharp cuts in production this year have reduced inventory stocks significantly. Real nonfarm inventories excluding motor vehicles fell at an annual rate of about $120 billion in the second quarter, more than twice the pace of liquidation recorded in the first quarter, and the book-value data for the manufacturing and trade sector in July suggest that businesses continued to cut back inventory stocks early in the third quarter.[14] Although the months' supply measure implied by the book-value data has come down significantly in the past few months, it remains elevated when measured at the current soft pace of sales. The picture from the staff's flow-of-goods inventory system is broadly the same: While the level of inventories continued to drop back in July and August, the decline in months' supply, aside from motor vehicles, has been modest given weak demand. Months' supply remains elevated for all the major market groups excluding motor vehicles. By contrast, according to the ISM, the net fraction of manufacturing supply managers that perceive their customers' inventories as too high moved down further in August to a level not seen since 2004, suggesting that purchasing managers in

[14] In all, real nonfarm inventories are estimated to have fallen at an annual rate of $169 billion in the second quarter, with about one-fourth of this liquidation occurring in the motor vehicles sector.

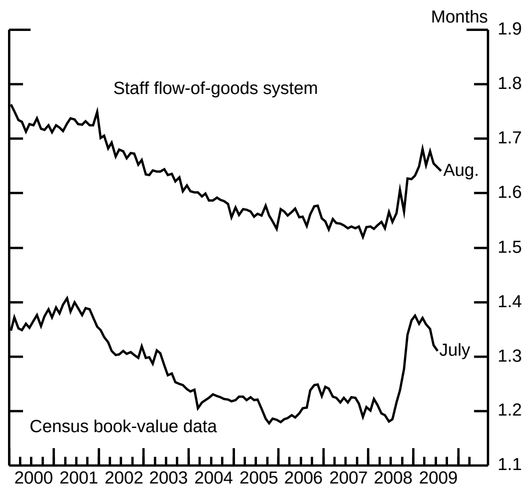
Nonfarm Inventory Investment

(Billions of dollars; seasonally adjusted annual rate)

Measure and sector	2008 Q4	2009 Q1	2009 Q2	2009 May	2009 June	2009 July
Real inventory investment (chained 2005 dollars)						
Total nonfarm business	**-35.7**	**-114.9**	**-163.2**	**...**	**...**	**...**
Motor vehicles	-.7	-63.6	-48.1	...	...	...
Nonfarm ex. motor vehicles	-35.1	-51.3	-115.1	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-19.8**	**-49.3**	**-111.0**	**-86.3**	**-138.2[e]**	**n.a.**
Manufacturing	8.2	-28.9	-40.0	-26.7	-45.3[e]	n.a.
Wholesale trade ex. motor vehicles & parts	-10.2	-8.8	-52.4	-36.8	-81.8[e]	n.a.
Retail trade ex. motor vehicles & parts	-17.8	-11.6	-18.6	-22.8	-11.0[e]	n.a.
Book-value inventory investment (current dollars)						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-155.9**	**-143.2**	**-150.2**	**-124.9**	**-178.0**	**-121.4**
Manufacturing	-65.2	-77.3	-63.6	-48.4	-68.9	-43.8
Wholesale trade ex. motor vehicles & parts	-55.7	-47.3	-62.9	-49.8	-90.6	-55.3
Retail trade ex. motor vehicles & parts	-34.9	-18.6	-23.7	-26.8	-18.5	-22.3

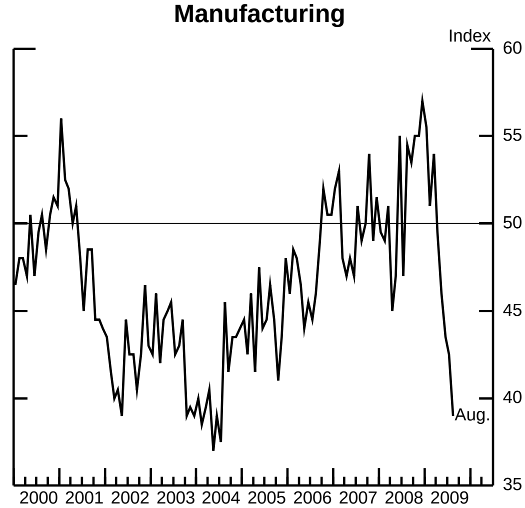
n.a. Not available.
... Not applicable.
e Staff estimate of real inventory investment based on revised book-value data.
Source: For real inventory investment, U.S. Dept. of Commerce, Bureau of Economic Analysis; for book-value data, Census Bureau.

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

manufacturing, at least, believe that some restocking by their customers may be in train.[15]

Federal Government Sector

The deficit in the federal unified budget widened further in July and August. The budget costs associated with financial stabilization programs and the 2009 stimulus package, together with the effects of the recession on revenues and outlays, have continued to add to the budget gap. The deficit for the 12 months ending in August totaled about $1.3 trillion, almost $1 trillion larger than in the preceding 12 months.[16]

Federal outlays, excluding such financial transactions as those related to the TARP and to the conservatorship of the mortgage-related GSEs, were 12 percent higher in the July-August period than a year earlier. Outlays were boosted by spending authorized under the fiscal stimulus plan and for income-support programs that have expanded during the recession. The rise in outlays for defense in the July-August period points to a modest increase during the third quarter in the NIPA measure of real federal expenditures following a sizable gain in the second quarter.

Receipts fell 6½ percent in the July-August period relative to a year earlier, reflecting the ongoing weakness in economic activity. Individual income and payroll tax receipts have decreased as wages and salaries have declined, and as capital gains realizations have likely fallen off. Corporate tax payments have plummeted, as profits were much lower than a year earlier.

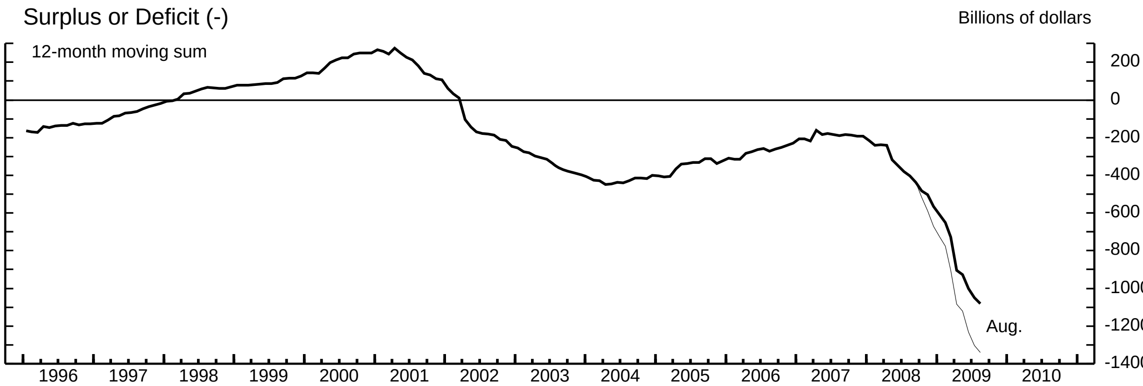
The Congressional Budget Office (CBO), in its updated *Budget and Economic Outlook*, estimates that the federal budget deficit will be almost $1.6 trillion in fiscal 2009 and that it will edge down to around $1.4 trillion in fiscal 2010. Similarly, the Office of Management and Budget (OMB), in its recent *Mid-Session Review*, expects the deficit to be about $1.6 trillion in fiscal 2009 and $1.5 trillion in fiscal 2010. Although the CBO and OMB estimates for the deficit in this fiscal year are essentially the same, they are based on different budget accounting assumptions for the mortgage-related GSEs: The

[15] The question posed to purchasing managers in the ISM survey to determine whether stocks are too high or too low does not specify the measure of sales against which respondents should compare the level of their customers' inventories. If the respondents currently are judging inventories against a level of expected sales in coming months that is materially above the recent pace of sales (not an unreasonable assumption given the marked improvement in recent months of their new orders index), the sharp decline in the customers' inventories measure to a low level is less obviously at odds with the inventory ratios in both the book-value data and the staff's flow-of-goods system.

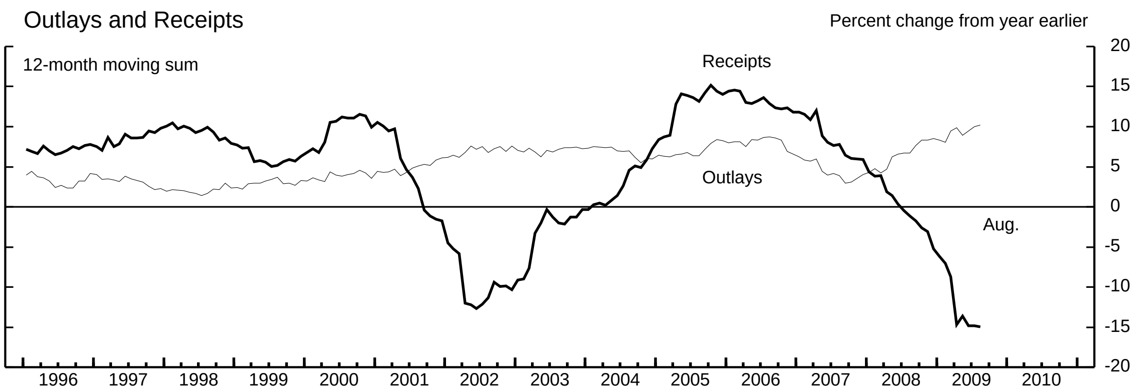
[16] The financial stabilization programs added about $250 billion to the deficit in the 12 months ending in August.

Federal Government Budget

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



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



Recent Federal Outlays and Receipts

(Billions of dollars except as noted; adjusted for payment-timing shifts and financial transactions)

Function or source	Sum of July-August			12 months ending in August		
	2008	2009	Percent change	2008	2009	Percent change
Outlays	496.8	556.3	12.0	2,939.4	3,238.7	10.2
Net interest	49.2	40.6	-17.6	247.9	204.0	-17.7
National defense	105.3	108.0	2.6	615.2	660.4	7.4
Major transfers[1]	270.4	320.0	18.3	1,633.9	1,866.4	14.2
Other	71.9	87.8	22.1	442.4	507.9	14.8
Receipts	317.5	297.0	-6.4	2,536.8	2,157.9	-14.9
Individual income and payroll taxes	266.3	254.1	-4.6	1,985.7	1,791.6	-9.8
Corporate income taxes	14.2	7.5	-47.0	327.4	163.1	-50.2
Other	37.0	35.4	-4.5	223.7	203.3	-9.1
Surplus or deficit (-)	-179.3	-259.3	...	-402.7	-1,080.8	...
Memo:						
Unadjusted surplus or deficit (-)	-214.7	-292.1	...	-387.7	-1,332.6	...

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

CBO Baseline Budget Projections and Economic Assumptions

	Actual 2008	2009	2010	2011	2012	2013	2014	Average 2015-19
Budget projections[1] **(fiscal years)**	Billions of dollars							
Receipts	2524	2100	2264	2717	3010	3221	3403	3913
Outlays	2983	3688	3644	3638	3600	3759	3961	4542
Surplus or deficit (-)	-459	-1587	-1381	-921	-590	-538	-558	-630
Debt held by public[2]	5803	7612	8868	9782	10382	10870	11439	14324
	Percent of GDP							
Receipts	17.7	14.9	15.7	18.1	19.1	19.4	19.6	20.0
Outlays	21.0	26.1	25.2	24.3	22.8	22.6	22.9	23.2
Surplus or deficit (-)	-3.2	-11.2	-9.6	-6.1	-3.7	-3.2	-3.2	-3.2
Debt held by public[2]	40.8	53.8	61.4	65.2	65.9	65.5	66.0	67.8
Economic assumptions[3] **(calendar years)**	Percent change, year over year							
Nominal GDP	3.3	-.7	2.9	4.0	5.4	5.2	4.1	4.1
Real GDP	1.1	-2.5	1.7	3.5	5.0	4.5	3.0	2.4
PCE prices	3.3	.4	1.5	.8	.7	.8	1.1	1.7
Core PCE prices	2.2	1.7	1.1	.6	.6	.8	1.1	1.6
CPI-U	3.8	-.5	1.7	1.3	1.0	1.1	1.5	2.0
Core CPI-U	2.3	1.7	1.3	1.0	1.0	1.2	1.5	2.0
	Percent, annual average							
Unemployment rate	5.8	9.3	10.2	9.1	7.2	5.6	4.9	4.8
Treasury yields								
3-month	1.4	.2	.6	1.7	3.1	4.1	4.5	4.7
10-year	3.7	3.3	4.1	4.4	4.7	5.0	5.3	5.6

1. The CBO calculates the cost of the TARP by estimating the present value (or accrual value) of all of the program's financial transactions, adjusted for market risk. Also, the CBO includes all of the costs and revenues associated with the GSEs (Fannie Mae and Freddie Mac) in the budget in a manner consistent with its assumption that these institutions should be treated as part of the federal government.

2. Debt held by the public at the end of the period.

3. The CBO did not update its economic assumptions to reflect the comprehensive NIPA revision released by the BEA in July 2009. The CBO still used a reference year of 2000 for its price and GDP projections, and its projections also do not reflect the BEA's reclassification affecting core PCE prices.

Source: Congressional Budget Office (2009), *The Budget and Economic Outlook: An Update* (August).

Administration Budget Deficit Projections and Economic Assumptions

	Actual 2008	2009	2010	2011	2012	2013	2014	Average 2015-19
Budget projections (fiscal years)	Billions of dollars							
Receipts	2524	2074	2264	2591	2945	3161	3365	3987
Outlays	2983	3653	3766	3715	3741	3936	4143	4802
Deficit (-)	-459	-1580	-1502	-1123	-796	-775	-778	-815
Total debt held by public[1]	5803	7856	9575	10590	11443	12281	13126	17493
	Percent of GDP							
Receipts	17.7	14.7	15.7	17.1	18.4	18.6	18.7	19.0
Outlays	21.0	25.9	26.1	24.6	23.3	23.2	23.0	22.9
Deficit (-)	-3.2	-11.2	-10.4	-7.4	-5.0	-4.6	-4.3	-3.9
Total debt held by public[1]	40.8	55.7	66.3	70.0	71.4	72.3	72.9	76.5
Economic assumptions (calendar years)	Percent change, fourth quarter to fourth quarter							
Nominal GDP	1.2	.2	4.1	5.8	6.1	6.1	5.8	4.7
Real GDP	-1.9	-1.7	2.9	4.3	4.3	4.3	4.0	2.9
GDP price index	1.9	1.4	1.2	1.4	1.7	1.7	1.7	1.8
CPI-U	1.5	.5	1.4	1.7	2.0	2.0	2.0	2.1
	Percent, annual average							
Unemployment rate	5.8	9.3	9.8	8.6	7.7	6.8	5.9	5.4
Treasury yields								
3-month	1.4	.2	1.3	2.6	3.8	4.0	4.0	4.0
10-year	3.7	3.6	4.5	4.9	5.2	5.2	5.2	5.2

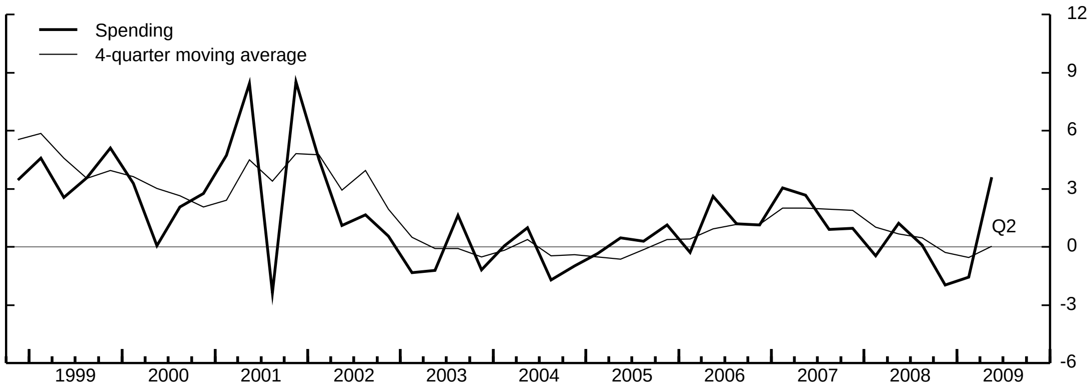
1. Debt held by the public at the end of the period.

Source: Office of Management and Budget (2009), *Mid-Session Review: Budget of the U.S. Government, Fiscal Year 2010* (August).

State and Local Indicators

Real Spending on Consumption and Investment

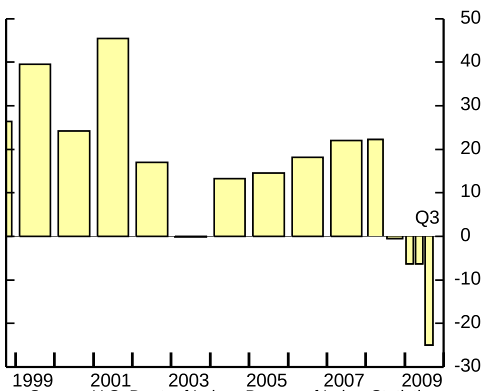
Percent change, annual rate



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

Net Change in Employment

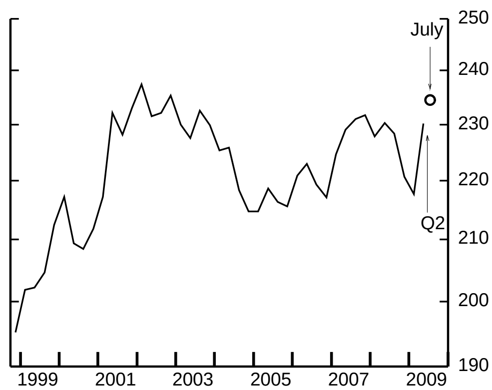
Thousands of jobs, monthly average



Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Employment Situation.
Note: Q3 is the average of July and August.

Real Construction

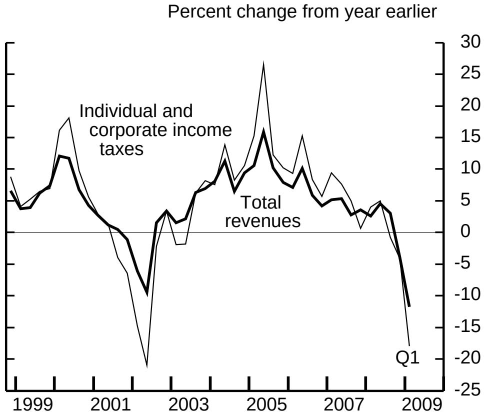
Billions of chained (2005) dollars, annual rate



Note: Nominal CPIP deflated by BEA prices through Q2 and by a staff projection thereafter.
Source: Census Bureau, Construction Spending.

State Revenues

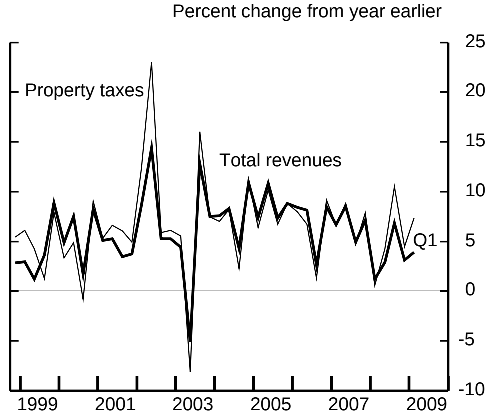
Percent change from year earlier



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

Local Revenues

Percent change from year earlier



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

Price Measures
(Percent change)

Measures	12-month change		3-month change (Annual rate)		1-month change (Monthly rate)	
	Aug. 2008	Aug. 2009	May 2009	Aug. 2009	July 2009	Aug. 2009
CPI						
Total	**5.4**	**-1.5**	**-.2**	**4.9**	**.0**	**.4**
Food	6.1	.4	-2.2	-.5	-.3	.1
Energy	27.2	-23.0	-18.9	57.1	-.4	4.6
Ex. food and energy	**2.5**	**1.4**	**2.3**	**1.4**	**.1**	**.1**
Core goods	.6	1.1	4.4	1.0	.2	-.3
Core services	3.3	1.6	1.5	1.6	.0	.2
Shelter	2.4	.9	1.1	-.2	-.2	.1
Other services	4.6	2.5	1.7	3.9	.3	.4
Memo: core ex. tobacco	2.5	1.2	1.5	1.3	.1	.1
Chained CPI (n.s.a.) [1]	4.6	-1.5	...	...	...	...
Ex. food and energy [1]	2.1	1.0	...	...	...	...
PCE prices [2]						
Total	**4.4**	**-.5**	**.2**	**3.8**	**.0**	**.4**
Food and bev. at home	6.7	-.5	-4.3	-.9	-.4	.1
Energy	28.4	-23.9	-19.4	64.7	-.4	4.9
Ex. food and energy	**2.7**	**1.3**	**1.8**	**1.5**	**.1**	**.1**
Core goods	.6	1.1	3.6	-.1	-.1	-.1
Core services	3.4	1.5	1.2	2.1	.1	.2
Housing services	2.8	1.7	2.0	.3	.0	.1
Other services	3.5	1.4	1.0	2.6	.2	.3
Memo: core ex. tobacco	2.6	1.1	1.0	1.4	.1	.1
Core market-based	2.6	1.7	2.1	1.3	.1	.1
Core non-market-based	2.7	-.8	.2	2.8	.3	.2
PPI						
Total finished goods	**9.7**	**-4.3**	**-2.1**	**11.0**	**-.9**	**1.7**
Food	9.0	-4.1	-3.4	.0	-1.5	.4
Energy	27.6	-21.1	-10.1	59.6	-2.4	8.0
Ex. food and energy	**3.7**	**2.3**	**.5**	**2.4**	**-.1**	**.2**
Core consumer goods	3.9	2.8	1.8	2.2	-.1	.1
Capital equipment	3.3	1.6	-1.0	2.3	-.2	.3
Intermediate materials	16.3	-12.3	-6.6	14.8	-.2	1.8
Ex. food and energy	11.8	-8.2	-5.2	4.8	.2	.6
Crude materials	35.4	-35.2	26.7	15.9	-4.5	3.8
Ex. food and energy	31.4	-30.0	19.4	57.2	2.9	6.0

1. Higher-frequency figures are not applicable for data that are not seasonally adjusted (n.s.a.).
2. PCE prices in August 2009 are staff estimates.
... Not applicable.
Source: For consumer price index (CPI) and producer price index (PPI), U.S. Dept. of Labor, Bureau of Labor Statistics; for personal consumption expenditures (PCE), U.S. Dept. of Commerce, Bureau of Economic Analysis.

CBO treats Fannie Mae and Freddie Mac as if they were entities of the federal government, while the OMB records only the ongoing budget costs of the GSE conservatorship. Using the OMB's budget accounting method for the GSEs, the CBO estimates that the deficit would be $1.4 trillion in fiscal 2009.[17]

State and Local Government Sector

The recent data on purchases by state and local governments have exhibited striking crosscurrents, with substantial cutbacks in employment balanced against considerable strength in construction spending. According to the latest labor market report, state and local employment fell 13,000 in August, and estimates for June and July were revised down to show a cumulative decline of 66,000; payrolls at both the state and local levels have fallen noticeably since May after having been little changed, on net, over the first five months of the year. Meanwhile, real construction expenditures appear to have turned in another strong performance in July after rising at an annual rate of 25 percent in the second quarter.[18] The upswing in real construction spending follows a steep drop in the second half of 2008 and the first quarter of 2009 and is likely attributable to a number of factors, including the availability of federal stimulus funds, the easing of credit conditions in the municipal bond market, and reductions in construction costs.[19]

The incoming information on the fiscal position of the sector remains grim. The Rockefeller Institute of Government estimates that, according to information from 46 states, state tax revenues fell nearly 20 percent on a year-over-year basis in the second quarter of 2009, with widespread weakness across the major categories of taxes.[20] Like the states, local governments are struggling to close budget gaps. Indeed, nearly all cities that responded to the City Financial Conditions Survey conducted by the National League of Cities during the spring and early summer indicated that they were cutting spending in response to fiscal pressures (most commonly through attrition and laying off workers or by canceling infrastructure projects). In addition, 45 percent of the responding cities had raised fees for public services, and 25 percent had hiked property tax rates.

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[17] With these adjustments, the OMB's projection for the deficit this year is wider than the adjusted CBO estimate because the OMB assumes higher outlays this year for the TARP and for other programs. However, the OMB's estimates of current-year outlays have often been too high at the time of the *Mid-Session Review*.

[18] Work on state and local construction projects is largely performed by private contractors.

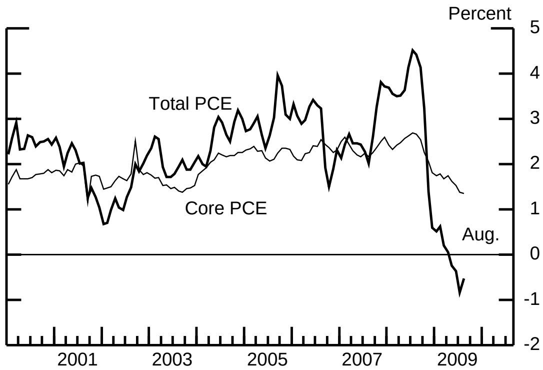
[19] As of the end of August, only about $2 billion in infrastructure grants had been disbursed, but states may have gone ahead with construction projects in anticipation of receiving the stimulus funds at a later date.

[20] The estimates from the Rockefeller Institute are for internal use only. The missing states are New Jersey, New Mexico, North Carolina, and South Dakota.

Consumer Prices

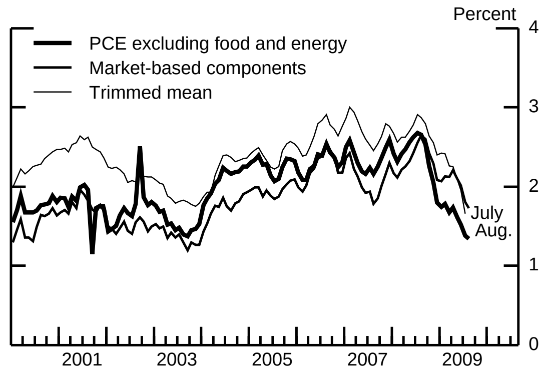
(12-month change except as noted; PCE prices in August are staff estimates)

PCE Prices



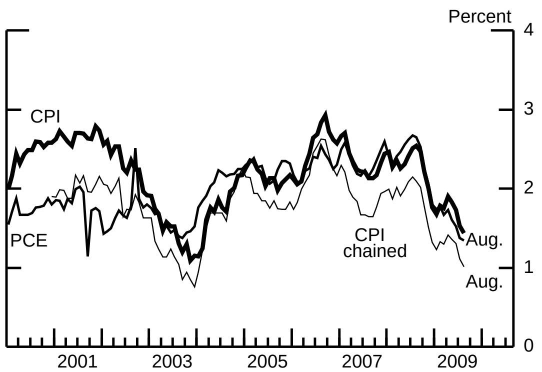
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Measures of Core PCE



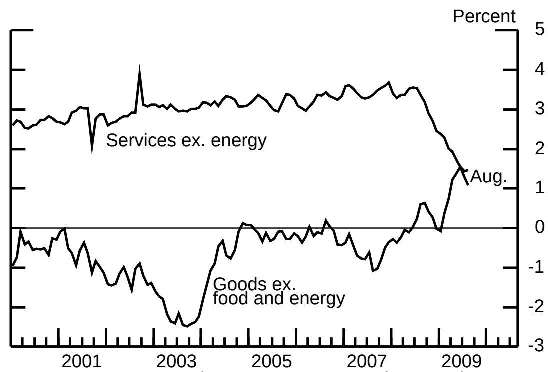
Source: For trimmed mean, Federal Reserve Bank of Dallas; for all else, U.S. Dept. of Commerce, Bureau of Economic Analysis.

CPI and PCE ex. Food and Energy



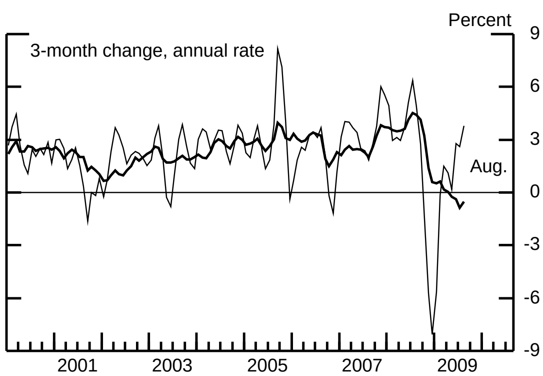
Source: For CPI, U.S. Dept. of Labor, Bureau of Labor Statistics; for PCE, U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Goods and Services



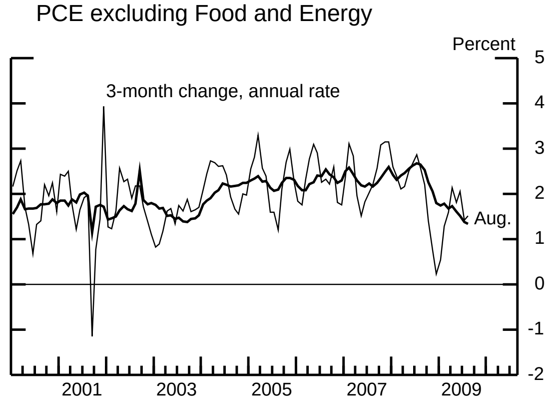
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE



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

PCE excluding Food and Energy



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

Prices

Both headline and core PCE prices have decelerated significantly over the past year, and recent monthly data suggest that the core measure has remained quite subdued while the headline measure has been boosted by a sharp upturn in energy prices. Based on our translation of the consumer price index (CPI) and the producer price index (PPI), we estimate that, over the three months ending in August, headline PCE prices rose at an annual rate of 3¾ percent after remaining about flat over the preceding three months. Meanwhile, we estimate that core PCE prices rose at an annual rate of 1½ percent over the same period, compared with a 1¾ percent increase over the preceding three months.[21] Over the 12 months ending in August, headline PCE prices declined ½ percent after having risen 4½ percent over the year-earlier period; this sharp deceleration reflects the reversal of last year's surge in energy prices as well as a step-down in the increase in PCE prices excluding food and energy. Core PCE prices rose 1¼ percent over the 12 months ending in August, compared with an increase of 2¾ percent during the year-earlier period, as market-based prices decelerated and non-market-based prices actually declined. Survey measures of longer-term inflation expectations have also edged down since the last Greenbook, but remain within their range of the past few years.

We estimate that consumer energy prices increased 5 percent in August after a small decline in the previous month. The pickup in August was led by a sizable increase in retail gasoline prices. The latest available survey data show that gasoline prices edged up further in the first two weeks of September, but with crude oil prices down from their recent high in August of around $74 per barrel, we expect gasoline prices to drift down over the following couple of months.

We estimate that PCE food prices turned up slightly in August, bringing the decline over the three months ending in August to nearly 1 percent. This decline, however, is much smaller than the sharp decrease over the previous three months, a pattern consistent with our view that the pass-through from the sharp downturn in spot prices of farm products in the second half of last year is complete. That said, farm prices have fallen again of late. The August USDA crop report projects a bumper harvest, which has pushed down corn and wheat spot prices since the last Greenbook, bringing the decline in these prices since the beginning of the year to about 10 and 30 percent, respectively.

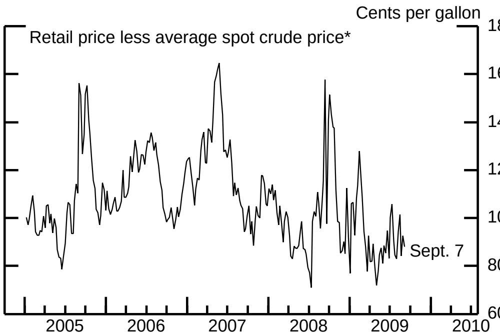
PCE prices excluding food and energy have been rising more slowly in recent months than they did earlier in the year; we estimate that core PCE prices rose 0.1 percent in

[21] The definition of core PCE was changed in the recent comprehensive revision of the national income and product accounts to include restaurant meals.

Energy and Food Price Indicators

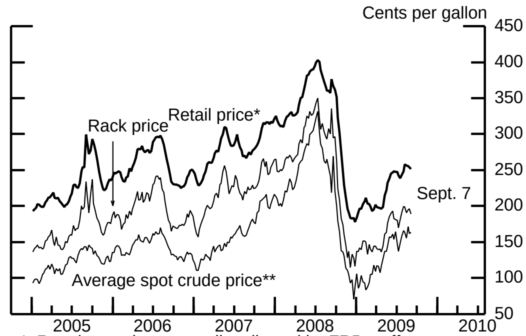
(Data from U.S. Department of Energy, Energy Information Administration, except as noted)

Total Gasoline Margin



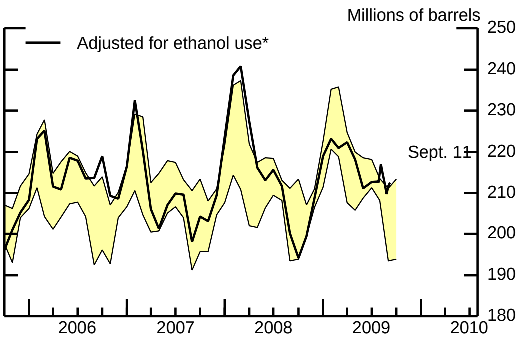
* Regular grade seasonally adjusted by FRB staff, less average spot crude price: 60% West Texas Intermediate, 40% Maya heavy crude. Includes gasoline taxes.

Gasoline Price Decomposition



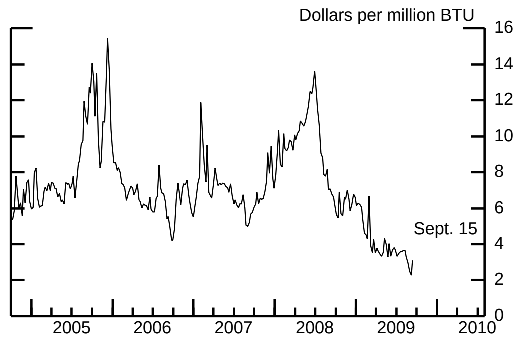
* Regular grade seasonally adjusted by FRB staff.
** 60% West Texas Intermediate, 40% Maya heavy crude.

Gasoline Inventories



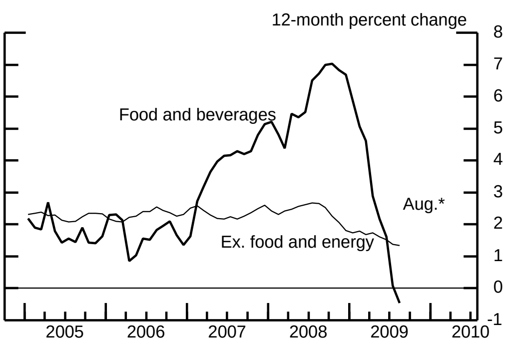
Note: Bounds are defined as the monthly mean over the preceding five years, plus or minus the standard deviation for each month. Monthly data through May 2009, weekly data thereafter.
* The RBOB component of total motor gasoline inventories is adjusted for ethanol use after 2006, boosting reported stocks; estimated by FRB staff.

Natural Gas Prices



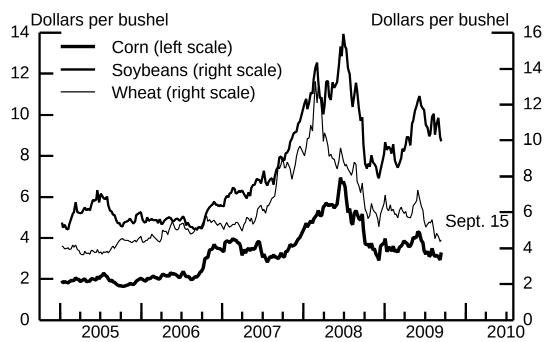
Note: National average spot price.
Source: Bloomberg.

PCE: Food at Home and Core Prices



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

Spot Prices of Agricultural Commodities



Source: Commodity Research Bureau.

Broad Measures of Inflation
(Percent change, Q2 to Q2)

Measure	2006	2007	2008	2009
Product prices				
GDP price index	3.6	3.0	1.9	1.5
Less food and energy	3.6	2.7	2.4	.9
Nonfarm business chain price index	3.5	2.4	1.1	1.7
Expenditure prices				
Gross domestic purchases price index	3.9	2.8	3.5	-.2
Less food and energy	3.4	2.6	2.8	.8
PCE price index	3.2	2.4	3.8	-.2
Less food and energy	2.3	2.2	2.5	1.6
PCE price index, market-based components	3.3	2.3	3.7	-.1
Less food and energy	2.2	2.0	2.3	2.1
CPI	3.9	2.6	4.3	-.9
Less food and energy	2.5	2.3	2.3	1.8
Chained CPI	3.6	2.4	3.8	-1.2
Less food and energy	2.2	1.8	2.0	1.4
Median CPI	2.8	3.1	3.0	2.4
Trimmed mean CPI	2.6	2.7	3.0	1.9
Trimmed mean PCE	2.6	2.7	2.7	2.1

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

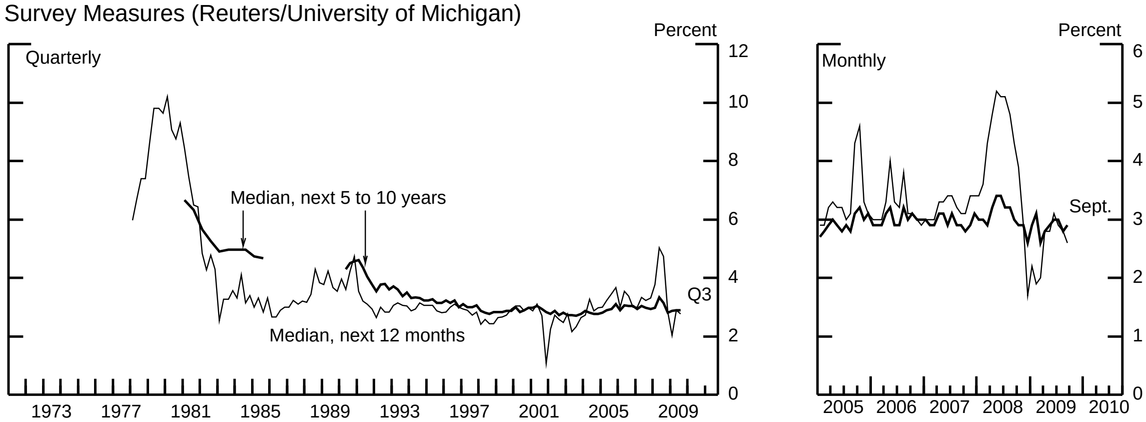
Surveys of Inflation Expectations
(Percent)

Period	Actual CPI inflation [1]	Reuters/Michigan Survey: 1 year [2] Mean	1 year [2] Median	5 to 10 years [3] Mean	5 to 10 years [3] Median	Professional forecasters (10 years) [4] CPI	Professional forecasters (10 years) [4] PCE
2007:Q4	4.0	4.1	3.3	3.3	2.9	2.4	2.1
2008:Q1	4.1	4.2	3.8	3.3	3.0	2.5	2.2
Q2	4.4	6.4	5.0	3.8	3.3	2.5	2.2
Q3	5.3	5.4	4.7	3.6	3.1	2.5	2.2
Q4	1.6	3.0	2.8	2.9	2.8	2.5	2.2
2009:Q1	.0	2.4	2.0	3.3	2.9	2.4	2.2
Q2	-1.2	3.4	2.9	3.1	2.9	2.5	2.3
Q3	n.a.	3.2	2.8	3.3	2.9	2.5	2.2
2009:May	-1.3	3.2	2.8	3.1	2.9	2.5	2.3
June	-1.4	3.9	3.1	3.2	3.0	...	...
July	-2.1	3.6	2.9	3.4	3.0	...	...
Aug.	-1.5	3.0	2.8	3.1	2.8	2.5	2.2
Sept.(p)	n.a.	3.1	2.6	3.3	2.9	...	...

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

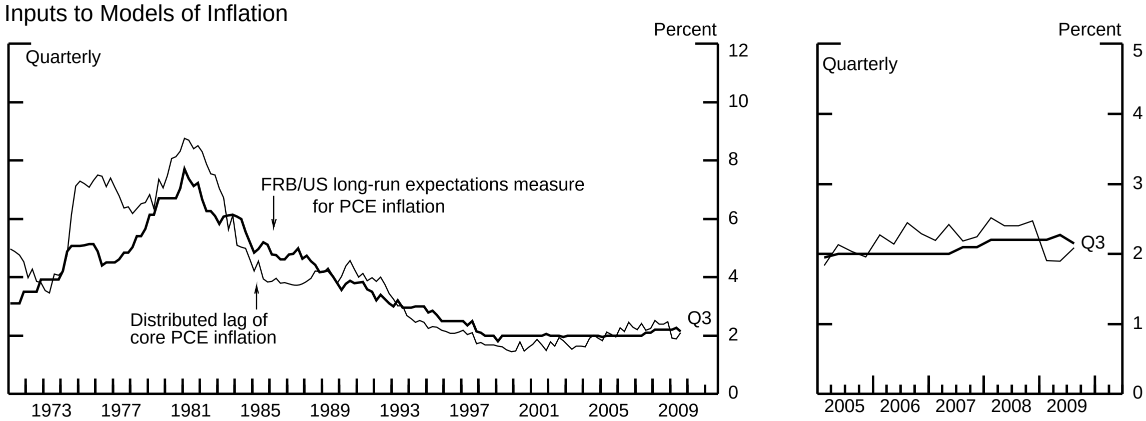
Measures of Expected Inflation

Survey Measures (Reuters/University of Michigan)



Source: Reuters/University of Michigan Surveys of Consumers.

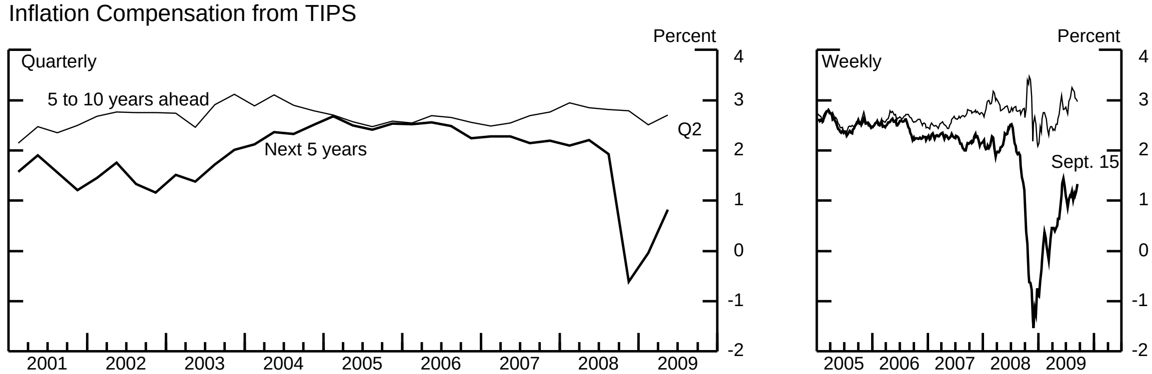
Inputs to Models of Inflation



Note: The distributed lag of core PCE inflation is derived from one of the reduced-form Phillips curves used by Board staff.

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

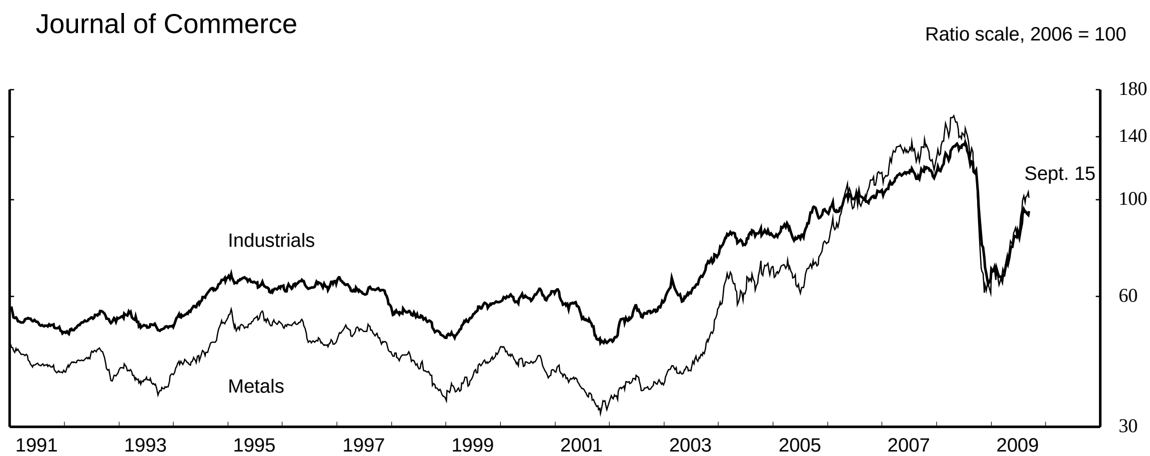
Inflation Compensation from TIPS



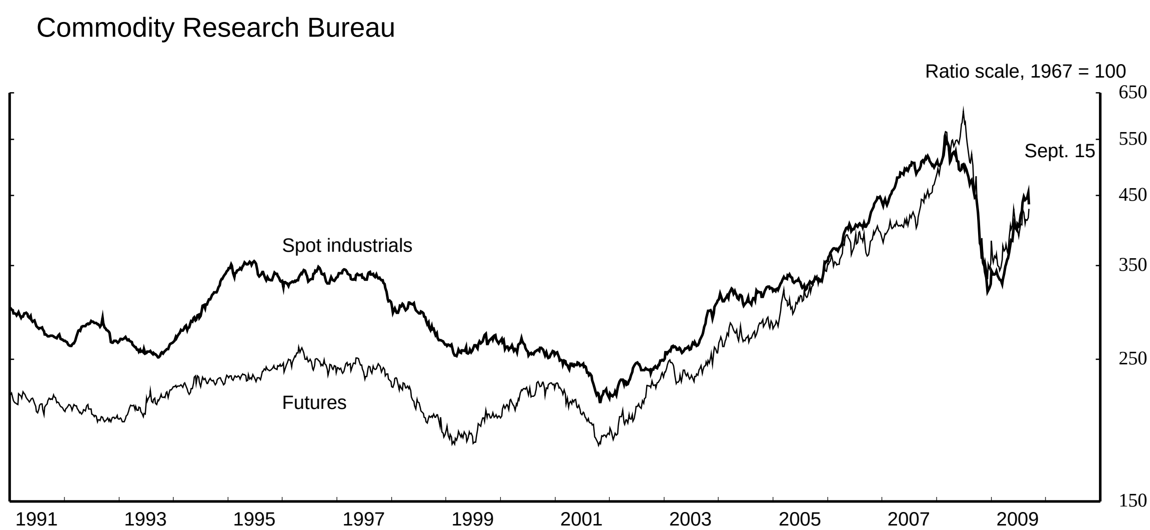
Note: Based on a comparison of an estimated TIPS (Treasury inflation-protected securities) yield curve with an estimated nominal off-the-run Treasury yield curve, with an adjustment for the indexation-lag effect.

Source: FRB staff calculations.

Commodity Price Indexes



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



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	2008[1]	12/30/08 to 8/4/09[2]	8/4/09[2] to 9/15/09	52-week change to 9/15/09
JOC industrials	-41.4	40.6	2.0	-18.1
JOC metals	-48.2	64.3	1.2	-12.3
CRB spot industrials	-34.3	34.2	-.8	-2.6
CRB spot foodstuffs	-14.1	5.9	.2	-17.7
CRB futures	-24.7	21.4	.4	-5.0

1. From the last week of the preceding year to the last week of the year indicated.
2. August 4, 2009, is the Tuesday preceding publication of the August Greenbook.

Hourly Compensation and Unit Labor Costs

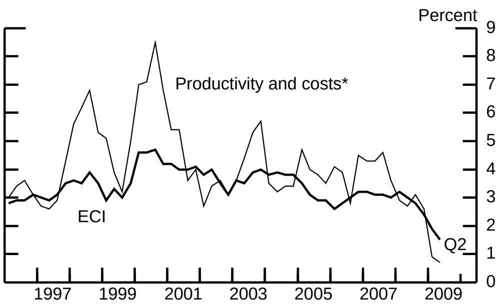
(Percent change from preceding period at compound annual rate; based on seasonally adjusted data)

Category	2007:Q2 to 2008:Q2	2008:Q2 to 2009:Q2[e]	2008 Q3	2008 Q4	2009 Q1[e]	2009 Q2[e]
Compensation per hour						
Nonfarm business	2.7	.7	4.5	2.9	-4.7	.4
Output per hour						
Nonfarm business	2.6	1.9	-.1	.8	.3	6.6
Unit labor costs						
Nonfarm business	.1	-1.1	4.6	2.0	-5.0	-5.8

e Staff estimate.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Compensation per Hour

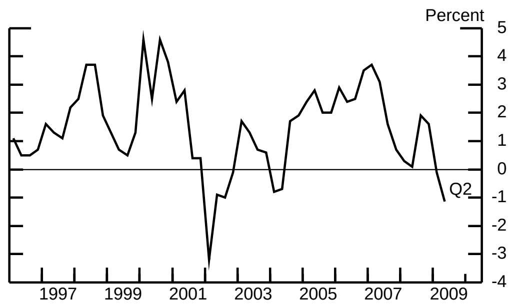
(Percent change from year-earlier period)



*Value for 2009:Q2 is a staff estimate.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Unit Labor Costs

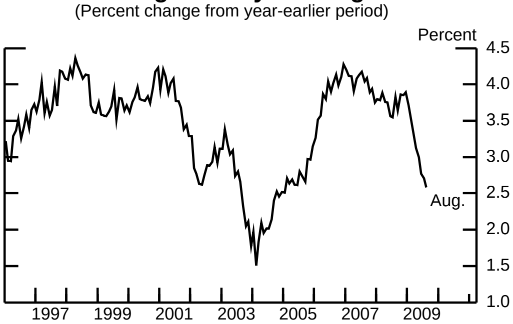
(Percent change from year-earlier period)



Note: Value for 2009:Q2 is a staff estimate.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

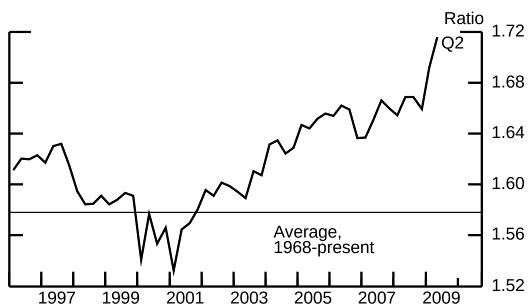
Average Hourly Earnings

(Percent change from year-earlier period)



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

Markup, Nonfarm Business



Note: The markup is the ratio of output price to unit labor costs. Value for 2009: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.

August, the same as in July.[22] Although core nonmarket prices have turned back up recently after posting sizable declines early this year, prices have decelerated considerably in many other categories. In particular, tax-related hikes in tobacco prices are no longer pushing up inflation as much as they did this spring, increases in prices of housing services have moderated noticeably, and a number of durable goods prices have declined outright.

Median year-ahead inflation expectations in the Reuters/Michigan survey slipped to 2.6 percent in the preliminary September survey but are still noticeably higher than the roughly 2 percent level recorded around the turn of the year. Long-term expectations—at 2.9 percent in the preliminary September survey—have edged down since the August Greenbook but remain in the narrow range that has prevailed over the past few years. In addition, median long-term expected PCE inflation from the Survey of Professional Forecasters fell back to 2.2 percent in the third quarter after edging up briefly to 2.3 percent in the previous quarter.

At earlier stages of processing, the PPI for core intermediate materials posted an increase in August for a third consecutive month; this index has now retraced about one-third of the decline that occurred over the preceding eight months. Following sharp increases over the first seven months of this year, changes in prices of non-energy commodities have been mixed since the August Greenbook. In particular, the CRB index of spot prices of commodities has edged down ¾ percent, whereas the *Journal of Commerce* index has risen 2 percent.

Labor Costs

All of our measures of hourly compensation and wages have decelerated sharply this year, likely in response to the sizable degree of slack in labor markets. The ECI for private industry workers increased at an annual rate of only ¾ percent in the first half of the year, 1¾ percentage points less than the rise in 2008. The deceleration in the ECI was broadly similar for both the wages and benefits components of the index. In addition, P&C compensation per hour (CPH) in the nonfarm business sector is now estimated to have tumbled at an annual rate of 4.7 percent in the first quarter, possibly reflecting a

[22] The staff estimates of PCE prices are slightly more tentative than usual because of an adjustment the BEA has announced it is making to the BLS prices for cars and trucks in July and August. A large number of cash-for-clunkers transactions occurred in the last week of July, but because the CPI measures new vehicle prices with some lag, a share of these transactions will be captured by the CPI in August rather than in July. The BEA has stated that it is making timing adjustments in order to better align the PCE price index with the actual timing of the cash-for-clunkers transactions.

steep decline in bonus payments similar to what we have seen in the ECI. In the second quarter, CPH is reported to have ticked up, bringing the decline over the first half of the year to an annual rate of 2¼ percent, which is by far the largest half-year drop in nominal compensation on record.[23] As a result of the decline in hourly compensation and the large gain in productivity, the already-elevated markup of prices over unit labor costs in the nonfarm business sector rose further in the first half of this year.

Turning to the current quarter, average hourly earnings of production and nonsupervisory workers rose 0.3 percent in both July and August, with the latest reading boosted by an increase in the federal minimum wage that went into effect at the end of July. Over the 12 months ending in August, this wage measure rose 2.6 percent, 1¼ percentage points less than over the preceding year.

Last page of Domestic Nonfinancial Developments

[23] The series for P&C hourly compensation in the nonfarm business sector begins in 1947.

Domestic Financial Developments

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008	2009			Change to Sept. 15 from selected dates (percentage points)		
	Sept. 12	June 22	Aug. 11	Sept. 15	2008 Sept. 12	2009 June 22	2009 Aug. 11
Short-term							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills[1]							
3-month	1.46	.20	.18	.13	-1.33	-.07	-.05
6-month	1.80	.34	.28	.21	-1.59	-.13	-.07
Commercial paper (A1/P1 rates)[2]							
1-month	2.39	.30	.22	.19	-2.20	-.11	-.03
3-month	2.75	.63	.29	.25	-2.50	-.38	-.04
Large negotiable CDs[1]							
3-month	2.79	.40	.32	.25	-2.54	-.15	-.07
6-month	3.09	.68	.46	.36	-2.73	-.32	-.10
Eurodollar deposits[3]							
1-month	2.60	.65	.50	.35	-2.25	-.30	-.15
3-month	3.00	1.05	.80	.50	-2.50	-.55	-.30
Bank prime rate	5.00	3.25	3.25	3.25	-1.75	.00	.00
Intermediate- and long-term							
U.S. Treasury[4]							
2-year	2.24	1.17	1.20	.96	-1.28	-.21	-.24
5-year	2.97	2.71	2.70	2.42	-.55	-.29	-.28
10-year	3.93	4.04	3.97	3.74	-.19	-.30	-.23
U.S. Treasury indexed notes[5]							
5-year	1.33	1.45	1.54	.99	-.34	-.46	-.55
10-year	1.77	2.10	1.89	1.63	-.14	-.47	-.26
Municipal general obligations (Bond Buyer)[6]	4.54	4.86	4.65	4.33	-.21	-.53	-.32
Private instruments							
10-year swap	4.26	3.97	3.98	3.67	-.59	-.30	-.31
10-year FNMA[7]	4.36	4.40	4.35	4.15	-.21	-.25	-.20
10-year AA[8]	6.62	5.94	5.41	5.13	-1.49	-.81	-.28
10-year BBB[8]	7.22	7.58	6.72	6.44	-.78	-1.14	-.28
10-year high yield[8]	10.66	12.13	10.61	10.17	-.49	-1.96	-.44
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.42	5.29	5.07	-.71	-.35	-.22
1-year adjustable	5.03	4.93	4.72	4.64	-.39	-.29	-.08

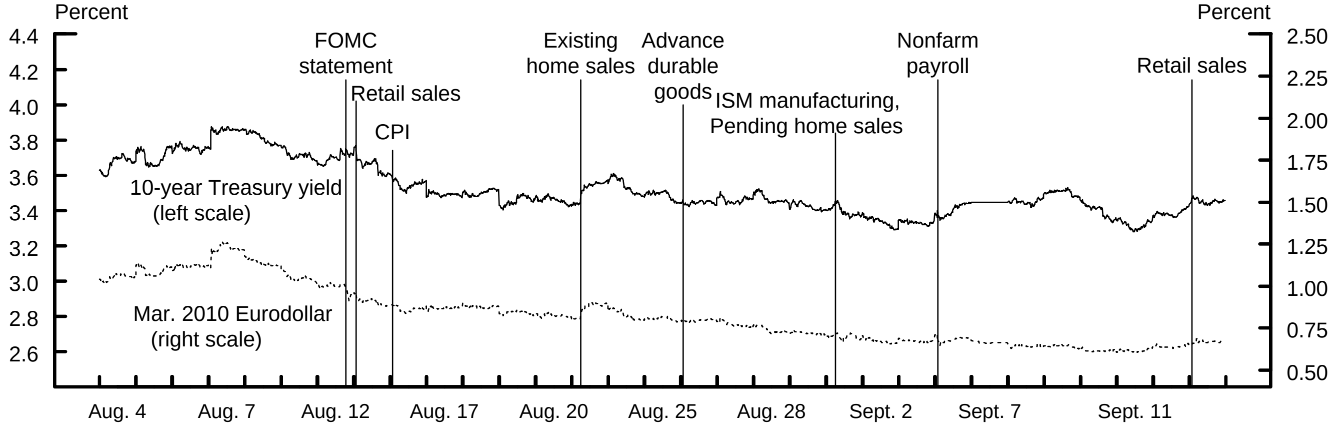
Stock exchange index	Record high		2009			Change to Sept. 15 from selected dates (percent)		
	Level	Date	June 22	Aug. 11	Sept. 15	Record high	2009 June 22	2009 Aug. 11
Dow Jones Industrial	14,165	10-9-07	8,339	9,241	9,683	-31.64	16.12	4.78
S&P 500 Composite	1,565	10-9-07	893	994	1,053	-32.75	17.87	5.86
Nasdaq	5,049	3-10-00	1,766	1,970	2,103	-58.35	19.05	6.75
Russell 2000	856	7-13-07	493	562	605	-29.32	22.73	7.60
D.J. Total Stock Index	15,807	10-9-07	9,130	10,243	10,870	-31.23	19.06	6.11

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

NOTES:
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.
June 22, 2009, is the day before the June 2009 FOMC monetary policy announcement.
August 11, 2009, is the day before the most recent FOMC monetary policy announcement.

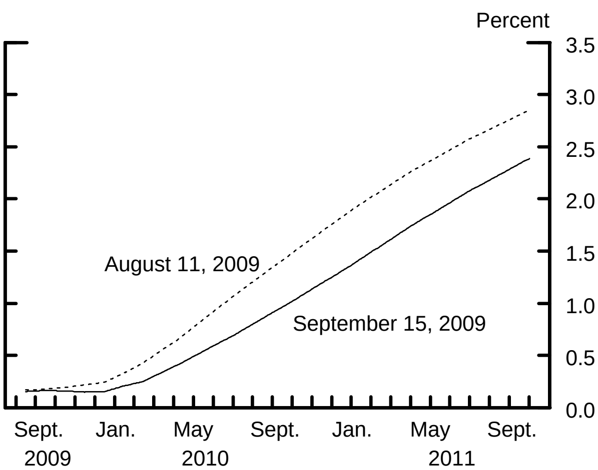
Policy Expectations and Treasury Yields

Interest Rates



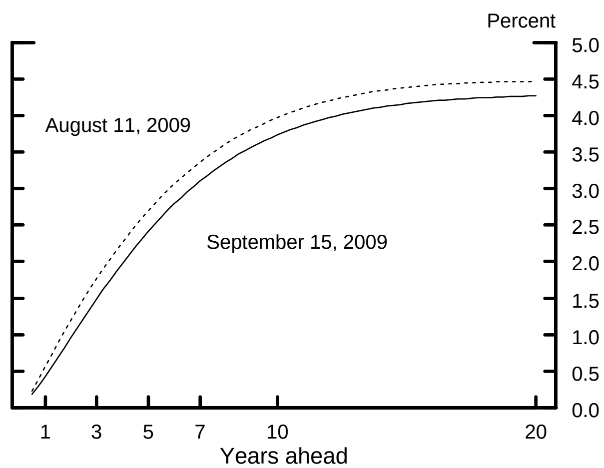
Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.
Source: Bloomberg.

Implied Federal Funds Rate



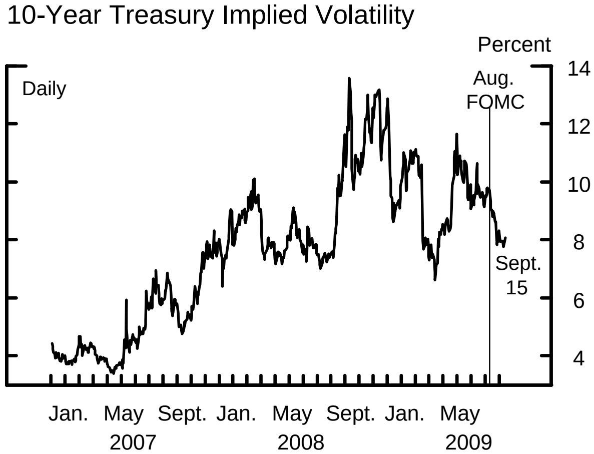
Note: Estimated from federal funds and Eurodollar futures, with an allowance for term premiums and other adjustments.
Source: CME Group.

Treasury Yield Curve



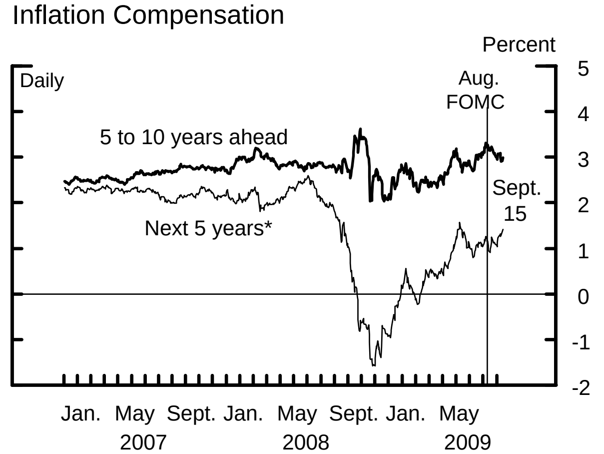
Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.
Source: Federal Reserve Board.

10-Year Treasury Implied Volatility



Note: 10-year Treasury note implied volatility derived from options on futures contracts.
Source: Bloomberg.

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 Board.

Domestic Financial Developments

Overview

Over the intermeeting period, conditions in U.S. short-term funding markets improved a bit more, and loans outstanding at the Federal Reserve's liquidity and credit facilities declined further. Although economic data appeared to be largely in line with, or a little better than, market expectations, federal funds and Eurodollar futures rates moved down on net. Nominal Treasury yields also decreased across the term structure, and auctions of very large volumes of newly issued Treasury securities were well received by investors. TIPS-based measures of inflation compensation increased over the next five years, but forward measures of inflation compensation beyond that horizon moved lower. Broad stock price indexes rose over the intermeeting period, while spreads of yields on corporate bonds over those on comparable-maturity Treasury securities were little changed. Net debt financing by businesses and households remained exceptionally weak.

Policy Expectations and Treasury Yields

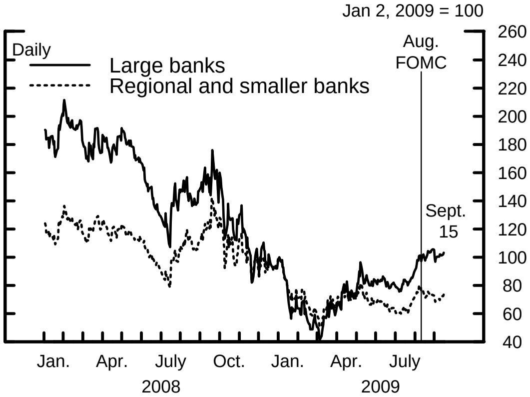
Policy rates implied by futures market quotes moved down, on net, over the intermeeting period. Based on the staff's standard assumptions about term premiums, investors now appear to expect the federal funds rate to remain in the current target range until the second quarter of 2010, about one quarter later than at the time of the August FOMC meeting. Futures quotes imply that market participants expect the federal funds rate to be about 1¼ percent at the end of 2010—about 50 basis points lower than expected in August. Amid data that continued to suggest a weak labor market and benign inflation, market participants may have come to the view that lower policy rates in the medium term would be more consistent with the likely pace of economic recovery. At the same time, a reduction in option-implied volatility suggests that term premiums in money market rates may have declined somewhat in recent weeks, indicating that our usual assumptions may overstate the extent to which market participants have revised down their policy expectations. Consistent with this interpretation, the September Blue Chip survey did not indicate a significant change in the consensus forecast for the path of the federal funds rate through the end of next year. And, similar to the August survey, this week, 14 of the 17 primary dealers reported expecting the first target rate increase to occur in or after the third quarter of 2010.

Yields on intermediate- and longer-term nominal Treasury securities also decreased over the intermeeting period, falling 28 and 23 basis points, respectively. Implied volatility on longer-term Treasury yields moved lower over the period suggesting, that, as with money market rates, a drop in term premiums was one reason for the decline in longer-term yields. When asked about the factors contributing to the recent decline in longer-term

Financial Institutions, Short-Term Funding Markets, and Liquidity Facilities

Bank ETFs

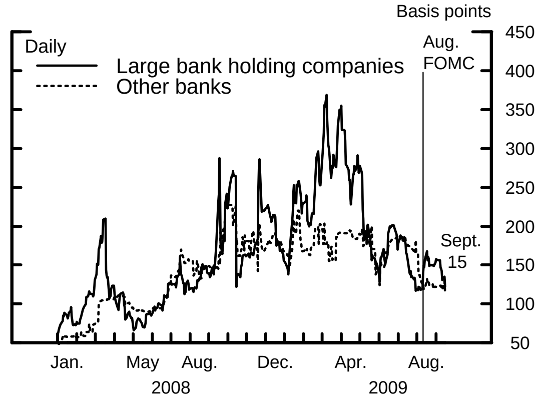
Jan 2, 2009 = 100



Note: Large bank ETF consists of 24 banks; regional and smaller bank ETF consists of 51 banks.
Source: Keefe, Bruyette & Woods (KBW) and Bloomberg.

Senior CDS Spreads for Banking Organizations

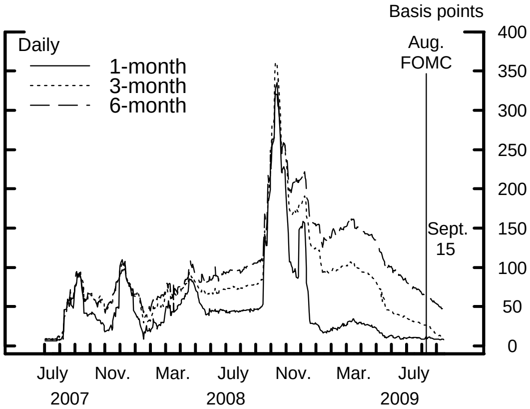
Basis points



Note: Median spreads for 6 large bank holding companies and 11 other banks.
Source: Markit.

Libor over OIS Spread

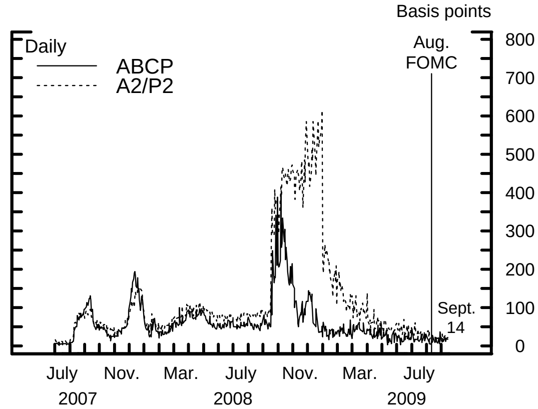
Basis points



Source: British Bankers' Association and Prebon.

Spreads on 30-day Commercial Paper

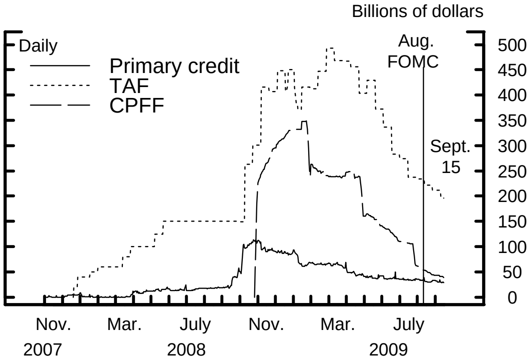
Basis points



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.

Federal Reserve Credit Outstanding

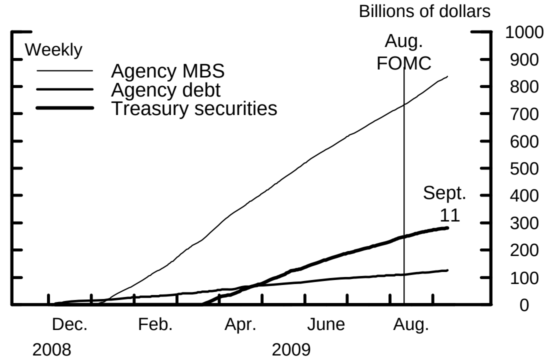
Billions of dollars



Source: Federal Reserve.

Federal Reserve Large-Scale Asset Purchases

Billions of dollars



Note: Due to settlement lags and other factors, cumulative purchases may be substantially higher than current holdings in the SOMA portfolio.
Source: Federal Reserve.

nominal Treasury yields, primary dealers attributed the most importance to a reduction in upside inflation risk, an increase in downside inflation risk, and foreign official flows. TIPS-based inflation compensation over the next five years increased 26 basis points, on net, but five-year inflation compensation five years forward decreased 25 basis points. The intermeeting decline in forward inflation compensation reversed some of the increase registered earlier in the summer. Median inflation expectations over the next 5 to 10 years in the Reuters/University of Michigan Surveys of Consumers ticked down 10 basis points, while long-term inflation expectations from the Survey of Professional Forecasters were unchanged.

Financial Institutions and Short-Term Funding Markets

Changes in investor sentiment toward the banking sector were mixed. Equity prices for larger banks increased about 6 percent since the August FOMC meeting, while stock prices for regional and smaller banks slipped about 3 percent. Market participants reportedly continued to be wary of the credit quality of banks' loan portfolios and the ability of smaller banking organizations to raise additional capital should the need arise. The divergence in equity prices may also partly reflect the quickening pace of failures of smaller banks—21 depository institutions with combined assets of about $53 billion failed over the intermeeting period, and the FDIC's list of troubled banks and thrifts reached 416, the highest count since 1994. Nonetheless, CDS spreads for banking institutions changed little, on net, since the August FOMC meeting. Citigroup was the only financial institution to issue FDIC-guaranteed debt over the intermeeting period; a number of firms, however, issued nonguaranteed debt, albeit at somewhat wider spreads than in July.

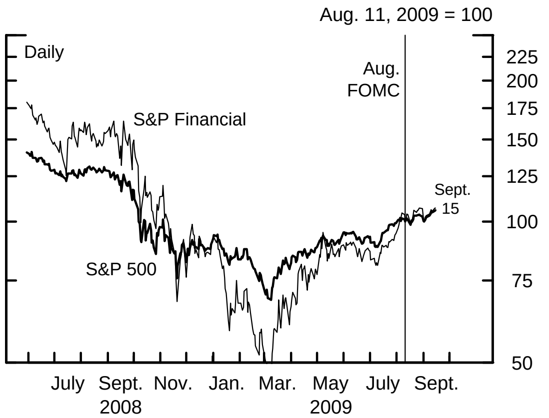
Conditions in short-term funding markets improved a bit further over the intermeeting period. One-month and three-month Libor-OIS spreads have now returned to about the levels prevailing before the onset of the financial crisis; longer-term Libor-OIS spreads also narrowed, though they have remained high by historical standards. Reports of considerable tiering in the market suggest that many banks have been paying well above Libor to obtain term funding. Since the August FOMC meeting, spreads on A2/P2-rated commercial paper and AA-rated ABCP were little changed, on net, remaining at the low ends of their ranges over the past two years.

Federal Reserve Purchase Programs and Facilities

Total Federal Reserve assets rose about $135 billion over the intermeeting period, as an increase in holdings of securities more than offset declines in the usage of liquidity and

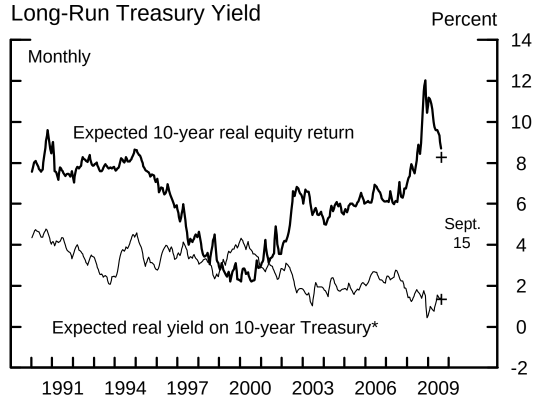
Corporate Yields, Risk Spreads, and Stock Prices

Selected Stock Price Indexes



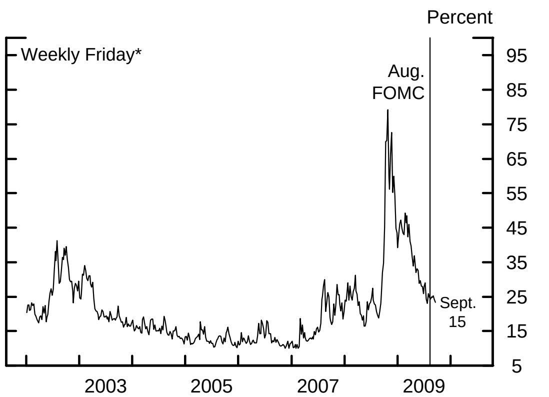
Source: Standard & Poor's.

Expected Real Equity Return and Long-Run Treasury Yield



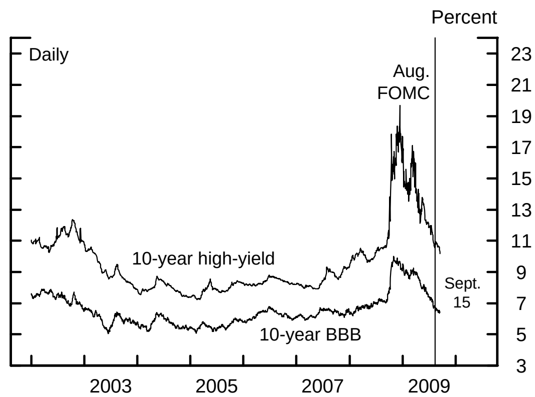
* Off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation.
+ Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.
Source: Thomson Financial.

Implied Volatility on S&P 500 (VIX)



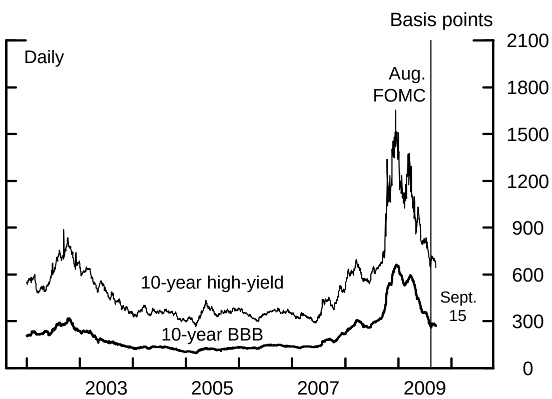
* Latest observation is for most recent business day.
Source: Chicago Board of Exchange.

Corporate Bond Yields



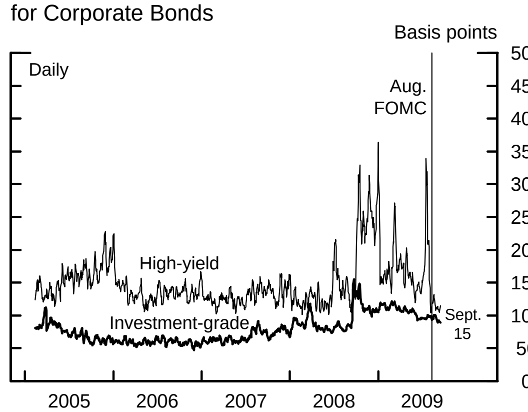
Note: Yields from smoothed yield curves based on Merrill Lynch bond data.

Corporate Bond Spreads



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

Estimated Median Bid-Asked Spread for Corporate Bonds



Source: Staff estimate using data from the National Assn. of Securities Dealers' Trade Reporting and Compliance Engine.

credit facilities. Commercial paper held by the CPFF continued to trend down, as did credit extended under the TAF. The Federal Reserve reduced the amount of TAF credit offered in August and September, and, despite reductions in the maximum size of TAF auctions from $125 billion to $75 billion, the auctions continued to be undersubscribed.

Over the intermeeting period, TALF loans outstanding increased about $14 billion, to $44 billion. The August 20 TALF subscription garnered $2.3 billion in loan requests for legacy commercial mortgage-backed securities, while TALF loans backed by asset-backed securities (ABS) totaled $6.5 billion at the September 3 subscription. Cash investors who do not use TALF financing have been purchasing larger shares of TALF-eligible auto, credit card, and equipment ABS. However, investors in other categories of TALF-eligible ABS have remained heavily reliant on TALF financing.

During the intermeeting period, the Federal Reserve purchased a total of $162 billion of long-term securities, bringing the System's cumulative purchases of Treasury securities, agency debt, and agency MBS to $283 billion, $125 billion, and $836 billion, respectively.[1] Subsequent to the announced tapering of Treasury purchases, market commentary and the primary dealer survey suggested that investors expect the FOMC to indicate that a similar process will be used to wind down the agency debt and agency MBS purchases as those programs approach their ends. On September 16, the Treasury announced that it would draw down balances held in the Supplementary Finance Program from the current level of about $200 billion to a level of $15 billion to provide flexibility to manage federal debt within the statutory debt limit.

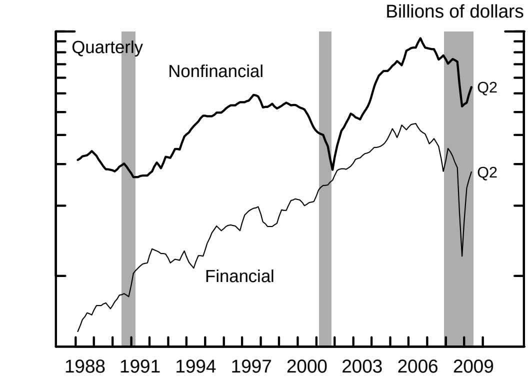
Stock Prices and Corporate Interest Rates

Amid somewhat better than expected data on housing market conditions and aggregate spending and lower interest rates, broad stock price indexes rose about 6 percent, on net, over the intermeeting period. The staff's estimate of the expected real equity return over the next 10 years for S&P 500 firms decreased slightly, while the gap between the expected return and real 10-year Treasury yield—a gauge of the equity risk premium—remained high by historical standards. After having come down significantly in prior months, option-implied volatility on the S&P 500 index stayed in a relatively narrow band at a level broadly comparable with prior recessions.

[1] The New York Domestic Trading Desk announced on September 1 that it would begin to include on-the-run securities in its agency debt purchases to mitigate dislocations in the agency debt market associated with the previous practice of purchasing only off-the-run securities. Also, while approximately $836 billion of the $1.25 trillion in agency MBS has been purchased to date, due to lags in settlement and other factors, only about $684 billion is currently on the Federal Reserve's balance sheet.

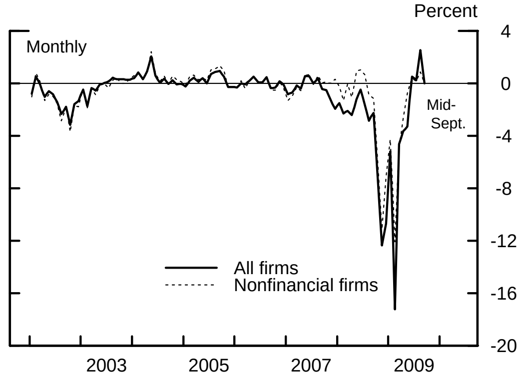
Corporate Earnings and Credit Quality

Domestic Corporate Profits before Tax



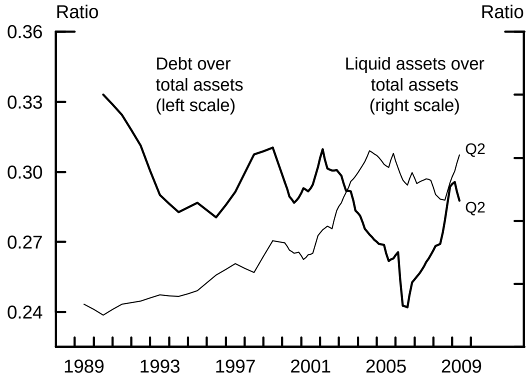
Note: Profits before tax plus capital consumption adjustment.
Note: Shaded bars indicate periods of business recessions defined by the National Bureau of Economic Research (NBER).
Source: Bureau of Economic Analysis.

Revisions to Expected S&P 500 Earnings



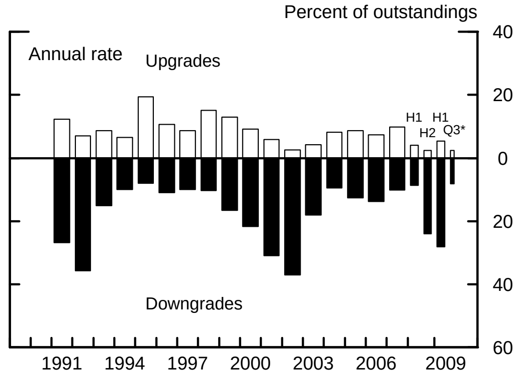
Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample.
Source: Thomson Financial.

Financial Ratios for Nonfinancial Corporations



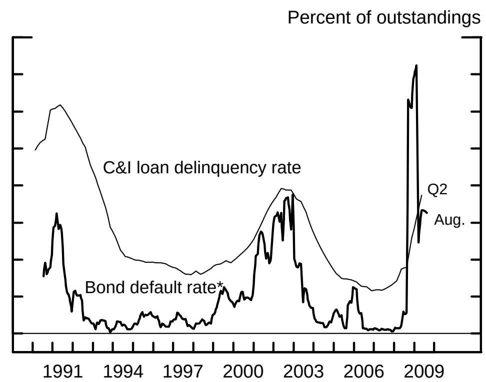
Note: Data are annual through 1999 and quarterly starting in 2000:Q1.
Source: Calculated using Compustat data.

Bond Ratings Changes of Nonfinancial Companies



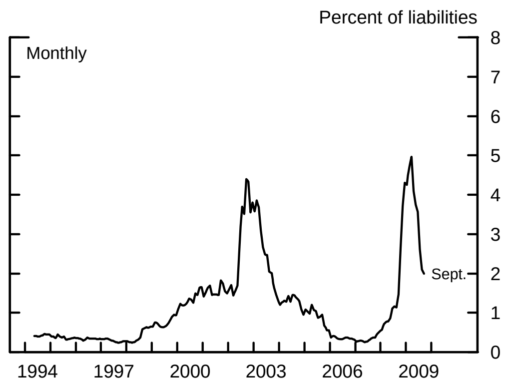
Source: Calculated using data from Moody's Investors Service.
* Based on July and August.

Selected Default and Delinquency Rates



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

Expected Nonfinancial Year-Ahead Defaults



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

Yields on investment- and speculative-grade corporate bonds declined along with Treasury yields, leaving their risk spreads little changed. Staff estimates of bid-asked spreads for investment- and speculative-grade corporate bonds narrowed a bit further, indicating the most liquid trading conditions seen in about a year. Conditions in the secondary market for leveraged syndicated loans also continued to recover, as average bid prices rose a bit further and bid-asked spreads narrowed.

Corporate Earnings and Credit Quality

Preliminary estimates indicate that the domestic profits of nonfinancial and financial corporations rebounded somewhat through the second quarter after having plunged in the latter half of 2008.[2] Nonfinancial profits were boosted last quarter by reductions in costs for labor and materials. However, smoothing through the quarterly volatility, financial corporations' operating profits did not show signs of a significant turnaround. Amid relatively light earnings news through mid-September, analysts did not substantively change their forecasts of year-ahead earnings for S&P 500 firms.

Indicators of the credit quality of nonfinancial firms have improved, on balance, in recent months. Preliminary estimates suggest that the aggregate ratio of debt to assets for nonfinancial corporations ticked down in the second quarter, while the aggregate liquid asset ratio rose further to nearly its peak level reached in 2004. The pace of nonfinancial corporate ratings downgrades by Moody's moderated in the first two months of the third quarter, while upgrades remained sparse. The six-month trailing bond default rate (for all U.S. firms) was about unchanged in August, staying well below its level in the spring. By contrast, the delinquency rate on C&I loans rose further in the second quarter to nearly the rate reached in 2002. In September, the year-ahead expected default frequency for nonfinancial firms from Moody's KMV remained close to 2 percent, less than half the rate registered in March.

Business Finance

Gross bond issuance by nonfinancial corporations moved back up in August following a lull in July; the rebound was particularly strong for speculative-grade firms, a trend that extended into September. However, on net, commercial paper outstanding was unchanged last month, and C&I loans tumbled again. Overall, net debt financing for the nonfinancial business sector remained negative in August.

[2] Although, in principle, NIPA profits should exclude the effects of capital losses (or gains) and write-downs on debt and securities, the fourth-quarter drop suggests that measuring financial firms' underlying operating earnings has been challenging.

Business Finance

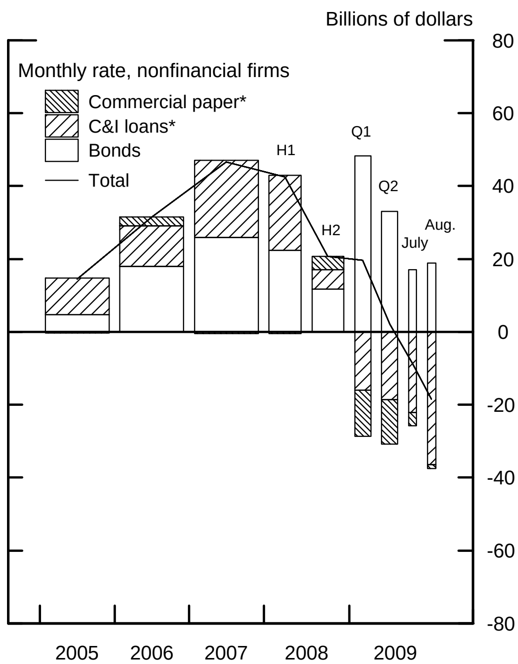
Gross Issuance of Securities by U.S. Corporations

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

Type of security	2005	2006	2007	2008 H1	2008 H2	2009 Q1	2009 Q2	2009 July	2009 Aug.
Nonfinancial corporations									
Stocks[1]	4.6	4.7	5.5	3.5	4.0	2.7	8.0	2.2	5.6
Initial public offerings	1.7	1.8	1.6	.6	.1	.3	.2	.0	.3
Seasoned offerings	2.8	2.9	3.8	2.9	3.9	2.4	7.8	2.1	5.3
Bonds[2]	18.7	29.3	35.1	36.0	19.4	57.4	42.8	21.5	29.8
Investment grade	8.7	13.1	17.5	24.9	14.2	42.5	22.8	7.3	15.8
Speculative grade	5.2	6.2	7.5	3.1	.4	3.0	7.5	2.6	7.5
Other (sold abroad/unrated)	4.8	10.1	10.0	8.0	4.8	11.9	12.4	11.7	6.5
Memo									
Net issuance of commercial paper[3]	-.2	2.4	-.4	-.5	3.7	-12.7	-12.2	-3.7	-1.1
Change in C&I loans at commercial banks[3]	10.1	11.2	21.2	20.7	5.2	-16.0	-18.7	-22.1	-36.4
Financial corporations									
Stocks[1]	5.0	5.3	8.6	17.2	9.9	.9	30.8	3.1	4.9
Bonds[2]	170.4	180.6	151.7	66.2	24.6	38.9	50.2	34.5	29.8

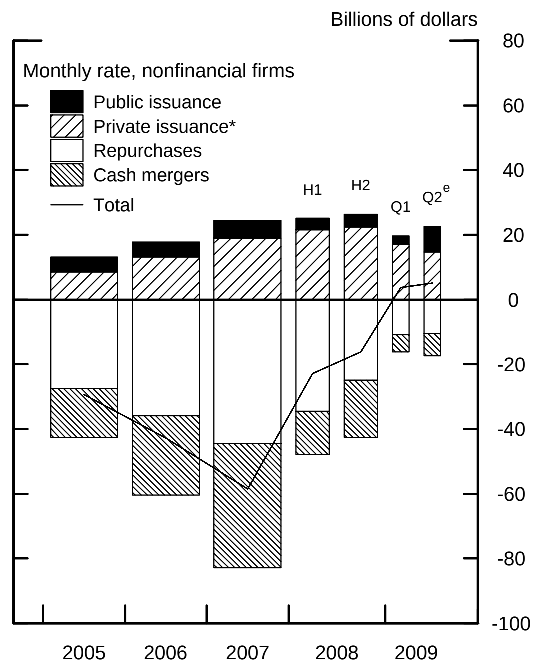
Note: Components may not sum to totals because of rounding.
1. Excludes private placements and equity-for-equity swaps that occur in restructurings.
2. Data include regular and 144a private placements. Bond totals reflect gross proceeds rather than par value of original discount bonds. Bonds are categorized according to Moody's bond ratings or to Standard & Poor's if unrated by Moody's.
3. End-of-period basis, seasonally adjusted.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

Selected Components of Net Debt Financing



* Seasonally adjusted, period-end basis.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

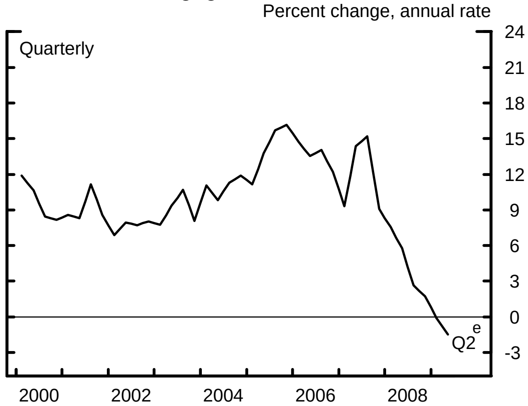
Components of Net Equity Issuance



e Estimate.
* Private issuance was revised back to 2005.
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

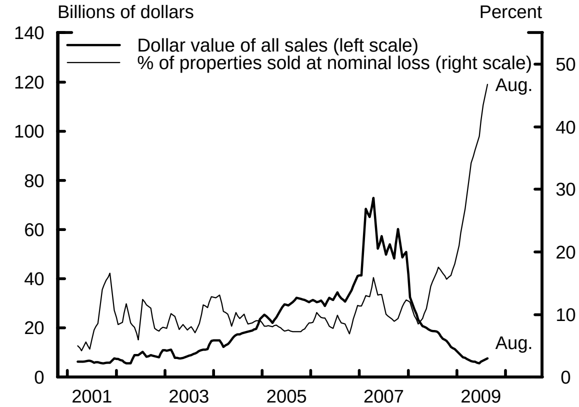
Commercial Real Estate

Commercial Mortgage Debt



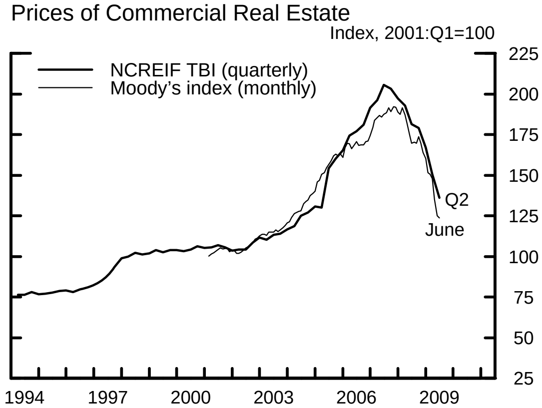
e Estimate.
Source: Federal Reserve.

Commercial Real Estate Sales



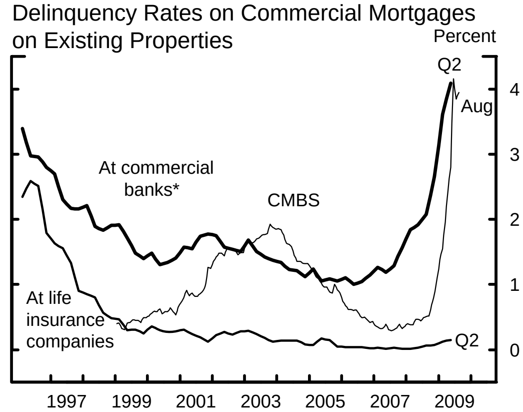
Note: Three-month moving averages shown.
Source: Real Capital Analytics.

Prices of Commercial Real Estate



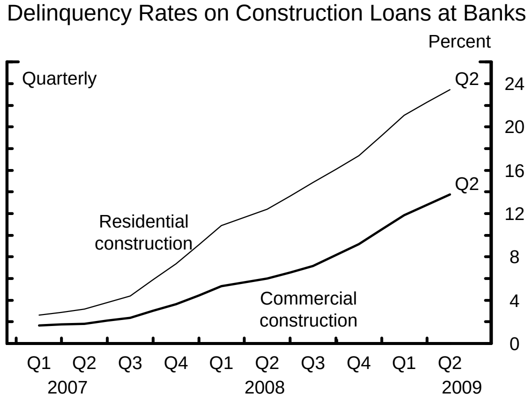
Source: NCREIF; MIT Center for Real Estate; Moody's.

Delinquency Rates on Commercial Mortgages on Existing Properties



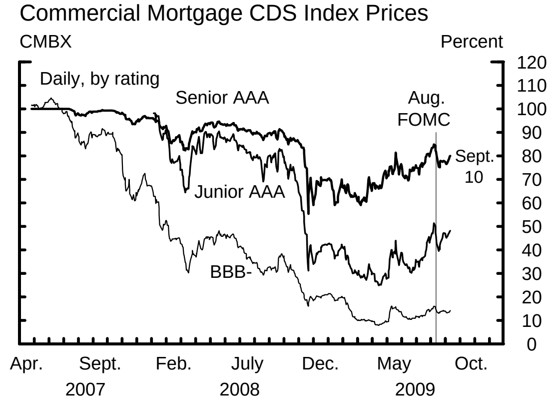
Note: CMBS are commercial mortgage-backed securities.
*Excluding farmland.
Source: Citigroup; Call Reports; ACLI.

Delinquency Rates on Construction Loans at Banks



Note: Data series begin in 2007:Q1.
Source: Call Reports.

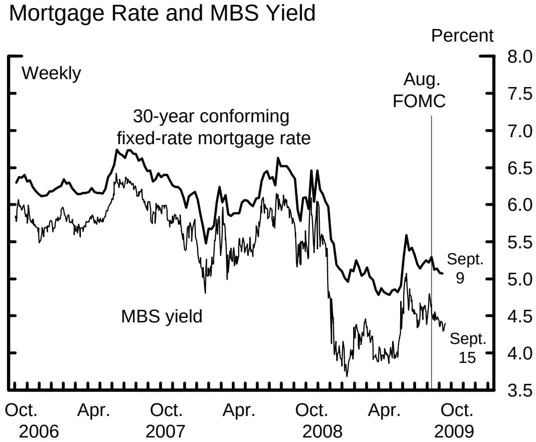
Commercial Mortgage CDS Index Prices



Note: Each index corresponds to pools of mortgages securitized in 2006:H1.
Source: JPMorgan Chase &Co.

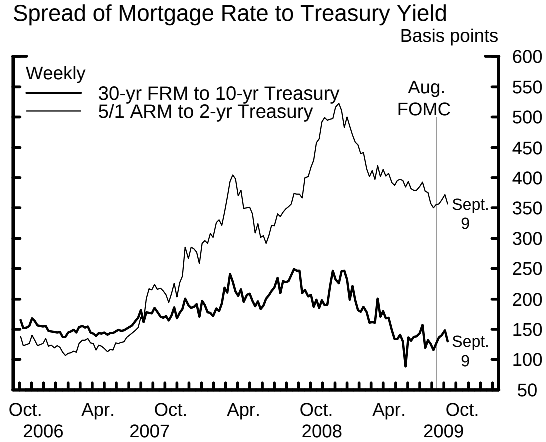
Residential Mortgages

Mortgage Rate and MBS Yield



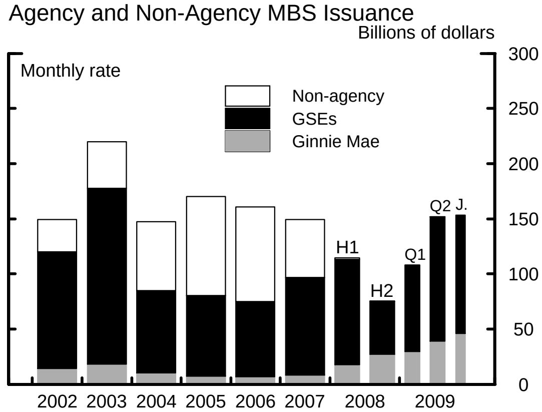
Note: For MBS yield, Fannie Mae 30-year current coupon rate.
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Spread of Mortgage Rate to Treasury Yield



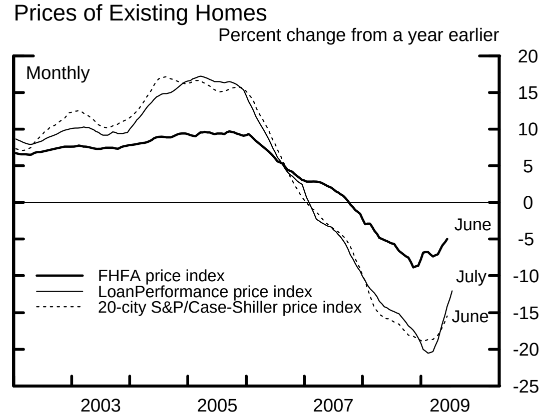
Note: Spreads are relative to corresponding off-the-run Treasury yields.
Source: Bloomberg; Freddie Mac.

Agency and Non-Agency MBS Issuance



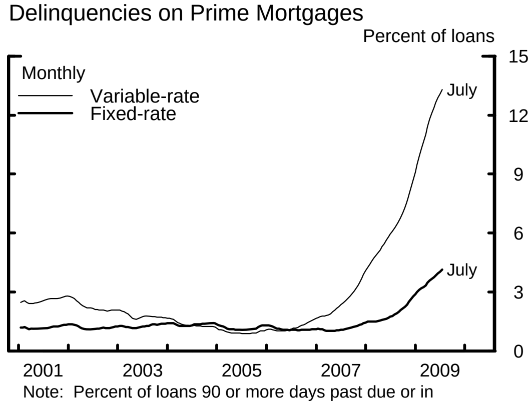
Source: For non-agency issuance, Inside Mortgage Finance; for agency, Fannie Mae, Freddie Mac, and Ginnie Mae.

Prices of Existing Homes



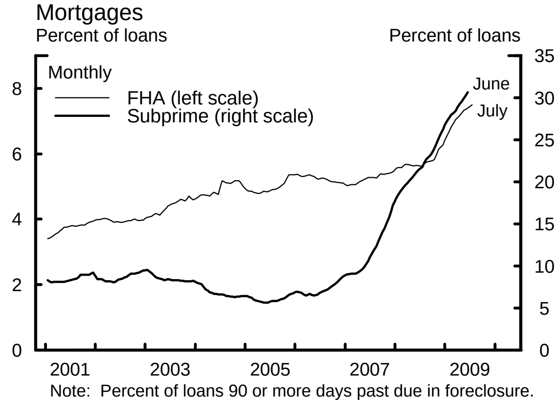
Note: LoanPerformance plans to publish its price index in late September. Data are confidential until then.
Source: For FHFA, Federal Housing Finance Agency; for LoanPerformance, First American CoreLogic; for S&P/Case-Shiller, Standard & Poor's.

Delinquencies on Prime Mortgages



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

Delinquencies on Subprime and FHA-Backed Mortgages



Note: Percent of loans 90 or more days past due in foreclosure. For subprime mortgages, rates are for securitized loans.
Source: For FHA-backed mortgages, McDash Analytics; for subprime mortgages, LoanPerformance, a division of First American CoreLogic.

Following a sluggish pace in July, last month, gross public equity issuance by nonfinancial firms has rebounded, boosted by a pickup in secondary offerings. Equity retirements from cash-financed mergers and estimated share repurchases were again quite modest in the second quarter and were outpaced by issuance. As a result, net equity issuance remained positive. In July and August, announcements of share repurchase programs remained thin, indicating that many corporations continued to conserve cash. Even so, over the same period, a spate of announced cash-financed mergers and acquisitions signaled a pickup in dealmaking from moribund levels.

Commercial Real Estate Finance

Credit markets for commercial real estate remained strained. Outstanding commercial mortgage debt is estimated to have decreased at an annual rate of 1½ percent in the second quarter, and indications suggest another decline this quarter. Sales of commercial properties have ticked up in recent months but remained quite light. In addition, a record 45 percent of the commercial real estate property that changed hands in August was sold at a loss, suggesting that many sellers were under financial pressure. Commercial property prices edged down further in June, leaving the broad indexes about one-third below their levels in early 2007. Delinquency rates on commercial mortgages held by banks—particularly those for residential and commercial construction loans—continued to rise in the second quarter, and, in July, the delinquency rate on securitized commercial mortgages remained near its historical high. Commercial mortgage CDS index prices were little changed, on net, over the intermeeting period.

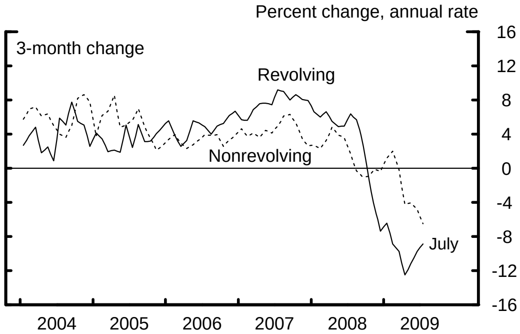
Household Finance

The average interest rate on 30-year conforming fixed-rate mortgages declined further over the intermeeting period, to about 5.1 percent, the lowest level recorded since the spring. Spreads between mortgage interest rates and 10-year Treasury yields were little changed, on net. Agency MBS yields decreased around 25 basis points, and issuance of MBS by the housing-related GSEs remained very strong in July. No private-label MBS have been issued since the beginning of 2008.

Regarding house prices, the repeat-sales price index for existing single-family homes from LoanPerformance (LP) jumped 12 percent at an annual rate in the second quarter, and similar indexes constructed by the Federal Housing Finance Agency (FHFA) and S&P/Case-Shiller (CS; this index covers 20 large cities) also turned up in recent months. Nonetheless, over the year ending in July, the LP index decreased 12 percent, while the FHFA and CS indexes dropped about 5 and 15 percent, respectively, through June.

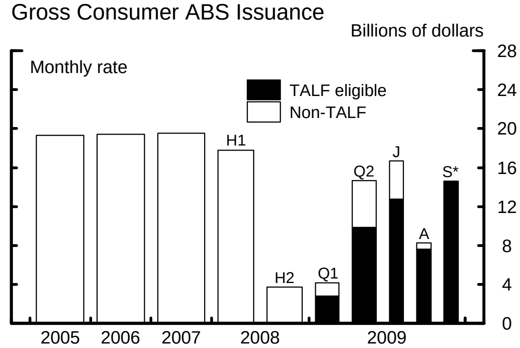
Consumer Credit and Mutual Funds

Consumer Credit



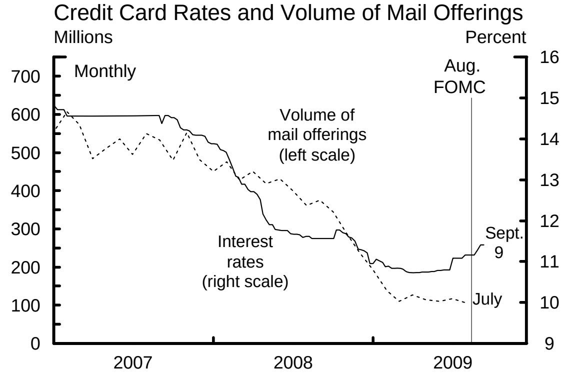
Source: Federal Reserve.

Gross Consumer ABS Issuance



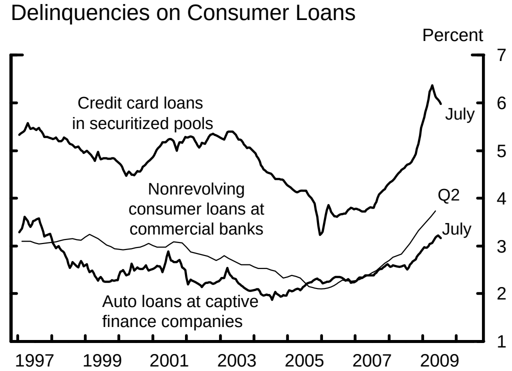
Note: Credit card, auto, and student loan ABS.
* Through September 11.
Source: Inside MBS & ABS, Merrill Lynch, Bloomberg, Federal Reserve.

Credit Card Rates and Volume of Mail Offerings



Source: For interest rates, Bankrate Monitor; for mail volume, Mintel.

Delinquencies on Consumer Loans



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

Net Flows into Mutual Funds

(Billions of dollars, monthly rate)

Fund type	2008 H1	2008 H2	2009 Q1	2009 Q2	2009 July	2009 Aug.[e]	Assets July
Total long-term funds	**11.8**	**-49.7**	**0.5**	**46.1**	**46.7**	**51.6**	**6,825**
Equity funds	**-3.6**	**-36.0**	**-14.4**	**14.2**	**9.8**	**3.5**	**4,365**
Domestic	-5.0	-20.7	-7.8	9.7	2.8	-2.3	3,265
International	1.3	-15.3	-6.5	4.4	7.0	5.8	1,099
Hybrid funds	**1.7**	**-4.8**	**-2.9**	**2.3**	**1.8**	**3.0**	**559**
Bond funds	**13.8**	**-8.9**	**17.8**	**29.7**	**35.1**	**45.1**	**1,901**
High-yield	-0.2	0.1	2.7	2.9	1.9	0.8	164
Other taxable	11.1	-7.4	11.2	21.1	25.9	34.9	1,335
Municipals	2.9	-1.6	3.9	5.7	7.3	9.4	402
Money market funds	**56.1**	**59.6**	**0.1**	**-55.2**	**-49.9**	**-55.6**	**3,623**

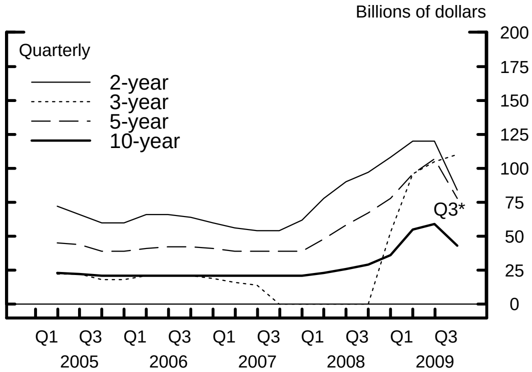
Note: Excludes reinvested dividends.

e Staff estimate.

Source: Investment Company Institute.

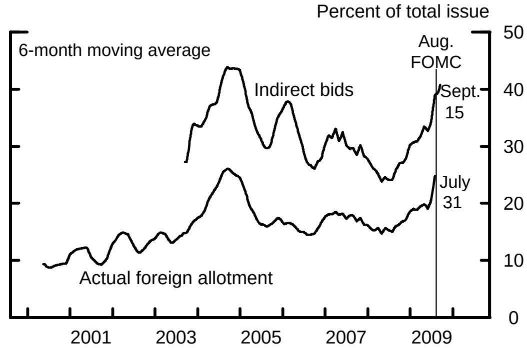
Treasury Finance

Treasury Auction Amounts



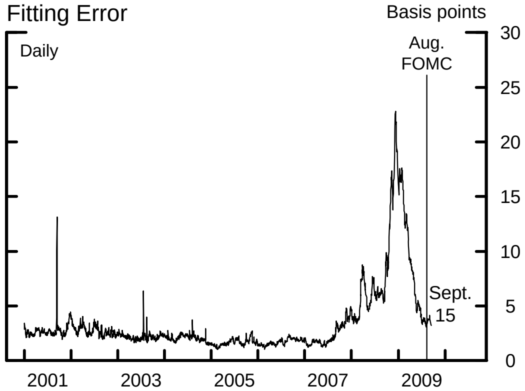
* Estimated using data through August.
Source: U.S. Treasury Dept.

Foreign Participation in Treasury Auctions



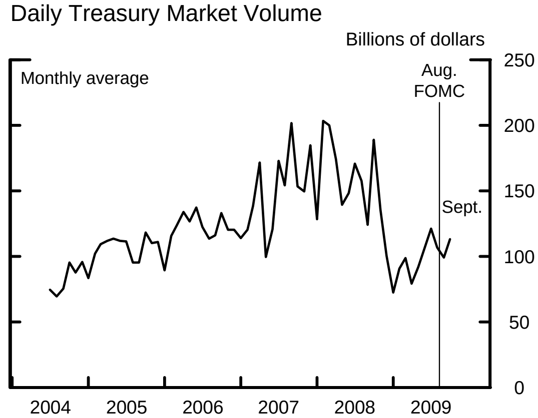
Note: Indirect bids and actual allotment are a percentage of the total amount accepted, including the amount tendered to the Federal Reserve. Moving averages include 2-, 5-, and 10-year original auctions and reopenings.
Source: Federal Reserve Board.

Average Absolute Nominal Yield Curve Fitting Error



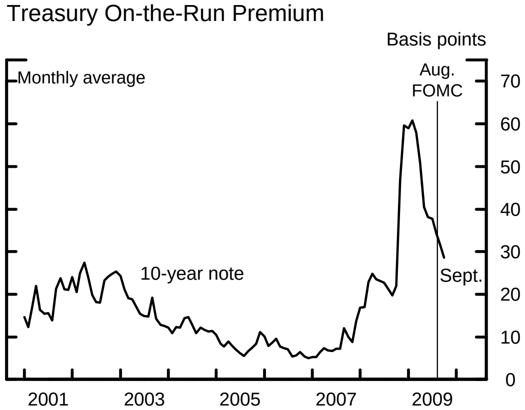
Note: Calculated from securities with 2 to 10 years until maturity, excluding on-the-run and first off-the-run securities.
Source: Federal Reserve Board.

Daily Treasury Market Volume



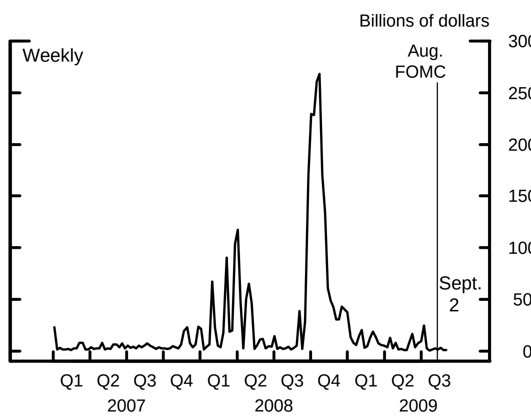
Note: September observation is the month-to-date average.
Source: Bloomberg.

Treasury On-the-Run Premium



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

Treasury Fails-to-Deliver



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

State and Local Government Finance

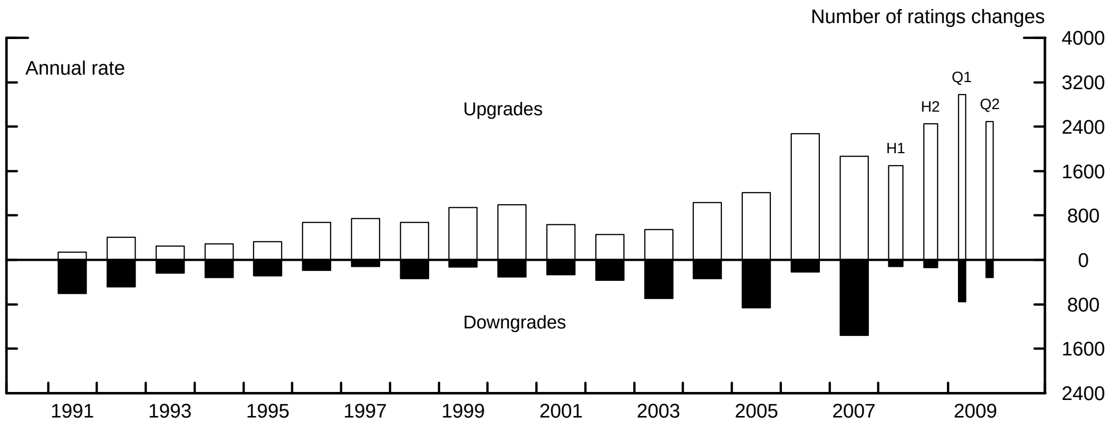
Gross Offerings of Municipal Securities

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

Type of security	2005	2006	2007	2008 H1	2008 H2	2009 Q1	2009 Q2	2009 July	2009 Aug.
Total	38.4	36.1	40.4	41.7	33.2	30.5	42.4	33.2	49.5
Long-term [1]	34.2	32.5	35.5	38.1	26.7	28.7	37.1	25.9	36.1
Refundings [2]	15.6	10.6	12.6	18.0	11.2	10.5	14.4	9.1	11.9
New capital	18.6	21.9	22.9	20.1	15.5	18.2	22.7	16.8	24.2
Short-term	4.2	3.7	4.9	3.6	6.5	1.8	5.3	7.3	13.4
Memo: Long-term taxable	2.1	2.5	2.4	2.8	1.8	1.1	7.9	4.9	10.4

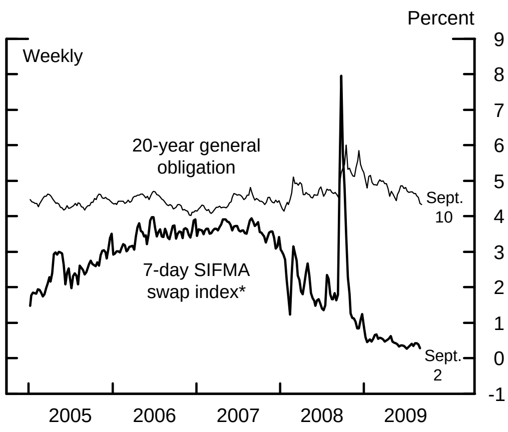
1. Includes issues for public and private purposes.
2. All issues that include any refunding bonds.
Source: Thomson Financial.

Ratings Changes



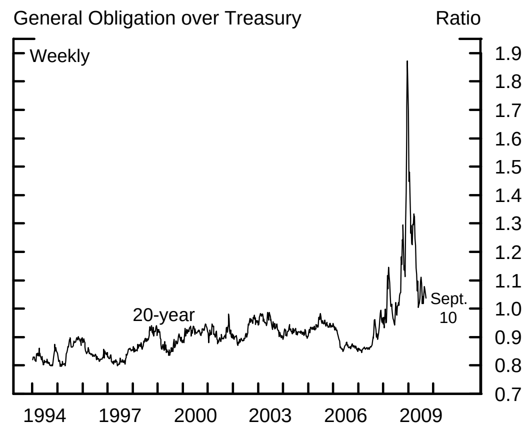
Note: Recent upgrades reflect S&P's change of rating standard.
Source: S&P's Credit Week Municipal; S&P's Ratings Direct.

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.

Delinquency rates on prime and subprime mortgages continued to rise, and the delinquency rate for FHA-backed loans rose to a record high of nearly 7.5 percent in July, about 120 basis points above its level at the end of 2008.

Consumer credit contracted for the sixth consecutive month in July, reflecting sizable declines in revolving and nonrevolving credit. Consumer credit ABS issuance decreased somewhat in August, but a large volume of TALF-eligible securities was issued early this month. Over the intermeeting period, secondary-market spreads on AAA-rated credit card and auto loan ABS both declined to 50 basis points, levels not seen in about a year. Average interest rates on variable-rate credit cards increased 25 basis points over the intermeeting period, continuing the trend from earlier this summer. The number of credit card offers sent by mail remained steady in July, indicating that the contraction in the supply of credit card loans might be abating. The latest readings on delinquency rates for consumer loans remained high by historical standards.

As in June and July, long-term mutual funds attracted sizable inflows in August, with bond funds attracting outsized flows. Money market funds continued to experience substantial net outflows last month, as yields on such funds remained extremely low.

Treasury and Agency Finance

Over the intermeeting period, nine auctions of Treasury securities totaling $254 billion were held. Considering the very large volume of securities offered, the auctions were generally quite well received, with stop-out rates near the when-issued rates just prior to the auctions and bid-to-cover ratios near or above their previous averages. Market commentary and evidence from indirect bidding at recent Treasury auctions suggest that foreign demand for Treasury securities has risen recently.

No material changes were observed in the market functioning for nominal Treasury securities over the intermeeting period. Average fitting errors from staff yield curve models for nominal Treasury issues were little changed. Bid-asked spreads held roughly steady in recent weeks, and trading volumes stayed relatively low. The staff’s measure of the on-the-run premium for the 10-year Treasury note was little changed at an elevated level, while premiums for 2-year and 5-year Treasury securities stayed very low.

State and Local Government Finance

Gross issuance of long-term municipal bonds was robust in August, mostly driven by the strength in new capital issuance, a substantial portion of which consisted of Build

M2 Monetary Aggregate

(Based on seasonally adjusted data)

Aggregate and components	Percent change (annual rate)[1]						Level (billions of dollars),
			2009				
	2007	2008	Q1	Q2	July	Aug. (p)	Aug. (p)
M2	5.9	8.3	12.9	2.6	-3.1	-7.3	8,298
Components[2]							
Currency	2.0	5.8	16.0	6.9	0.6	6.7	858
Liquid deposits[3]	4.3	6.8	20.6	12.6	7.9	4.1	5,317
Small time deposits	4.4	11.7	0.2	-16.3	-26.0	-33.1	1,218
Retail money market funds	20.2	12.9	-7.6	-23.9	-36.0	-50.0	899
Memo:							
Institutional money market funds	40.2	24.6	29.9	6.3	-7.0	-23.2	2,459
Monetary base	2.0	70.4	65.4	24.2	-10.3	28.2	1,705

1. For years, Q4 to Q4; for quarters and months, calculated from corresponding average levels.
2. Nonbank traveler's checks are not listed.
3. Sum of demand deposits, other checkable deposits, and savings deposits.
p Preliminary.
Source: Federal Reserve.

America Bonds, authorized by the fiscal stimulus program enacted earlier this year.[3] Short-term issuance in August doubled the July volume, as some municipalities reportedly acted on low short-term yields. Yields on long-term municipal bonds declined over the intermeeting period, leaving the ratio to yields on comparable-maturity Treasury securities about unchanged. Rating upgrades in the second quarter again outpaced downgrades, as rating agencies continued to transition their ratings for municipalities toward the models used for corporate debt.

Money and Bank Credit

Following a decline of 3 percent at an annual rate in July, the contraction in M2 steepened to 7¼ percent last month, likely reflecting an increase in appetite for risky assets and a further reaction to low interest rates on M2 assets. Both small time deposits and retail money market funds contracted much more rapidly in August than they had in July. Although liquid deposits, the largest component of M2, expanded last month, the 4 percent growth rate was less than half the rate posted in July. In part, the outflows from small time deposits and retail money market funds, as well as the smaller rise in liquid deposits, may have been associated with the rapid inflows to bond mutual funds in recent months. After having registered strong expansion in the first half of the year, currency growth moderated somewhat over July and August. Currency demand from abroad was restrained compared with early this year amid stabilizing financial conditions around the globe; domestic demand remained solid. The monetary base rose 9 percent over July and August, as the effects of the Federal Reserve's large-scale asset purchases more than offset reduced usage of the liquidity and credit facilities.

Total assets at commercial banks decreased significantly again in August, as another substantial decrease in bank loans more than offset a considerable increase in cash—a category that includes bank reserves—and a further rise in securities. For most of this year, the contraction in commercial bank credit had been concentrated at large and foreign banks, but, in August, it extended to smaller banks.

Total bank loans shrank at a rate of 17 percent last month. C&I loans dropped at a 28 percent pace last month with reported paydowns of outstanding loans again elevated and widespread. Results from the August Survey of Terms of Business Lending showed

[3] The Build America Bonds Program allows state and local governments to issue taxable bonds in 2009 and 2010 for government capital projects and receive a subsidy payment from the Treasury for 35 percent of its interest costs. Issuers can choose either to offer the tax credit to buyers or to receive direct payment from the federal government. Most of the Build America Bonds issued so far are direct payment bonds.

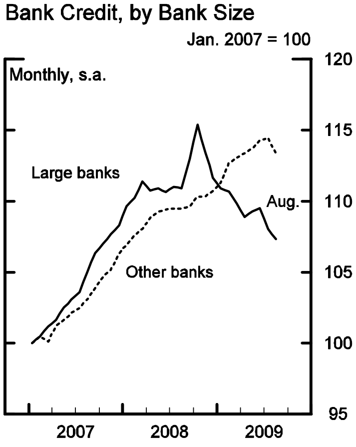
Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	Q1 2009	Q2 2009	July 2009	Aug. 2009	Level[1] Aug. 2009
Total	9.9	5.1	4.5	-5.5	-3.5	-12.6	-10.8	9,258
Loans[2]								
Total	10.7	4.6	2.1	-7.1	-6.6	-19.3	-17.0	6,886
Core	9.6	5.2	2.7	-3.0	-5.8	-8.7	-14.4	6,120
To businesses								
Commercial and industrial	19.0	16.6	11.4	-13.4	-15.3	-12.1	-28.0	1,453
Commercial real estate	9.3	6.0	2.9	-.7	-1.7	-5.1	-7.8	1,690
To households								
Residential real estate	5.6	-3.0	-5.2	-1.4	-1.5	-9.5	-12.2	2,131
Revolving home equity	5.7	13.0	13.0	10.0	2.8	-6.1	-5.3	606
Closed-end mortgages	5.6	-7.9	-11.2	-5.6	-3.2	-10.8	-15.1	1,524
Consumer	6.7	7.2	7.4	8.0	-7.0	-8.4	-9.4	847
Memo: Originated[3]	6.4	5.7	4.4	1.4	-4.3	-3.8	-11.4	1,248
Other	18.7	.5	-1.5	-34.2	-13.0	-95.6	-37.3	767
Securities								
Total	7.0	6.9	12.9	-.2	6.4	7.7	7.4	2,372
Treasury and agency	-6.1	18.6	32.4	5.9	-5.8	8.6	15.5	1,418
Other[4]	28.3	-7.0	-11.2	-9.6	25.6	6.4	-4.4	953

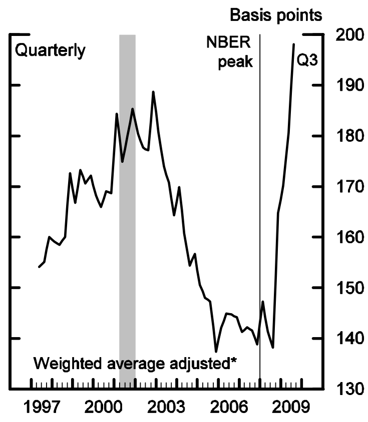
Note: Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FAS 115) and the initial consolidation of certain variable interest entities (FIN 46). Data also account for the effects of nonbank structure activity of $5 billion or more.
1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels.
2. Excludes interbank loans.
3. Includes an estimate of outstanding loans securitized by commercial banks.
4. Includes private mortgage-backed securities; securities of corporations, state and local governments, and foreign governments; and any trading account securities that are not Treasury or agency securities.
Source: Federal Reserve.

Bank Credit, by Bank Size



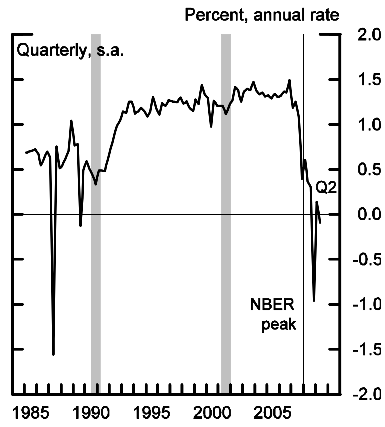
Note: Large is defined as the top 25 banks by asset size.
Source: Federal Reserve.

C&I Loan Rate Spreads--All Banks



Note: The spread over market interest rate on an instrument of comparable maturity. For an explanation on the shaded bar, see "Return on Assets" panel.
*Adjusted for changes in nonprice loan characteristics.
Source: Survey of Terms of Business Lending.

Return on Assets



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

that C&I loan rate spreads over comparable-maturity market instruments had risen noticeably since the May survey. The increase in spreads was evident across most loan characteristics, with the exception being a decline in spreads on lower-risk loans. In August, the runoff in commercial real estate loans held by banks also intensified. Although originations of closed-end residential mortgages apparently picked up during the intermeeting period, an unusually large volume of loans were sold to the GSEs, and banks' balance-sheet holdings decreased at an annual rate of 15 percent last month. Revolving home equity and consumer loans on banks' books also shrank. Part of the overall weakness in bank loans likely owes to the further reduction in unused commitments to fund loans shown by the second quarter Call Report data. That said, the rate of contraction in unused commitments was about half the pace in the fourth quarter of 2008 and first quarter of this year.

Call Report data also show that the U.S. commercial banking industry registered a loss in the second quarter after posting a small gain in the first quarter. The drop in profitability was attributable to a further sizable increase in the rate of provisioning for loan losses and by the FDIC's special assessment to bolster its Deposit Insurance Fund. Despite increased provisioning by banks, measures of reserve adequacy declined to historically low levels in the second quarter, as net charge-off and delinquency rates increased to their highest levels since at least 1985. Nonetheless, regulatory capital ratios rose further, as banks' boosted their capital buffers while their risk-weighted assets and average tangible assets ran off.

Last page of Domestic Financial Developments

International Developments

International Developments

U.S. International Transactions

Trade in Goods and Services

The U.S. international trade deficit widened to $32 billion in July from $27.5 billion in June, as a strong increase in exports was more than offset by a sizable increase in imports. The July figures further solidify the view that trade bottomed out in the second quarter.

Trade in Goods and Services

	2008	Annual rate			Monthly rate		
		2008	2009		2009		
		Q4	Q1	Q2	May	June	July
	Percent change						
Nominal BOP							
Exports	-3.4	-38.0	-40.7	-4.6	1.4	2.1	2.2
Imports	-7.3	-46.2	-55.4	-11.4	-.7	2.5	4.7
Real NIPA							
Exports	-3.4	-19.5	-29.9	-5.0	...	...	...
Imports	-6.8	-16.7	-36.4	-15.1	...	...	...
	Billions of dollars						
Nominal BOP							
Net exports	-695.9	-578.0	-369.6	-332.0	-26.4	-27.5	-32.0
Goods, net	-840.2	-715.3	-496.1	-461.9	-37.2	-38.3	-42.7
Services, net	144.3	137.3	126.5	129.9	10.8	10.8	10.7

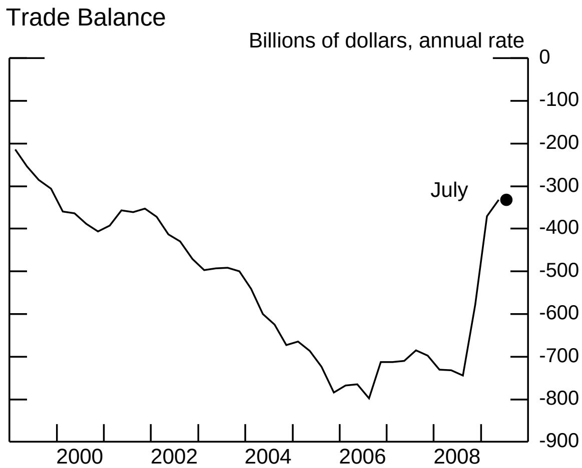
n.a. Not available. ... Not applicable.
BOP Balance of payments.
NIPA National income and product accounts.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Census Bureau.

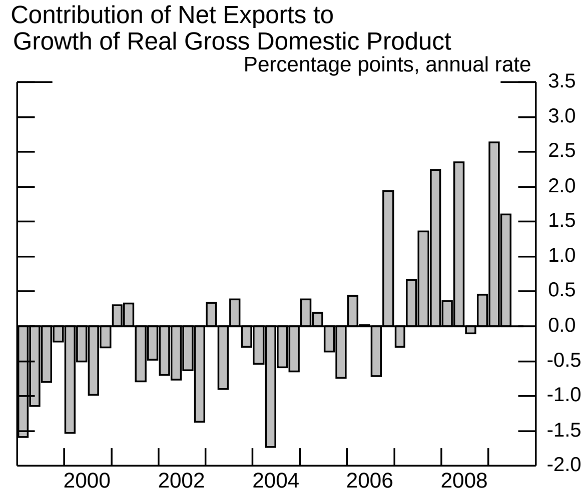
The value of exports of goods and services rose 2.2 percent in July, following a similar increase in June and marking the third consecutive monthly increase since the April low. About one-half of the July increase was in exports of automotive products, which soared 25 percent as production cutbacks among automakers eased. Nearly all other major categories of exports also grew, with exports of computers, consumer goods, and industrial supplies exhibiting solid increases. The increase in exports of industrial supplies reflected greater volumes rather than price increases.

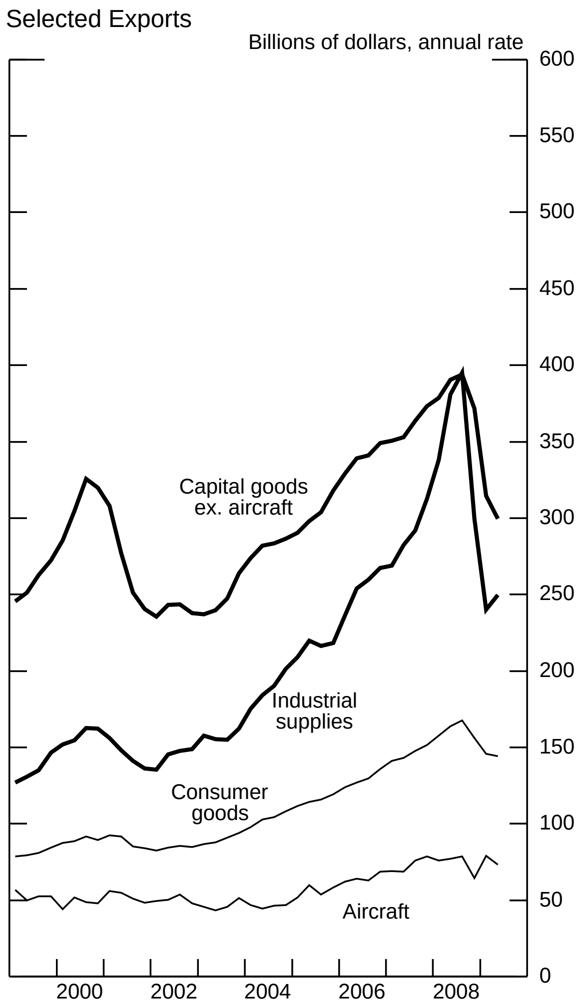
Despite the increases observed in May and June, sharp declines in previous months led the average value of exports in the second quarter to fall 4.6 percent at an annual rate. Exports of capital goods exhibited the largest decline, with exports of automotive products and services also displaying notable decreases. In contrast, exports of industrial supplies and agricultural goods rose, helped by higher prices.

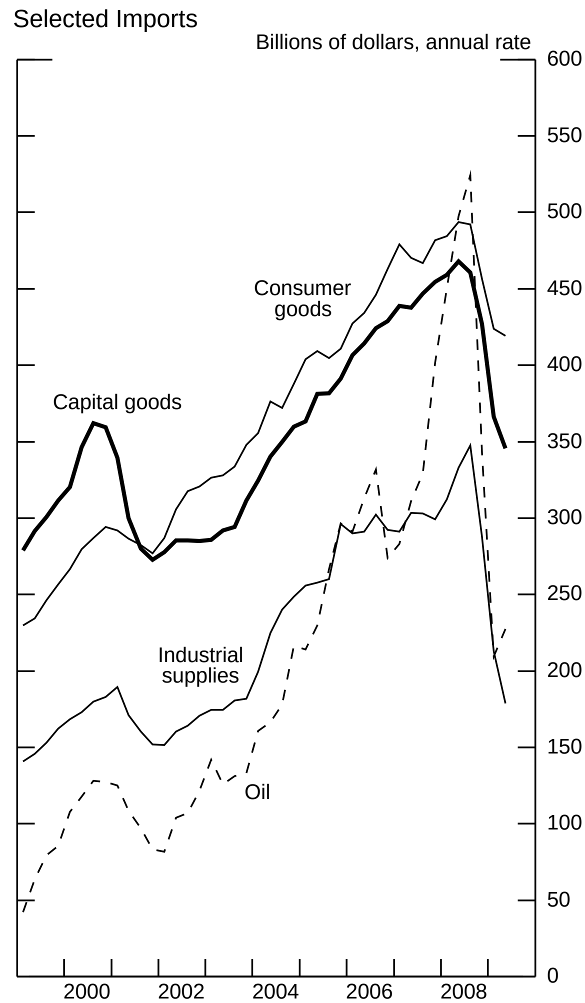
U.S. International Trade in Goods and Services

(Quarterly)









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

U.S. Exports and Imports of Goods and Services

(Billions of dollars; annual rate, balance of payments basis)

	Levels				Change[1]			
	2009		2009		2009		2009	
	Q1	Q2	June	July	Q1	Q2	June	July
Exports of goods and services	**1488.8**	**1471.3**	**1498.5**	**1531.1**	**-207.8**	**-17.5**	**30.6**	**32.6**
Goods exports	997.5	984.5	1008.6	1040.5	-164.8	-13.0	23.7	31.9
Gold	13.8	12.3	12.0	12.7	.4	-1.5	-2.3	.8
Other goods	983.7	972.2	996.7	1027.8	-165.2	-11.4	26.0	31.1
Capital goods	393.8	373.1	377.1	386.1	-42.3	-20.7	5.3	9.0
Aircraft & parts	79.0	73.4	74.1	76.0	14.7	-5.6	1.9	1.8
Computers & accessories	36.9	35.5	35.2	39.1	-2.4	-1.4	-.9	4.0
Semiconductors	33.4	35.0	36.9	38.5	-10.6	1.6	2.7	1.6
Other capital goods	244.5	229.2	230.9	232.4	-44.0	-15.3	1.7	1.6
Automotive	70.2	66.7	65.5	81.6	-38.9	-3.4	.8	16.0
Ind. supplies (ex. ag., gold)	240.2	249.8	267.8	272.6	-59.3	9.6	15.9	4.8
Consumer goods	146.0	144.2	144.9	149.3	-10.1	-1.8	-.3	4.4
Agricultural	94.4	101.0	103.7	98.8	-8.6	6.6	3.0	-4.9
All other goods	39.1	37.4	37.8	39.4	-6.0	-1.7	17.8	1.7
Services exports	491.3	486.7	489.9	490.6	-43.0	-4.6	6.9	.7
Imports of goods and services	**1858.4**	**1803.3**	**1828.4**	**1914.6**	**-416.2**	**-55.1**	**43.9**	**86.2**
Goods imports	1493.6	1446.5	1468.6	1552.6	-383.9	-47.2	36.9	84.0
Oil	208.9	227.8	259.2	268.5	-132.9	18.9	50.7	9.4
Gold	7.3	8.4	11.4	10.1	.7	1.1	4.7	-1.3
Other goods	1277.5	1210.3	1198.0	1273.9	-251.7	-67.2	-18.5	75.9
Capital goods	366.3	345.6	346.3	361.9	-60.5	-20.7	-.7	15.6
Aircraft & parts	30.2	31.4	31.5	33.5	-2.0	1.2	1.2	2.0
Computers & accessories	80.6	84.4	89.1	95.0	-7.0	3.8	5.4	6.0
Semiconductors	19.0	20.4	20.8	21.5	-4.0	1.4	.1	.8
Other capital goods	236.5	209.4	205.0	211.8	-47.5	-27.1	-7.4	6.8
Automotive	129.4	126.8	132.9	161.5	-70.1	-2.6	11.0	28.5
Ind. supplies (ex. oil, gold)	212.9	178.7	172.8	182.1	-74.8	-34.2	-8.7	9.3
Consumer goods	423.6	419.1	404.8	425.1	-32.9	-4.4	-21.2	20.3
Foods, feeds, beverages	81.7	81.5	82.3	81.6	-7.1	-.2	.9	-.7
All other goods	63.7	58.6	58.9	61.7	-6.3	-5.1	.1	2.8
Services imports	364.8	356.8	359.8	362.0	-32.2	-8.0	7.0	2.2
Memo:								
Oil quantity (mb/d)	13.78	11.62	11.66	11.63	.19	-2.16	.81	-.03
Oil import price ($/bbl)	41.61	53.70	60.85	63.22	-27.83	12.10	8.23	2.37

1. Change from previous quarter or month.

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

The value of imports of goods and services rose 4.7 percent in July, marking two months of increases following the May trough. As with exports, imports of automotive products exhibited the largest increase, reflecting some recovery in North American auto production. Imports of consumer goods, capital goods, and industrial supplies also rose sharply. Imports of oil rose more moderately, with the increase in the value of oil imports wholly reflecting higher prices, as volumes moved down slightly.

The average value of imports in the second quarter declined 11.4 percent at an annual rate. Imports of industrial supplies and machinery registered very large declines. Imports of automotive products, consumer goods, and services also moved down, while imports of aircraft, computers, and semiconductors recorded small increases. Imports of oil rose visibly on account of higher prices, as volumes decreased.

Prices of Internationally Traded Goods

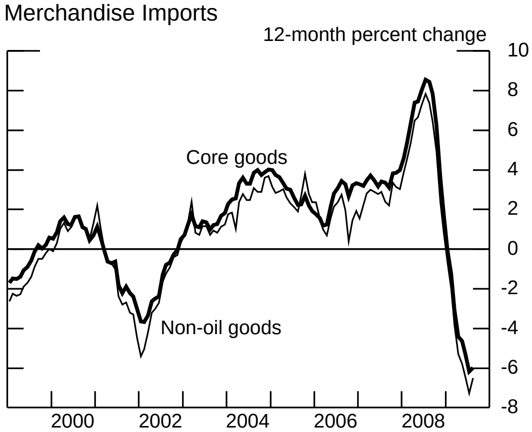
Non-oil imports. Prices for imported core goods fell 0.2 percent in July and then rose 0.4 percent in August. The August increase was the largest rise since July 2008 and reflected a turnaround in the prices for material-intensive goods. In July, prices of material-intensive goods declined 0.5 percent but bounced back with a 1.5 percent increase in August, reflecting higher prices for foods and primary metals. Overall prices for finished goods were little changed over the two months; prices for imported consumer goods fell 0.2 percent each month, whereas prices for automotive products rose by a similar amount.

After falling modestly in the second quarter, the average level of core import prices in July and August was 1.1 percent at an annual rate above the second-quarter average. The reversal mostly reflected price fluctuations for nonfuel industrial supplies, whose prices fell 4.2 percent in the second quarter and have increased 3.9 percent so far in the third quarter. Most of the other major categories also saw higher average prices in July and August. The one exception was imported consumer goods, whose average price in July and August was 0.8 percent lower.

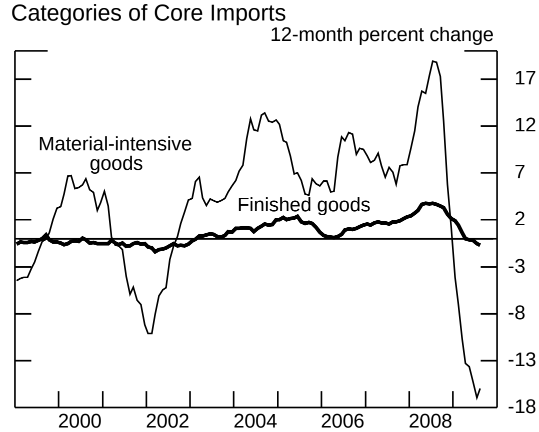
Oil. The Bureau of Labor Statistics price index of imported oil rose 10.5 percent in August on the heels of a 2.6 percent decline in July. The spot price of West Texas Intermediate (WTI) crude oil showed only modest volatility during August and closed most recently on September 15 at $70.93 per barrel, down a touch from the previous month’s average price of $71.06. The modest decline in the price of spot WTI appears

Prices of U.S. Imports and Exports

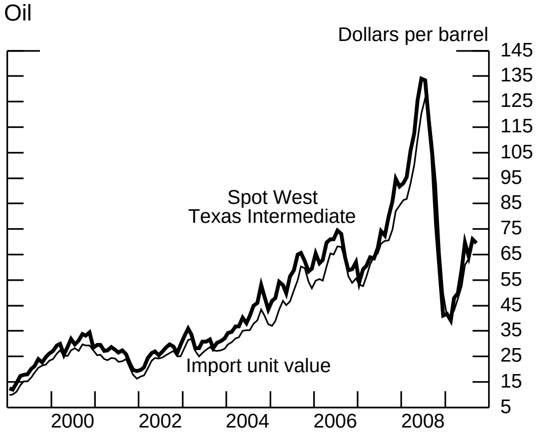
Merchandise Imports



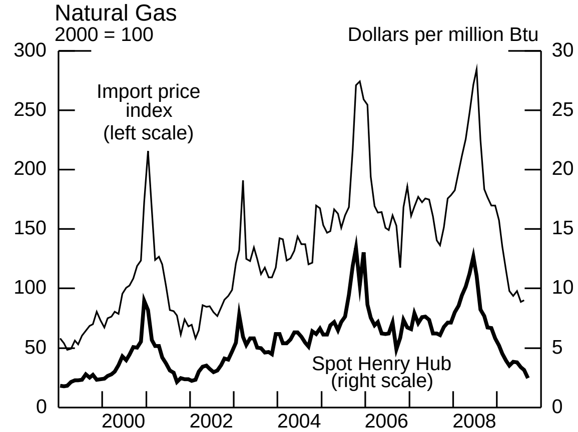
Categories of Core Imports



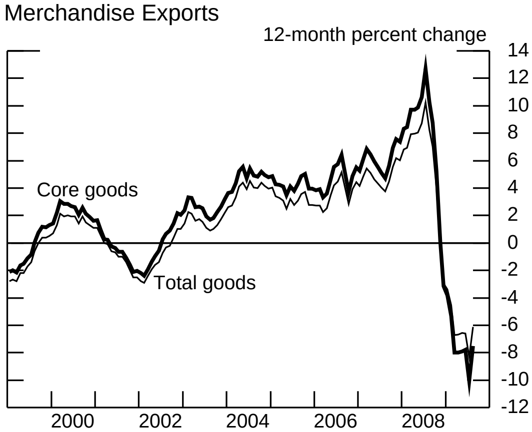
Oil



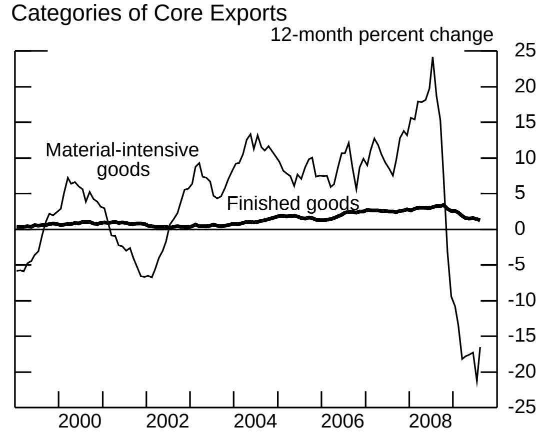
Natural Gas



Merchandise Exports



Categories of Core Exports



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

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

	Annual rate			Monthly rate		
	2009			2009		
	Q1	Q2	Q3e	June	July	Aug.
	---------------------- BLS prices					
Merchandise imports	-24.3	14.9	11.4	2.7	-.7	2.0
Oil	-72.6	247.1	89.1	17.2	-2.6	10.5
Non-oil	-10.9	-3.2	.4	.2	-.3	.4
Core goods[1]	-11.3	-1.2	1.1	.2	-.2	.4
Finished goods	-1.2	-.5	.1	.1	-.0	-.0
Cap. goods ex. comp. & semi.	-.7	-1.4	.5	.0	.2	-.1
Automotive products	-.5	.0	1.2	.1	.1	.2
Consumer goods	-1.8	-.1	-.8	.1	-.2	-.2
Material-intensive goods	-30.1	-2.9	3.4	.4	-.5	1.5
Foods, feeds, beverages	-9.6	.8	.9	.4	-1.0	1.7
Industrial supplies ex. fuels	-35.4	-4.2	3.9	.3	-.3	1.3
Computers	-8.3	-4.2	1.0	-.6	.6	.0
Semiconductors	-10.9	7.1	-6.9	.0	-2.0	.5
Natural gas	-61.0	-74.7	-25.4	4.3	-9.0	1.5
Merchandise exports	-8.8	2.4	3.4	1.0	-.3	.7
Core goods[2]	-11.1	2.5	3.8	1.3	-.5	.9
Finished goods	1.6	.3	1.7	.2	.2	.1
Cap. goods ex. comp. & semi.	3.1	2.5	1.8	.2	.3	.1
Automotive products	.5	-.6	-.8	-.1	-.2	.1
Consumer goods	-1.2	-4.0	3.6	.4	.4	.3
Material-intensive goods	-24.4	5.2	6.3	2.6	-1.4	1.7
Agricultural products	-12.3	19.5	-4.1	4.2	-4.9	.2
Industrial supplies ex. ag.	-28.4	1.2	10.1	2.0	-.1	2.3
Computers	-9.1	-3.4	-2.3	-.3	-.7	.5
Semiconductors	7.4	12.3	4.9	-.3	1.2	.1
	--------------------- NIPA prices					
Chain price index						
Imports of goods & services	-28.3	4.1	--	...	...	...
Non-oil merchandise	-10.5	-4.0	--	...	...	...
Core goods[1]	-9.4	-2.4	--	...	...	...
Exports of goods & services	-12.6	.5	--	...	...	...
Total merchandise	-14.8	2.5	--	...	...	...
Core goods[2]	-12.5	2.6	--	...	...	...

1. Excludes computers, semiconductors, and natural gas.
2. Excludes computers and semiconductors.
e Estimate based on average of two months.
n.a. Not available. ... Not applicable.
BLS Bureau of Labor Statistics.
NIPA National income and product accounts.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; Bureau of Labor Statistics.

to reflect positive supply developments; in particular, Russian production has been stronger than expected in recent months, once again topping 10 million barrels per day.

Exports. Core export prices rose 0.9 percent in August after falling 0.5 percent in July. The July price decline mainly reflected a 4.9 percent drop in the prices for agricultural exports. Prices for these goods stabilized in August, but prices for non-agricultural industrial supplies rose 2.3 percent. Prices for exported finished goods edged up in both July and August.

The average level of core export prices in July and August was up 3.8 percent at an annual rate from the second-quarter average. Over this period, prices for exported non-agricultural industrial supplies were up 10.1 percent. Prices for exported consumer goods, which fell at a 4 percent pace in the second quarter, were 3.6 percent higher, on average, in July and August. In contrast, prices for exported agricultural and automotive products fell on average.

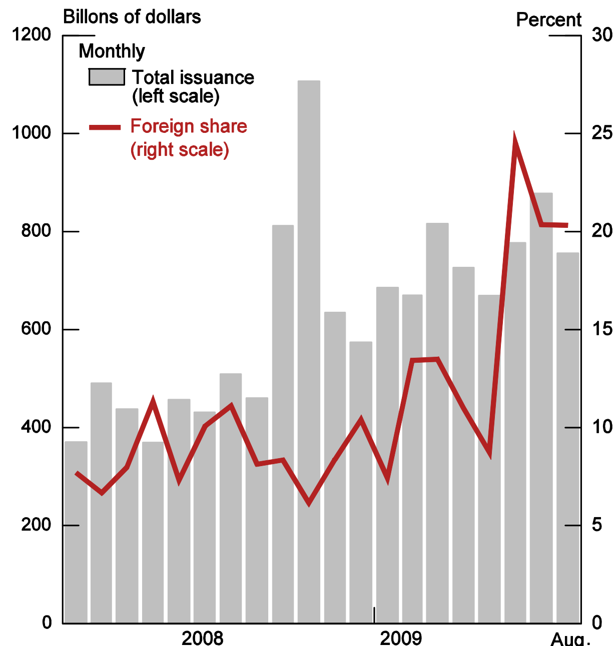
U.S. International Financial Transactions

Since the previous Greenbook, we have received Treasury data on international financial transactions for July that indicate a continued easing of tensions in financial markets and further portfolio reallocations toward riskier securities. Private foreign investors purchased sizable amounts of U.S. equities and sold U.S. Treasury securities. U.S. investors' net purchases of foreign securities have returned to their pre-crisis levels. Foreign official purchases of U.S. Treasuries remained strong in July, although total official inflows were damped somewhat by sales of agency securities.

Foreign official inflows in July (see line 1 of the table "Summary of U.S. International Transactions;" see also the figure "Foreign Official Financial Inflows through July 2009") totaled $43 billion, roughly equal to the average monthly rate registered in each of the past three years.

More recent custody data from the FRBNY suggest that the pace of foreign official inflows into Treasuries and of outflows from agencies slowed a bit in August. The figure to the right shows the amounts of Treasury bills, notes, and bonds issued at auctions and the shares allotted to foreign accounts (private and official). Even though the U.S. Treasury has been issuing more Treasury securities this year, the foreign share of auction allotments has increased notably, suggesting that foreigners continue to participate heavily in Treasury auctions.

Treasury Auction Issuance of Bills, Notes, and Bonds and Foreign Share of Allotments



Source: U.S. Department of the Treasury, Office of Debt Management.

Following a trend that began earlier this year, foreign private investors continued to increase their purchases of corporate stocks in July (see line 4d of the table and the middle-right panel of the figure "Private Securities Flows through July 2009"). Foreign private sales of agencies continued, but at a much slower pace (line 4b). Net purchases of Treasuries (line 4a) and corporate and municipal bonds (line 4c) remain volatile and were negative in July. Overall, foreign private investors recorded an outflow of $16 billion from their net sales of U.S. securities in July (line 4).

Financial outflows associated with U.S. investors' net purchases of foreign securities returned to their pre-crisis level in the second quarter of this year and remained steady in July (line 5 and the bottom panels of the figure "Private Securities Flows through July 2009").

More-stable conditions in interbank funding markets have continued to foster cross-border lending through private channels, replacing the funding provided by the Federal Reserve swap lines; central banks' outstanding drawings on the swap lines declined to $61 billion as of September 11. The official inflows associated with the unwinding of these swaps are shown in line 2. Outflows from net private bank lending continued to be large in July (line 3).

The BEA will release the balance of payments data for the second quarter on September 16; these data will be discussed in the Greenbook supplement.

Summary of U.S. International Transactions

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

	2007	2008	2008		2009			
			Q3	Q4	Q1	Q2	June	July
Official financial flows	**451.1**	**-54.6**	**-108.9**	**-286.5**	**313.5**	**319.6**	**119.1**	**81.7**
1. Change in foreign official assets in the U.S. (increase, +)	475.2	480.0	117.5	-17.9	70.7	128.2	56.1	43.4
a. G-10 countries + ECB	36.8	-8.4	8.9	-16.0	-7.4	15.5	20.5	6.6
b. OPEC	33.0	45.5	16.1	-3.4	-5.0	-0.3	-1.3	-0.4
c. All other countries	405.5	430.0	92.5	-11.4	83.1	113.0	36.9	37.2
2. Change in U.S. official assets (decrease, +)[1]	-24.1	-534.6	-226.4	-268.7	242.8	191.4	63.0	38.2
Private financial flows	**212.5**	**559.7**	**252.0**	**374.8**	**-266.4**	**n.a.**	**...**	**...**
Banks								
3. Change in net foreign positions of banking offices in the U.S.[2]	-86.1	-15.6	-106.7	338.9	-278.6	-191.5	-116.7	-99.0
Securities[3]								
4. Foreign net purchases (+) of U.S. securities	673.9	70.9	-24.1	52.7	3.7	18.3	57.0	-16.0
a. Treasury securities	67.1	197.0	79.1	81.6	55.4	17.4	47.6	-19.2
b. Agency bonds	-8.6	-185.0	-70.1	-21.5	-45.2	-13.8	-2.4	-2.8
c. Corporate and municipal bonds	384.7	2.5	-35.4	-3.8	-12.5	-21.0	-4.5	-17.5
d. Corporate stocks[4]	230.7	56.4	2.4	-3.6	6.0	35.7	16.3	23.5
5. U.S. net acquisitions (-) of foreign securities	-366.8	60.5	79.6	68.6	-33.1	-89.8	-35.5	-30.8
a. Bonds	-218.5	64.2	65.5	37.0	-31.8	-52.5	-20.6	-15.2
b. Stock purchases	-136.4	3.4	14.1	35.8	0.6	-37.3	-14.9	-15.6
c. Stock swaps[4]	-11.9	-7.1	0.0	-4.3	-1.9	0.0	0.0	0.0
Other flows[5]								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-54.1	-84.5	-24.0	n.a.	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	62.8	96.8	35.3	n.a.	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-4.1	-14.5	8.4	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	5.8	29.9	11.8	n.a.	...	...
10. Other (inflow, +)[6]	118.8	455.8	292.8	-113.0	10.0	n.a.	...	...
U.S. current account balance[5]	**-726.6**	**-706.1**	**-184.2**	**-154.9**	**-101.5**	**n.a.**	**...**	**...**
Capital account balance[7]	**-1.9**	**1.0**	**3.0**	**-0.7**	**-0.7**	**n.a.**	**...**	**...**
Statistical discrepancy[5]	**64.9**	**200.1**	**38.1**	**67.2**	**55.1**	**n.a.**	**...**	**...**

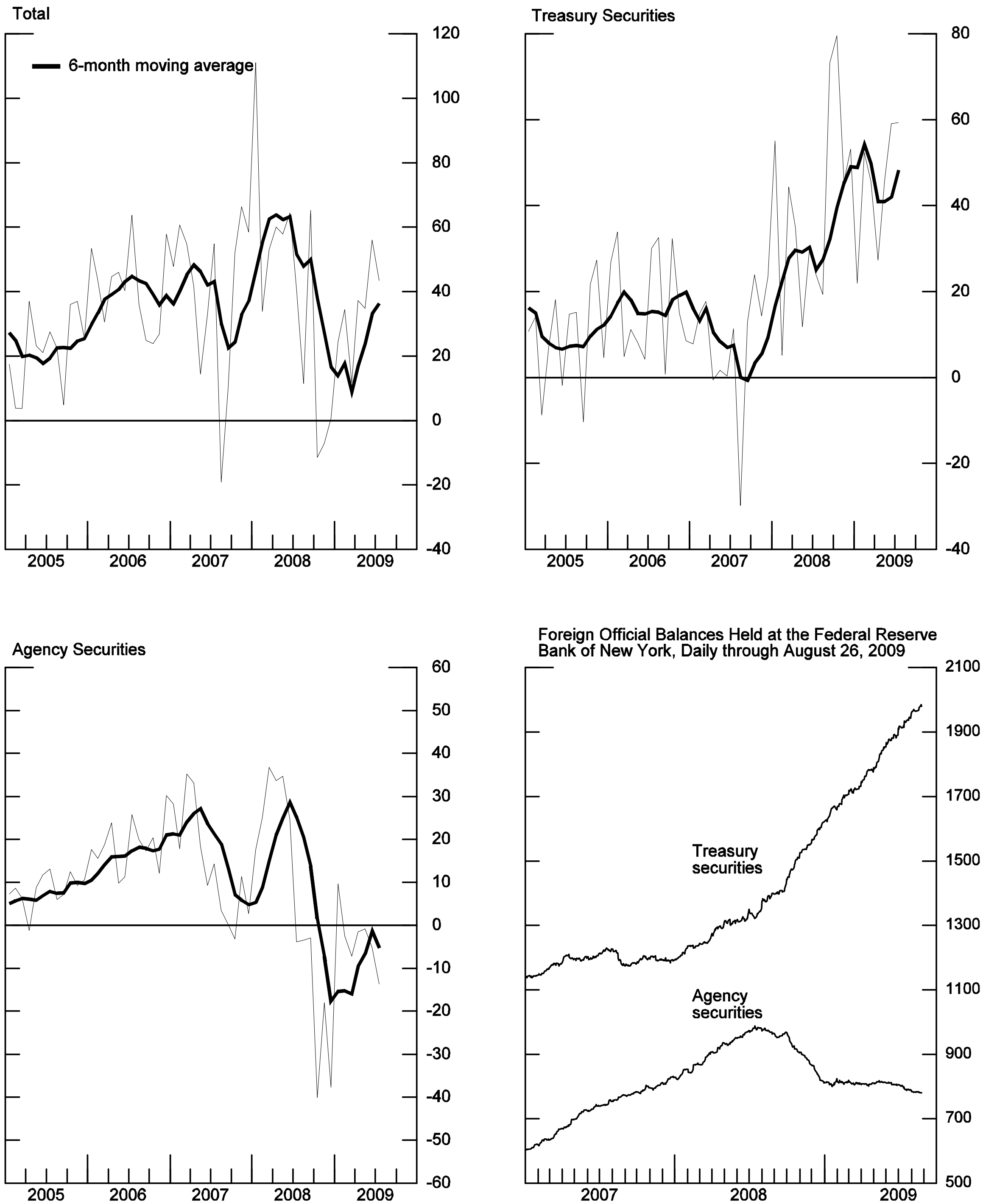
Note: Data in lines 1 through 5 differ in timing and coverage from the balance of payments data published by the Department of Commerce. Details may not sum to totals because of rounding.

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

G-10 Group of Ten (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, United Kingdom, United States).
ECB European Central Bank.
OPEC Organization of the Petroleum Exporting Countries.
n.a. Not available. ... Not applicable.
Source: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Treasury International Capital reports with staff adjustments.

Foreign Official Financial Inflows (+) through July 2009

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



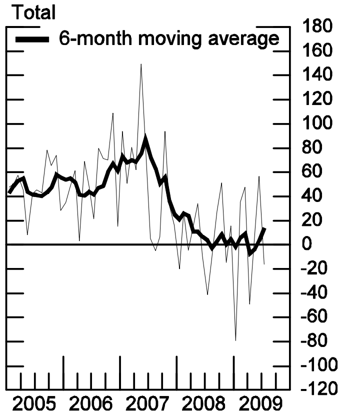
Source: U.S. Treasury International Capital reports with staff adjustments and the Federal Reserve Bank of New York.

Private Securities Flows through July 2009

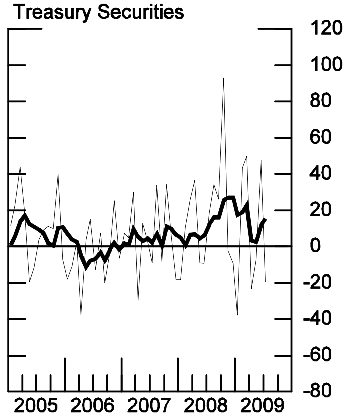
(Billions of dollars; monthly rate, not seasonally adjusted)

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

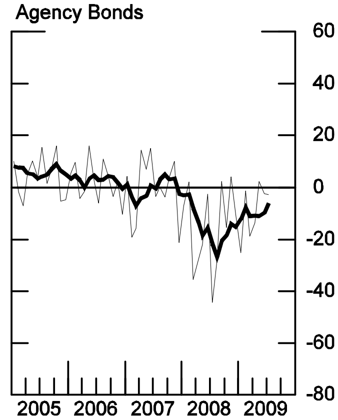
Total



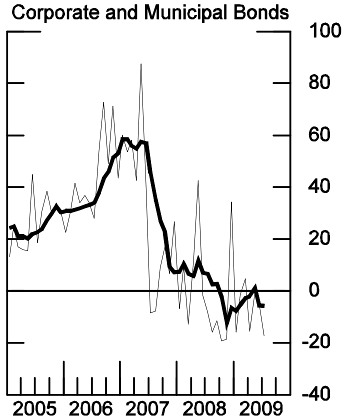
Treasury Securities



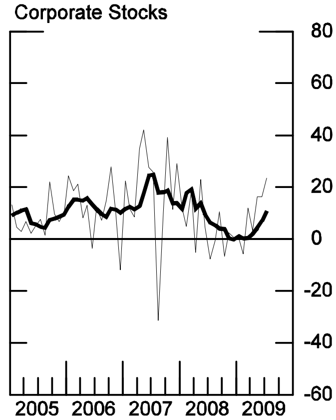
Agency Bonds



Corporate and Municipal Bonds

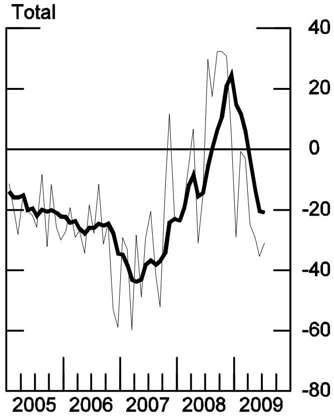


Corporate Stocks

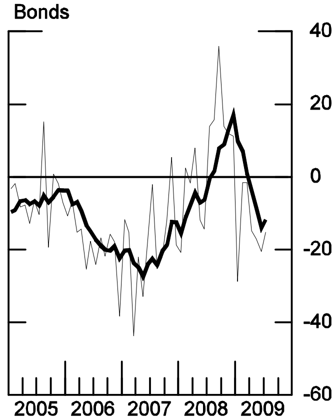


U.S. Net Acquisitions (-) of Foreign Securities

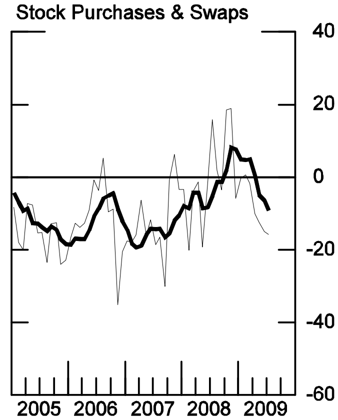
Total



Bonds



Stock Purchases & Swaps



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

Foreign Financial Markets

The trade-weighted index of the exchange value of the dollar against the major foreign currencies has changed little on net since the August Greenbook. The dollar appreciated ¾ percent against the Canadian dollar and 3 percent against sterling, but it depreciated 1½ percent against the euro, and 4¾ percent against the Japanese yen. The exchange value of the dollar against its other important trading partners has increased ¾ percent, as the dollar has appreciated about 2 percent against the Mexican peso. This appreciation came after the Bank of Mexico signaled that it would scale back its foreign exchange intervention.

Despite upbeat economic indicators, expected policy rates over the next two years and sovereign yields declined in major industrial economies. Market participants attributed part of these movements to major central banks emphasizing their commitments to keeping interest rates low. Although the European Central Bank left its main policy rate unchanged at 1 percent, as expected, it surprised some market participants by announcing that it will again charge banks that rate rather than a higher rate for twelve-month funds at its upcoming long-term refinancing operation. The Bank of England (BoE) surprised markets by expanding its asset purchase program by £50 billion at its August meeting; the minutes showed some support for an even larger expansion. On August 12, the BoE released its quarterly inflation report, which market participants interpreted as more pessimistic than expected on the outlook for recovery. In connection with the release, Governor King expressed concern that the remuneration of all reserves at the Bank Rate, introduced along with its quantitative easing program in March, created a disincentive for banks to turn those reserves into other assets. Some market participants expect the BoE to revert to a framework in which reserves exceeding a particular level are remunerated at a penalty.

Headline stock indexes in Europe increased 7 to 8 percent, which market participants partly attributed to an improvement in the economic outlook, but the Japanese stock market was down about 3 percent. CDS spreads on emerging market sovereign debt declined slightly, and equity prices in most major emerging market economies rose moderately. Conversely, China's A-shares index declined 13 percent, partly driven by media reports that authorities were taking actions to moderate the pace of loan growth in China, but H-shares (which consist of shares of some Chinese companies traded in Hong Kong and open to global investors) declined only 1¾ percent.

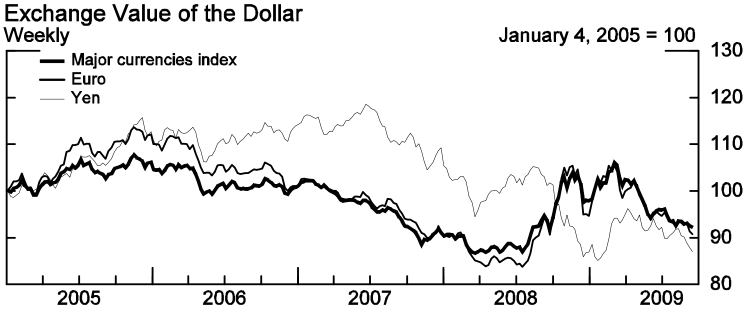
Exchange Value of the Dollar and Stock Market Indexes

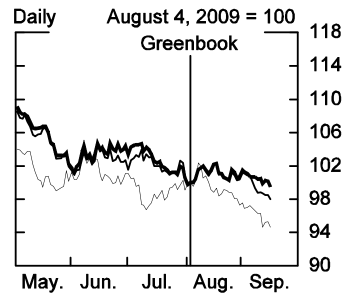
	Latest	Percent change since August Greenbook
*Exchange rates**		
Euro ($/euro)	1.4617	-1.5
Yen (¥/$)	90.950	-4.7
Sterling ($/£)	1.6436	3.0
Canadian dollar (C$/$)	1.0760	0.7
Nominal dollar indexes^*		
Broad index	103.1	0.4
Major Currencies index	74.5	0.1
OITP index	135.0	0.7
Stock market indexes		
DJ Euro Stoxx	266	7.5
TOPIX	933	-2.8
FTSE 100	5042	7.9
S&P 500	1053	4.7

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

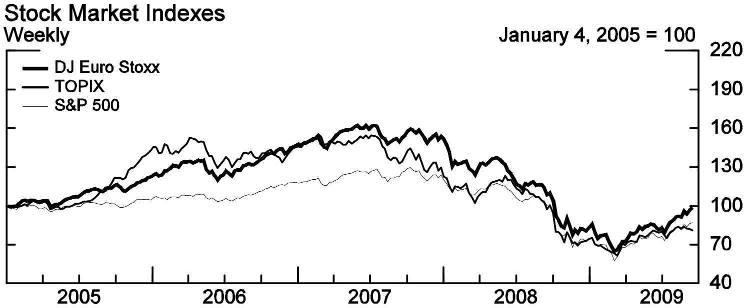
^ Indexed to 100 in Jan. 1997 for the Broad and OITP indexes and Mar. 1973 for the Major Currencies index.

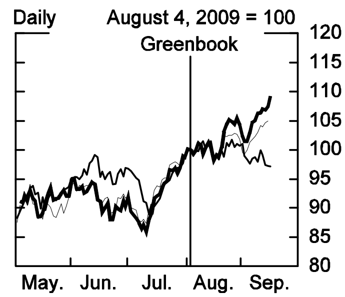
Exchange Value of the Dollar





Stock Market Indexes





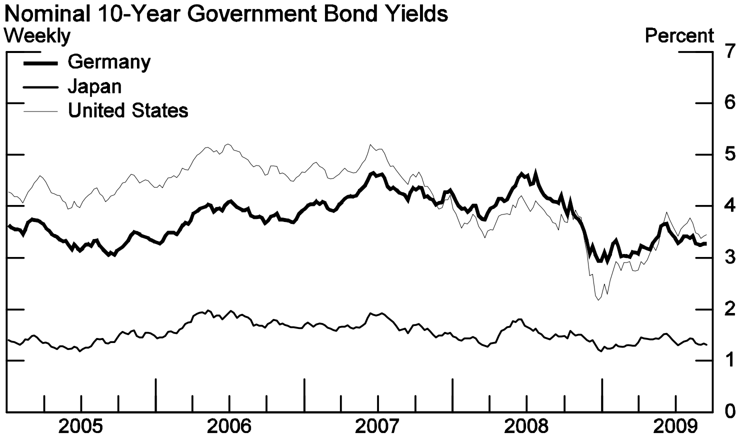
Industrial Countries: Nominal and Real Interest Rates

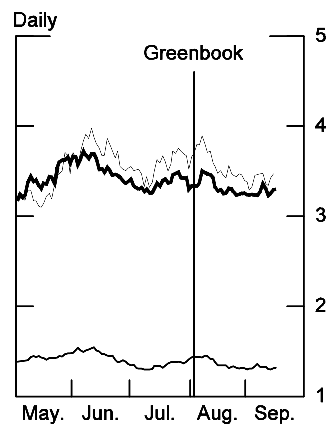
Percent

	3-month Libor		10-year nominal		10-year indexed	
	Latest	Change since Aug. Greenbook	Latest	Change since Aug. Greenbook	Latest	Change since Aug. Greenbook
Germany	0.72	-0.13	3.29	-0.05	1.02	-0.31
Japan	0.35	-0.06	1.32	-0.12	2.31	-0.18
United Kingdom	0.61	-0.27	3.62	-0.23	0.98	-0.32
Canada	0.50	-0.10	3.37	-0.17	...	...
United States	0.29	-0.18	3.47	-0.23	1.72	-0.26

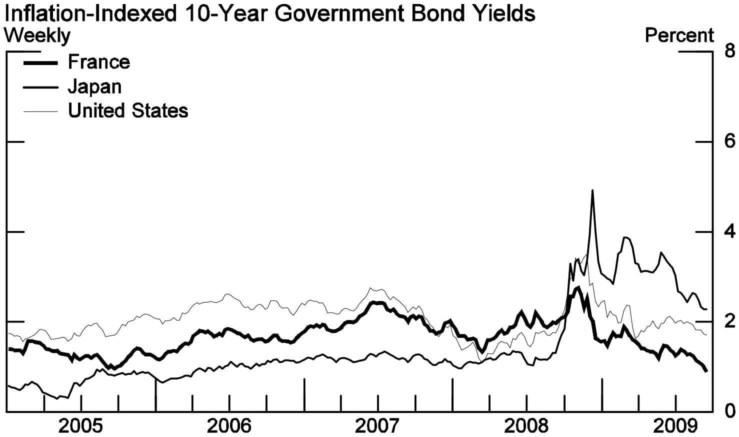
... Not applicable.
Libor: London interbank offered rate.

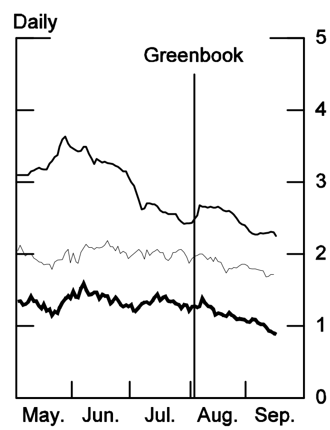
Nominal 10-Year Government Bond Yields





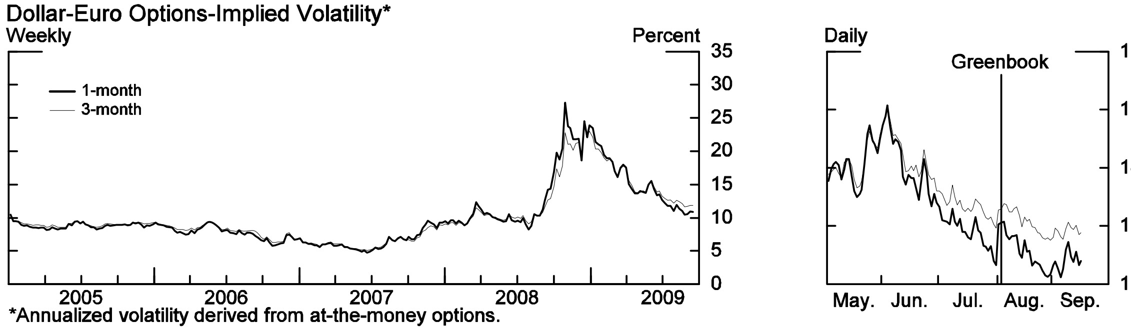
Inflation-Indexed 10-Year Government Bond Yields





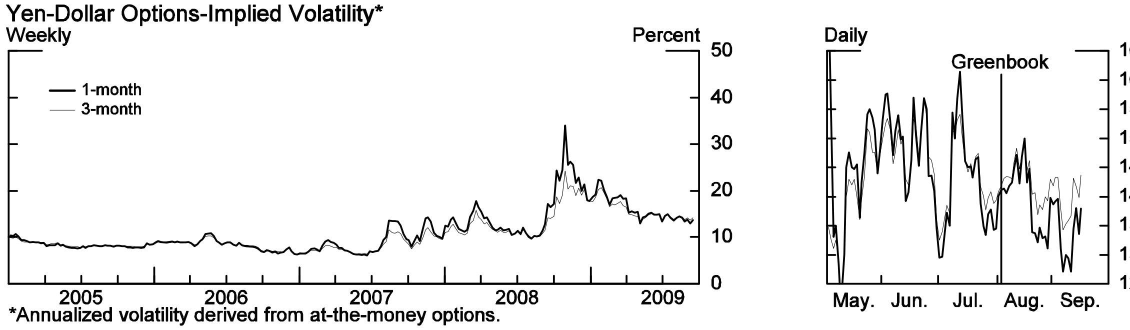
Measures of Market Volatility

Dollar-Euro Options-Implied Volatility*



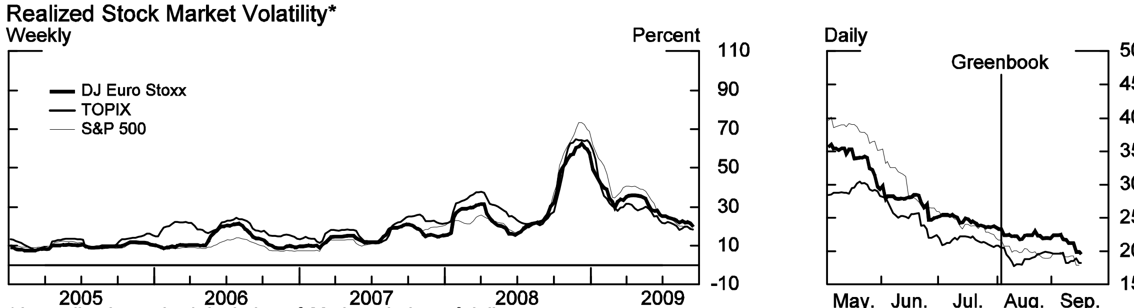
*Annualized volatility derived from at-the-money options.

Yen-Dollar Options-Implied Volatility*



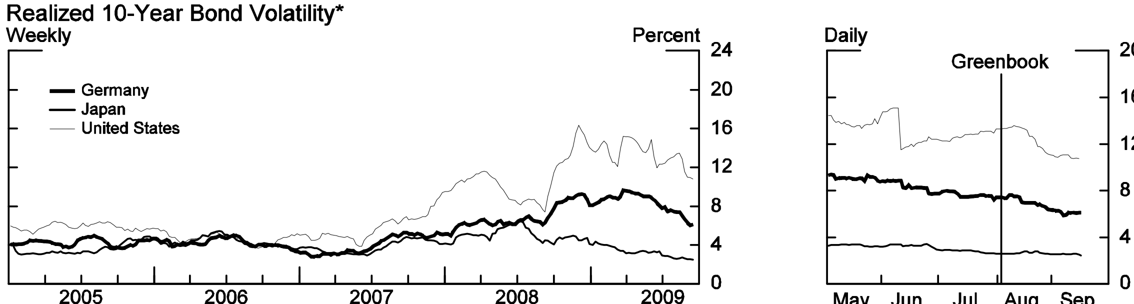
*Annualized volatility derived from at-the-money options.

Realized Stock Market Volatility*



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

Realized 10-Year Bond Volatility*



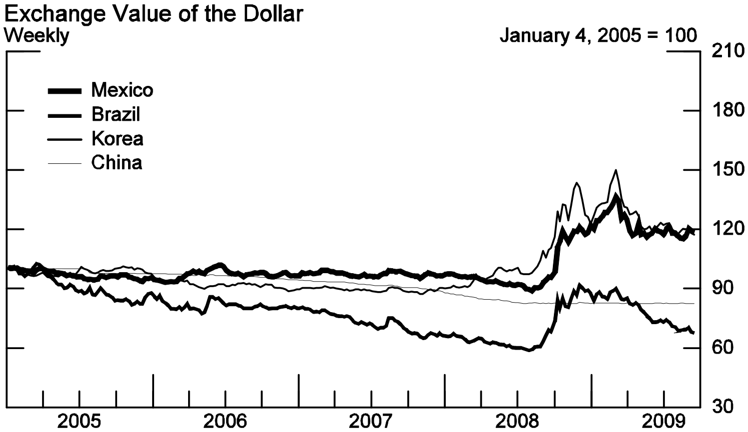
*Annualized standard deviation of 60-day window of daily returns.

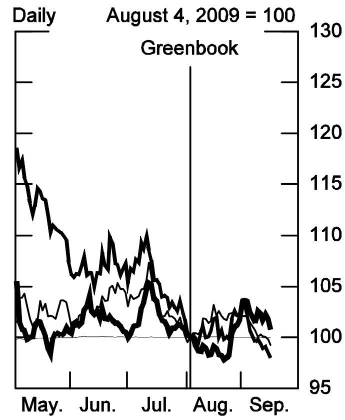
Emerging Markets: Exchange Rates and Stock Market Indexes

	Exchange value of the dollar		Stock market index	
	Latest	Percent change since Aug. Greenbook*	Latest	Percent change since Aug. Greenbook
Mexico	13.3365	1.8	29625	6.3
Brazil	1.8058	-1.5	59264	5.8
Venezuela	2.14	0.0	53795	16.5
China	6.8289	-0.0	3034	-12.6
Hong Kong	7.7501	0.0	20866	0.3
Korea	1217.4	-0.2	1653	5.6
Taiwan	32.57	-0.2	7346	5.6
Thailand	33.90	-0.2	703	9.7

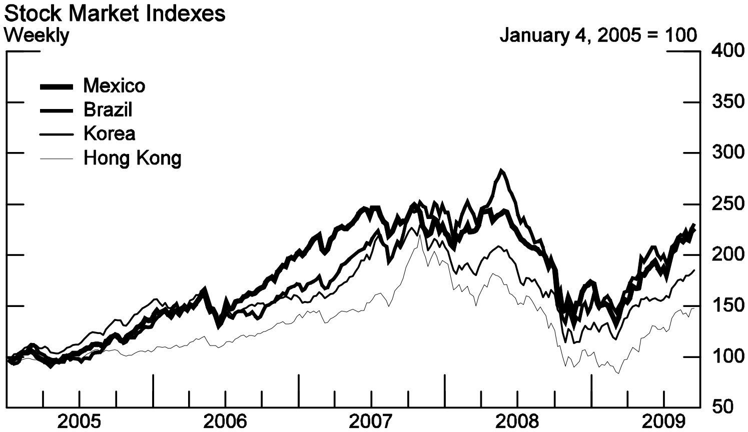
* Positive percent change denotes appreciation of U.S. dollar.

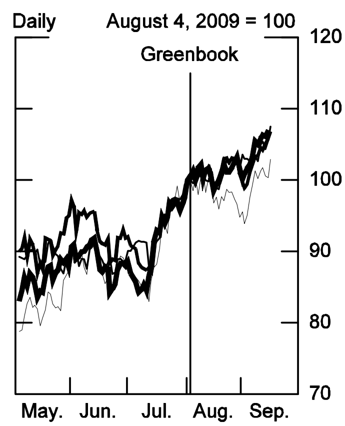
Exchange Value of the Dollar





Stock Market Indexes



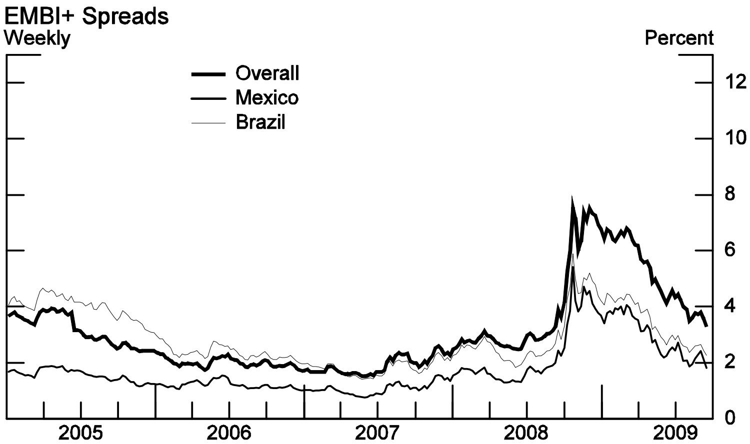


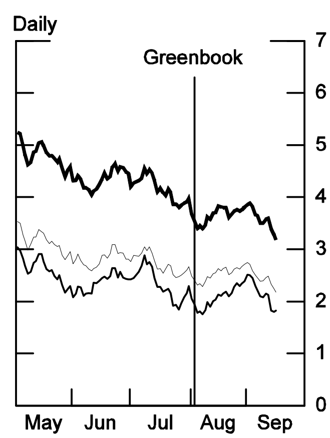
Emerging Markets: Short-Term Interest Rates and Dollar-Denominated Bond Spreads

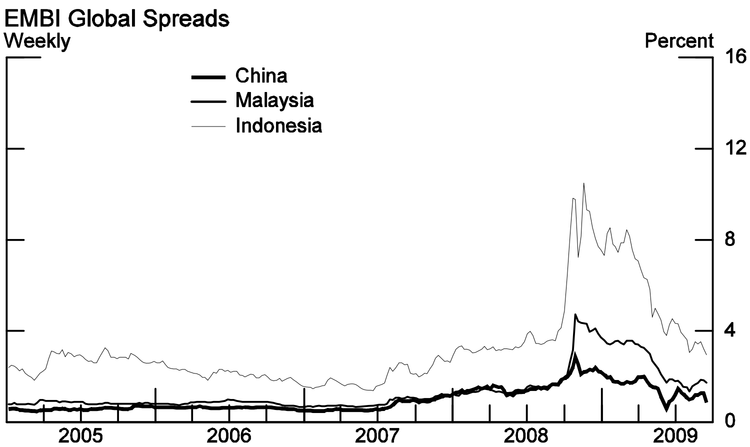
Percent

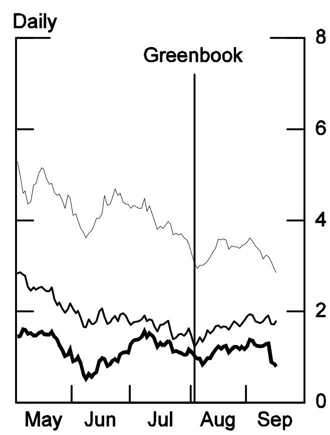
	Short-term interest rates*		Dollar-denominated bond spreads**	
	Latest	Change since Aug. Greenbook	Latest	Change since Aug. Greenbook
Mexico	4.49	0.01	1.79	-0.15
Brazil	9.00	0.40	2.24	-0.16
Argentina	12.44	-0.63	7.47	-1.35
China	...	...	0.86	-0.16
Korea	2.10	0.00	...	...
Taiwan	1.14	0.07	...	...
Singapore	0.31	0.00	...	...
Hong Kong	0.14	0.07	...	...

*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.









Developments in Advanced Foreign Economies

Gross domestic product (GDP) contracted more moderately in the advanced foreign economies in the second quarter, with positive growth resuming in several countries. In Japan, a trade-related rebound in industrial production led to a solid increase in output despite a sharp fall in private investment and further drag from inventories. Government incentives for automobile purchases contributed to a modest expansion of the German and French economies, but the euro-area economy as a whole contracted slightly owing to further declines in Spain and Italy; inventory drawdowns continued to weigh on activity throughout the euro area. Canada and the United Kingdom experienced further output drops amid weak exports and domestic demand, respectively.

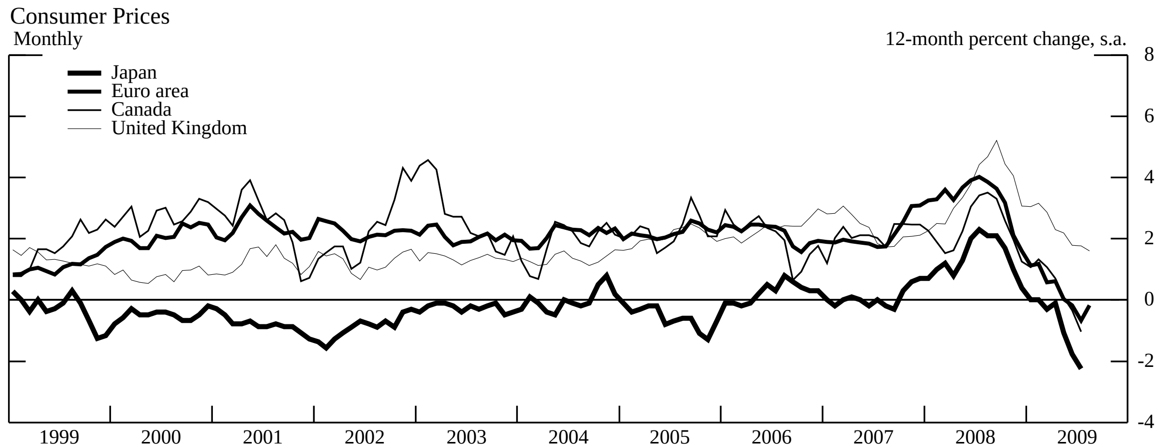
Purchasing managers indexes (PMIs) rose further in the intermeeting period, reaching levels consistent with stabilization or moderate expansion of output in the third quarter. Confidence indicators also continued to climb, though they remained well below their pre-recession levels, in part because households worried about rising unemployment rates. Twelve-month consumer price inflation stayed negative in all major economies, with the exception of the United Kingdom, where it was stable at just less than 2 percent. The European Central Bank (ECB), the Bank of Japan (BOJ), and the Bank of England (BOE) continued the implementation of their asset-purchase programs.

Japanese GDP rose a solid 2.3 percent (a.r.) in the second quarter following a four-quarter contraction during which GDP fell more than 7 percent. Total second-quarter domestic demand dropped 4.0 percent, as a sharp fall in private investment and heightened inventory drawdowns offset solid consumption growth and a surge in public investment. Private investment has fallen 25 percent from its 2007:Q1 peak. Net exports contributed 5.1 percentage points to growth, as exports increased nearly 30 percent and imports fell 19 percent.

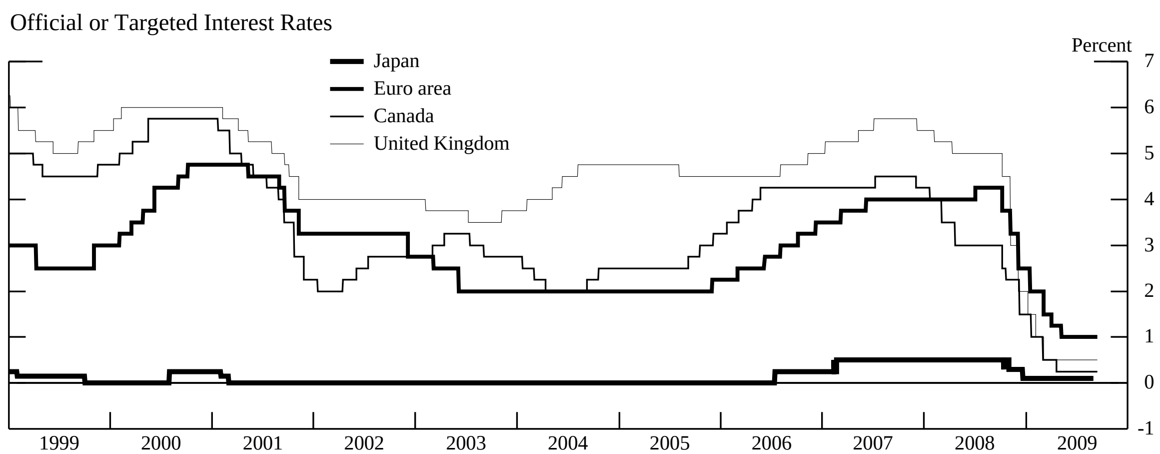
Japan’s recovery has been led by a rebound in industrial production. Although industrial production remains depressed compared to pre-recession levels, it has increased nearly 20 percent since reaching its nadir in February. Consistent with the rebound in production, both exports and imports have risen sharply in recent months, but also remain far below their peak levels.

Advanced Foreign Economies

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



Source: Haver Analytics.



Source: Bloomberg.

Japanese Real GDP

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

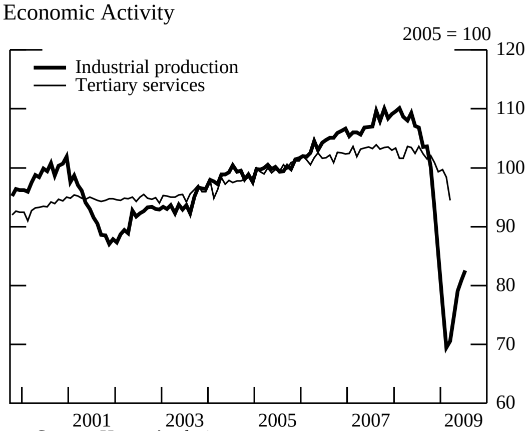
Component	2007[1]	2008[1]	2008		2009	
			Q3	Q4	Q1	Q2
GDP	1.9	-4.5	-5.1	-12.8	-12.4	2.3
Total domestic demand	.5	-1.8	-4.6	-1.9	-9.1	-4.0
Consumption	.3	-.2	.5	-2.9	-4.6	3.0
Private investment	-1.9	-8.8	-14.0	-20.7	-28.6	-20.7
Public investment	-4.3	-4.7	6.4	8.8	10.5	33.6
Government consumption	3.2	.1	-.7	5.5	.4	-1.3
Inventories[2]	.3	.1	-2.0	2.2	-1.2	-2.8
Exports	9.8	-12.9	-2.9	-44.2	-63.9	28.1
Imports	1.4	2.6	.7	10.3	-47.7	-18.9
Net exports[2]	1.3	-2.3	-.6	-9.5	-5.9	5.1

1. Q4/Q4.
2. Percentage point contribution to GDP growth.
Source: Haver Analytics.

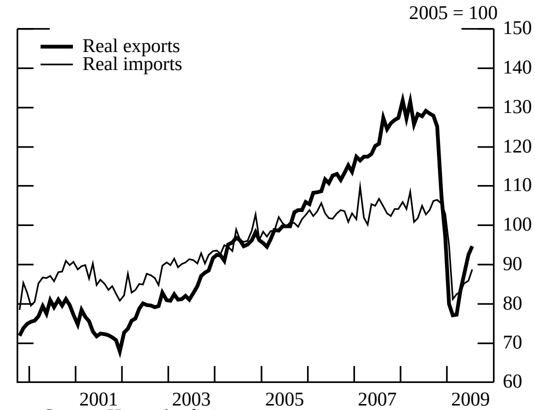
With the help of government stimulus, consumption growth has been generally solid since early spring, and consumer confidence has continued to rise. However, indicators for the housing sector and the labor market remain weak. July housing starts, at more than 25 percent below their level at the beginning of the year, were approaching a series low. The ratio of job openings to applicants (the number of officially posted job openings relative to the number of officially registered job seekers) reached a new record low of 0.42 in July. Employment fell 2.1 percent over the past 12 months, the fastest 12-month decline since 1955. The unemployment rate increased to 5.7 percent in July, a series record.

Japanese consumer prices fell 2.2 percent over the 12 months ending in July, in part as energy prices continued to put downward pressure on inflation. Excluding food and energy prices, 12-month consumer price inflation was negative 0.9 percent.

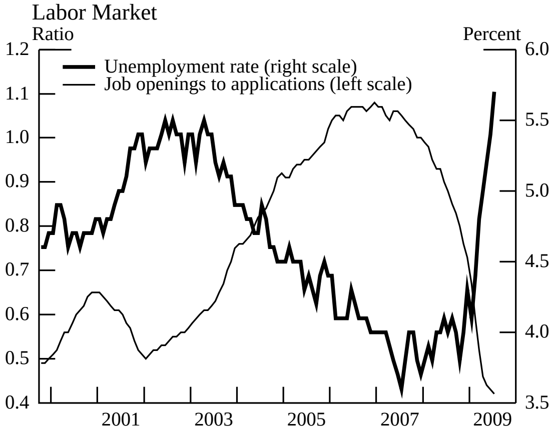
Japan



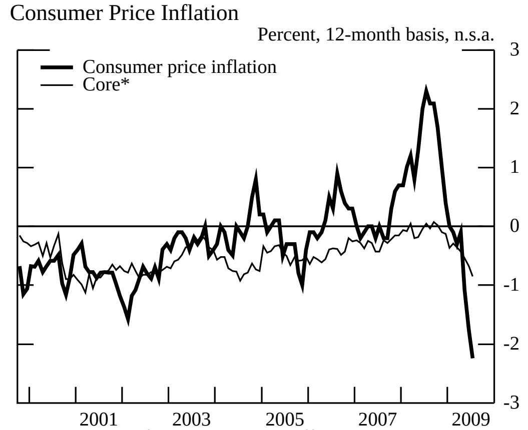
Source: Haver Analytics.



Source: Haver Analytics.



Source: Haver Analytics.



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

Economic Indicators

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

Indicator	2008 Q4	2009 Q1	2009 Q2	2009 May	2009 June	2009 July	2009 Aug.
Housing starts	-8.3	-10.6	-15.7	-2.7	-1.2	-.5	n.a.
Machinery orders[1]	-15.1	-9.9	-4.9	-3.0	9.7	-9.3	n.a.
Household expenditures	-1.4	-1.9	.9	-.1	.1	.5	n.a.
New car registrations	-12.6	-12.2	14.4	4.4	7.4	11.6	-.7
Business sentiment[2]	-24.0	-46.0	-45.0	...	...	...	...
Wholesale prices[3]	2.6	-1.8	-5.4	-5.5	-6.7	-8.5	-8.5

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

The BOJ left its target for the call rate unchanged at 0.1 percent over the intermeeting period and maintained its program to purchase commercial paper, corporate bonds, equities, and government bonds. In August elections, Prime Minister Taro Aso's Liberal Democratic Party received a stunning loss at the hands of the Democratic Party of Japan. Yukio Hatoyama was appointed prime minister in a special Diet session held on September 16.

In the second quarter, the contraction of output in the **euro area** moderated to 0.5 percent, with economic activity in Germany and France expanding for the first time since early 2008. Private consumption increased almost ¾ percent, led by a surge in automobile purchases, but investment continued to decline, although at a slower pace. As in the first quarter, inventory investment was a significant drag on euro-area GDP. The decline in imports was deeper than the drop in exports, resulting in a positive contribution of net exports to output growth.

Euro-Area Real GDP

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

Component	2007[1]	2008[1]	2008		2009	
			Q3	Q4	Q1	Q2
GDP	2.2	-1.7	-1.4	-7.0	-9.5	-.5
Total domestic demand	1.9	-.3	.9	-2.5	-7.7	-3.3
Consumption	1.2	-.7	-.1	-1.8	-2.0	.7
Investment	3.3	-5.5	-5.3	-13.0	-19.5	-5.0
Government consumption	1.9	2.5	2.0	2.3	2.6	1.8
Inventories[2]	.1	.7	1.5	.7	-2.9	-2.8
Exports	4.0	-6.7	-3.6	-25.7	-31.0	-4.3
Imports	3.5	-3.8	1.3	-17.5	-27.8	-10.9
Net exports[2]	.3	-1.4	-2.3	-4.7	-1.8	2.8
Memo: GDP of selected countries						
France	2.1	-1.6	-.9	-5.5	-5.3	1.4
Germany	1.6	-1.8	-1.3	-9.4	-13.4	1.3
Italy	.1	-2.9	-3.1	-8.1	-10.4	-2.0

1. Q4/Q4.
2. Percentage point contribution to GDP growth.
Source: Haver Analytics.

Data received during the intermeeting period point to a rebound in activity in the current quarter. In August, the business climate and economic sentiment indicators increased further, reaching their highest levels in a year, and the manufacturing and services PMIs rose sharply. The total economy output index currently stands in the expansion region. Industrial orders in June increased at the fastest pace since early 2008, suggesting that manufacturing production is likely to pick up in upcoming months. Industrial production and retail sales, on the other hand, edged down in July. New car registrations leveled off in July and August, suggesting that the impetus to growth from government incentives for automobile purchases may be waning.

Conditions in the labor market deteriorated. The euro-area unemployment rate rose to 9.5 percent in July, but the pace of increase has moderated to 0.1 percentage point per month since the beginning of the second quarter. The extent of deterioration in labor market conditions remains diverse across countries, with the unemployment rate close to 20 percent in Spain and below 5 percent in the Netherlands and Austria.

Twelve-month euro-area inflation was negative 0.2 percent in August, versus negative 0.7 percent in July. The downturn in energy prices has been an important factor leading to a fall in the consumer price index: Excluding energy and food, August inflation was 1.2 percent.

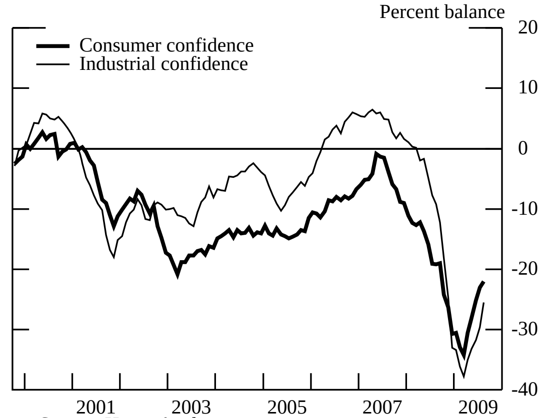
The Governing Council of the ECB kept its benchmark rate unchanged at 1 percent at its September 3 meeting. The ECB also announced that it will not impose any penalty spread over its main refinancing rate at the next one-year liquidity operation, scheduled for September 30. In August, the ECB continued to purchase covered bonds in the amount of about €5 billion per month as part of its €60 billion purchase program.

Euro Area

Nominal Exports and Imports

Source: Haver Analytics.

Economic Sentiment

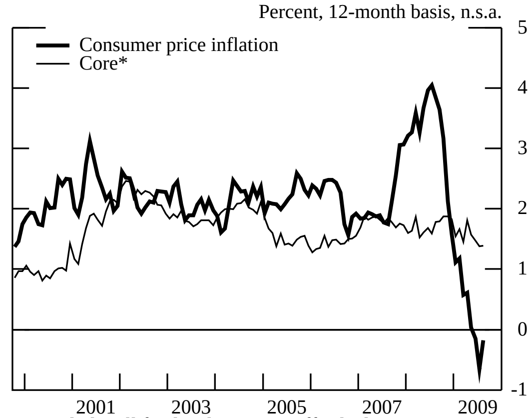


Source: Haver Analytics.

Unemployment Rate

Source: Haver Analytics.

Consumer Price Inflation



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

Economic Indicators

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

Indicator	2008	2009		2009			
	Q4	Q1	Q2	May	June	July	Aug.
Industrial production[1]	-6.2	-7.5	-2.7	.7	-.2	-.3	n.a.
Retail sales volume[2]	-.8	-.8	-.3	-.5	.0	-.2	n.a.
New car registrations	-7.0	.9	12.2	5.2	2.2	-2.1	1.0
Employment	-.3	-.7	-.5	...	...	...	...
Producer prices[3]	2.7	-2.0	-5.2	-5.4	-5.9	-7.8	n.a.
M3[3]	9.2	6.5	4.7	4.3	4.1	3.5	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 up to a still-sizable decline of 2.6 percent. Private consumption and especially investment contracted further, although both components fell at a somewhat slower pace than in the previous quarter. The speed of inventory decumulation moderated for the first time since the third quarter of 2007, with the inventory swing contributing a percentage point to GDP growth. Net exports continued to add to overall demand growth, although both exports and imports posted sizable declines.

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

Component	2007[1]	2008[1]	2008		2009	
			Q3	Q4	Q1	Q2
GDP	2.4	-1.8	-2.9	-7.0	-9.3	-2.6
Total domestic demand	3.1	-2.9	-3.1	-8.7	-9.5	-3.4
Consumption	2.2	-.5	-1.3	-4.3	-5.3	-3.4
Investment	4.9	-7.8	-10.7	-4.7	-26.9	-17.0
Government consumption	1.2	3.5	1.9	4.3	.9	3.1
Inventories[2]	.6	-2.0	-.8	-6.3	-1.5	1.0
Exports	3.4	-3.8	-1.7	-15.6	-25.0	-10.2
Imports	5.6	-7.7	-2.8	-20.2	-24.1	-12.2
Net exports[2]	-.8	1.4	.4	2.1	.4	.9

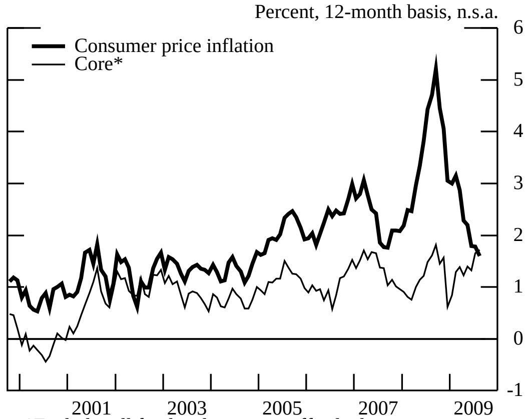
1. Q4/Q4.
2. Percentage point contribution to GDP growth.
Source: Haver Analytics.

Data on activity received since the last Greenbook point a return to growth in the third quarter. Industrial production rose 0.6 percent in both June and July after falling more than 12 percent from to its pre-recession level. Retail sales were robust in June and July, and the overall index of services posted its first monthly increase in June since September 2008. The PMI for services hit 54 in August, consistent with an acceleration in the pace of services growth late in the quarter, although the PMI for manufacturing, at about 50, was consistent only with stabilization.

Despite signs of recovery in several sectors of the U.K. economy, many indicators remain weak, particularly those related to the labor market, investment, and lending. The Labor Force Survey and the claims-based measures of the unemployment rate edged up to 7.9 percent and 5.0 percent in June and August, respectively. New construction orders fell back to near their recent trough in June despite a recovery in house prices and

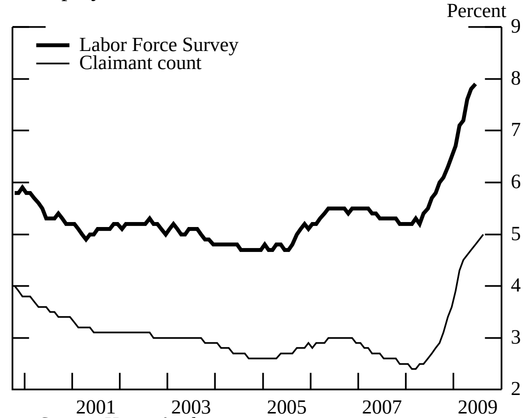
United Kingdom

Consumer Price Inflation



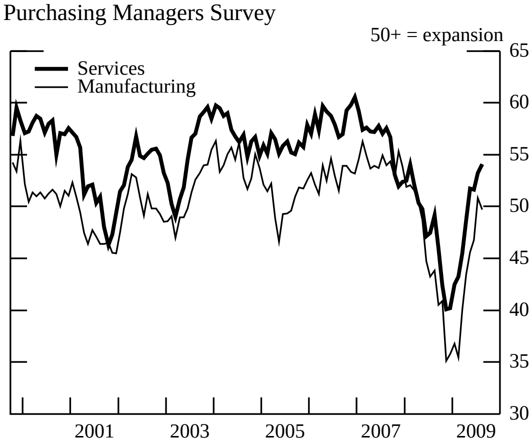
*Excludes all food and energy; staff calculations.
Source: Haver Analytics.

Unemployment Rates



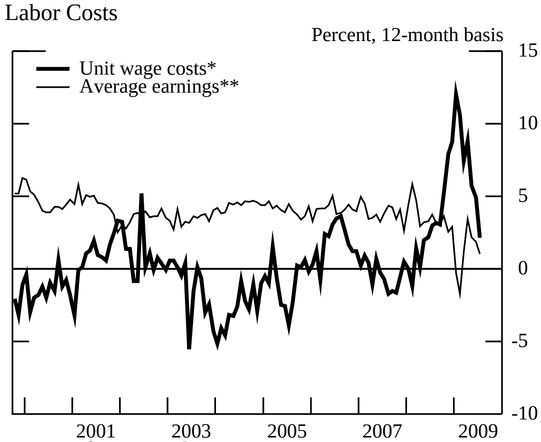
Source: Haver Analytics.

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	2009		2009			
	Q4	Q1	Q2	May	June	July	Aug.
Producer input prices[1]	9.0	.7	-8.9	-8.8	-12.0	-12.2	-7.5
Industrial production	-4.5	-5.1	-.5	-.6	.6	.6	n.a.
Business confidence[2]	-38.3	-45.0	-22.0	-17.0	-17.0	-14.0	-5.0
Consumer confidence[2]	-28.1	-31.0	-19.9	-20.8	-18.1	-16.0	-16.2
Trade balance[3]	-9.6	-11.8	-12.3	-3.7	-3.9	-4.0	n.a.
Current account[3]	-13.7	-12.2	--	...	...	...	...

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

property transactions. According to the BOE Agents' Summary of Business Conditions, investment intentions in both the services and manufacturing sectors remained depressed in July, and 93 percent of industrial firms surveyed by the Confederation of British Industries in the third quarter judged that installed capacity was sufficient to meet demand over the coming year. Bank lending to private nonfinancial corporations fell 3.5 percent in the 12 months to July.

Pressures on production costs continued to be low in the intermeeting period. The 12-month change in average weekly earnings excluding bonuses slipped to 1.7 percent in July, its lowest reading since the series records began in 1996. Producer input prices moved up in August, reflecting higher oil prices, but remained nearly 8 percent below their level a year earlier. Headline inflation, at 1.6 percent in August, has fallen at a slower rate than expected by most market analysts in recent months due to higher-than-predicted pressure from import prices.

As of September 10, 2009, the Bank of England had acquired £145.5 billion in assets through its Asset Purchase Facility, the vast majority of which (£143.4 billion) were gilts.

In **Canada**, real GDP fell 3.4 percent in the second quarter (a.r.) following a 6.1 percent decline in the previous quarter. The contraction in output wholly reflected a falloff in net exports, as exports fell faster than imports. Total domestic demand was unchanged as consumption rose solidly, investment fell a smaller-than-expected 5.6 percent, and the drag from inventory reductions lessened.

In encouraging news for the third quarter, monthly GDP turned positive in June, increasing 0.1 percent. Housing starts dipped in July but are up more than 25 percent from their April low. Manufacturing orders rose 21 percent in June, a pace more than double the previous record increase. Manufacturing shipments, however, rose only slightly.

Canadian exports and imports increased markedly in July. Real exports rose 4.3 percent as shipments of capital goods rose at near-record rates and automotive product exports surged 12.5 percent. Real imports jumped 8.6 percent, also on the back of capital goods and automotive products. Imports of consumer goods posted solid gains.

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

Component	2007[1]	2008[1]	2008		2009	
			Q3	Q4	Q1	Q2
GDP	2.8	-1.0	.4	-3.7	-6.1	-3.4
Total domestic demand	6.6	-1.1	.6	-6.1	-10.9	-.0
Consumption	5.4	.2	.6	-3.1	-1.2	1.8
Investment	4.5	-3.6	.6	-14.8	-22.8	-5.6
Government consumption	3.7	3.1	-.0	2.5	2.1	3.2
Inventories[2]	1.7	-1.1	.1	-1.2	-5.1	-.4
Exports	-1.5	-7.3	-4.1	-17.7	-30.4	-19.3
Imports	8.5	-7.7	-3.4	-23.4	-38.9	-8.5
Net exports[2]	-4.2	.7	-.4	2.2	4.1	-3.4

1. Q4/Q4.
2. Percentage point contribution to GDP growth.
Source: Haver Analytics.

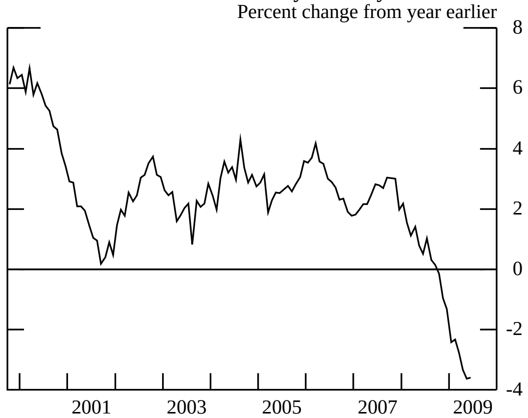
The August employment report was mixed. Employment rose 27,000; however, the increase came solely from part-time workers. The number of full-time workers fell slightly. Hours worked declined 0.7 percent in August, and the unemployment rate climbed to 8.7 percent.

Consumer prices fell 1 percent in the 12 months to July. The decline was due almost entirely to energy prices, as inflation excluding food and energy was 1 percent, down slightly but within its range over the past several years.

The Bank of Canada kept its policy rate at 0.25 percent and reiterated its intention, conditional on the outlook for inflation, to keep rates at this level until the end of the second quarter of 2010.

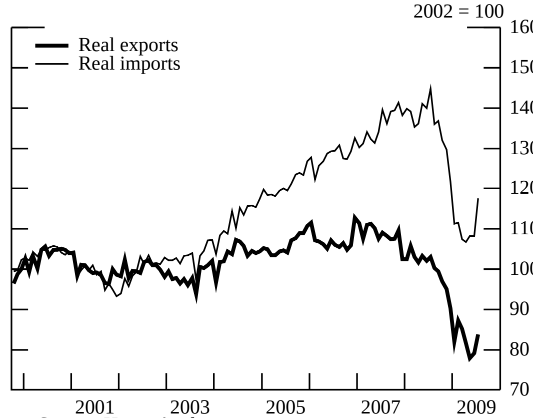
Canada

Real Gross Domestic Product by Industry



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

Real Trade

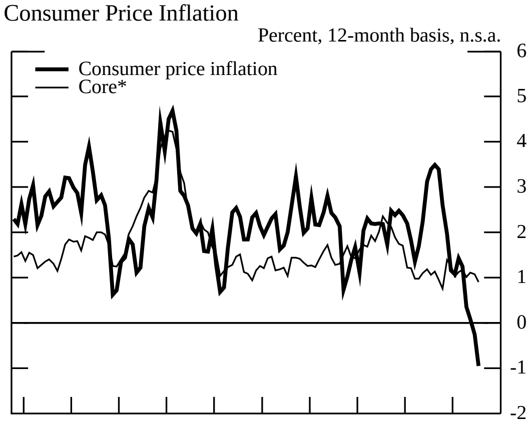


Source: Haver Analytics.

Unemployment Rate

Source: Haver Analytics.

Consumer Price Inflation



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

Economic Indicators

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

Indicator	2008 Q4	2009 Q1	2009 Q2	2009 May	2009 June	2009 July	2009 Aug.
Industrial production	-3.2	-5.0	-4.1	-1.8	-.6	n.a.	n.a.
New manufacturing orders	-9.3	-12.2	-2.0	-12.0	16.7	-4.0	n.a.
Retail sales	-1.7	-1.1	.5	.6	.4	n.a.	n.a.
Employment	.1	-1.4	-.4	-.2	-.0	-.3	.2
Wholesale sales	-7.6	-7.3	.1	.1	1.0	n.a.	n.a.
Ivey PMI[1]	43.8	41.5	53.4	48.4	58.2	51.8	55.7

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

Economic Situation in Other Countries

Data confirmed that economic activity in most emerging market economies rebounded strongly in the second quarter, particularly in Asia, although in Mexico, real GDP continued to contract. Indicators of activity in the third quarter point to a continued expansion of output. Purchasing managers indexes (PMIs) have moved into the expansionary range in many countries, indicating a rebound in manufacturing. Trade has been picking up, buoyed in part by Chinese demand, but demand from the advanced economies still appears weak. Inflation pressures remain muted, with inflation moving lower in Latin America and remaining subdued in emerging Asia.

In **China**, indicators point to a continued rapid expansion of the economy. The official PMI moved up to 54 in August, and industrial production increased 1.7 percent. Auto production and sales have been very strong, supported in part by a sales tax rebate on purchases of small cars. Real retail sales have edged up and were 18 percent higher in August than a year earlier. Robust domestic demand has contributed to rising imports, although they remain about 17 percent below their year-earlier level. Exports have also moved up, albeit to a lesser extent than imports, resulting in a somewhat narrower trade surplus. The recently released current account balance was $130 billion over the first half of the year, about $60 billion less than over the same period of 2008.

Chinese authorities continue to state that fiscal and monetary policy will remain accommodative until a sustainable recovery is assured, but they have begun to tighten policies at the margin. Authorities have taken some measures to slow loan growth that appear to have been effective, but the pace of lending observed in July and August should still be supportive of strong economic expansion. Despite the rapid loan growth this year, there are few indications at this point that the economy is overheating, and inflation pressures remain contained, with consumer prices in August about 1.2 percent below their year-earlier level.

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

Indicator	2007	2008	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
Real GDP[1]	12.3	6.9	6.5	18.5	. . .	. . .	. . .
Industrial production	19.5	1.8	7.8	4.4	6.2	-.7	1.7
Consumer prices[2]	6.5	1.2	-.6	-1.5	-1.7	-1.8	-1.2
Merch. trade balance[3]	262.7	298.1	324.9	144.1	65.5	71.2	134.1

1. Gross domestic product. Annual rate. Quarterly data estimated by staff from reported 4-quarter growth rates. Annual data are Q4/Q4.
2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.
3. Billions of U.S. dollars, annual rate. Imports are valued at cost, insurance, and freight.
n.a. Not available. ... Not applicable.
Source: CEIC.

India's economy grew a robust 7.3 percent at an annual rate in the second quarter. Growth was underpinned by a strong revival in the manufacturing sector as well as spending on public works. The manufacturing PMI remained steady at 55 in July before falling slightly to 53 in August, but it remains in the expansionary range. Exports rose for a fourth consecutive month in July; they have now risen 34 percent since March. The sharper rise in imports observed in recent months moderated in July. Twelve-month consumer price inflation spiked in July, as drought conditions in many provinces contributed to rising food prices. Wholesale prices have also been rising on a monthly basis, but remain below their year-earlier levels.

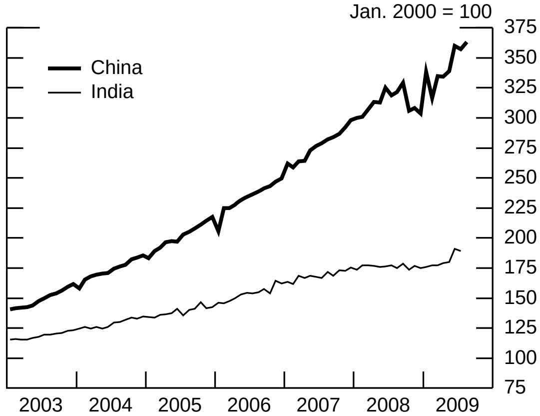
Indian Economic Indicators
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2007	2008	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
Real GDP[1]	9.3	5.8	6.3	7.3	. . .	. . .	. . .
Industrial production	9.9	4.4	1.0	3.6	6.1	-1.0	n.a.
Consumer prices[2]	5.5	9.7	9.4	8.2	8.3	10.9	n.a.
Wholesale prices[2]	3.8	6.2	3.2	.5	-1.0	-1.3	-.9
Merch. trade balance[3]	-79.2	-121.6	-57.7	-60.2	-72.6	-76.4	n.a.
Current account[4]	-11.3	-36.1	19.0	n.a.	. . .	. . .	. . .

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.
2. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.
3. Billions of U.S. dollars, annual rate.
4. Billions of U.S. dollars, not seasonally adjusted, annual rate.
n.a. Not available. ... Not applicable.
Source: CEIC.

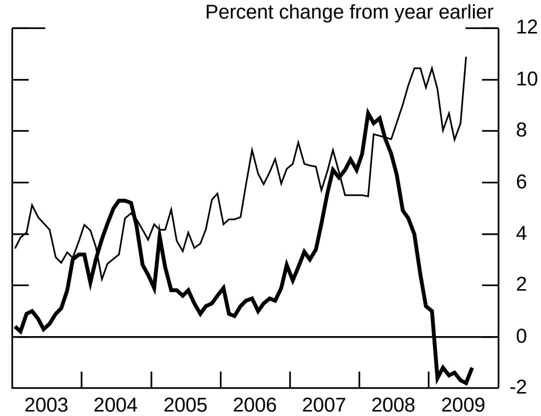
China and India

Industrial Production



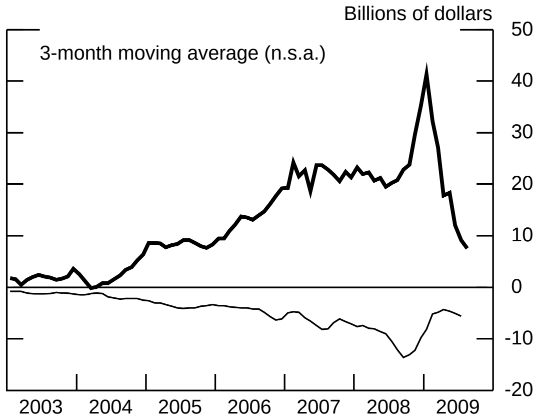
Source: CEIC.

Consumer Prices



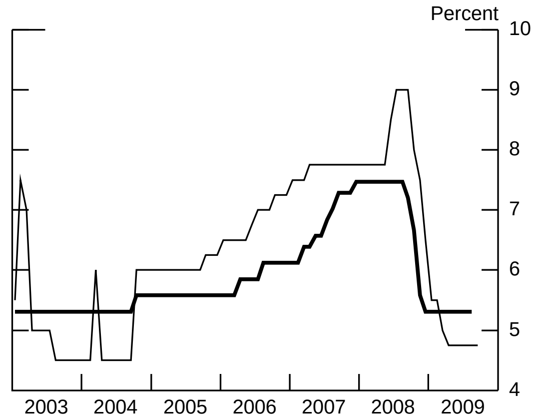
Source: China Statistic and Consultancy Service Center; CEIC.

Merchandise Trade Balances



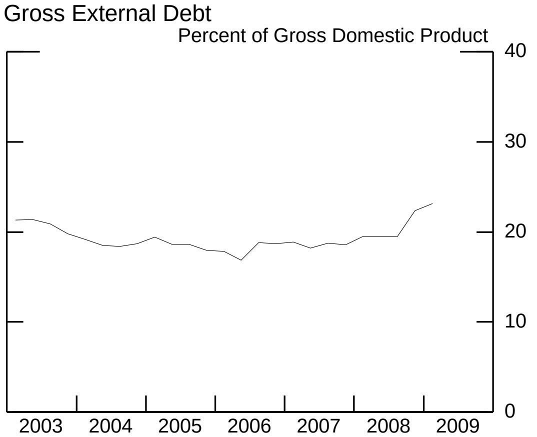
Source: China Statistic and Consultancy Service Center; CEIC.

Benchmark Interest Rates



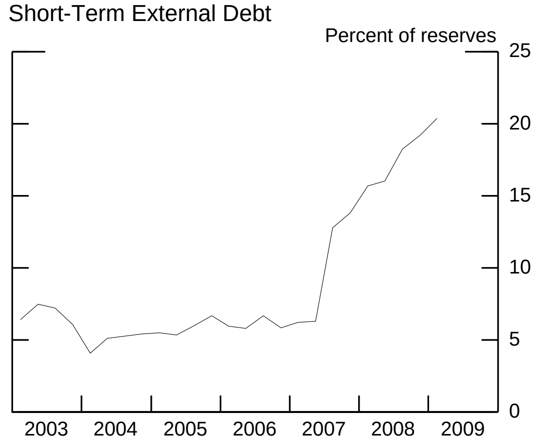
Source: Bloomberg; CEIC.

Gross External Debt



Source: Bank for International Settlements; Haver Analytics.

Short-Term External Debt



Source: Bank for International Settlements; CEIC.

Economic recovery in the **newly industrialized economies (NIEs)**[1] was robust in the second quarter, with real GDP in all of the NIEs growing at a double-digit pace. This economic momentum appears to have been maintained in the third quarter, with indications of rising domestic demand, strengthening external demand (primarily from China), and, possibly, easing inventory decumulation. Korean industrial production rose 2 percent in July, led by autos, semiconductors, and electronic components. In August, Singapore's manufacturing PMI rose almost 3 points to more than 54, marking the strongest monthly gain since February 2000 and the highest level of the index since November 2006. Similarly, Taiwan's manufacturing PMI rose to 55 in July, including a jump in the new orders component to nearly 58. In addition, high-tech production in the region also continued to bounce back, recording gains in July of 2½ percent in Taiwan and 19½ percent in Singapore. Some leading indicators for the sector, such as the book-to-bill ratio (the ratio of orders received to the amount of goods shipped and billed), have now exceeded pre-crisis levels.

In Taiwan, additional fiscal stimulus measures were recently passed in response to the damage caused by Typhoon Morakot. The perceived poor response to the typhoon led the Taiwanese cabinet to resign en masse; Premier Liu Chao-shiuan was replaced by KMT Secretary General Wu Den-yih. We do not believe the cabinet reshuffling will have a significant economic impact.

Twelve-month consumer price inflation rose to 2.2 percent in August in Korea, led by recent increases in food and oil prices. The rest of the region experienced price deflation on a 12-month basis, generally reflecting previous declines in commodity prices; however, the most recent monthly inflation rates were positive.

[1] The NIEs are Hong Kong, South Korea, Singapore, and Taiwan.

Economic Indicators for Newly Industrialized Economies: Growth

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

	2007	2008	2009				
			Q1	Q2	May	June	July
Real GDP[1]							
Hong Kong	7.1	-2.7	-16.1	13.9	. . .	. . .	. . .
Korea	5.7	-3.4	.5	11.0	. . .	. . .	. . .
Singapore	5.8	-4.0	-12.2	20.7	. . .	. . .	. . .
Taiwan	6.5	-8.5	-3.7	11.8	. . .	. . .	. . .
Industrial production							
Hong Kong	-1.5	-6.6	-2.8	n.a.	. . .	. . .	. . .
Korea	7.0	3.0	-2.7	11.4	1.4	5.7	2.0
Singapore	5.9	-4.2	-7.4	13.9	-2.6	-9.6	23.4
Taiwan	7.8	-1.8	-8.0	17.3	1.6	5.0	1.2

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

Economic Indicators for Newly Industrialized Economies: Merchandise Trade Balance

(Billions of U.S. dollars; seasonally adjusted annual rate)

	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Hong Kong	-23.5	-25.9	-19.9	-15.5	-19.2	-39.9	n.a.
Korea	28.2	6.0	41.0	68.0	59.0	61.5	n.a.
Singapore	36.2	18.4	11.6	26.8	23.9	34.1	n.a.
Taiwan	16.8	4.4	26.5	21.7	18.2	23.2	27.9

n.a. Not available.
Source: CEIC.

Economic Indicators for Newly Industrialized Economies: Consumer Price Inflation

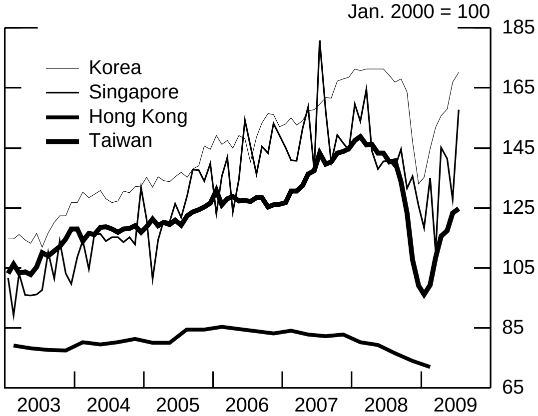
(Non-seasonally adjusted percent change from year earlier except as noted)

	2007[1]	2008[1]	2009				
			Q1	Q2	June	July	Aug.
Hong Kong	3.8	2.1	1.7	-.1	-.9	-1.5	n.a.
Korea	3.6	4.1	3.9	2.8	2.0	1.6	2.2
Singapore	4.4	4.3	2.1	-.5	-.5	-.5	n.a.
Taiwan	3.3	1.3	.0	-.8	-2.0	-2.3	-.8

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

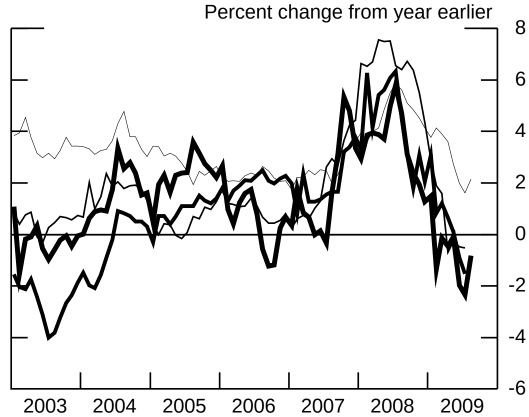
Newly Industrialized Economies

Industrial Production



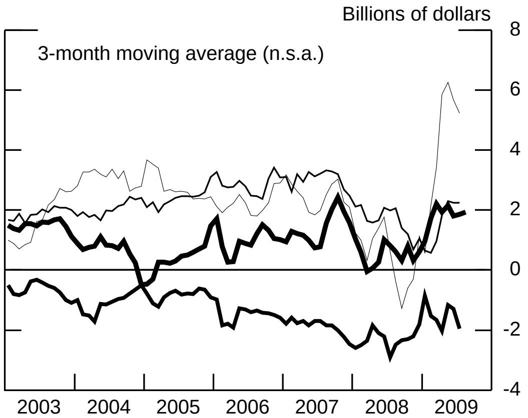
Source: CEIC.

Consumer Prices



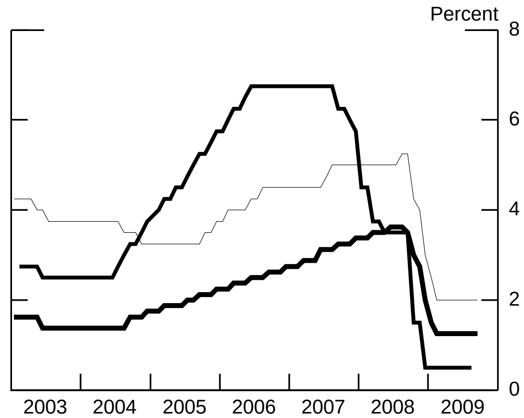
Source: CEIC; Bank of Korea; Reuters.

Merchandise Trade Balances



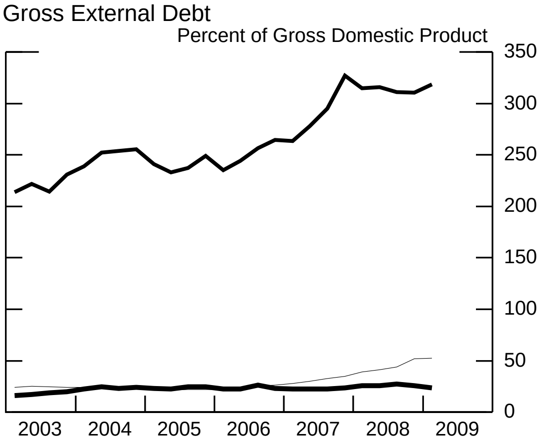
Source: CEIC.

Benchmark Interest Rates



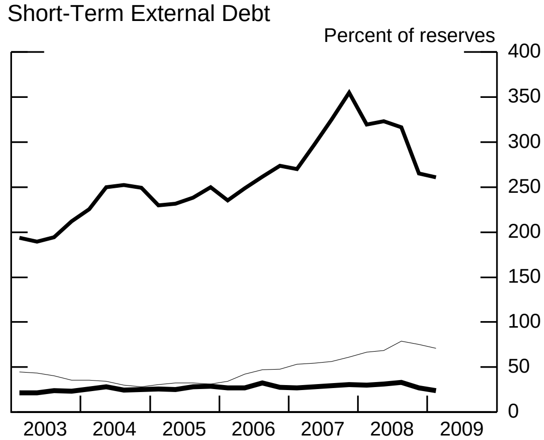
Source: Bloomberg.

Gross External Debt



Source: Bank for International Settlements.

Short-Term External Debt



Source: Bank for International Settlements.

Since the last Greenbook, second-quarter GDP figures have come in for the **Association of Southeast Asian Nations (ASEAN-4)**.[2] In Malaysia, the economy grew 14.5 percent at an annual rate; in the Philippines, 9.8 percent; in Thailand, 9.6 percent; and in Indonesia, 4.5 percent. With the exception of Indonesia, growth was supported by a sharp rebound in industrial production, and data for Malaysia and Thailand suggest a continued expansion in July. Exports have also rebounded in all four countries, particularly in the Philippines and Indonesia. Consumer price inflation in the region appears to be stabilizing on a month-on-month basis, although prices remain below year-earlier levels in Malaysia and Thailand. The central banks of Malaysia, Thailand, and the Philippines kept their policy rates steady in August, while Bank Indonesia cut its rate from 6¾ percent to 6½ percent.

ASEAN-4[1] Economic Indicators: Growth
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2007	2008	2009				
			Q1	Q2	May	June	July
Real GDP[2]							
Indonesia	5.8	5.3	4.4	4.5	. . .	. . .	. . .
Malaysia	7.2	.1	-17.6	14.5	. . .	. . .	. . .
Philippines	6.4	2.9	-8.3	9.8	. . .	. . .	. . .
Thailand	5.9	-4.2	-7.2	9.6	. . .	. . .	. . .
Industrial production[3]							
Indonesia[4]	5.6	3.0	1.9	-.7	3.1	-2.9	-1.8
Malaysia	2.1	.5	-4.5	2.0	-.6	.2	5.5
Philippines	-2.7	.3	-17.0	13.5	5.8	1.5	n.a.
Thailand	8.2	5.3	-9.0	9.8	.3	2.5	1.9

1. Association of Southeast Asian Nations.
2. Gross domestic product. Annual rate. Annual data are Q4/Q4.
3. Annual data are annual averages.
4. Staff estimate.
n.a. Not available. ... Not applicable.
Source: CEIC.

[2] The ASEAN-4 are Indonesia, Malaysia, the Philippines, and Thailand.

ASEAN-4[1] Economic Indicators: Merchandise Trade Balance

(Billions of U.S. dollars; seasonally adjusted annualized rate)

Indicator	2007	2008	2009				
			Q1	Q2	May	June	July
Indonesia	39.6	31.6	29.8	36.9	34.5	34.1	31.4
Malaysia	29.2	42.7	38.1	30.8	33.1	31.1	29.8
Philippines	-5.0	-7.7	-8.7	-5.0	-6.3	-6.3	n.a.
Thailand	11.6	.2	32.6	22.6	34.8	12.2	11.8

1. Association of Southeast Asian Nations.
n.a. Not available.
Source: CEIC; Bank of Thailand; Philippines Economic Indicators Telegram (PEIT); Monetary Authority of Singapore.

ASEAN-4[1] Economic Indicators: Consumer Price Inflation

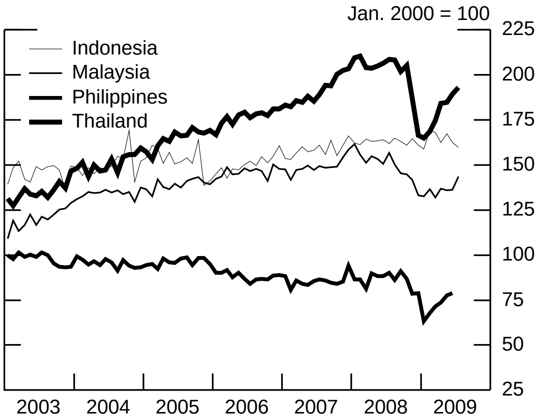
(Non-seasonally adjusted percent change from year earlier except as noted)

Indicator	2007[2]	2008[2]	2009				
			Q1	Q2	June	July	Aug.
Indonesia	5.8	11.1	8.6	5.6	3.7	2.7	2.8
Malaysia	2.4	4.4	3.7	1.3	-1.4	-2.4	-2.4
Philippines	3.9	8.0	6.9	3.2	1.5	.2	.1
Thailand	3.2	.4	-.2	-2.8	-4.0	-4.4	-1.0

1. Association of Southeast Asian Nations.
2. Dec./Dec.
n.a. Not available.
Source: CEIC; IMF International Financial Statistics database.

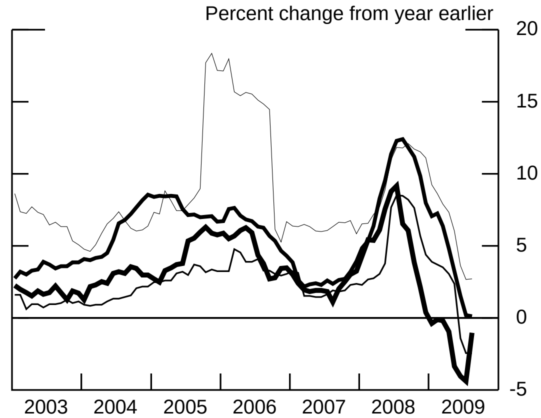
ASEAN-4

Industrial Production



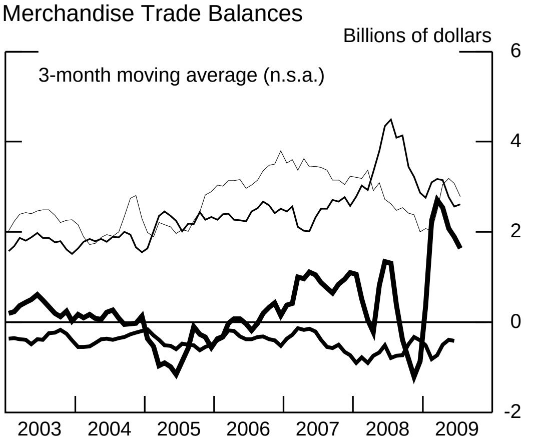
Source: CEIC; Bank of Philippines.

Consumer Prices



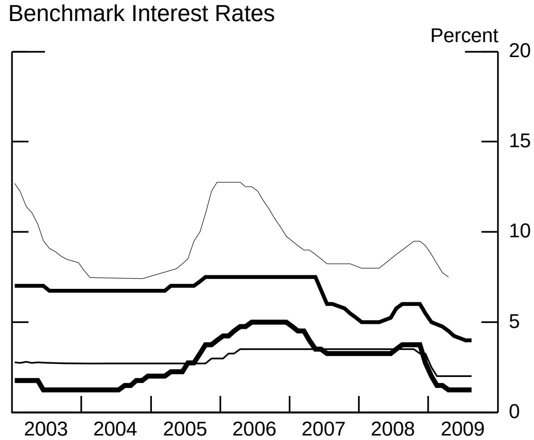
Source: IMF International Financial Statistics; CEIC.

Merchandise Trade Balances



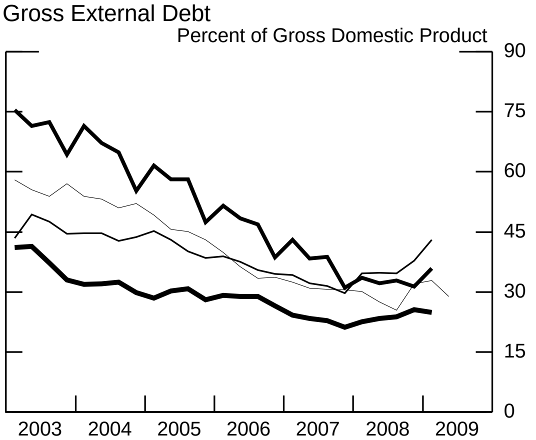
Source: CEIC; Philippines Economic Indicators Telegram (PEIT);
Bank of Thailand Monthly Statistical Release.

Benchmark Interest Rates



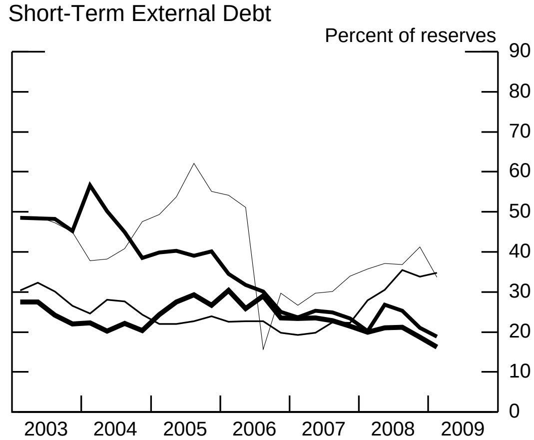
Source: Bloomberg; Haver Analytics.

Gross External Debt



Note. ASEAN is the Association of Southeast Asian Nations.
Source: CEIC; Bank for International Settlements.

Short-Term External Debt



Source: Bank for International Settlements.

In **Mexico**, real GDP continued to contract in the second quarter, led by the effects of the H1N1 flu outbreak and the restructuring of GM and Chrysler. Only a few signs of recovery have emerged in the third quarter thus far. Most significantly, automotive production increased sharply. Consumer and business confidence indexes continued to improve, but retail sales have risen only slightly. Rising unemployment continues to restrain household spending. Exports appear to have stabilized and imports have edged slightly higher. Twelve-month headline consumer price inflation has moderated further, falling to 5.1 percent in August. It appears that tepid domestic demand and the relative stabilization of the peso are beginning to make a dent in inflation.

In early September, President Felipe Calderon announced a cabinet reshuffling that replaced the attorney general, the agriculture secretary, and the director of PEMEX, Mexico's state-owned oil monopoly. Mid-term cabinet changes are not uncommon in Mexico (President Calderon's term runs from 2006 to 2012), but some analysts have speculated that the removal of the attorney general may signal some change in the government's approach to the antidrug war. All in all, we do not expect these cabinet changes to have much economic impact.

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

Indicator	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Real GDP[1]	3.7	-1.7	-21.2	-4.4	. . .	. . .	. . .
Overall economic activity	3.1	1.0	-5.2	-1.6	-.2	n.a.	n.a.
Industrial production	2.4	-1.0	-4.7	-1.1	-.2	2.8	n.a.
Unemployment rate[2]	3.7	4.0	4.8	5.7	5.6	5.7	n.a.
Consumer prices[3]	3.8	6.5	6.2	6.0	5.7	5.4	5.1
Merch. trade balance[4]	-10.1	-17.3	-12.1	-4.9	-8.3	-14.7	n.a.
Merchandise imports[4]	281.9	308.6	228.8	217.3	223.8	226.2	n.a.
Merchandise exports[4]	271.9	291.3	216.7	212.3	215.5	211.4	n.a.
Current account[5]	-8.2	-15.7	-13.5	1.8	. . .	. . .	. . .

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.
2. Percent; counts as unemployed those working 1 hour a week or less.
3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, not seasonally adjusted, annual rate.
n.a. Not available. ... Not applicable.
Source: Haver Analytics; Bank of Mexico.

In **Brazil**, real GDP rose 7.8 percent in the second quarter following two quarters of decline. The rebound in activity was led by private consumption, which rose 8½ percent, boosted by temporary tax breaks and rapid credit growth from government-owned banks. Exports, particularly of primary commodities to Asia, also soared. Indicators for the third quarter appear to be mixed. Industrial production jumped in July, and the manufacturing PMI moved above 50 in August. However, auto production declined over July and August. Despite a jump in Brazilian exports to China in recent months, total Brazilian exports have remained fairly constant. Headline inflation in August fell a touch on a monthly basis, and 12-month inflation remained about 4½ percent, around the midpoint of the inflation target range.

At its meeting this month, the central bank of Brazil held its policy rate steady at 8¾ percent after having reduced the rate a cumulative 500 basis points earlier this year. Brazil continues to be the recipient of net capital inflows, prompting the central bank to intervene in the foreign exchange market to mitigate upward pressures on the *real*. Partly because of these interventions, foreign reserves reached a record high of $220 billion in early September.

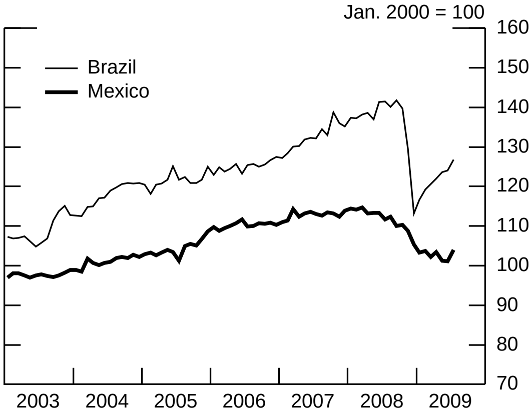
Brazilian Economic Indicators
(Percent change from previous period, seasonally adjusted, except as noted)

Indicator	2007	2008	2009				
			Q1	Q2	June	July	Aug.
Real GDP[1]	6.1	1.2	-3.8	7.8	. . .	. . .	. . .
Industrial production	6.0	3.1	-6.8	3.7	.4	2.2	n.a.
Unemployment rate[2]	9.3	7.9	8.5	8.3	7.9	7.9	n.a.
Consumer prices[3]	4.5	5.9	5.8	5.2	4.8	4.5	4.4
Merch. trade balance[4]	40.0	25.0	21.0	43.2	50.4	23.4	32.1
Current account[5]	1.6	-28.2	-19.8	-8.5	-6.4	-20.0	n.a.

1. Gross domestic product. Annual rate. Annual data are Q4/Q4.
2. Percent.
3. Non-seasonally adjusted percent change from year-earlier period, except annual data, which are Dec./Dec. Price index is IPCA.
4. Billions of U.S. dollars, annual rate.
5. Billions of U.S. dollars, not seasonally adjusted, annual rate.
n.a. Not available. ... Not applicable.
Source: Haver Analytics; IMF International Financial Statistics database; Intituto Brasileiro de Geografia e Estatistica.

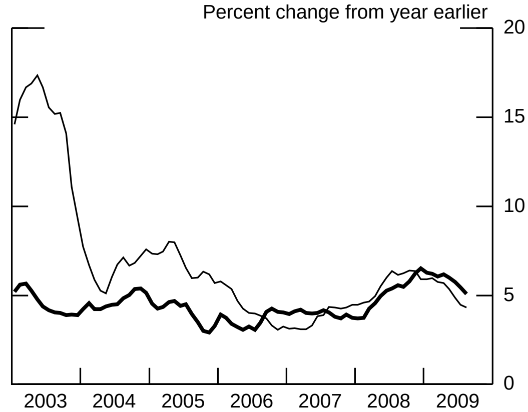
Latin America

Industrial Production



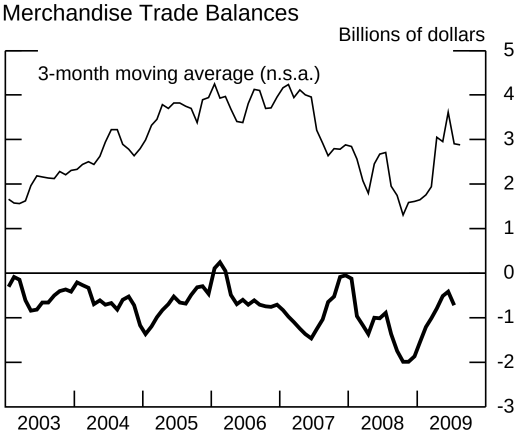
Source: Fundacion de Investigaciones Economicas Latinoamericanas; Haver Analytics.

Consumer Prices



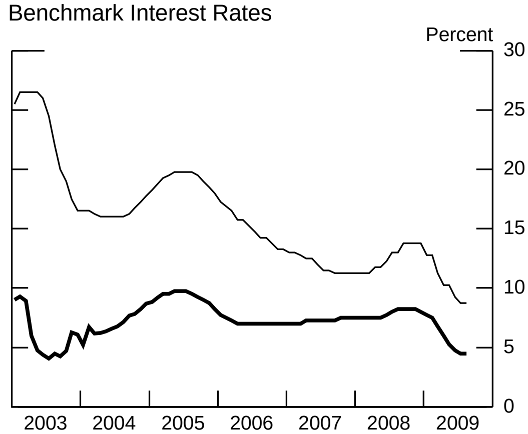
Source: IMF International Financial Statistics; Getulio Vargas Foundation;, Haver Analytics; Bank of Mexico.

Merchandise Trade Balances



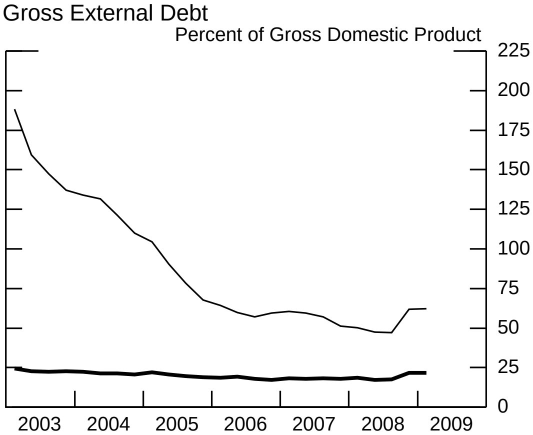
Source: IMF International Financial Statistics, Bank of Mexico.

Benchmark Interest Rates



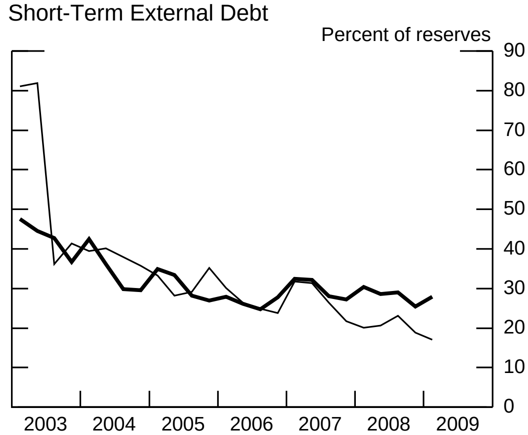
Source: Bloomberg.

Gross External Debt



Source: Haver Analytics; Bank for International Settlements.

Short-Term External Debt



Source: Bank for International Settlements.

Russian real GDP contracted 2.3 percent in the second quarter, the third straight quarterly decline. However, the most recent indicators suggest that the economy is now expanding. Industrial production rose 3.4 percent from the previous month in both June and July. Fixed capital investment has shown recent strength, but weak consumer spending continues to be a drag on growth. Producer prices rose 2.3 percent in July but are still 12 percent lower than their year-earlier level. Consumer prices rose 0.8 percent in August, bringing 12-month headline inflation down to 11.3 percent, the lowest in a year and a half.

Abbreviations–Part 2

Abbreviations—Part 2

ABCP	asset-backed commercial paper
ABS	asset-backed securities
ACLI	American Council of Life Insurers
ARM	adjustable-rate mortgage
ASEAN-4	Association of Southeast Asian Nations (Indonesia, Malaysia, the Philippines, and Thailand)
BEA	Bureau of Economic Analysis, Department of Commerce
BLS	Bureau of Labor Statistics, Department of Labor
BOE	Bank of England
BOJ	Bank of Japan
BOP	balance of payments
BTU	British thermal units
CARS	Consumer Assistance to Recycle and Save
CBO	Congressional Budget Office
CD	certificate of deposit
CDS	credit default swap
C&I	commercial and industrial
CPFF	Commercial Paper Funding Facility
CPH	compensation per hour
CPI	consumer price index
CPIP	construction put in place
CRB	Commodity Research Bureau
DPJ	Democratic Party of Japan
ECB	European Central Bank
ECI	employment cost index
E&S	equipment and software
ETF	exchange-traded fund
FDIC	Federal Deposit Insurance Corporation

FHA	Federal Housing Administration, Department of Housing and Urban Development
FHFA	Federal Housing Finance Agency
FHLMC	Federal Home Loan Mortgage Corporation (Freddie Mac)
FOMC	Federal Open Market Committee; also, the Committee
FRB	Federal Reserve Board
FRBNY	Federal Reserve Bank of New York
FRM	fixed-rate mortgage
GDP	gross domestic product
GM	General Motors
GSE	government-sponsored enterprise
IP	industrial production
IPO	initial public offering
ISM	Institute for Supply Management
IT	information technology
JOC	Journal of Commerce
KMT	Kuomintang (Taiwan)
LDP	Liberal Democratic Party (Japan)
Libor	London interbank offered rate
LSAP	large-scale asset purchase
LTRO	long-term refinancing operation
MBS	mortgage-backed securities
mpg	miles per gallon
MPU	microprocessor unit
NAR	National Association of Realtors
NBER	National Bureau of Economic Research
NCREIF	National Council of Real Estate Investment Fiduciaries
NFIB	National Federation of Independent Business
NIEs	newly industrialized economies (Hong Kong, South Korea, Singapore, and Taiwan)

NIPA	national income and product accounts
nsa	not seasonally adjusted
OIS	overnight index swap
OMB	Office of Management and Budget
OPEC	Organization of the Petroleum Exporting Countries
P&C	Productivity and Costs
PCE	personal consumption expenditures
PEMEX	Petróleos Mexicanos
PMI	purchasing managers index
PPI	producer price index
RADGO	real adjusted durable goods orders
s.a.	seasonally adjusted
s.a.a.r.	seasonally adjusted annual rate
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
SPF	Survey of Professional Forecasters
TAF	Term Auction Facility
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TIPS	Treasury inflation-protected securities
TLGP	Temporary Liquidity Guarantee Program
UI	unemployment insurance
USDA	U.S. Department of Agriculture
WTI	West Texas Intermediate

Prefatory Note

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

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

Class III FOMC - Internal (FR)

September 18, 2009

CURRENT ECONOMIC
AND FINANCIAL CONDITIONS

Supplemental Notes

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Contents

Supplemental Notes

The Domestic Nonfinancial Economy

Housing Starts

Single-family housing starts inched down to an annual rate of 480,000 units in August but remained substantially above the record low reached in the first quarter. Adjusted single-family permit issuance—which usually leads starts activity by a month or so—held steady in August at a level just below the rate of starts. Meanwhile, tight credit conditions and elevated vacancy rates continued to hold back activity in the much smaller multifamily sector, with starts registering another very weak reading of 120,000 units (annual rate) in August.

Note: Attached is an updated version of the table on nonfarm inventory investment that appeared on page II-26 of Part 2.

The Domestic Financial Economy

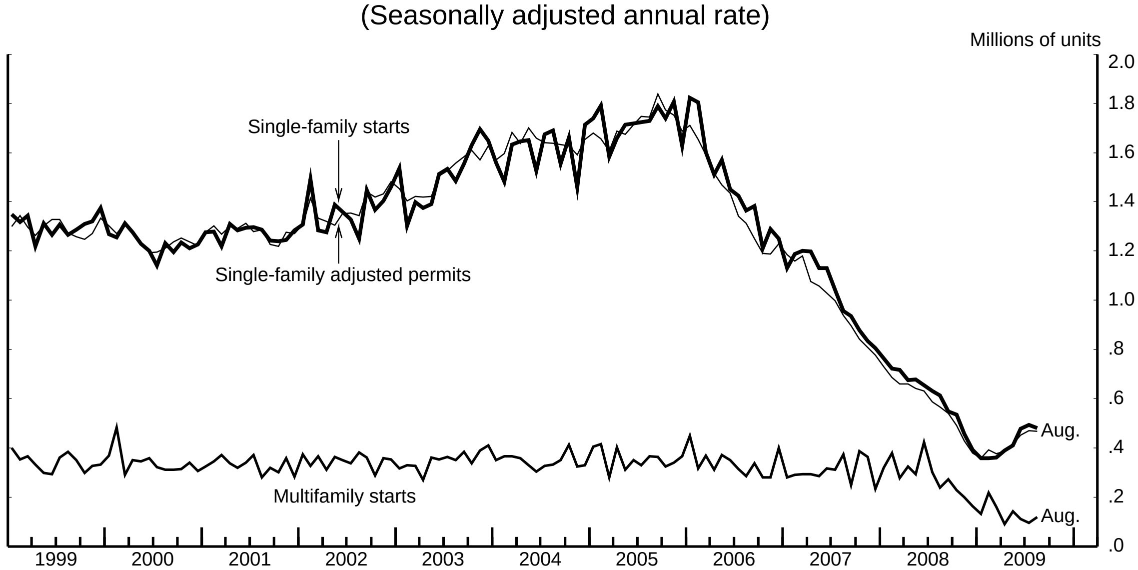
Update tables on commercial bank credit and selected financial market quotations are attached.

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

Sector	2008	2009 Q1	2009 Q2	2009 June	2009 July	2009 Aug.
All units						
Starts	.91	.53	.54	.59	.59	.60
Permits	.91	.53	.53	.57	.56	.58
Single-family units						
Starts	.62	.36	.43	.48	.49	.48
Permits	.58	.36	.41	.43	.46	.46
Adjusted permits[1]	.58	.37	.42	.45	.47	.47
New homes						
Sales	.49	.34	.37	.40	.43	n.a.
Months' supply[2]	10.68	11.61	9.55	8.51	7.51	n.a.
Existing homes						
Sales	4.35	4.12	4.24	4.33	4.61	n.a.
Months' supply[2]	9.98	9.69	8.80	8.39	8.03	n.a.
Multifamily units						
Starts	.28	.17	.12	.11	.10	.12
Built for rent	.22	.14	.10	n.a.	n.a.	n.a.
Built for sale	.07	.03	.02	n.a.	n.a.	n.a.
Permits	.33	.17	.12	.14	.10	.12
Condos and co-ops						
Existing home sales	.56	.47	.52	.56	.63	n.a.

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

Private Housing Starts and Permits
(Seasonally adjusted annual rate)



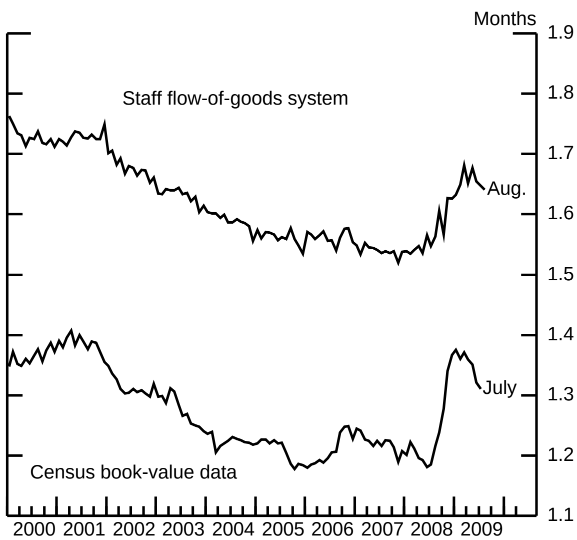
Note: Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.
Source: Census Bureau.

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

Measure and sector	2008 Q4	2009 Q1	2009 Q2	2009 May	2009 June	2009 July
Real inventory investment (chained 2005 dollars)						
Total nonfarm business	**-35.7**	**-114.9**	**-168.6** e	**...**	**...**	**...**
Motor vehicles	-.7	-63.6	-48.1 e	...	...	...
Nonfarm ex. motor vehicles	-35.1	-51.3	-120.5 e	...	...	...
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-19.8**	**-49.3**	**-111.0** e	**-86.3** e	**-138.2** e	**n.a.**
Manufacturing	8.2	-28.9	-40.0 e	-26.7 e	-45.3 e	n.a.
Wholesale trade ex. motor vehicles & parts	-10.2	-8.8	-52.4 e	-36.8 e	-81.8 e	n.a.
Retail trade ex. motor vehicles & parts	-17.8	-11.6	-18.6 e	-22.8 e	-11.0 e	n.a.
Book-value inventory investment (current dollars)						
Manufacturing and trade ex. wholesale and retail motor vehicles and parts	**-155.9**	**-143.2**	**-150.2**	**-124.9**	**-178.0**	**-121.4**
Manufacturing	-65.2	-77.3	-63.6	-48.4	-68.9	-43.8
Wholesale trade ex. motor vehicles & parts	-55.7	-47.3	-62.9	-49.8	-90.6	-55.3
Retail trade ex. motor vehicles & parts	-34.9	-18.6	-23.7	-26.8	-18.5	-22.3

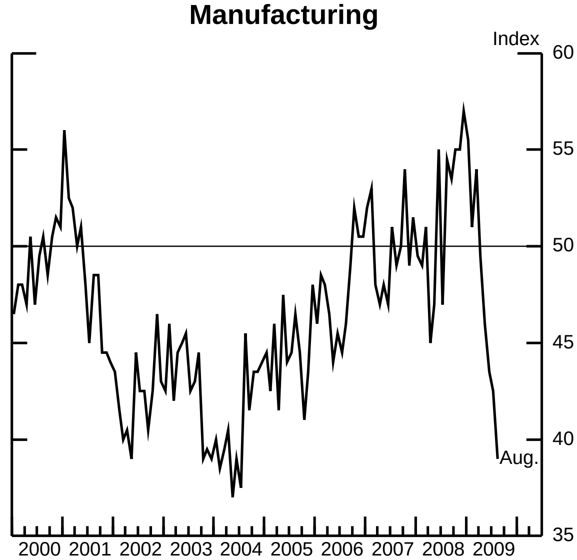
n.a. Not available.
... Not applicable.
e Staff estimate of real inventory investment based on revised book-value data.
Source: For real inventory investment, U.S. Dept. of Commerce, Bureau of Economic Analysis; for book-value data, Census Bureau.

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

Commercial Bank Credit

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

Type of credit	2007	2008	H2 2008	Q1 2009	Q2 2009	July 2009	Aug. 2009	Level[1] Aug. 2009
Total	9.9	5.1	4.5	-5.5	-3.5	-12.6	-10.6	9,260
Loans[2]								
Total	10.7	4.6	2.1	-7.1	-6.6	-19.3	-17.0	6,886
Core	9.6	5.2	2.7	-3.0	-5.8	-8.7	-14.4	6,120
To businesses								
Commercial and industrial	19.0	16.6	11.4	-13.4	-15.3	-12.1	-27.8	1,453
Commercial real estate	9.3	6.0	2.9	-.7	-1.7	-5.1	-7.8	1,690
To households								
Residential real estate	5.6	-3.0	-5.2	-1.4	-1.5	-9.5	-12.3	2,131
Revolving home equity	5.7	13.0	13.0	10.0	2.8	-6.1	-5.1	606
Closed-end mortgages	5.6	-7.9	-11.2	-5.6	-3.2	-10.8	-15.2	1,524
Consumer	6.7	7.2	7.4	8.0	-7.0	-8.4	-9.3	847
Memo: Originated[3]	6.4	5.7	4.4	1.4	-4.3	-3.8	-11.4	1,248
Other	18.7	.5	-1.5	-34.2	-13.0	-95.6	-37.8	766
Securities								
Total	7.0	6.9	12.9	-.3	6.3	7.7	8.5	2,373
Treasury and agency	-6.1	18.6	32.4	5.9	-5.8	7.9	17.2	1,419
Other[4]	28.3	-7.0	-11.2	-9.6	25.5	7.3	-4.3	954

Note: Yearly annual rates are Q4 to Q4; quarterly and monthly annual rates use corresponding average levels. Data have been adjusted to remove the effects of mark-to-market accounting rules (FAS 115) and the initial consolidation of certain variable interest entities (FIN 46). Data also account for the effects of nonbank structure activity of $5 billion or more.
1. Billions of dollars. Pro rata averages of weekly (Wednesday) levels.
2. Excludes interbank loans.
3. Includes an estimate of outstanding loans securitized by commercial banks.
4. Includes private mortgage-backed securities; securities of corporations, state and local governments, and foreign governments; and any trading account securities that are not Treasury or agency securities.
Source: Federal Reserve.

III-T-1

Selected Financial Market Quotations

(One-day quotes in percent except as noted)

Instrument	2008	2009			Change to Sept. 17 from selected dates (percentage points)		
	Sept. 12	June 22	Aug. 11	Sept. 17	2008 Sept. 12	2009 June 22	2009 Aug. 11
Short-term							
FOMC intended federal funds rate	2.00	.13	.13	.13	-1.87	.00	.00
Treasury bills[1]							
3-month	1.46	.20	.18	.10	-1.36	-.10	-.08
6-month	1.80	.34	.28	.20	-1.60	-.14	-.08
Commercial paper (A1/P1 rates)[2]							
1-month	2.39	.30	.22	.18	-2.21	-.12	-.04
3-month	2.75	.63	.29	.22	-2.53	-.41	-.07
Large negotiable CDs[1]							
3-month	2.79	.40	.32	.25	-2.54	-.15	-.07
6-month	3.09	.68	.46	.36	-2.73	-.32	-.10
Eurodollar deposits[3]							
1-month	2.60	.65	.50	.40	-2.20	-.25	-.10
3-month	3.00	1.05	.80	.55	-2.45	-.50	-.25
Bank prime rate	5.00	3.25	3.25	3.25	-1.75	.00	.00
Intermediate- and long-term							
U.S. Treasury[4]							
2-year	2.24	1.17	1.20	.97	-1.27	-.20	-.23
5-year	2.97	2.71	2.70	2.41	-.56	-.30	-.29
10-year	3.93	4.04	3.97	3.68	-.25	-.36	-.29
U.S. Treasury indexed notes[5]							
5-year	1.33	1.45	1.54	1.01	-.32	-.44	-.53
10-year	1.77	2.10	1.89	1.63	-.14	-.47	-.26
Municipal general obligations (Bond Buyer)[6]	4.54	4.86	4.65	4.20	-.34	-.66	-.45
Private instruments							
10-year swap	4.26	3.97	3.98	3.63	-.63	-.34	-.35
10-year FNMA[7]	4.36	4.40	4.35	4.11	-.25	-.29	-.24
10-year AA[8]	6.62	5.94	5.41	5.05	-1.57	-.89	-.36
10-year BBB[8]	7.22	7.58	6.72	6.38	-.84	-1.20	-.34
10-year high yield[8]	10.66	12.13	10.61	9.98	-.68	-2.15	-.63
Home mortgages (FHLMC survey rate)							
30-year fixed	5.78	5.42	5.29	5.04	-.74	-.38	-.25
1-year adjustable	5.03	4.93	4.72	4.58	-.45	-.35	-.14

Stock exchange index	Record high		2009			Change to Sept. 17 from selected dates (percent)		
	Level	Date	June 22	Aug. 11	Sept. 17	Record high	2009 June 22	2009 Aug. 11
Dow Jones Industrial	14,165	10-9-07	8,339	9,241	9,784	-30.93	17.33	5.87
S&P 500 Composite	1,565	10-9-07	893	994	1,065	-31.92	19.31	7.15
Nasdaq	5,049	3-10-00	1,766	1,970	2,127	-57.87	20.41	7.97
Russell 2000	856	7-13-07	493	562	615	-28.08	24.89	9.49
D.J. Total Stock Index	15,807	10-9-07	9,130	10,243	11,008	-30.36	20.58	7.47

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

NOTES:
September 12, 2008, is the last business day before Lehman Brothers Holdings filed for bankruptcy.
June 22, 2009, is the day before the June 2009 FOMC monetary policy announcement.
August 11, 2009, is the day before the most recent FOMC monetary policy announcement.

The International Economy

U.S. Current Account

Balance of payments data for the second quarter were released on Wednesday. The current account deficit narrowed slightly in the second quarter of 2009 to $395 billion at an annual rate. The decrease relative to the previous quarter was more than accounted for by a shrinking of the deficit on goods and services, as imports have fallen by more than exports. However, this improvement in the goods and services balance was partly offset by a somewhat smaller surplus in investment income and larger deficit in other income and transfers.

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
Annual				
2007	-701.4	97.9	-123.1	-726.6
2008	-695.9	125.6	-135.7	-706.1
Quarterly				
2008:Q3	-743.8	143.7	-136.7	-736.7
Q4	-578.0	92.1	-133.6	-619.5
2009:Q1	-369.6	80.4	-128.6	-417.8
Q2	-332.0	72.8	-135.9	-395.2
Change				
Q3-Q2	-12.4	31.4	-4.9	14.2
Q4-Q3	165.8	-51.6	3.1	117.2
Q1-Q4	208.3	-11.7	5.0	201.7
Q2-Q1	37.6	-7.7	-7.3	22.6

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

U.S. International Financial Transactions

The recently released balance of payments data also included more complete information on financial flows in the second quarter. U.S. direct investment abroad and foreign direct investment into the United States remained weak in the second quarter (see lines 6 and 7 of the table “Summary of U.S. International Transactions”), and on net generated an outflow of $19 billion. Transactions by non-banking concerns and other bank flows reported quarterly resulted in an inflow of $54 billion (line 10).

The statistical discrepancy for the first half of 2009 was a sizable $111 billion, more than half the current account deficit recorded during the period. This positive discrepancy suggests some over-reporting of the current account deficit or under-reporting of net financial flows.

Summary of U.S. International Transactions

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

	2007	2008	2008		2009			
			Q3	Q4	Q1	Q2	June	July
Official financial flows	**451.1**	**-54.6**	**-108.9**	**-286.5**	**313.5**	**316.1**	**117.9**	**82.6**
1. Change in foreign official assets in the U.S. (increase, +)	475.2	480.0	117.5	-17.9	70.7	124.7	54.9	44.9
a. G-10 countries + ECB	36.8	-8.4	8.9	-16.0	-7.4	15.5	20.5	6.6
b. OPEC	33.0	45.5	16.1	-3.4	-5.0	-0.3	-1.3	-0.4
c. All other countries	405.5	430.0	92.5	-11.4	83.1	117.5	38.4	38.7
2. Change in U.S. official assets (decrease, +) [1]	-24.1	-534.6	-226.4	-268.7	242.8	191.4	63.0	37.7
Private financial flows	**212.5**	**559.7**	**252.0**	**374.8**	**-278.1**	**-257.8**	**...**	**...**
Banks								
3. Change in net foreign positions of banking offices in the U.S. [2]	-86.1	-15.6	-106.7	338.9	-278.6	-191.5	-116.7	-99.0
Securities [3]								
4. Foreign net purchases (+) of U.S. securities	673.9	70.9	-24.1	52.7	-3.8	-8.0	41.7	-14.8
a. Treasury securities	67.1	197.0	79.1	81.6	52.4	-22.5	27.8	-19.0
b. Agency bonds	-8.6	-185.0	-70.1	-21.5	-49.7	-0.3	2.1	-1.8
c. Corporate and municipal bonds	384.7	2.5	-35.4	-3.8	-12.5	-21.0	-4.5	-17.5
d. Corporate stocks [4]	230.7	56.4	2.4	-3.6	6.0	35.7	16.3	23.5
5. U.S. net acquisitions (-) of foreign securities	-366.8	61.4	79.6	69.5	-35.2	-91.9	-36.2	-31.5
a. Bonds	-218.5	62.1	65.5	34.9	-33.9	-54.6	-21.3	-15.9
b. Stock purchases	-136.4	6.4	14.1	38.8	0.6	-37.3	-14.9	-15.6
c. Stock swaps [4]	-11.9	-7.1	0.0	-4.3	-1.9	0.0	0.0	0.0
Other flows [5]								
6. U.S. direct investment (-) abroad	-398.6	-332.0	-54.1	-84.5	-40.3	-44.9	...	...
7. Foreign direct investment in the U.S.	275.8	319.7	62.8	96.8	23.9	26.1	...	...
8. Net derivatives (inflow, +)	6.2	-28.9	-4.1	-14.5	8.4	n.a.	...	...
9. Foreign acquisitions of U.S. currency	-10.7	29.2	5.8	29.9	11.8	-1.9	...	...
10. Other (inflow, +) [6]	118.8	454.9	292.8	-113.9	35.6	54.3	...	...
U.S. current account balance [5]	**-726.6**	**-706.1**	**-184.2**	**-154.9**	**-104.5**	**-98.8**	**...**	**...**
Capital account balance [7]	**-1.9**	**1.0**	**3.0**	**-0.7**	**-0.7**	**-0.7**	**...**	**...**
Statistical discrepancy [5]	**64.9**	**200.1**	**38.1**	**67.2**	**69.8**	**41.2**	**...**	**...**

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; 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.