

Prefatory Note

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Class II FOMC – Restricted (FR)

Report to the FOMC on Economic Conditions and Monetary Policy



Book A

Economic and Financial Conditions: Current Situation and Outlook

September 15, 2010

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 Economic Developments and Outlook

The information we have received since the time of the August projection points to a more sluggish pace of expansion in economic activity than we previously projected. Although consumer spending has been a bit firmer than we had expected, most other indicators have been disappointing. In the housing sector, both sales and starts in July were considerably weaker than we had anticipated, providing further evidence that a meaningful recovery in the housing market has yet to get under way. Indicators of business spending have also come in on the low side of our expectations, with both the data on orders and shipments of capital goods and readings from surveys of business sentiment suggesting a weaker second half of the year than we had been projecting. In addition, the anemic pace of employment growth this summer, along with the still elevated level of initial claims, led us to mark down the projected pace of job growth through the end of this year. All told, we now project that real GDP will rise at an annual rate of 2 percent in the second half of this year— $\frac{1}{2}$ percentage point lower than we projected in August.

In addition to the weaker incoming data, the conditioning assumptions in this projection have become somewhat less favorable than they were at the time of the August Tealbook. Equity prices have moved a bit lower, foreign growth is expected to be weaker, and the projected path of the dollar is a little higher. We also revised down our projection for the change in house prices, a reflection of the disappointing news on housing activity and foreclosure volumes. The combination of these less supportive conditioning assumptions and the weaker incoming data has led us to lower our medium-term projection as well.

In particular, we now project that real GDP will increase $3\frac{1}{4}$ percent in 2011, about $\frac{1}{4}$ percentage point less than in the last forecast. For 2012, which we just added to the medium-term projection, we expect real GDP growth to step up to about $4\frac{1}{2}$ percent. Even with these gains, the economic recovery makes only limited progress in reemploying productive resources that are currently idle; the unemployment rate falls only gradually from $9\frac{3}{4}$ percent at the end of this year to 8 percent at the end of 2012.

Our projection for inflation is little changed from the last Tealbook. Although we marked down our outlook for economic activity, we also raised our estimate of the

NAIRU, leaving the margin of slack over the projection period close to that in the August Tealbook. We project that core PCE inflation will slow from 1.1 percent this year to 0.9 percent next year, unchanged from the August forecast. For 2012, we expect core inflation to remain at 0.9 percent. With energy prices expected to rise a bit faster than core, we expect overall consumer price inflation to be 1.1 percent in 2011 and 1 percent in 2012.

KEY BACKGROUND FACTORS

Monetary Policy

As in the August Tealbook, we assume that the FOMC will hold the target federal funds rate in the current range of 0 to $\frac{1}{4}$ percent until the fourth quarter of 2012. In this forecast, we have incorporated the FOMC's decision to reinvest principal payments from agency debt and agency mortgage-backed securities by purchasing longer-term Treasury securities. This change in policy has the effect of keeping constant the projected size of the Federal Reserve's securities holdings over the next few years, an action that we estimate shaves roughly 10 basis points off the level of the 10-year Treasury yield over the medium term relative to the August projection.

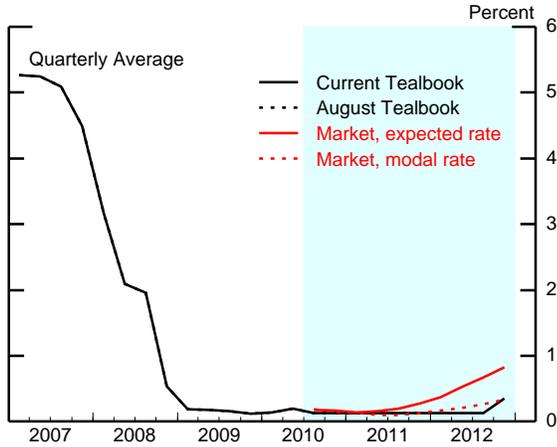
Financial Conditions

The 10-year Treasury yield has decreased since the time of the August Tealbook, and we have lowered slightly the projected path of the 10-year Treasury yield in this forecast. Nonetheless, as in the previous forecast, we anticipate that the Treasury yield will rise gradually, but significantly, from its current level of about $2\frac{3}{4}$ percent to about $4\frac{1}{4}$ percent by the end of 2012. Several factors underlie this projected contour, but, quantitatively, the most important is the movement of the 10-year valuation window through the period of near-zero short-term interest rates.

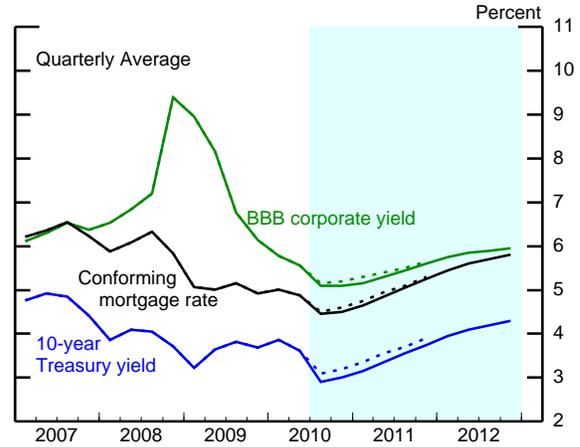
Yields on investment-grade corporate bonds have decreased slightly in recent weeks, and their spreads to comparable-maturity Treasury yields have inched up. Meanwhile, conforming fixed mortgage rates have edged down a bit less than Treasury yields since early August, leaving their spreads a shade higher. Given these relatively small changes, the projected paths for corporate bond yields and mortgage rates are only a touch lower than in the August Tealbook.

Key Background Factors Underlying the Baseline Staff Projection

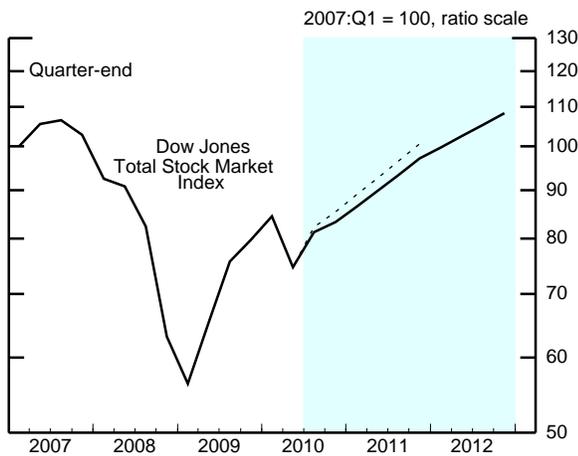
Federal Funds Rate



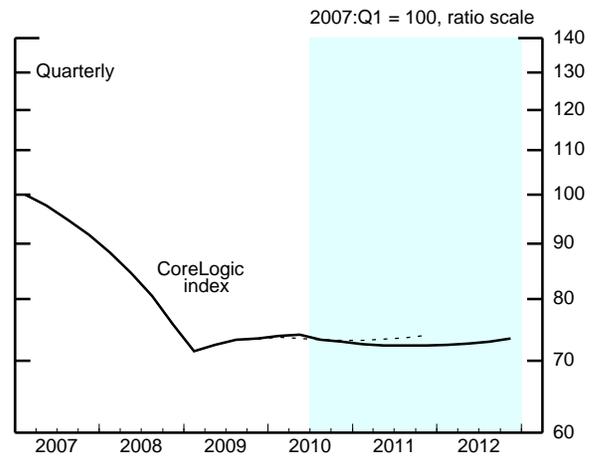
Long-Term Interest Rates



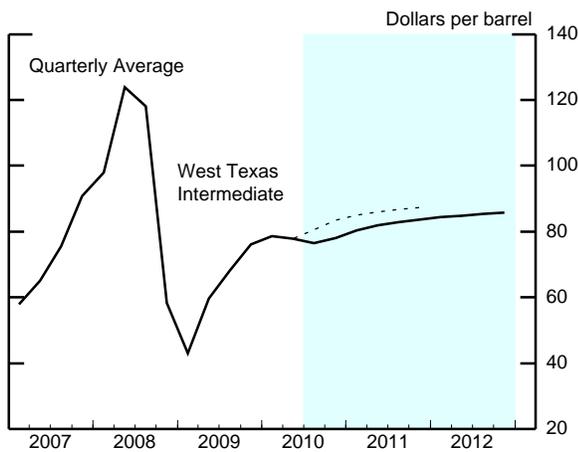
Equity Prices



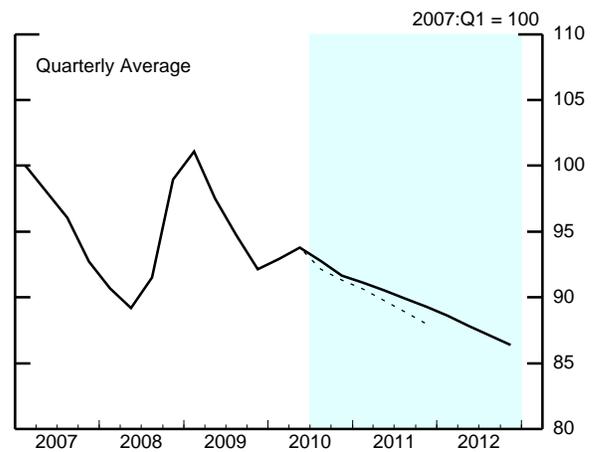
House Prices



Crude Oil Prices



Broad Real Dollar



Note: Shading represents the projection period, which begins in 2010:Q3. In the upper-left panel that reports the federal funds rate, the black dotted line is not apparent because the paths of the federal funds rate in the August and the current Tealbooks are the same.

The Dow Jones U.S. Stock Market Index is on track to end the current quarter a bit below the level anticipated in the August Tealbook, and, in light of the weaker economic outlook, we have trimmed the projected rate of appreciation expected over the medium term, leaving the level of stock prices down 3½ percent by the end of 2011. Nonetheless, with the equity premium remaining well above longer-run norms, we continue to expect stock prices to increase markedly over the next couple of years—at an average annual rate of about 13 percent—to bring the implied premium down toward a more typical level.

For house prices, the CoreLogic repeat sales index (formerly known as the LoanPerformance index) was firmer than we expected in the second quarter, but it decreased noticeably in July. More importantly, a broad range of indicators—including home sales and foreclosure volumes—suggest a weaker housing market than we had anticipated and portend additional softness in home prices in coming quarters. We now expect house prices to post small declines through the middle of next year and then to turn up gradually thereafter; all told, we shaved about 2 percent from the level of prices at the end of 2011.

Fiscal Policy

Fiscal policy is expected to provide a touch more impetus to aggregate demand than we anticipated in the August forecast. In particular, in response to recent legislation, we have raised federal grants-in-aid to state and local governments in 2011 by \$26 billion. Our assumptions for other federal policies are unchanged, including our expectations that most provisions of the 2001–03 and ARRA tax cuts will be extended and that the EUC program will be winding down over 2011 and 2012. All told, we expect that discretionary federal fiscal policy actions will provide a small direct boost to the increase in aggregate demand in the second half of this year, but that they will then impose a drag in 2011 and 2012.

Our forecast for the unified federal budget is roughly the same as in the August Tealbook, with the deficit expected to be about \$1.3 trillion in both fiscal 2010 and 2011 (around 9 percent of GDP in both years). The deficit is projected to narrow to about \$1 trillion in fiscal 2012 (around 7 percent of GDP), primarily reflecting the budgetary effects of the continuing economic recovery and the winding down of stimulus-related spending.

The Foreign Outlook and the Dollar

Although data for foreign economic activity in the second quarter surprised us on the upside, more recent indicators have, on balance, been weaker than we had expected. The softer foreign data, along with the downward revision to the projected path of U.S. GDP growth, led us to mark down the outlook for foreign real GDP growth by $\frac{1}{2}$ percentage point in the second half of this year and by $\frac{1}{4}$ percentage point in 2011. We now project that foreign GDP growth will slow from an annual rate of $5\frac{1}{2}$ percent in the first half of this year to $2\frac{3}{4}$ percent in the second half, as the boost from the recovery in global trade, manufacturing, and inventories wanes. Thereafter, we expect that foreign growth will pick up to roughly a $3\frac{1}{2}$ percent pace as a gradual revival in private spending more than offsets a withdrawal of policy stimulus.

Since the August forecast, the dollar has appreciated slightly on a trade-weighted basis against a broad set of currencies. We are assuming a moderate trend rate of depreciation of the real dollar in 2011 and 2012 of about 3 percent per year. This rate of depreciation is slightly smaller than we had assumed in August, as we now see China and other emerging market economies allowing their currencies to rise more slowly against the dollar in light of the softer outlook for economic growth. Our forecast leaves the broad real dollar $1\frac{1}{4}$ percent higher than in the August Tealbook at the end of 2011.

Oil and Other Commodity Prices

After rising to more than \$80 per barrel just prior to the close of the August Tealbook, oil prices have since declined, on net, consistent with a weaker outlook for global economic activity. The spot price of West Texas Intermediate (WTI) oil has fallen about \$6 per barrel relative to the August projection, closing most recently on September 14 at \$77—well within the \$70 to \$80 per barrel range that has largely prevailed in recent months. Prices of futures contracts dated for delivery further out have also declined, but by lesser amounts. Consistent with these futures prices, we now project that the spot price of WTI will rise to \$84 per barrel by the end of 2011, nearly \$4 lower than in our previous forecast, and to \$86 per barrel by the end of 2012.

In contrast to oil prices, prices of many other commodities have either moved higher or changed little since the August Tealbook, and we estimate that our index of nonfuel commodity prices will have risen $6\frac{3}{4}$ percent at an annual rate this quarter. Food prices, especially prices for corn and wheat, have continued to increase because of concerns about foreign crop conditions; however, those prices remain well below the

peaks reached in early 2008, as global inventories are much higher than they were then. In addition, prices for metals have recovered from a mid-August decline, and futures prices now trace a path slightly above that projected in the August Tealbook. Taken together, we see nonfuel commodity prices increasing at an 11 percent rate in the fourth quarter, an upward revision of more than 5 percentage points. For 2011 and 2012, consistent with quotes from futures markets, we project nonfuel commodity prices to remain about flat at a level around 3 percent higher than in the previous Tealbook.

RECENT DEVELOPMENTS AND THE NEAR-TERM OUTLOOK

The data on domestic economic activity that we have received since the time of the August forecast have been weaker than expected on balance. The BEA revised down its estimate of the increase in real GDP for the second quarter by $\frac{1}{2}$ percentage point, to an annual rate of just $1\frac{1}{2}$ percent; employment gains in recent months have been disappointing; and, while consumer spending appears to be a touch stronger than we had expected, business and residential investment appear weaker. In response, we have marked down our forecast for real GDP growth over the second half of the year to an annual rate of 2 percent, $\frac{1}{2}$ percentage point lower than in the August Tealbook.¹

Labor Markets

The improvement in the labor market continues to be quite sluggish. Private employment rose just 67,000 in August, leaving the level of private employment in August about 50,000 lower than in the last Tealbook projection. Over the three months ending in August, private employers added roughly 80,000 workers per month, about half of the pace recorded over the preceding three months. Meanwhile, the average workweek for all employees moved sideways on balance over this period.

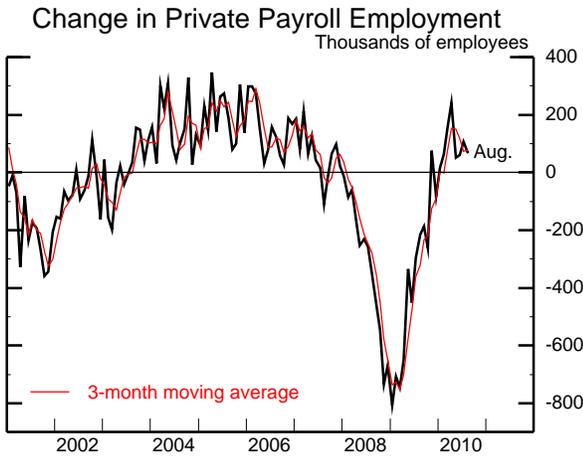
In addition, other labor market indicators, including initial claims for unemployment insurance, suggest that the pace of layoffs has increased a bit in recent

¹ With the annual revision of the NIPA released in July, the BEA revised its seasonal adjustment procedure for oil imports in such a way as to create an unusual surge in real oil imports in the second and third quarters, and a corresponding decline in the first and fourth quarters. In the past, problems with seasonal adjustments seem not to have fully shown through to top-line GDP estimates, so we have offset about one-half of the expected effect in the third and fourth quarters of this year by adjusting our projection for inventory investment. Of course, the entire effect could show through this time; in that case, the growth rate of real GDP would be lower than we are projecting for the third quarter and higher for the fourth.

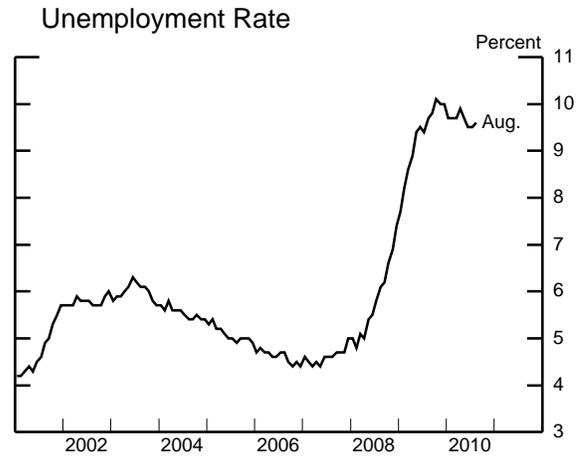
Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

Measure	2010:Q2		2010:Q3		2010:Q4	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	2.1	1.7	2.4	1.7	2.6	2.4
Private domestic final purchases	4.3	4.3	1.5	.9	2.9	2.1
Personal consumption expenditures	1.6	2.0	1.6	2.2	2.0	2.0
Residential investment	28.5	26.3	-8.6	-27.2	8.3	3.5
Nonres. structures	4.8	-2.7	.6	-1.5	.7	-1.8
Equipment and software	26.1	26.4	3.9	-.3	10.5	4.6
Federal purchases	9.2	9.1	4.3	3.4	.5	4.5
State and local purchases	1.4	.6	-.5	-1.0	-.2	-.1
Contribution to change in real GDP (percentage points)						
Inventory investment	.6	.8	.8	.9	-.6	-.9
Net exports	-2.9	-3.5	.1	-.1	.8	1.1

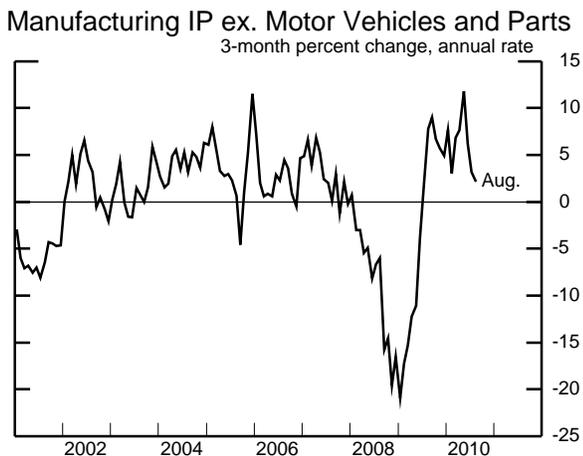
Recent Nonfinancial Developments (1)



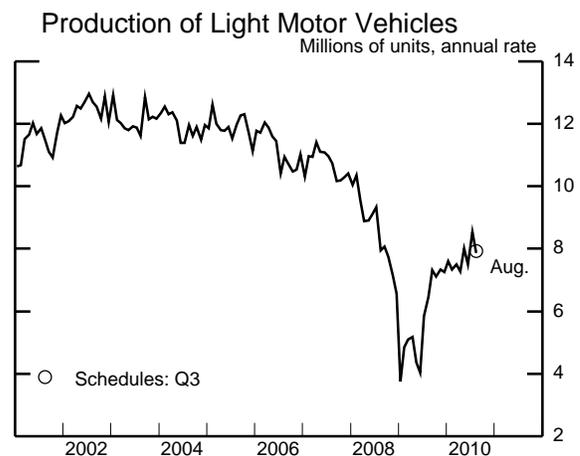
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



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



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



Note: Schedules data are from Ward's Communications. Source: Ward's Auto Infobank.

How Likely Is a Double Dip?

The recent weakness in a range of economic indicators has raised concerns about the possibility of a double-dip recession. Anticipating a turning point in real activity in real time is notoriously difficult, but these difficulties notwithstanding, here we consider results from a range of models that generate recession probabilities.

To begin, we examine the probability that the economy has already fallen into recession, using several Markov-switching models that we regularly track.¹ The figure below shows probabilities from three models: one using percent changes in real GDP as the model input, one using percent changes in both real GDP and real GDI, and one using the four monthly indicators highlighted by the NBER Business Cycle Dating Committee—payroll employment, real personal income net of transfers, industrial production, and manufacturing and trade sales. As can be seen in the figure, probabilities from the models line up well with the historical NBER recession dates, and the model using both

GDP and GDI often has signaled the onset of recessionary periods before the other two models.

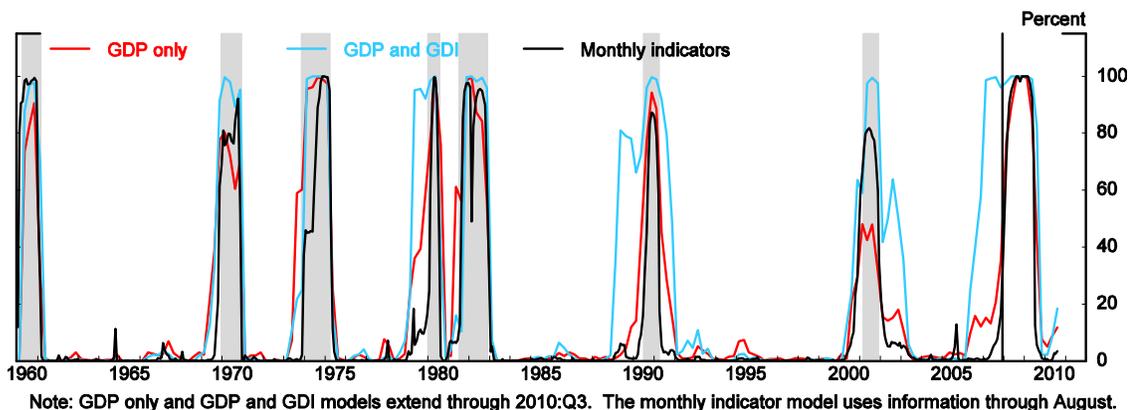
As shown in the table (see bottom of next page) and figure, all three models agree that the probability that the economy is in recession has risen recently but is still relatively low. Conditional on the Tealbook forecast for the current quarter, the model using GDP shows a probability of 12 percent in 2010:Q3, up from 5 percent in 2010:Q1, while the model using GDP and GDI shows a probability of 18 percent in 2010:Q3, up from 2 percent in 2010:Q1. The probability from the monthly indicators model, using information through August, has also ticked up a little after running at 0 percent earlier in the year.²

What about the likelihood that the economy will fall into recession in the near future? The probabilities from the Markov-switching models likely are an encouraging signal in this regard

¹ The Markov-switching models produce probabilities that the economy is in a low-growth state, which do not always coincide exactly with NBER-dated recessions. However, for short, we refer to the probabilities generated by these models as recession probabilities. For more details on the models using GDP and GDI, see Jeremy Nalewaik (2007), “Estimating Probabilities of Recession in Real Time Using GDP and GDI,” Finance and Economics Discussion Series 2007-07 (Washington: Board of Governors of the Federal Reserve System).

² For the monthly indicators model, the August probability is computed using data on employment and industrial production, and forecasts of sales and income variables.

Probability of Recession



because of the strong historical tendency for expansions to persist, absent major shocks. Another way to look ahead is with stochastic simulations around the Tealbook projection, using forecast errors from prior Greenbooks and Tealbooks. Given the baseline projection, the historical forecast errors imply a 13 percent probability that real GDP will decline for two consecutive quarters between 2010:Q3 and 2011:Q2. While this probability is still low, it has risen from 6 percent in March.³

Other models rely on financial indicators to forecast recessions, and at the moment place fairly low odds on the likelihood of a double dip. For example, a model using the slope of the yield curve and a corporate bond spread has, since the middle of last year, been showing a close-to-zero probability of recession one-year ahead.⁴ However, given the extraordinary circumstances prevailing in financial markets in recent years, including the binding zero lower bound, the usefulness of these financial variables for forecasting a recession may be somewhat diminished currently.

The accumulation of evidence in recent months—as seen through the filter of the models just described—does not suggest that a double-dip recession is imminent. However, the models have their limitations. As noted, the Markov-switching models exploit the tendency for expansions to persist, but the forces that have driven that persistence over history may be less relevant now than in the past. And the factors that are currently raising recession fears, including concerns about household and business confidence, may not be well captured by these models. Finally, in the current environment, fiscal and monetary policy may be more limited than usual in their ability to respond to adverse shocks, perhaps leaving the economy more vulnerable than suggested by historical relationships. Overall, we judge that the risk of recession or persistent slow growth is likely higher than suggested by these models.

³Although the stochastic simulations suggest that the probability of two consecutive negative quarters is relatively low, the probability of a single quarter of contraction is noticeably higher, registering around 30 percent back in March and almost 50 percent now. The consensus in the most recent Blue Chip survey places the odds of at least one quarter of contraction over the coming year at around 25 percent.

⁴ See Thomas King, Andrew Levin, and Roberto Perli (2007), “Financial Market Perceptions of Recession Risk,” Finance and Economics Discussion Series 2007-57 (Washington: Board of Governors of the Federal Reserve System).

Probabilities of Recession

(percent)

Model	2010:Q1	2010:Q2	2010:Q3
GDP	5	9	12
GDP and GDI	2	9	18
Real monthly indicator	0	1	3
Stochastic simulation with TB Errors*	6	9	13

*Probabilities of two consecutive quarters of negative GDP growth over the next four quarters, using the March, June, and September staff projections as baselines.

months, while indicators of hiring remain quite soft. Along with the deterioration in the near-term GDP outlook, these discouraging labor market readings have caused us to mark down our forecast of the gain in private employment to an average of 90,000 per month for the rest of the year, about half the pace projected in the August Tealbook. Consistent with this anemic rate of job growth, we expect the unemployment rate to edge up from 9.6 percent in August to 9.7 percent in the fourth quarter.

The Industrial Sector

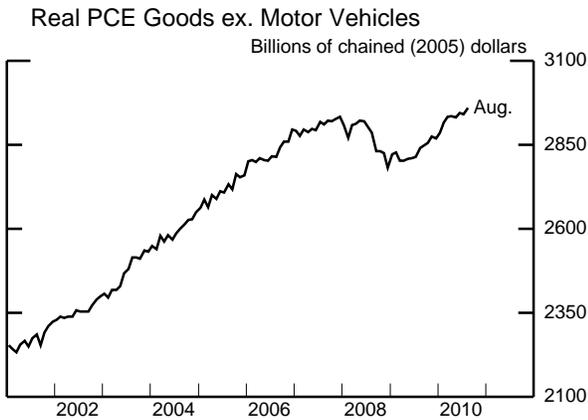
The rise in industrial production (IP) moderated, on net, in recent months, and is expected to slow further over the remainder of the year. Manufacturing IP in the current quarter has been supported by a step-up in motor vehicle assemblies, as automakers replenished lean dealer stocks. However, schedules suggest that automakers plan to pare back production next quarter, and we expect motor vehicle output to be a drag on IP in the fourth quarter.

Elsewhere in manufacturing, output gains have slowed from their robust pace earlier in the year, as the impetus to production from inventory rebuilding has diminished and the recovery in domestic demand for domestically produced goods has remained lackluster. Moreover, with the most recent indicators of near-term manufacturing activity having softened, we expect only modest gains in production in coming months. All told, we now project that manufacturing output will increase at an annual rate of about 2 percent in the second half of this year, down from about 7 percent in the first half.

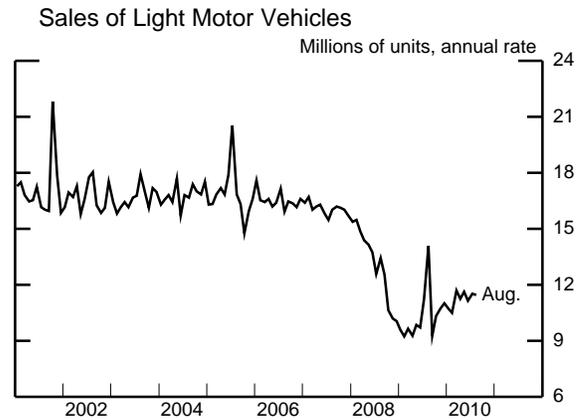
Household Spending

Real PCE rose 0.2 percent in July, similar to the average gain over the two preceding months, and based on data for retail sales and light motor vehicles, we project a gain of 0.3 percent in August. Although our current estimate for August is higher than in the previous Tealbook, the data on spending are still broadly consistent with the overall weakness in the key determinants of consumption. In particular, gains in employment have been sluggish, wage increases have been small, and households likely have continued to make spending adjustments in response to the large declines in wealth over the past few years. Moreover, consumer sentiment has remained at a depressed level, as many households appear anxious about their future income prospects. Given these factors, we continue to project that real PCE will rise at an annual rate of about

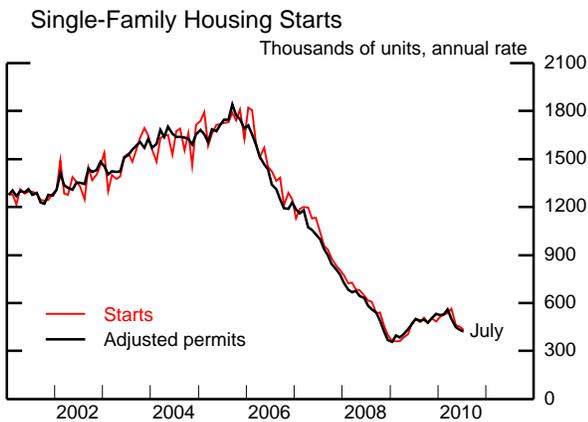
Recent Nonfinancial Developments (2)



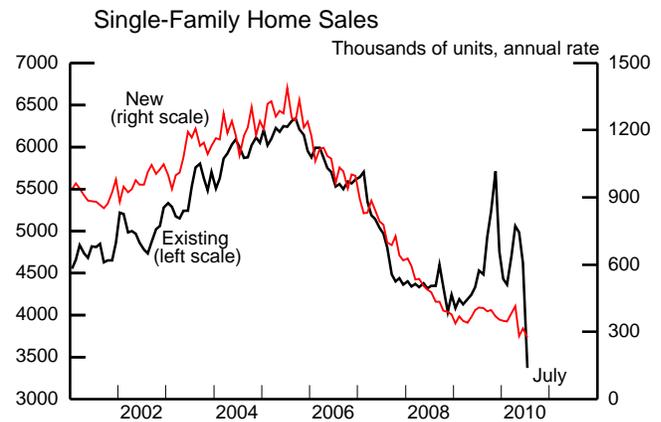
Note: Figures for June, July, and August are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis



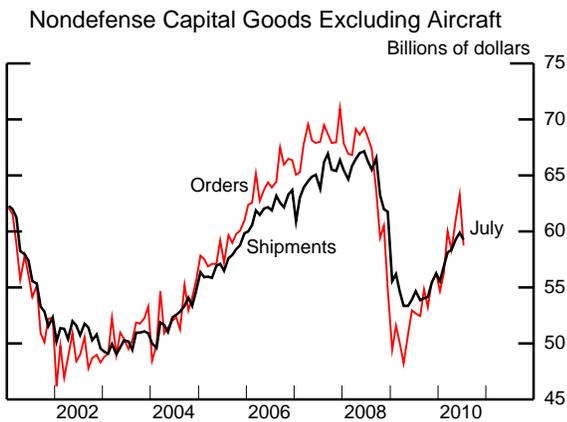
Source: Ward's Auto Infobank.



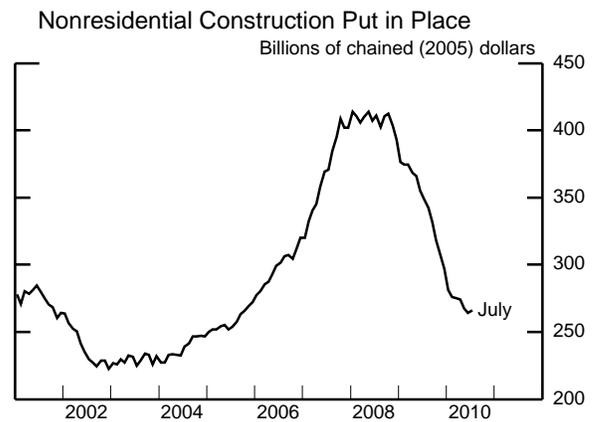
Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.
Source: U.S. Census Bureau.



Source: For existing, National Association of Realtors; for new, U.S. Census Bureau.



Source: U.S. Census Bureau.



Source: U.S. Census Bureau.

2 percent over the second half of this year, a pace close to that recorded in the first half of the year.

Housing demand has dropped to exceptionally weak levels since the April signing deadline for the homebuyer tax credit.² Existing home sales plunged 30 percent between April and July, and new home sales have hovered at record lows since May. As for construction activity, single-family starts from May to July were about 15 percent below the average level over the preceding three months, and the July reading for adjusted permit issuance suggests more of the same in August.

These incoming data were considerably weaker than we expected and suggest that the tax credit pulled forward more sales than we anticipated and that the payback will be more concentrated in the third quarter than we had assumed. Even after making allowances for those larger tax credit effects, we continue to be surprised by the weakness in home sales in this environment of low mortgage rates and housing prices that are both low and apparently leveling out. This unexpected weakness in housing demand may reflect a number of influences, including the drag on household formation from economic uncertainty and anemic job creation, persistent concerns about potential further house price declines, and continued constraints on the ability of some households to obtain mortgage credit. We now expect little material improvement in the underlying pace of housing activity until next year.

Business Investment

After surging over the past three quarters, real E&S spending is expected to decelerate markedly in the second half of this year. In part, the step-down reflects a sharp dropback in business outlays for motor vehicles following an exceptionally rapid increase in these purchases over the first half of the year. But E&S spending outside of transportation is projected to decelerate as well.

We expect that slowdown to be greater than in the August Tealbook, as the incoming data have been softer than we expected. The BEA's preliminary estimate of software spending in the second quarter was below our expectations, and in July,

² At the time of the end-of-April signing deadline, recipients of the credit were required to close the sale by the end of June. In late June, the closing deadline was extended through September.

shipments of nondefense capital goods excluding aircraft declined more than we anticipated. Moreover, orders dropped sharply in July and now stand a bit below shipments. The latest readings on business sentiment have also softened some, but analysts' expectations for the earnings of capital goods producers remain consistent with robust investment growth and most anecdotal reports from major equipment manufacturers are still relatively upbeat. We now project that overall E&S will increase at an annual rate of just 2 percent in the second half of the year; excluding transportation, E&S is expected to increase at an annual rate of about 5 percent rate over this time period—still relatively solid, but about 3 percentage points below our previous forecast.

Investment in nonresidential structures has drifted lower of late, as increases in spending on drilling and mining structures have been more than offset by declines in building construction. Looking ahead, energy prices appear high enough to sustain solid increases in drilling and mining expenditures over the second half of this year. In contrast, while the downtrend in construction outlays on buildings appears to have slowed somewhat, the overhang of unoccupied space and tight lending conditions continue to weigh on this sector. We look for a moderate decline in outlays on building construction over the second half of 2010.

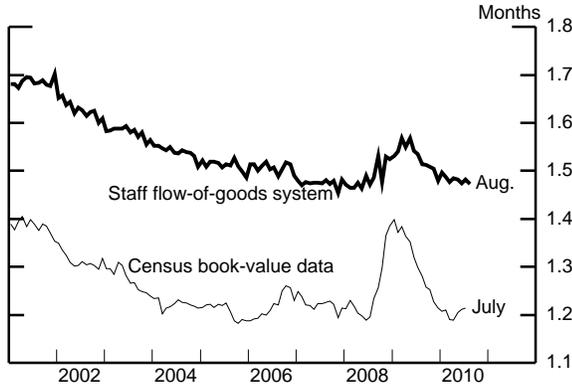
Real inventory investment rose further in the second quarter and the latest book-value data point to a jump in stockbuilding by manufacturers and wholesalers in July. Nevertheless, business inventories overall do not appear excessive: Inventory-sales ratios in most sectors remain well below their recent peaks, and according to the survey data, most businesses do not perceive an overaccumulation. In the motor vehicle sector, after having been rebuilt through August, dealer inventories are projected to change little, on balance, through the end of the year. Outside of motor vehicles, we expect stockbuilding to continue at a relatively steady pace over the remainder of the year as firms boost their inventories in line with sales growth. For the second half of the year as a whole, inventory investment is projected to contribute little to the rate of change of real GDP.

Government

In the government sector, we expect real federal purchases to rise at an annual rate of 4 percent in the second half of this year, a pace that is just a bit slower than in the first half. Defense spending is expected to post robust increases, while nondefense spending is expected to edge down as temporary Census workers are laid off. In the state and local sector, employment fell 14,000 per month, on average, in July and August,

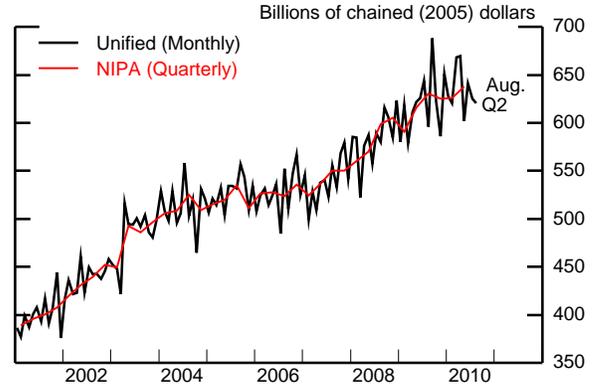
Recent Nonfinancial Developments (3)

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: U.S. Census Bureau; staff calculation.

Defense Spending



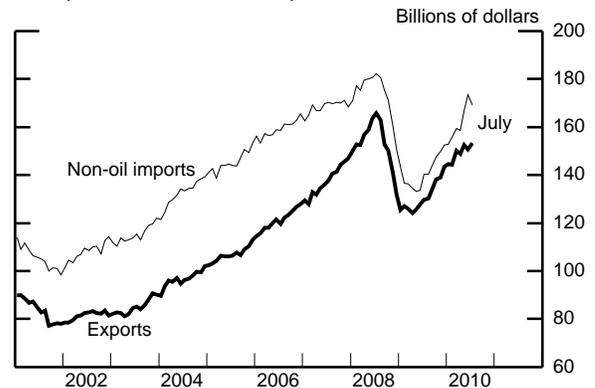
Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.
Source: Monthly Treasury Statement.

Trade Balance



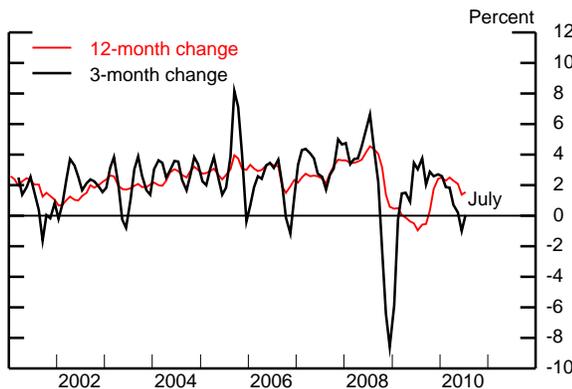
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Exports and Non-Oil Imports



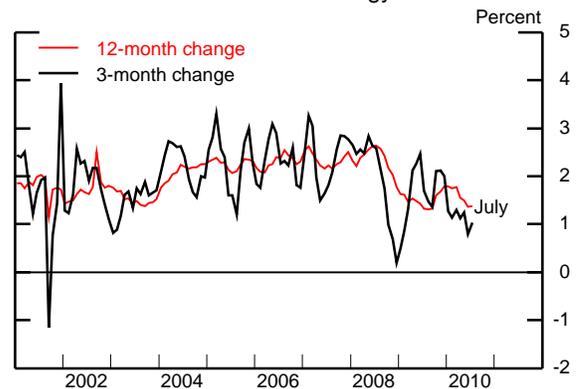
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Total PCE Prices



Note: 3-month changes are at an annual rate.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



Note: 3-month changes are at an annual rate.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

about the same pace of job loss as that recorded over the first half of the year, and nominal construction outlays in July were about flat. We expect hiring to continue to decline slowly over the remainder of the year, and construction spending to pick up just a bit. All told, we expect real state and local purchases to edge down $\frac{1}{2}$ percent at an annual rate over the second half of the year.

Foreign Trade

Following a remarkable 33 percent surge in the second quarter, real imports of goods and services are expected to edge up at an annual rate of only 4 percent in the second half of the year. The exceptional strength of imports in the second quarter far outstripped the expansion in domestic demand. Although a sharp increase in real oil imports, in part driven by an odd seasonal adjustment pattern, contributed importantly to the second quarter increase, non-oil imports were also very robust. We expect import growth going forward to fall back to a rate more in line with that of U.S. activity—a projection broadly supported by a decline in imports in the monthly trade data for July. Of note, real oil imports are projected to fall in the second half, reflecting the unwinding of the aforementioned seasonal pattern. In contrast, real exports are expected to increase at an annual rate of $9\frac{1}{2}$ percent in the second half of the year—similar to their first-half pace—reflecting our projection of continued moderate foreign GDP growth and a continuation of the cyclical rebound in trade.

After subtracting close to $3\frac{1}{2}$ percentage points from the change in real GDP in the second quarter, including a negative contribution of over 1 percentage point from real oil imports alone, we expect net exports to make a positive contribution of about $\frac{1}{2}$ percentage point on average in the second half of the year. This contribution is similar to that in the previous Tealbook.

Prices and Wages

Core PCE price inflation slowed from $1\frac{3}{4}$ percent over the four quarters of 2009 to an annual rate of just a little over 1 percent over the first half of this year, and we expect it to remain at about that slower pace in the second half. Core goods prices decreased at an annual rate of about 1 percent in the first half of 2010, and we project that these prices will decline further on average in the second half of this year. The index for housing services has turned up in recent months, but the pace of price increases for other core services has moderated somewhat. On balance, we now expect the price index for

non-energy services to rise in the second half of this year at about the same modest pace as in the first half.

The July reading on core consumer price inflation was slightly higher than expected, and we took some signal from the surprises in the more persistent components of the index—including the rent indexes. As a result, our current projection for core inflation in the second half of 2010 is a couple of tenths above our forecast in the August Tealbook.

Total PCE prices increased, on average, at about the same rate as core PCE prices in the first half of this year, as the run-up in energy prices in the first quarter was reversed in the second. For the remainder of the year, we expect PCE energy prices to post only modest increases and total PCE prices to increase at a rate very close to that of core PCE prices.

The incoming data on labor compensation continue to be subdued. Compensation per hour in the nonfarm business sector was revised down sharply in the first half of the year, largely reflecting the incorporation of more complete earnings data from unemployment insurance records for the first quarter. We now estimate that compensation per hour declined at an annual rate of about $\frac{3}{4}$ percent in the first half of 2010, following a $2\frac{1}{2}$ percent increase in 2009. More-recent data suggest a pickup in labor compensation, with average hourly earnings rising about $\frac{1}{4}$ percent per month in July and August, and we expect compensation per hour will increase at an annual rate of about 2 percent in the second half of this year.

THE MEDIUM-TERM OUTLOOK

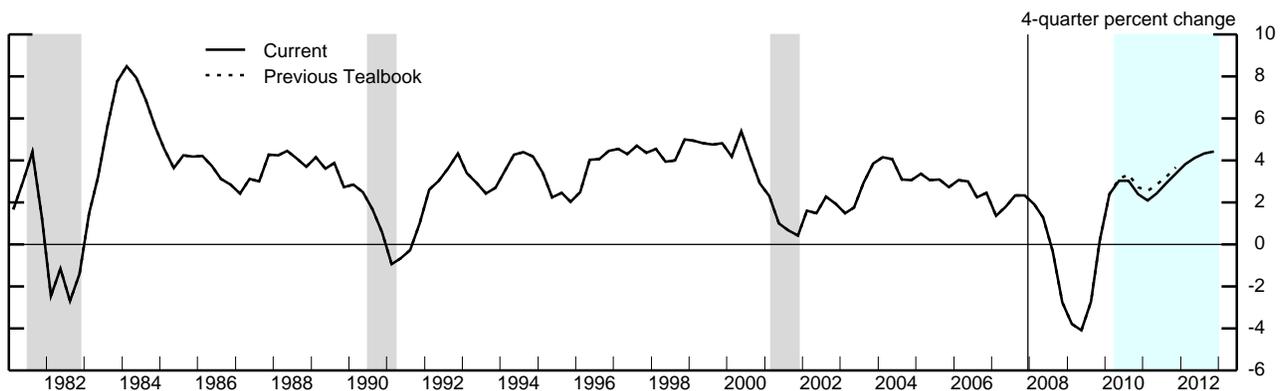
The weaker-than-expected incoming data suggest that underlying demand is softer than we had thought. In addition, financial conditions are somewhat less supportive of economic growth than at the time of the August Tealbook. As a result, we have marked down our projection for real GDP growth in 2011 to $3\frac{1}{4}$ percent, about $\frac{1}{4}$ percentage point slower than in the August Tealbook. We project real GDP growth to pick up to $4\frac{1}{2}$ percent in 2012.

The basic dynamics of the recovery are the same as in previous forecasts. Although the impetus from federal fiscal policy wanes, private demand is expected to be supported by a continued increase in credit availability and a reduction in the adverse

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

Measure	2009	2010		2011	2012
		H1	H2		
Real GDP	.2	2.7	2.0	3.3	4.4
Previous Tealbook	.2	2.9	2.5	3.6	
Final sales	-3	1.0	2.0	3.4	4.3
Previous Tealbook	-3	1.3	2.4	3.8	
Personal consumption expenditures	.2	1.9	2.1	3.0	4.2
Previous Tealbook	.2	1.7	1.8	3.5	
Residential investment	-13.4	5.3	-13.2	19.2	17.5
Previous Tealbook	-13.4	6.1	-5	19.0	
Nonresidential structures	-26.5	-10.5	-1.6	-2.0	-.7
Previous Tealbook	-26.5	-7.2	.7	-5	
Equipment and software	-4.9	23.4	2.1	10.5	11.0
Previous Tealbook	-4.9	23.2	7.2	11.6	
Federal purchases	3.6	5.4	4.0	1.1	.2
Previous Tealbook	3.6	5.4	2.3	1.0	
State and local purchases	-1.0	-1.6	-.6	.4	1.3
Previous Tealbook	-1.0	-1.2	-.4	.0	
Exports	-.1	10.3	9.6	7.6	7.5
Previous Tealbook	-.1	10.8	10.3	8.2	
Imports	-7.2	21.5	4.1	5.7	6.3
Previous Tealbook	-7.2	19.7	5.1	6.5	
Contributions to change in real GDP (percentage points)					
Inventory change	.5	1.7	.0	.0	.1
Previous Tealbook	.5	1.6	.1	-.2	
Net exports	1.2	-1.9	.5	.0	-.1
Previous Tealbook	1.2	-1.5	.5	.0	

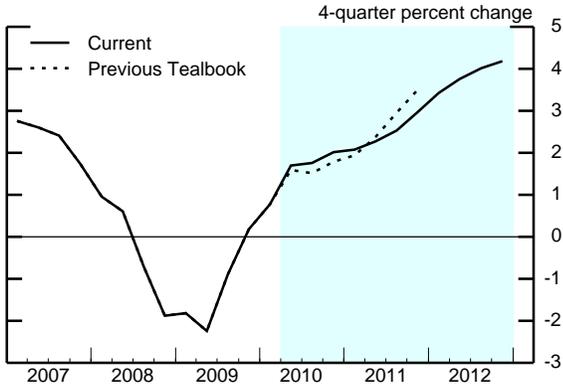
Real GDP



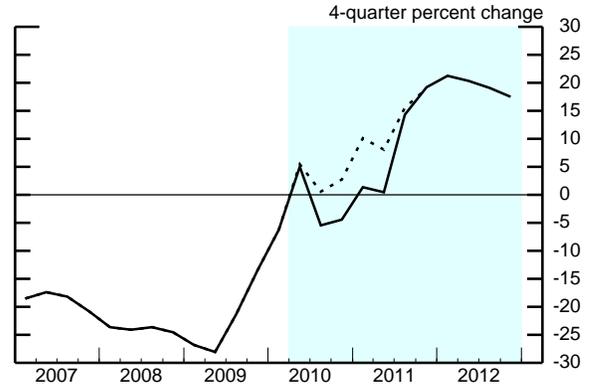
Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

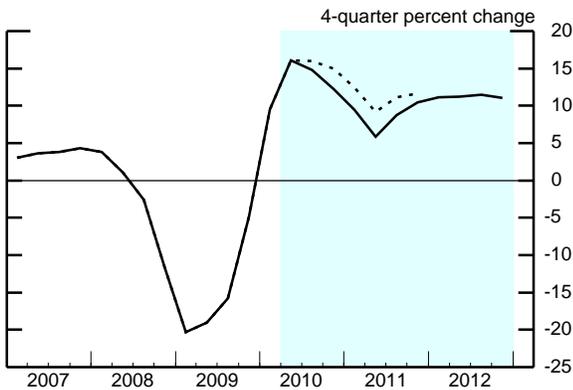
Personal Consumption Expenditures



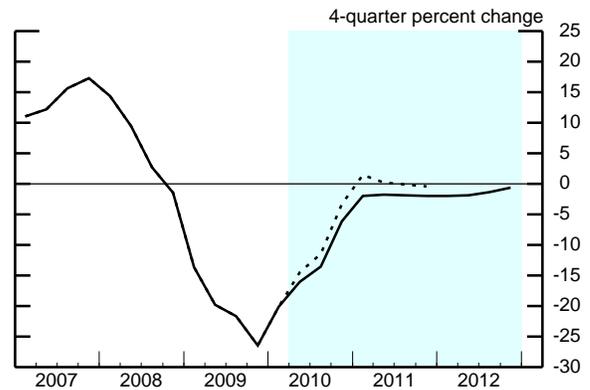
Residential Investment



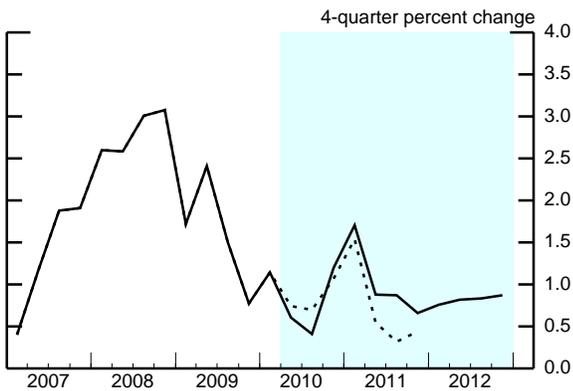
Equipment and Software



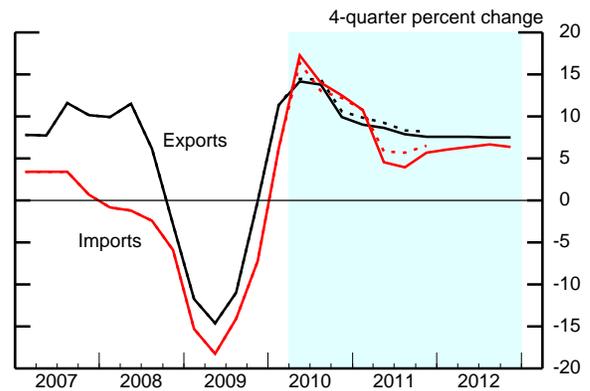
Nonresidential Structures



Government Consumption & Investment



Exports and Imports



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

effects of earlier declines in wealth. At the same time, business and household confidence is anticipated to improve and a more pronounced recovery in the labor market to take hold. Of course, the timing and magnitude of this “virtuous circle” are difficult to predict, but we believe that we have taken a reasonable middle ground between an economy that accelerates quickly as pent-up demand is unleashed and one in which consumers and businesses remain extremely cautious for an extended period.

In the household sector, for example, we expect that the support to spending from pent-up demand and more favorable credit conditions will be moderated by ongoing efforts of households to shore up their balance sheets and by the slow pace of job creation and continued concerns about future income prospects. As a result, we project real consumption spending to rise 3 percent in 2011, roughly in line with the increase in income and consistent with a saving rate that is about flat at close to 5½ percent. By 2012, however, we expect that consumer confidence about the recovery will have solidified, and our projection calls for real PCE to accelerate to more than 4 percent growth and for the saving rate to edge down.

Similarly, by the middle of 2011, we expect housing activity to be rising steadily, supported by the boost to affordability from low mortgage rates and low house prices, increasing confidence that house prices have bottomed out, and improvements in income and employment. However, at 600,000 units and 880,000 units for 2011 and 2012, respectively, our projection for single-family housing starts is still far below the pace we believe is consistent with the longer-run demand for housing. This shortfall reflects, in large part, the substantial overhang of vacant homes and lingering impediments to the availability of mortgage credit.

Our projection calls for real E&S spending to increase about 10 percent per year in both 2011 and 2012, consistent with the relatively slow growth environment that we are projecting to prevail over the next couple of years. The resulting level of investment is only a bit higher than that required to replace the depreciating stock, leaving the growth rate of the capital stock quite low for an economic recovery. (See the box on the recovery in equipment and software for further discussion.)

The overall pace of the recovery in our projection is also held down by our expectation that some sectors will experience an especially protracted period of weakness. For example, investment in nonresidential structures is projected to continue

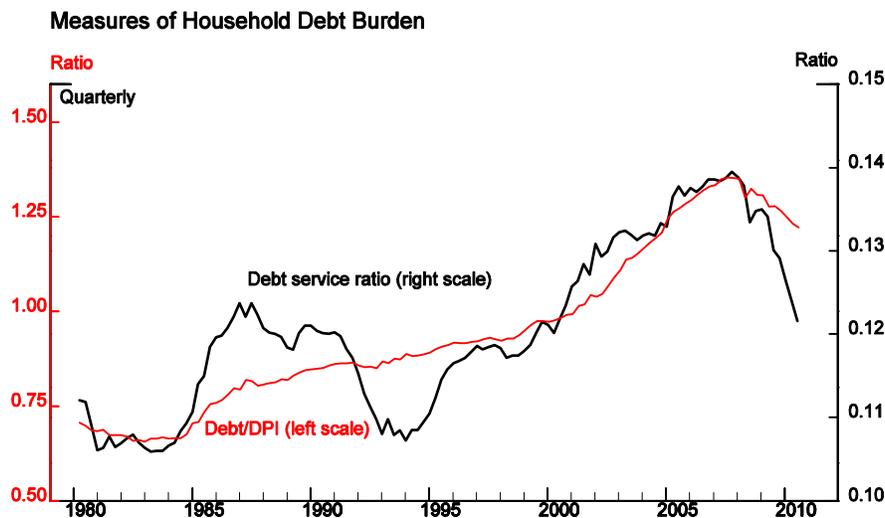
How Much Progress Have Households Made in Repairing Their Balance Sheets?

Sharp reductions in employment, income, and wealth left many households with a need to repair severely distressed balance sheets. Aggregate data suggest that progress has been made in this regard. However, a significant number of households continue to face financial strains that run deeper than the aggregate data suggest, and, for them, the financial repair process could take considerable time to completely play out.

After having reached an all-time high in the third quarter of 2007, the aggregate ratio of household debt to disposable personal income (shown in the figure below) declined noticeably through the second quarter of 2010. This decrease reflects reduced borrowing by households, repayments of a portion of existing debt, and defaults on some obligations, as well as a modest rise in disposable

income. Over the same period, the household debt service ratio (DSR)—defined as the minimum payments to cover principal and interest on household debt as a fraction of disposable income—has decreased more noticeably, as the average interest rates paid on debt have moved down on net (figure on facing page). The DSR currently stands at a level last seen in 2000.

Measures of household credit quality have also showed some signs of improvement in recent months. Delinquency rates have fallen noticeably from their recession peaks, although they remain at unusually high levels. The extent of improvement is not uniform, however, as delinquency rates on mortgages have moved down less than rates on consumer credit, a

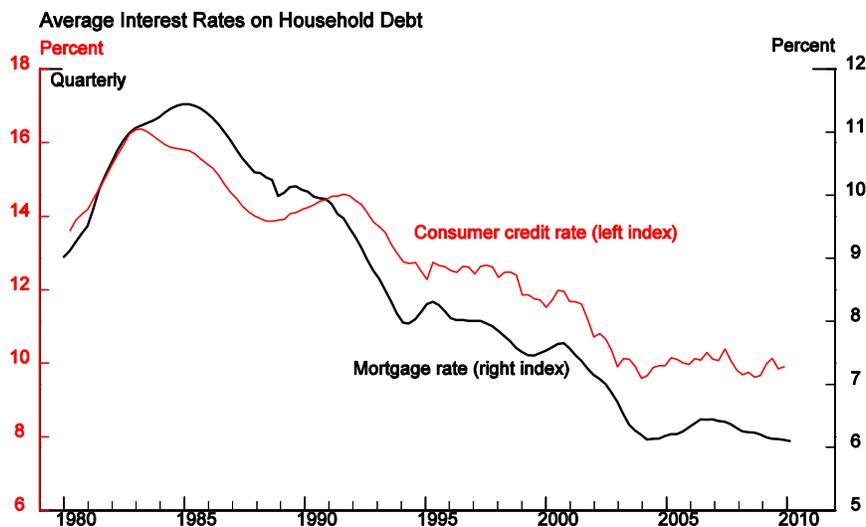


pattern that likely reflects the persistence of widespread negative home equity. (See the exhibit on household finances in the “Financial Developments” section for further details.)

Meanwhile, in recent quarters, household assets have risen, on net, reflecting increases in equity prices, a leveling-off of home prices, and a higher personal saving rate than in the years before the crisis. At the end of the third quarter, the ratio of household net worth—the difference between household assets and debt—to disposable income is projected to stand far below the exceptional peak in mid-2007, but close to its average level over the past 50 years.

Despite these signs of improvement, we think that the aggregate measures overstate the amount of financial repair that has occurred. Several factors

are standing in the way of financial repair for many households, including high unemployment, pervasive negative home equity (affecting, according to our estimates, at least 20 percent of all home mortgages), and mortgage refinancing that has been mostly limited to borrowers with good credit scores and sufficient home equity. In addition, the scale of the housing market collapse and the financial crisis was outside of the bounds of most households’ experiences and may have changed consumer attitudes about saving and borrowing. All told, even though we expect financial stress on these households to gradually lessen, we think that the forces of deleveraging and balance sheet repair will be a moderating influence on household spending for some time.



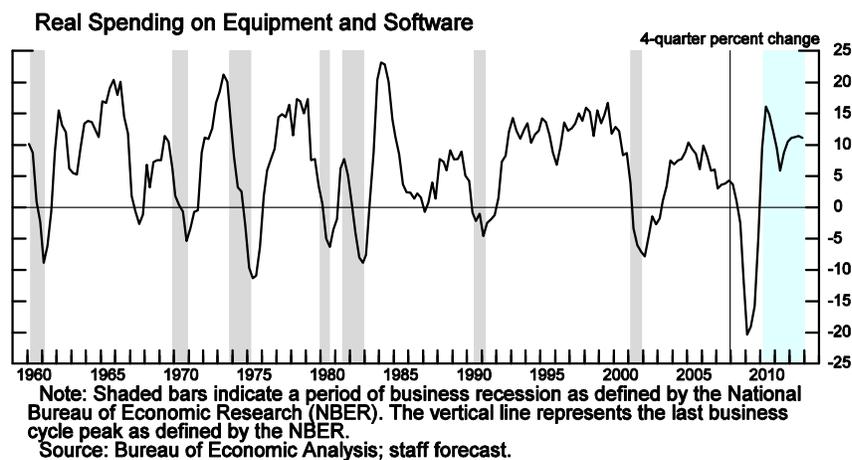
The Recovery in Equipment and Software Investment

Spending on equipment and software increased rapidly in the final quarter of 2009 and the first half of this year. Over the four quarters ending last quarter, real E&S rose 16 percent. Moreover, E&S investment has been a major contributor to the recovery, accounting for approximately one-third of the increase in overall output over this period—about the same contribution as PCE—despite constituting less than 7 percent of GDP.

Investment spending during the recovery has followed a fairly typical cyclical pattern. As shown in the figure below, real E&S spending usually falls sharply in recessions—a response to the decline in sales, heightened uncertainty about the outlook, and relatively tight credit conditions. A rapid recovery generally follows as firms respond to the improvement in sales prospects and the relatively low costs of borrowing that typify the onset of recovery. Recoveries are also usually boosted by the resumption of investment projects that were deferred because of the increased uncertainty and financing difficulties.

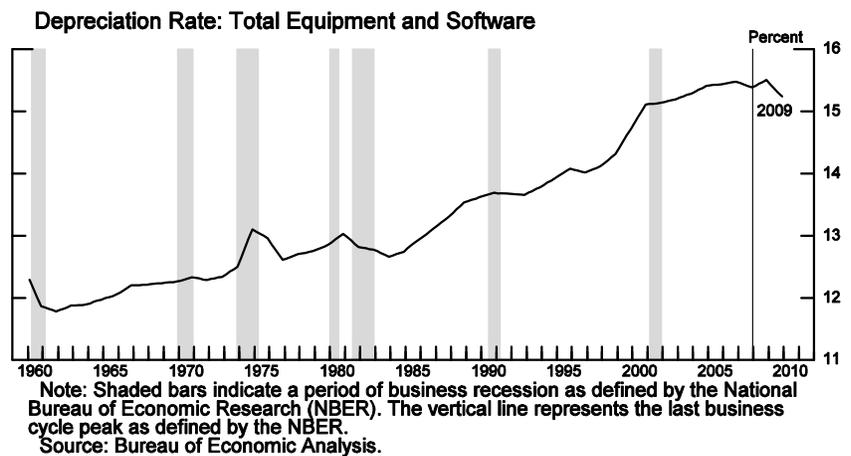
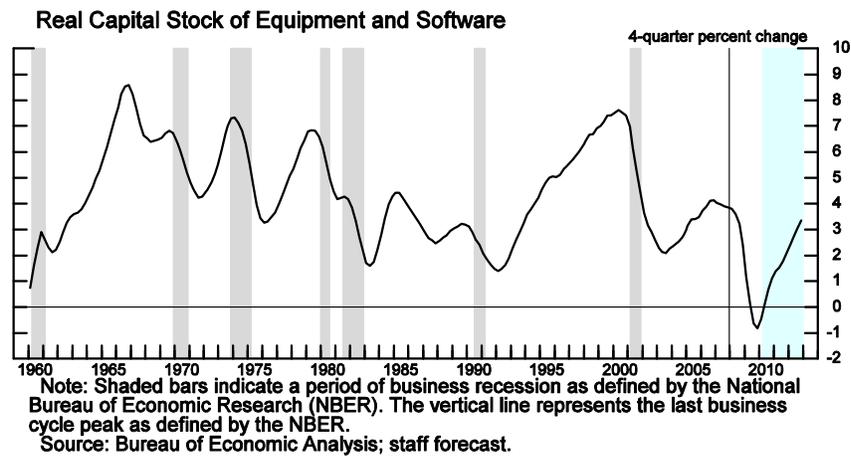
The same factors have likely been in play during this recession: The steep investment decline reflected the severity of the recession, extraordinarily high uncertainty about the outlook, and unusually tight credit conditions. The subsequent bounceback in investment growth has likely been boosted, in part, by the ensuing pent-up demand.

However, even with the rapid pickup in E&S growth over the past few quarters, the level of investment has risen only enough to produce meager gains in the capital stock. The top figure on the next page shows the four-quarter change in the E&S capital stock. In the year ending last quarter, the capital stock increased at an anemic rate, after having actually fallen for several quarters—the first declines in the post–World War II period. Although the drop in gross investment during the recession was larger than in most previous downturns, that alone does not fully explain the fall in the capital stock and the subsequent weak recovery.



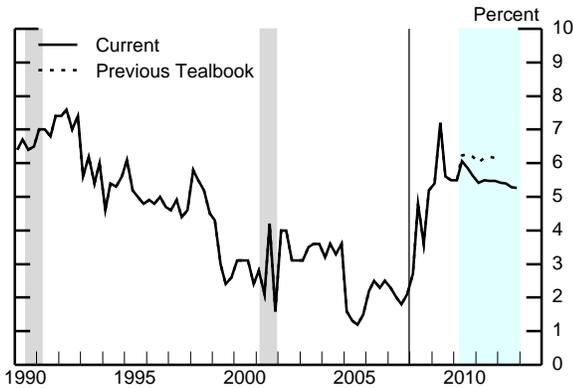
The other important factor has been an increase over time in the amount of investment required to replace the capital stock—that is, a rising depreciation rate. This development reflects the gradual shift in the composition of the capital stock toward assets with shorter service lives such as computers and software. Thus, a portion of the large gains in investment over the past several quarters has served only to bring capital spending back up to the level of replacement investment.

Going forward, we project that outlays for E&S will continue to rise solidly, albeit not spectacularly—a reflection of the subpar recovery in business sales that we are projecting and the waning of the boost from pent-up demand. As investment rises further above the level required to replace depreciated capital, the growth rate of the capital stock picks up in the medium term though it remains quite low for a recovery.



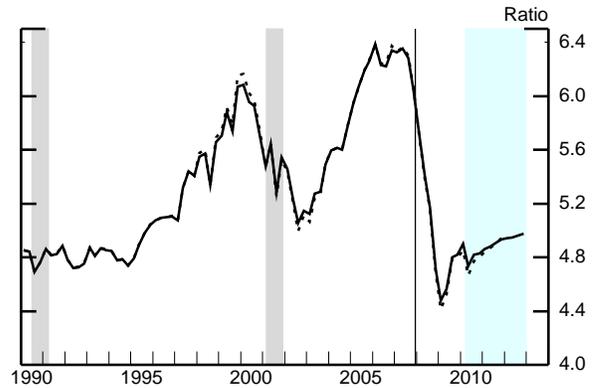
Aspects of the Medium-Term Projection

Personal Saving Rate



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

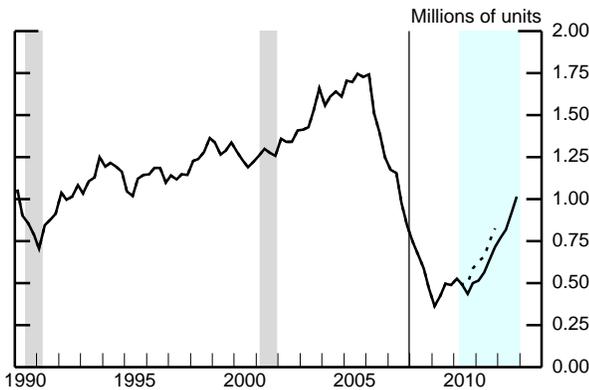
Wealth-to-Income Ratio



Note: Household net worth as a ratio to disposable personal income.

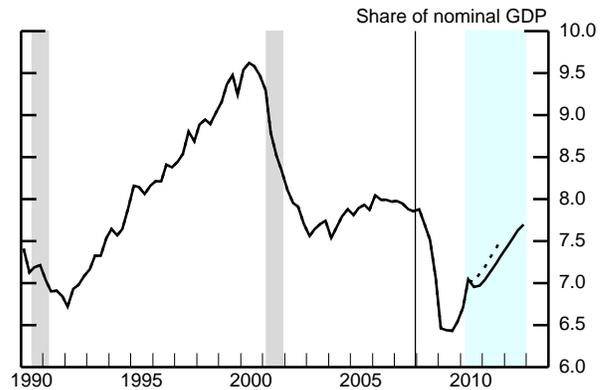
Source: Flow of Funds Accounts.

Single-Family Housing Starts



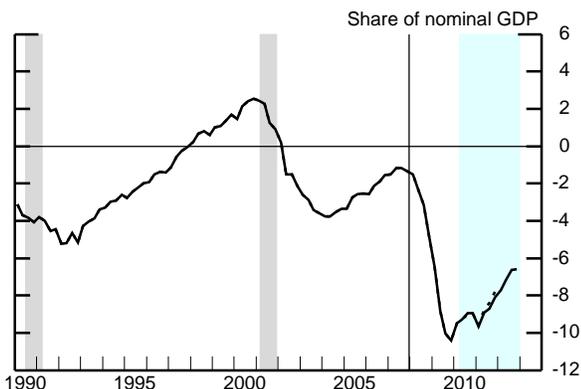
Source: U.S. Census Bureau.

Equipment and Software Spending



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

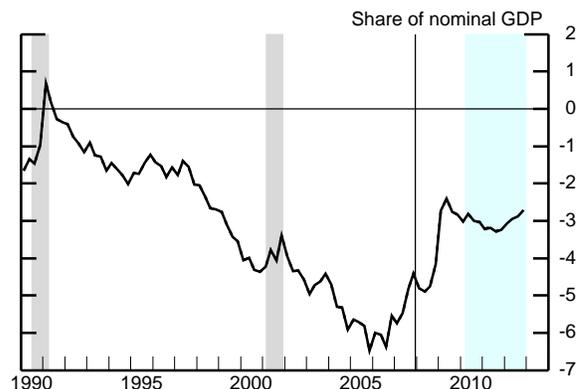
Federal Surplus/Deficit



Note: Share of federal government surplus/deficit is shown as a 4-quarter moving average.

Source: Monthly Treasury Statement.

Current Account Surplus/Deficit



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

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

declining, albeit at a slower pace, throughout 2011 and most of 2012. Indeed, elevated vacancy rates and low commercial property prices, as well as our expectation that lending conditions for commercial real estate will remain tight for quite some time, suggest that a substantial turnaround in this sector remains some years away.

In addition, government purchases are projected to rise at a very subdued pace over the next few years. For the federal government, declines in expenditures related to Iraq and the waning of stimulus-related nondefense expenditures are projected to slow the rise in real expenditures to just 1 percent in 2011 and $\frac{1}{4}$ percent in 2012. In the state and local sector, budget pressures are projected to ease only slowly, as the projected rise in tax collections from the recovering economy is partially offset by the unwinding of the federal stimulus grants. As a result, real spending in this sector is projected to increase only about $\frac{1}{2}$ percent next year and $1\frac{1}{4}$ percent in 2012.

Finally, net exports are anticipated to be about neutral, on balance, for the recovery in real GDP over the medium term. Supported by moderate foreign GDP growth and continued dollar depreciation, real exports are projected to rise more than 7 percent per year, on average, during 2011 and 2012. At the same time, real imports are projected to increase at a 6 percent annual rate, driven by the increase in U.S. GDP. Exports and imports grow a little more slowly than in the August forecast, in line with our markdowns to economic growth here and abroad.

AGGREGATE SUPPLY, THE LABOR MARKET, AND INFLATION

Potential GDP and the NAIRU

As described in the box “Structural Unemployment and Revisions to the Staff’s NAIRU,” we have raised our estimate of the current level of NAIRU from $5\frac{1}{4}$ percent to $5\frac{3}{4}$ percent, with that increment assumed to have occurred gradually over 2008 and 2009.³ As a result, we marked down our estimate of potential GDP growth over this

³ The $5\frac{3}{4}$ percent figure for the NAIRU does not include the effects of extended and emergency unemployment benefits (EEB). EEB programs add to the unemployment rate by inducing individuals who would otherwise have dropped out of the labor force to report themselves as unemployed in order to receive these benefits, and by enabling jobseekers to be more deliberate in their search. We estimate that these programs are currently boosting the unemployment rate by close to 1 percentage point, and we anticipate that this effect will diminish throughout the forecast period as these programs are phased out. As a result, the amount of unemployment not representative of slack in resource utilization—which could be thought of

Structural Unemployment and Revisions to the Staff's NAIRU

In the staff's view, the sharp run-up in the unemployment rate since late 2007 has been largely cyclical rather than structural. That said, we now think that the NAIRU has increased by more than we had assumed earlier, and we have raised our estimate of the current NAIRU by an additional ½ percentage point to 5¾ percent.

The steep increase in unemployment resulting from permanent layoffs (shown in the figure to the lower left) is a key factor underlying our assumed increase in structural unemployment. Permanent job loss often requires affected individuals to change industries, occupations, or locations in order to become reemployed. Further, such workers typically experience longer spells of unemployment than do workers who lose their jobs through temporary layoffs or who become unemployed upon entering the labor force. Because this measure has remained stubbornly high, these workers' obstacles to a successful job search—such as skill mismatch or skill depreciation—appear to have been greater than we had previously thought.

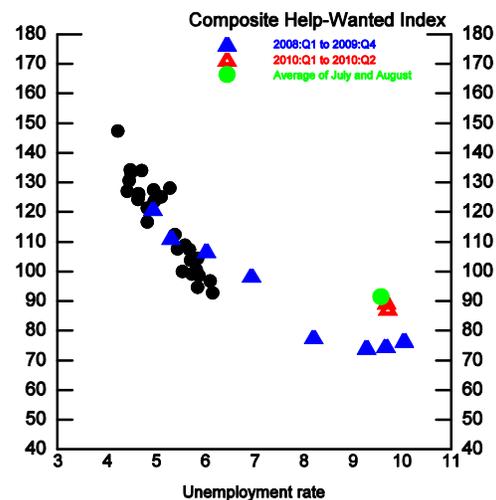
One piece of evidence that permanent job loss has led to a larger rise in structural unemployment than we had previously assumed is the outward movement in the Beveridge Curve (shown in the figure to the lower right), which represents the relationship between the job-vacancy rate and the unemployment rate.¹ Movements in the Beveridge Curve can occur for several reasons, and, indeed, the continued elevated pace of layoffs and the effects on the unemployment rate of the extensions of unemployment insurance benefits have both likely contributed to this outward movement. Nonetheless, job-finding rates for unemployed workers (not shown) fell sharply during 2008 and 2009 and have remained extraordinarily low despite an increase in the vacancy rate. This development suggests that the amount of structural unemployment associated with job mismatch may have increased as well. In this regard, staff research suggests that the observed shift in the Beveridge Curve is roughly consistent with the increase in the staff's estimate of the NAIRU since the beginning of the recession.

¹ The job-vacancy rate is measured by the staff's composite index of help-wanted advertising as a share of nonfarm payroll employment.

Job Losers Not on Temporary Layoff



Beveridge Curve



Decomposition of Potential GDP
(Percent change, Q4 to Q4, except as noted)

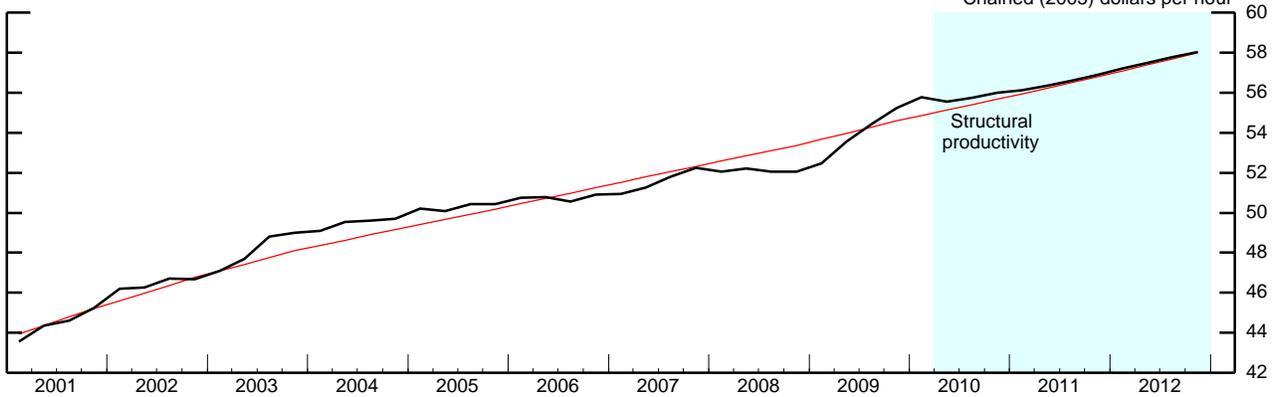
Measure	1974-1995	1996-2000	2001-2008	2009	2010	2011	2012
Potential GDP	3.0	3.5	2.7	2.2	2.5	2.5	2.5
Previous Tealbook	3.0	3.5	2.7	2.6	2.4	2.5	
<i>Selected contributions¹</i>							
Structural labor productivity	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Previous Tealbook	1.5	2.7	2.5	2.4	1.9	2.0	
Capital deepening	.7	1.5	.7	.3	.4	.6	.8
Previous Tealbook	.7	1.5	.7	.1	.3	.6	
Multifactor productivity	.5	.9	1.6	1.9	1.5	1.3	1.2
Previous Tealbook	.5	.9	1.6	2.1	1.5	1.4	
Trend hours	1.7	1.1	.8	.1	.7	.7	.7
Previous Tealbook	1.7	1.1	.8	.4	.7	.7	
Labor force participation	.5	.0	-.2	-.2	-.2	-.2	-.2
Previous Tealbook	.5	.0	-.2	-.2	-.2	-.2	

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.

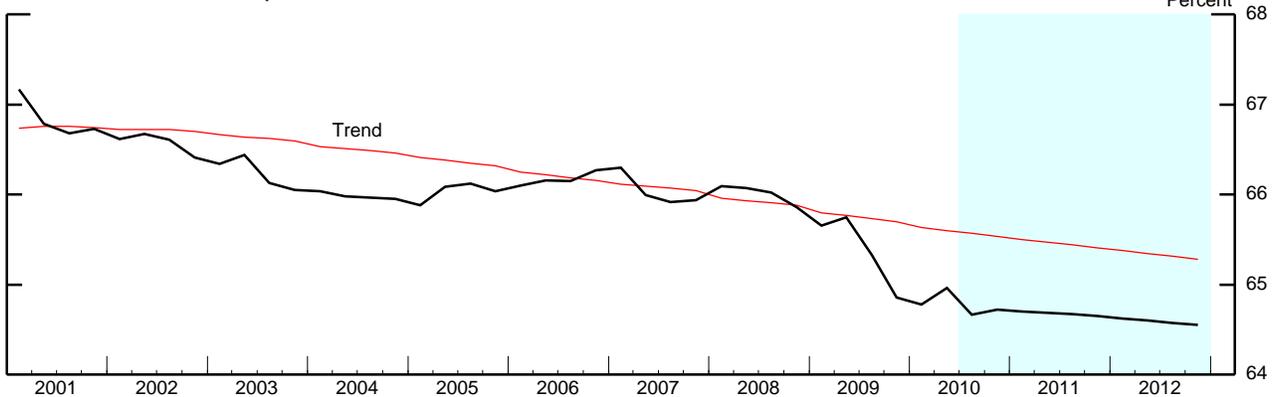
1. Percentage points.

Source: Staff assumptions.

Nonfarm Business Productivity



Labor Force Participation Rate



Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

period, leaving the level of potential GDP about $\frac{3}{4}$ percentage point lower by the end of 2009. However, we did not change our assumption about the growth rate of potential GDP going forward, and continue to assume it will increase at an annual rate of $2\frac{1}{2}$ percent over the forecast period.

We have made no material change to our estimates of structural labor productivity. In particular, we continue to assume that structural productivity will grow roughly 2 percent per year throughout the medium-term projection. Likewise, our assumptions about the trends in labor force participation and the workweek are essentially unchanged from the previous Tealbook forecast.

Productivity and the Labor Market

As in recent forecasts, we view the sizable increase in labor productivity last year as having resulted, in part, from pressures that firms placed on workers by aggressively cutting staffing even as output increased. As a consequence, we judge productivity to have moved above its structural level by the end of last year. Part of that gap was erased over the first half of this year, as firms resumed hiring and lengthened workweeks despite the moderation in the pace of output growth. We expect this trend to continue over the forecast period as firms gradually become more confident about the recovery and step up the pace of hiring to further ease the strains on their existing workforces. As a result, we project labor productivity to rise a little less than its structural rate in 2011. By 2012, we expect the gap between structural and actual productivity to have closed, and labor productivity to rise at its structural rate of about 2 percent.

However, given the weaker path for real GDP in this forecast, we now expect the pickup in employment to be significantly slower than in the August Tealbook. For 2011, employment gains are projected to average 200,000 per month, about 50,000 less than in the last projection. This pace of job gains results in a more gradual reduction in the unemployment rate, which now edges down from $9\frac{3}{4}$ percent at the end of this year to about 9 percent by the end of 2011, about $\frac{1}{4}$ percentage point higher than in the August forecast. For 2012, we expect employment to increase 270,000 per month, on average, and the unemployment rate to fall to 8 percent by the end of the year.

as an “effective” NAIRU—is currently around $6\frac{3}{4}$ percent and will decline gradually to just above $5\frac{3}{4}$ percent by the end of 2012.

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

Measure	2009	2010	2011	2012
Output per hour, nonfarm business	6.2	1.3	1.6	2.0
Previous Tealbook	6.3	1.4	1.3	
Nonfarm private employment	-4.7	.9	2.1	2.9
Previous Tealbook	-4.7	1.2	2.7	
Labor force participation rate ¹	64.9	64.7	64.7	64.6
Previous Tealbook	64.9	64.7	64.6	
Civilian unemployment rate ¹	10.0	9.7	9.1	8.0
Previous Tealbook	10.0	9.7	8.9	
MEMO				
GDP gap ²	-7.1	-7.2	-6.4	-4.7
Previous Tealbook	-7.9	-7.6	-6.6	

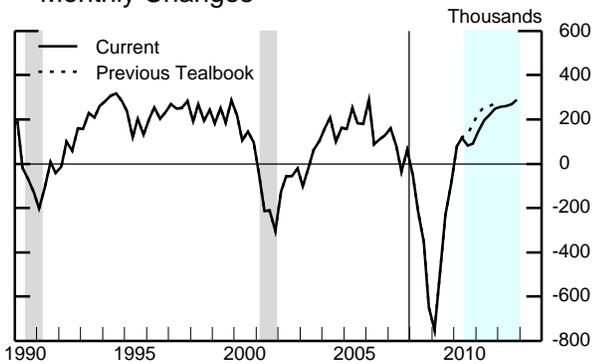
Note: A negative number indicates that the economy is operating below potential.

1. Percent, average for the fourth quarter.

2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated.

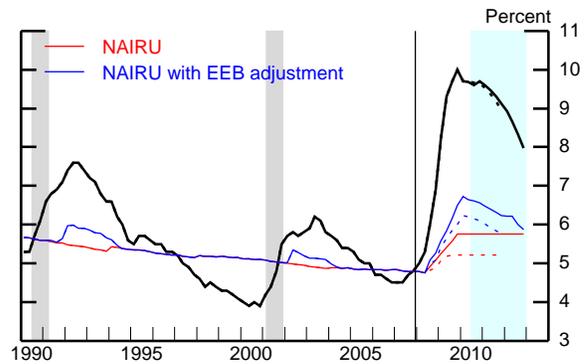
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

Private Payroll Employment, Average Monthly Changes



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

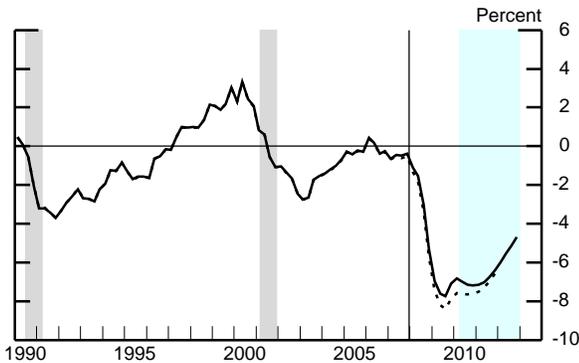
Unemployment Rate



Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics; staff assumption.

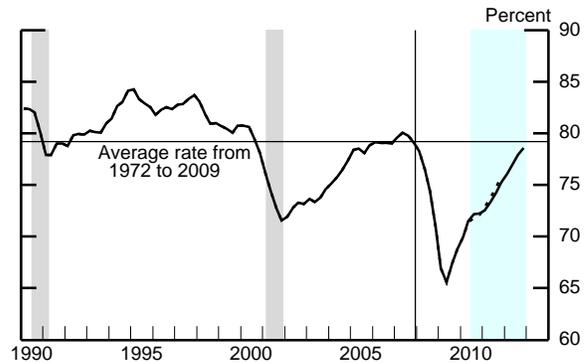
GDP Gap



Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.

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

Manufacturing Capacity Utilization Rate



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

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

Resource Utilization

The upward revision to our estimate of the NAIRU implies that, despite the higher path for the unemployment rate in this projection, the projected margin of slack over the next two years is not much changed from the last Tealbook. Thus, the amount of current and projected slack remains very large. By our estimate, the unemployment rate currently stands about 3 percentage points above the effective NAIRU, and, in the projection, the unemployment gap only declines to about 2¼ percentage points by the end of 2012.⁴ This extended period of considerable labor market slack is likely to be associated with other features of a weak labor market, including below-trend labor force participation and an unusually large concentration of workers experiencing unemployment spells of long duration.

Similarly, our revision to potential output means that, even with the downward revisions to our projection for the change in real GDP, the level of the gap at the end of 2011—at 6½ percent—is virtually unchanged from the last forecast. By the end of 2012, the gap shrinks to about 4¾ percent of GDP. We continue to expect slack in the industrial sector to be taken up more quickly than in the economy as a whole, in part because manufacturing capacity, after contracting 1¼ percent in 2009, is projected to be flat, on average, in 2010 and 2011 and to expand only about ¾ percent in 2012. Indeed, by the end of 2012, our projection has the factory operating rate returning to about its long-run average.

Compensation and Prices

We expect that the wide margin of labor market slack, along with low rates of price inflation, will continue to restrain labor costs over the forecast period. The Productivity and Cost measure of compensation per hour in the nonfarm business sector is projected to rise only about 1¾ percent in 2011 and roughly 2 percent in 2012. Similarly, we expect the employment cost index to rise at an annual rate of about 2 percent over the forecast period. These modest increases in hourly compensation, in combination with the moderate rise in labor productivity in this forecast, result in unit labor costs that are about flat in both 2011 and 2012.

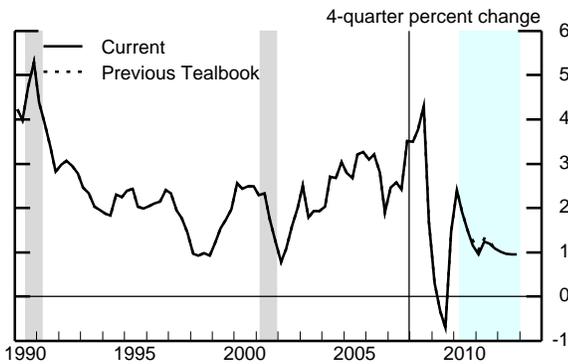
⁴ By the end of 2012, the EUC programs are mostly phased out under our assumptions, so the effective NAIRU is only a little bit above the actual NAIRU.

Inflation Projections (Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.2	1.1	1.0
Previous Tealbook	1.5	1.3	1.1	
Food and beverages	-1.6	1.2	.7	.7
Previous Tealbook	-1.6	1.3	.7	
Energy	2.7	1.4	4.4	1.8
Previous Tealbook	2.7	4.5	3.8	
Excluding food and energy	1.7	1.1	.9	.9
Previous Tealbook	1.7	1.1	.9	
Prices of core goods imports ¹	-1.9	2.7	1.2	.9
Previous Tealbook	-1.9	2.7	1.2	

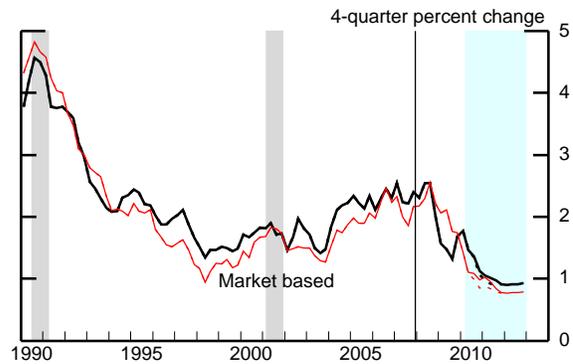
1. Core goods imports exclude computers, semiconductors, oil, and natural gas.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE Prices



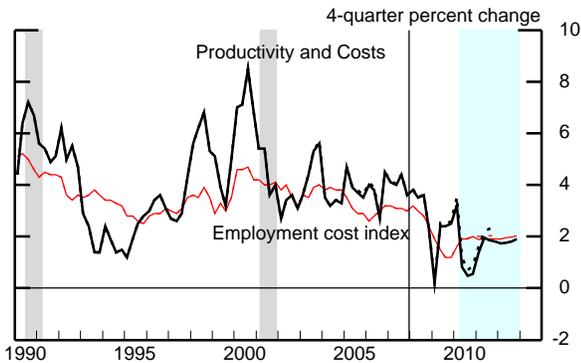
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



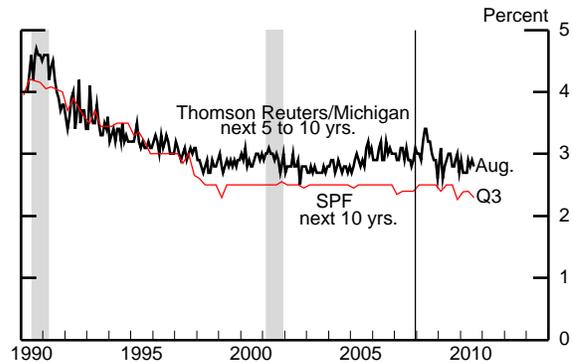
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Compensation per Hour



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

Long-Term Inflation Expectations



Note: The Survey of Professional Forecasters (SPF) projection is for the CPI.
Source: Thomson Reuters/University of Michigan Surveys of Consumers; The Federal Reserve Bank of Philadelphia.

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

After rising at an annual rate of 3 percent in the second quarter, prices of imported core goods (all goods excluding fuels, computers, and semiconductors) are projected to increase at a 1¼ percent pace in the third quarter, a step-down consistent with recent monthly readings on import prices. For the fourth quarter, we forecast that the recent increases in nonfuel commodity prices, combined with projected dollar depreciation, will lead to a temporary pickup in import price inflation to 2¼ percent. Thereafter, core import price inflation settles down to 1 percent, in line with our projections of moderate dollar depreciation and small increases in commodity prices.

As in previous forecasts, we anticipate that reduced labor cost pressures and low levels of resource utilization will exert a downward influence on core PCE inflation over the projection period, but that these disinflationary forces will be mostly checked by ongoing stability in inflation expectations. With the degree of slack in this projection roughly the same as in the last projection, we continue to project that core PCE inflation will rise 1.1 percent this year and 0.9 percent in 2011. Our projection for core PCE inflation for 2012 is also 0.9 percent. With food and energy price inflation expected to be modest, our projection for headline inflation is just a bit above core inflation throughout the forecast horizon.

THE LONG-TERM OUTLOOK

We have extended the staff forecast to 2015 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 FOMC participants at the June meeting.
- The Federal Reserve's holdings of securities follow the baseline portfolio projections reported in Book B of this Tealbook. We assume that the projected decline in the Fed's holdings will contribute about 20 basis points to the rise in the 10-year Treasury yield over the 2013–15 period.
- Beyond 2012, the risk premiums on corporate bonds and equity decline gradually to normal levels and banks ease their lending standards somewhat further.

- The federal government budget deficit narrows to about 4½ percent of GDP by the end of 2015. This improvement reflects the effects of the economic recovery on tax receipts and transfer payments as well as further policy actions after 2012 aimed at reducing the deficit.
- The real foreign exchange value of the dollar is assumed to depreciate 1¼ percent per year in the 2013–15 period. The price of WTI crude oil rises to around \$90 per barrel by the end of 2015, consistent with futures prices. Under these assumptions, movements in the prices of energy and imports have only minor implications for domestic inflation in the extension. Foreign real GDP expands, on average, about 3¼ percent per year from 2013 through 2015, with foreign economies growing close to their trend rates.
- After 2012, the NAIRU remains at 5¾ percent, reflecting our view that a prolonged period of high unemployment is likely to have persistent adverse effects on the functioning of the labor market. Potential GDP is assumed to expand by 2½ percent per year from 2013 to 2015.

The unemployment rate enters 2013 well above the assumed NAIRU, and the staff's estimate of the output gap is still very wide. Real GDP rises at an annual rate of 4½ percent on average in 2013 and 2014, notably above its potential pace, as improved confidence, reduced uncertainty, and supportive financial conditions allow aggregate demand to catch up with aggregate supply. Unemployment falls over this period, inflation moves back toward the assumed long-run target, and the federal funds rate continues to rise, reaching 3¾ percent in 2015.⁵ With improvements in confidence and financial conditions largely complete by 2015, gains in real GDP move back toward gains in underlying potential; in addition, the unemployment rate falls to the NAIRU, and consumer price inflation reaches 1½ percent.

⁵ In the long-run outlook, the federal funds rate (R) follows the prescriptions of a Taylor-type rule of the form $R = 2.5 + \pi - 1.1(u - u^*) + 0.5(\pi - 2)$, subject to the zero lower bound constraint. In this expression, π denotes the four-quarter rate of core PCE inflation, u is the civilian unemployment rate, and u^* is the staff estimate of the NAIRU (with an adjustment for the temporary effects on unemployment of the extended and emergency unemployment benefit programs). In essence, this is just the traditional Taylor rule, rewritten in terms of the unemployment gap, with the coefficient on resource utilization appropriately rescaled.

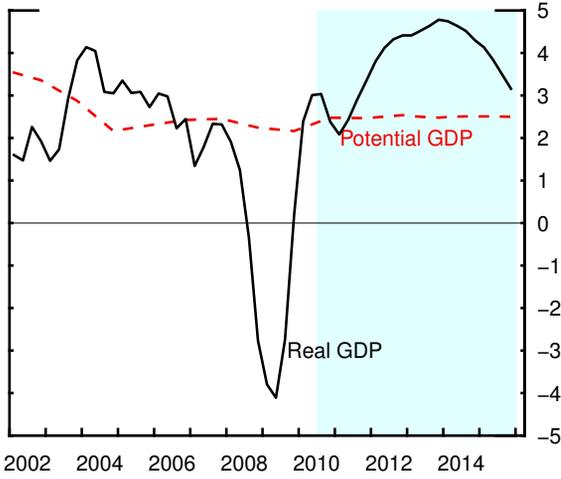
The Long-Term Outlook

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

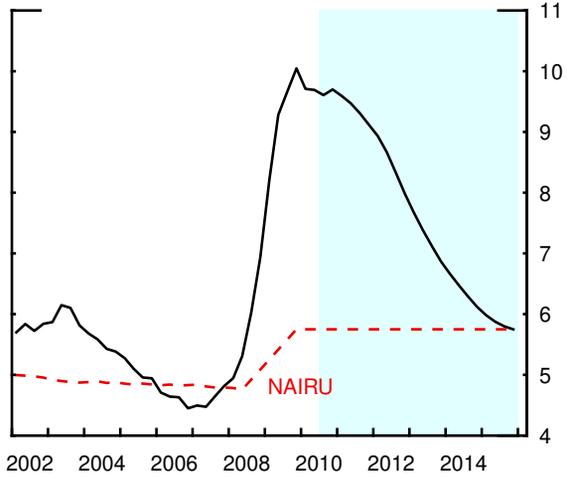
Item	2010	2011	2012	2013	2014	2015
Real GDP	2.4	3.3	4.4	4.8	4.3	3.2
Civilian unemployment rate ¹	9.7	9.1	8.0	6.9	6.1	5.7
PCE prices, total	1.2	1.1	1.0	1.1	1.4	1.6
Core PCE prices	1.1	.9	.9	1.1	1.3	1.5
Federal funds rate ¹	.1	.1	.3	1.8	3.0	3.7

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

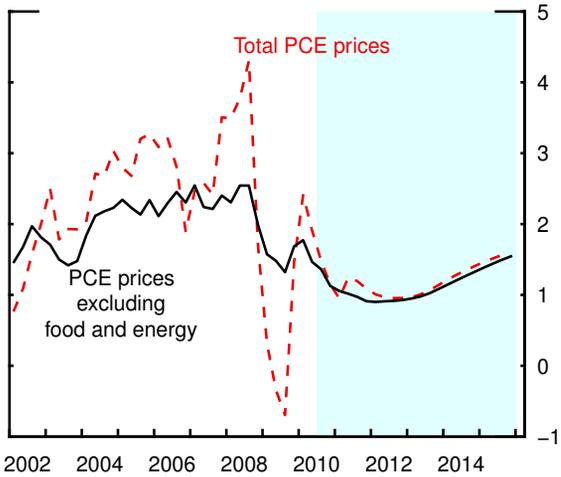
Real GDP
4-quarter percent change



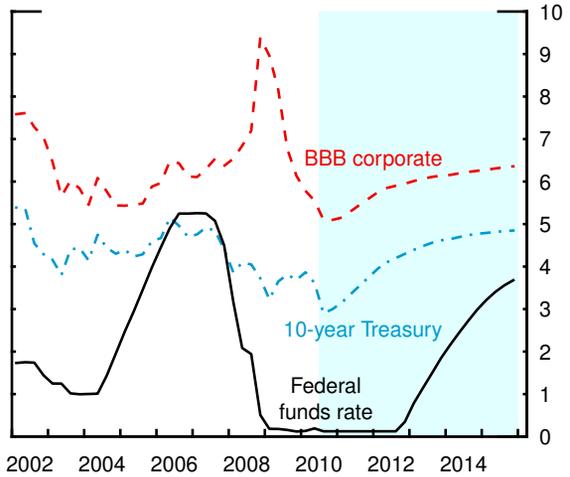
Unemployment Rate
Percent



PCE Prices
4-quarter percent change



Interest Rates
Percent



Note: In each panel, shading represents the projection period.

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International Economic Developments and Outlook

Although foreign GDP data for the second quarter proved stronger than we had anticipated, more recent indicators support our expectation that the pace of activity abroad will slow significantly in the second half of this year. The second-quarter strength reflected surprisingly vigorous GDP growth for a number of economies, particularly the euro area and Mexico. The euro-area performance appears to reflect greater resilience in the face of the region's debt-related financial stresses than we had anticipated, and we have carried some of this momentum forward, but we judge that Mexico's second-quarter surge reflected transitory factors. Indicators for the third quarter, in contrast, have come in on the weak side of our expectations. The softer tone of the foreign data, along with downward revisions to the path of U.S. GDP, has led us to mark down the outlook for foreign GDP growth by ½ percentage point in the second half of the year and by ¼ percentage point in 2011.

We now project that foreign economic activity will slow from an annual rate of 5½ percent in the first half of this year to 2¾ percent in the second half, as the recovery in global trade, manufacturing, and inventories matures. Thereafter, economic growth picks up to 3½ percent by 2012 as a gradual revival in private spending more than offsets the withdrawal of fiscal and monetary stimulus. Although fiscal policy should be approximately neutral this year, we continue to project that fiscal consolidation efforts will exert a drag on foreign growth in 2011 and 2012.

Staff Projections for Foreign Economies

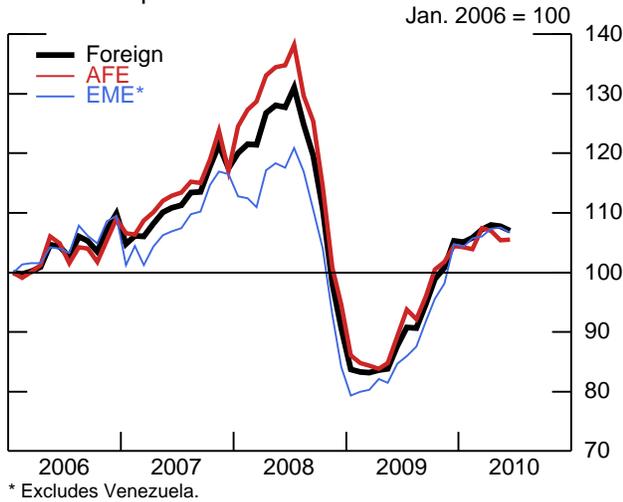
(Percent change from end of previous period, annual rate)

Indicator	2009	2010		Projection			
				2010		2011	2012
		Q1	Q2	Q3	Q4		
Real GDP	.4	4.9	5.9	2.5	2.9	3.2	3.5
August TB	.4	4.8	4.7	3.1	3.2	3.4	...
CPI	1.2	3.4	1.3	1.9	2.1	2.2	2.2
August TB	1.2	3.4	1.3	1.8	2.2	2.2	...

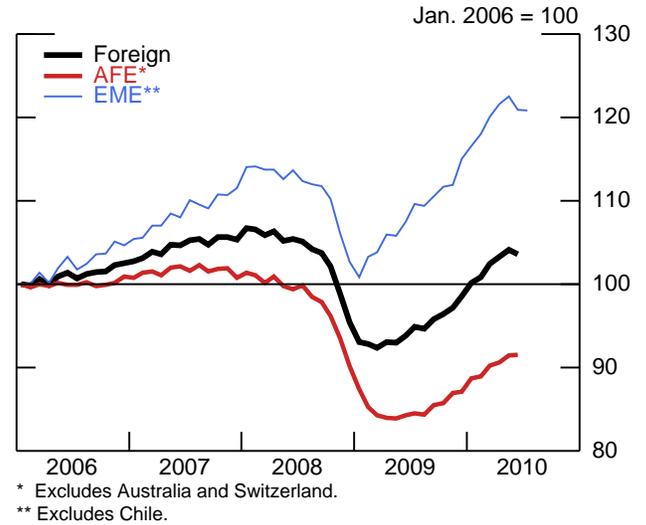
... Not applicable.

Recent Foreign Indicators

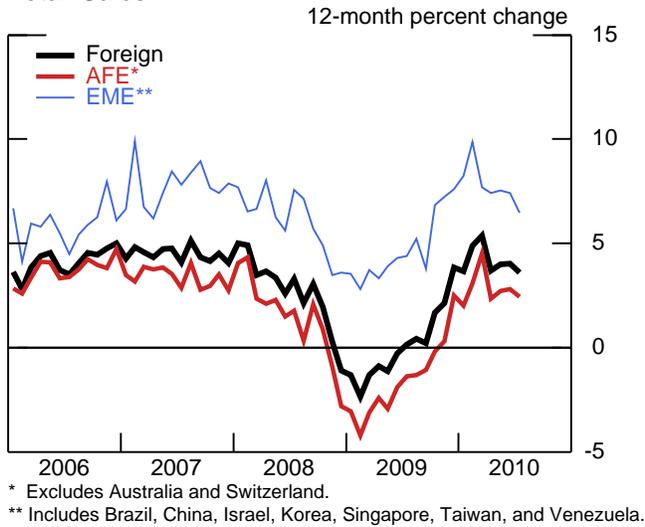
Nominal Exports



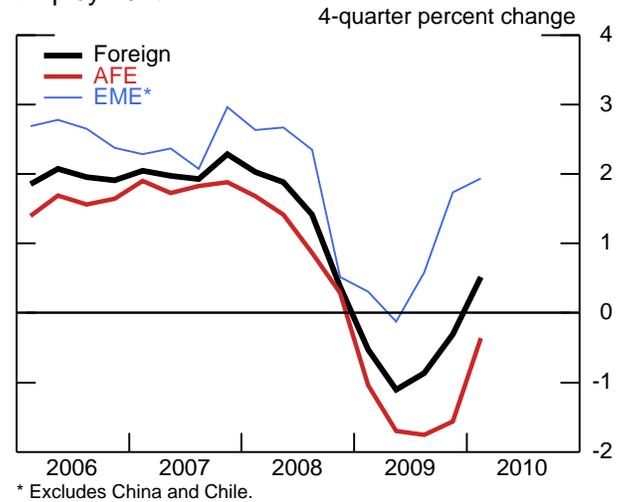
Industrial Production



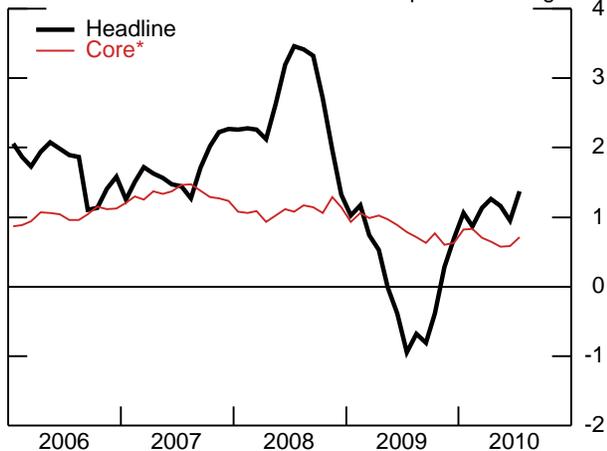
Retail Sales



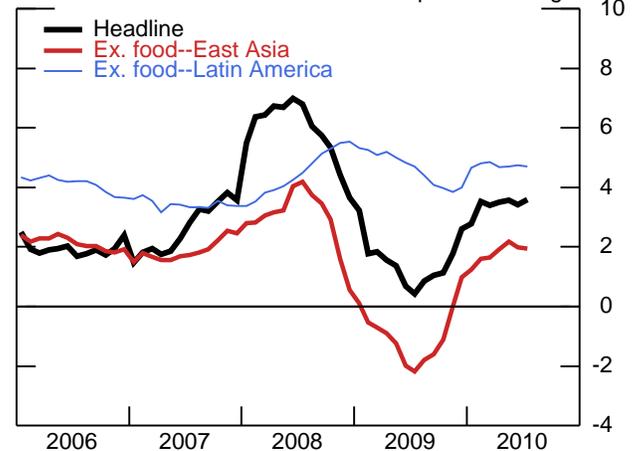
Employment



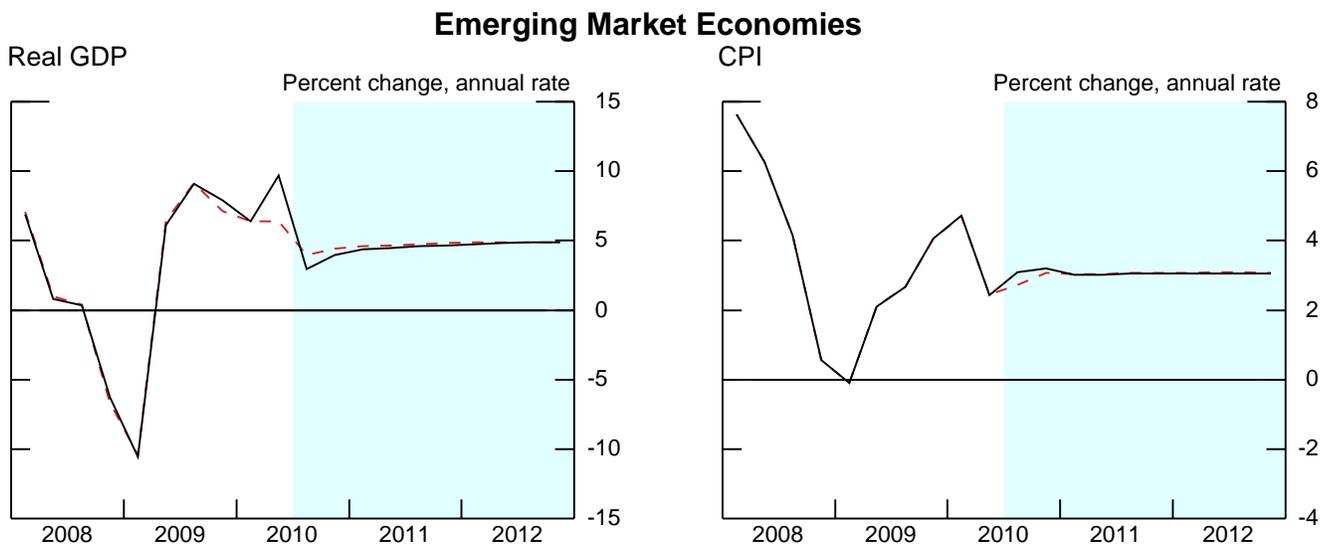
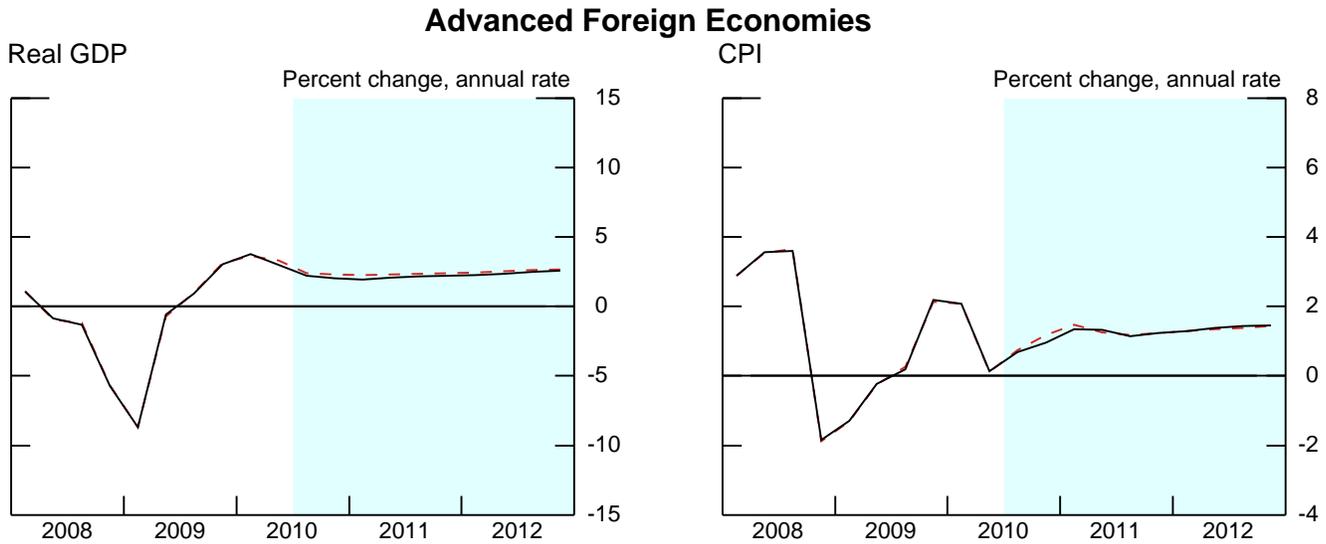
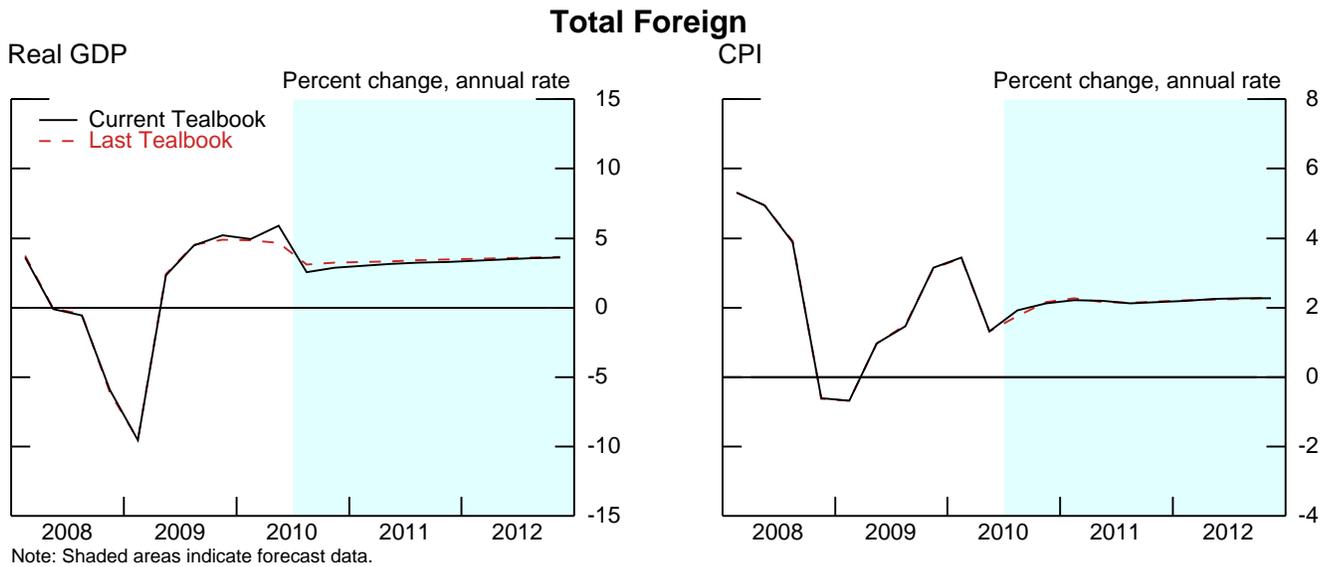
Consumer Prices: Advanced Foreign Economies



Consumer Prices: Emerging Market Economies



The Foreign Outlook



Int'l Econ Devel & Outlook

Foreign inflation was pushed down in the second quarter, as food and energy prices decelerated. Inflation is expected to rebound to an annual rate of nearly 2 percent in the current quarter and a bit higher thereafter as food and energy prices pick back up. Continued resource slack, especially in the advanced economies, should keep foreign inflation subdued over the remainder of the forecast period, with Japan remaining in deflation throughout.

With inflation prospects well contained, we continue to expect that monetary policy abroad will remain generally accommodative. This morning, Japanese authorities unilaterally intervened in foreign exchange markets to weaken the yen in an effort to bolster the economy's flagging growth. (For further details, see the box, "The Recent Appreciation of the Yen," and the "Financial Developments" section.) In contrast, since the August Tealbook, central banks in a number of economies where the recoveries have become more firmly established, including Canada, Sweden, and some emerging market economies (EMEs), have tightened policy.

ADVANCED FOREIGN ECONOMIES

Output growth in the advanced foreign economies (AFE) came in at 3 percent in the second quarter, slightly weaker than we had expected, as a surprising surge in euro-area economic growth was offset by more tepid figures for Canada and Japan. Going forward, we expect AFE economic activity to continue to moderate, in particular as fiscal austerity and financial stresses weigh on Europe. After bottoming out next year at around 2 percent, AFE economic growth rises to 2½ percent in 2012 as financial stresses wane and demand from the United States and EMEs picks up. Incoming data and somewhat more modest expectations for global economic activity have led us to revise down our projected path of AFE economic growth around ¼ percentage point compared with the previous Tealbook.

Economic Activity

Euro area. Incoming data for the euro area show that the region's fiscal stresses have led to increasingly divergent economic outcomes across member countries but have yet to stymie economic growth for the region as a whole. Euro-area real GDP grew almost 4 percent in the second quarter, a full percentage point higher than anticipated in the August Tealbook. Economic growth was robust across the main Northern European members with a particularly robust performance in Germany, where strong external

The Recent Appreciation of the Yen

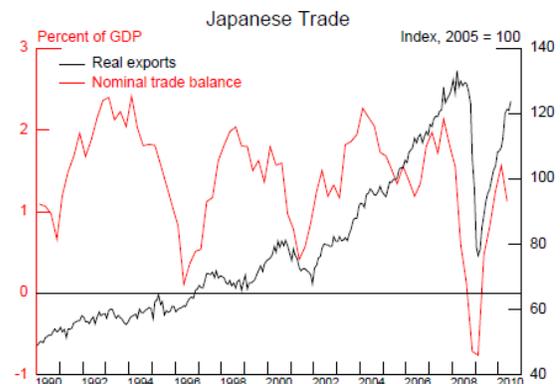
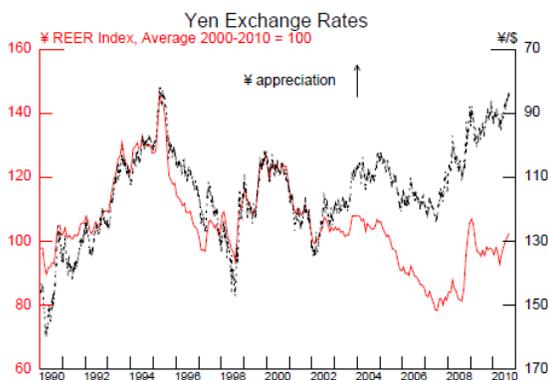
Japanese officials warned about the dangers of “excessive exchange rate volatility” in August and early September and then intervened unilaterally on September 15 to weaken the yen. The intervention resulted in the yen depreciating roughly 3 percent against the dollar to about ¥86 per dollar. Before the intervention, the yen had appreciated roughly 10 percent against the dollar since May, continuing a trend that saw the value of the yen rise from about ¥125 per dollar in August 2007 to ¥83 per dollar just before the intervention.

A number of factors have contributed to the yen’s appreciation against the dollar in recent years. U.S. interest rates have declined, significantly narrowing the gap with Japan’s low interest rates, and expectations for U.S. GDP growth have recently declined relative to those for Japan. Diminished risk appetite has also boosted the yen over the last few years, and most recently it has played an important role as uncertainty about the global economy has increased. According to this explanation, when risk aversion increases,

Japanese investors pull back from risky foreign investments and bring funds home, thereby lifting the yen against other currencies, including the dollar.

While the nominal value of the yen is close to historic highs against the U.S. dollar, the real effective value of the yen is well below the high reached in 1995, and is, in fact, currently close to its average value over the past decade. Furthermore, the recent increases in both the nominal and the real effective values of the yen are within the range of normal variation experienced over the last two decades.

Perhaps most important, the appreciation of the yen does not appear to have prevented a recovery in Japanese exports. Since bottoming out in early 2009, Japanese real merchandise exports have rebounded more than 60 percent, and the nominal trade balance as a share of GDP has returned to a surplus comparable in size to those experienced during the past two decades.



demand helped fuel a 9 percent surge in real GDP. In contrast, economic growth in Spain and Portugal was only weakly positive, and Greek GDP contracted at a 7 percent pace as private consumption and investment plummeted. Second-quarter GDP data for Ireland have yet to be released, but financial conditions worsened over the intermeeting period on further revelations about the poor performance of the major banks. (For a discussion, see the box, “Recent Developments in the Irish Banking Sector.”)

Staff Projections for Advanced Foreign Economies
(Percent change from end of previous period, annual rate)

Indicator	2009	2010		Projection			
				2010		2011	2012
		Q1	Q2	Q3	Q4		
Real GDP	-1.4	3.7	3.0	2.2	2.0	2.1	2.4
August TB	-1.4	3.6	3.3	2.4	2.3	2.3	...
CPI	.2	2.1	.1	.7	1.0	1.3	1.4
August TB	.2	2.1	.1	.7	1.2	1.3	...

... Not applicable.

For the euro area as a whole, indicators for activity in the current quarter suggest some moderation from the rapid second-quarter pace. Euro-area purchasing managers indexes (PMIs) for August edged down, and industrial production was flat in July. However, these indicators came in better than we had expected, and retail sales and consumer confidence also suggest more momentum than we had anticipated in the August Tealbook. Accordingly, we have revised up our estimate for euro-area GDP growth in the second half nearly $\frac{1}{2}$ percentage point to $1\frac{3}{4}$ percent. Going forward, we continue to believe that significant headwinds remain, as countries implement substantial fiscal consolidation, the impetus from the inventory cycle fades, and stresses in the banking sector persist. We expect euro-area economic growth to slow further to $1\frac{1}{2}$ percent in 2011 before picking up to about 2 percent in 2012.

Our outlook for the euro area is conditional on a gradual easing of the financial pressures that emerged in the spring of 2010, based on tangible progress toward cutting budgets. Indeed, to date, peripheral euro-area countries have been implementing fiscal consolidation plans in line with their commitments. Based on our projections, however, the significant fiscal consolidation undertaken by Greece will not be sufficient to stabilize

its government debt as a share of GDP, a view shared by many market participants. Therefore, we do not expect Greece to regain access to market funding at reasonable interest rates in early 2012, as is currently written into the joint International Monetary Fund (IMF) and European Union (EU) program. As such, we expect that the IMF and the EU will, at a minimum, lengthen the maturity of their current loans to Greece and commit additional funds. A more ambitious plan, which would better assure the long-run sustainability of Greek debt, would also include a restructuring of the Greek debt held by the private sector. Regardless of the steps that are eventually taken to address the Greek debt situation, we continue to assume that there will be only minimal spillovers to other euro-area economies, although more severe outcomes are clearly possible.

United Kingdom. Recently released data indicate that an upswing in inventories accounted for most of the United Kingdom's 5 percent increase in GDP in the second quarter. Final domestic demand increased only $\frac{3}{4}$ percent, significantly less than we had estimated, as a sharp decline in investment largely offset a rebound in consumption. Accordingly, and consistent with purchasing managers surveys and confidence indicators, we see economic growth moderating to $1\frac{1}{2}$ percent in the second half of the year. Thereafter, a sharp fiscal consolidation should subtract roughly $1\frac{3}{4}$ percentage points from GDP growth in both 2011 and 2012. Nonetheless, we see GDP growth picking up to $2\frac{1}{2}$ percent by the end of 2012 as a weak pound supports exports and some healing in financial conditions helps to revive private spending.

Japan. Japanese real GDP slowed to $1\frac{1}{2}$ percent in the second quarter. External demand continued to drive the recovery, but private domestic demand was tepid. Indicators for the third quarter have been mixed. Real consumption expanded at a solid pace in July, but industrial production fell and the manufacturing PMI for August declined to its lowest level in more than a year. We project real GDP growth to rise to nearly 2 percent by the end of 2012 as private domestic spending picks up. Over the intermeeting period, the Japanese government, under mounting political pressure, announced a new stimulus plan to boost employment and help small businesses, but this plan is too small to affect our outlook. We also see the economic effects of today's intervention by the Japanese authorities in foreign exchange markets as being small.

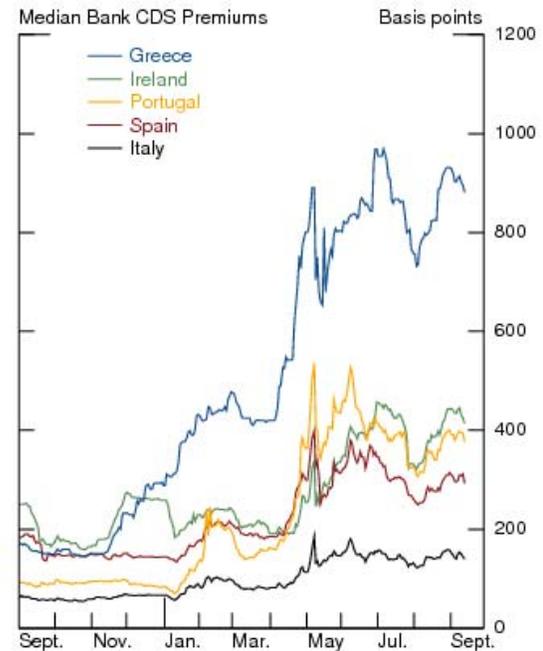
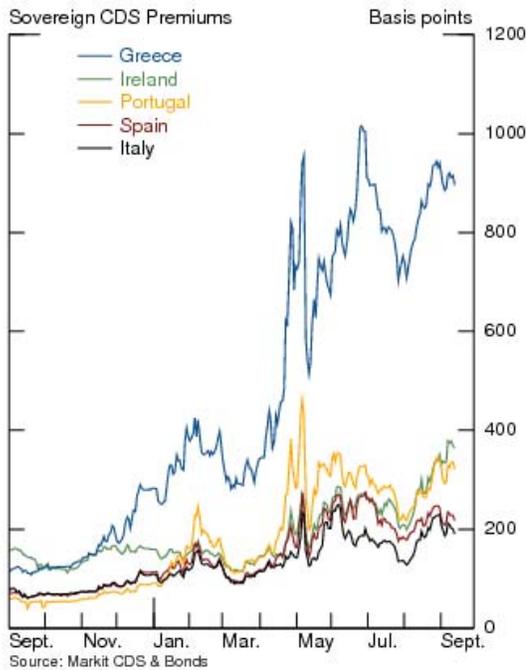
Canada. After expanding at an annual rate of nearly 6 percent in the first quarter, real GDP in Canada rose at a disappointing 2 percent pace in the second, with consumption spending especially weak. In reaction, we have carried some of this

Recent Developments in the Irish Banking System

In August, bad news about bank earnings and asset quality reduced investor confidence in Ireland’s banking system and heightened concerns that Irish banks may remain fragile for a prolonged period. In addition, the news raised questions about whether Ireland’s already strapped government will be able to continue to support the banking system on the scale needed to avoid a crisis. As a result of these concerns, S&P downgraded Ireland’s sovereign credit rating to AA- from AA, and credit default swap (CDS) premiums on the debt of Irish banks and of the Irish government increased significantly—both relative to their levels in early August and relative to increases seen in other peripheral European countries.

Asset Quality

The news in August centered on Ireland’s three largest banks, which collectively hold 80 percent of the banking system’s assets. Early in the month, the European Commission authorized new capital injections for Anglo Irish Bank (Anglo) of up to €10 billion, corresponding to 11.5 percent of Anglo’s assets. The Bank of Ireland and Allied Irish Banks, Ireland’s two largest banks, announced large first-half losses and disclosed that their nonperforming loan ratios increased substantially, by about 30 to 40 percent from year-end 2009 to the end of June 2010.



These announcements reinforced perceptions that the asset quality of the Irish banking system is poor and worsening, driven by deteriorating economic conditions and a sharp drop in home prices. The rapidly growing nonperforming loans, coupled with poor earnings, have intensified capital needs, and a further deterioration of asset quality is likely if economic conditions do not improve. For example, the capital injection received by Anglo in August was barely sufficient to cover its 2010 loan loss expenses to date. Indeed, Anglo is seen as likely to need further capital injections, with estimates of future losses ranging from €2 billion to €10 billion.

These developments likely would have exacerbated funding pressures for Irish banks were it not for a government guarantee of new bank liabilities with maturities of less than five years. These guarantees were originally planned to end this month but were extended until the end of 2010. Irish banks may face intensified funding pressures when these guarantees expire.

Fiscal Burden

In response to the financial crisis and the bursting of its real estate bubble, the Irish

government has injected capital of €33 billion into five banks, including Anglo, which it nationalized in December 2008. It also established the National Asset Management Agency (NAMA) to purchase distressed real estate loans from banks. To date, loans with a face value of €27 billion have been transferred to NAMA, at an average discount of about 50 percent.

Including these expenditures, S&P now estimates that the total gross costs, excluding future recoveries, to the Irish government of cleaning up the banks through recapitalization and the costs of NAMA transfers will be €90 billion. These costs amount to more than 55 percent of GDP and will add to an already heavy fiscal burden in Ireland, where the deep recession has led to a sharp deterioration in public finances. However, the long-run costs to the government of supporting the banking system could be lower than these gross figures, depending on ultimate repayments of capital injections and recovery values for assets purchased.

weakness in consumption forward, revising down our second-half forecast by about $\frac{3}{4}$ percentage point to $2\frac{1}{2}$ percent. Despite increases in the number of jobs, which should support consumption, we expect economic growth to edge up only modestly over the forecast period, restrained by a somewhat more subdued projection for the United States than in the August Tealbook.

Monetary Policy

With a subdued recovery in economic activity, and inflation prospects still contained, we project that monetary policy abroad will generally remain accommodative over the forecast period. For the Bank of England, we pushed back our expectation for the first rate hike to early 2012 because of the recent softness in final domestic demand. We anticipate that the ECB will maintain easy monetary and liquidity conditions and keep its benchmark policy rate unchanged at 1 percent until mid-2012. Conversely, at its recent meeting, the Bank of Canada hiked its target for the overnight rate 25 basis points to 1 percent, and we expect further modest increases to $1\frac{3}{4}$ percent by 2012 amid relatively limited resource slack.

The Bank of Japan likely will keep its target for the call rate close to zero well beyond 2012. At an unscheduled meeting on August 30, the Bank of Japan introduced a new facility offering up to ¥10 trillion (\$118 billion) in six-month funds at its current target rate. This meager policy measure was reportedly made in response to pressure from the government, which has become increasingly concerned about the risks caused by the rising yen to Japan's recovery. As noted previously, Japanese authorities intervened in foreign exchange markets this morning in an effort to weaken the yen.

EMERGING MARKET ECONOMIES

Economic activity in the EMEs appears to have slowed markedly in the current quarter, following a surge in growth to nearly 10 percent in the second. A leap of about 13 percent in Mexican GDP, along with upside surprises in a number of other economies, led us to revise up EME growth by more than 3 percentage points for the second quarter. However, incoming data for the current quarter have turned notably softer: Industrial production decelerated in July in a number of economies, and exports also declined in some cases. PMIs for July and August generally moved down relative to their second-quarter levels but nonetheless remained in the expansion range in most economies.

All told, we now expect economic growth in the EMEs to drop to 3½ percent in the second half of this year. Much of this deceleration was foreseen in our August forecast, and we revised down our second-half projection by only ¾ percentage point. This revision reflects a combination of the weaker-than-expected data mentioned above, payback in Mexico from its surprising second-quarter surge, and the markdown to the U.S. outlook. In 2011 and 2012, we project EME economic growth to step up to roughly 4¾ percent per year, a rate we view as sustainable and in line with the projected firming in activity in the advanced economies.

Staff Projections for Emerging Market Economies
(Percent change from end of previous period, annual rate)

Indicator	2009	2010		Projection			
				2010		2011	2012
		Q1	Q2	Q3	Q4		
Real GDP	2.8	6.4	9.7	3.0	4.0	4.5	4.8
August TB	2.8	6.4	6.4	4.0	4.4	4.7	...
CPI	2.2	4.7	2.4	3.1	3.2	3.0	3.1
August TB	2.2	4.7	2.4	2.7	3.1	3.0	...

... Not applicable.

China. In China, incoming data have reinforced our assessment that GDP growth has moderated from the rapid pace over the past year. Industrial production dipped slightly in July but rebounded in August, leaving the three-month change—at 2.2 percent—similar to the second-quarter pace. The PMI, fixed-asset investment, and retail sales weakened in July, but improved in August. Exports moved down in July and August, but imports were also soft, resulting in a widening of the trade surplus, on average, from the second quarter.

In response to the weaker U.S. outlook, we have revised our projection of GDP in China down about ¼ percentage point to 8 percent in the second half of this year. For 2011 and 2012, Chinese economic growth edges up to 8½ percent. Although concerns have been raised that China may be heading for a sharp slowdown, perhaps reflecting excesses in its property market, we see recent developments as broadly consistent with only a moderation in the pace of growth, in line with the intentions of the Chinese authorities. In addition, we believe that the authorities have sufficient scope for further

fiscal stimulus should the economy slow considerably; some additional infrastructure projects and accelerated public housing construction have already been approved. However, absent signs of such a slowdown, authorities are likely to resume tightening monetary policy later this year.

Other Emerging Asia. Elsewhere in emerging Asia, recent data also point to a deceleration in activity. In July, industrial production weakened in several countries, and exports generally fell. The slowdown in exports seen so far appears to be concentrated more in sales to China than to the United States, suggesting that weakness in the United States is not the primary driver of the moderation of activity in the region. Readings on PMIs for July and August moved down significantly in some countries—in Singapore and Taiwan, PMIs slipped into the contractionary range—and indicators of activity in the global electronics sector weakened a bit. All told, we project GDP growth in the emerging Asian economies other than China to fall to about 3 percent in the second half of this year, a bit below the August Tealbook forecast because of weaker-than-expected data as well as the markdown to the U.S. outlook. Thereafter, economic growth should pick up to about 4½ percent as conditions in the global economy firm.

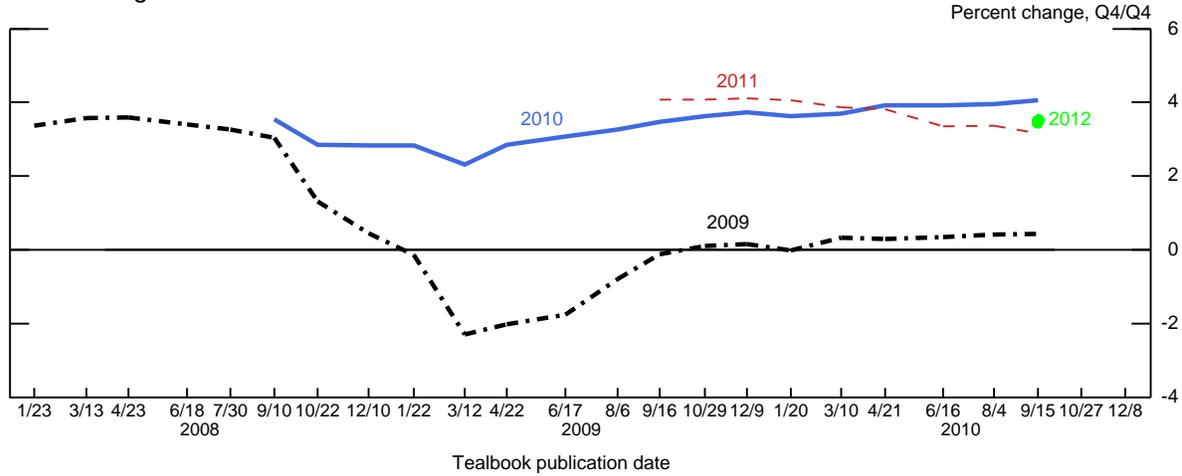
We do not yet see any strong evidence that the moderation of activity we are observing in emerging Asia is signaling a more pronounced slowdown in the region. Moreover, even outside of China, we believe that these economies have scope to use expansionary policy to support economic growth. Even so, the possibility that the recent deceleration in activity may portend a sharper slowdown than we now expect is an important downside risk to the outlook, which is explored in the “Risks and Uncertainty” section.

Latin America. In Mexico, GDP growth surged to an annual rate of 13½ percent in the second quarter following a contraction in the first, propelled by strong manufacturing production and agricultural output. We believe that this performance reflects transitory factors that will dissipate going forward, consistent with the deceleration of industrial production in recent months. Accordingly, we project that economic growth will step down in the current quarter and average about 1¾ percent for the remainder of this year. This projection is roughly 1½ percentage points lower than that in the previous forecast, reflecting payback from the second-quarter surprise. Over the next two years, Mexican GDP growth rises to about 4 percent, in line with the contour of U.S. manufacturing production.

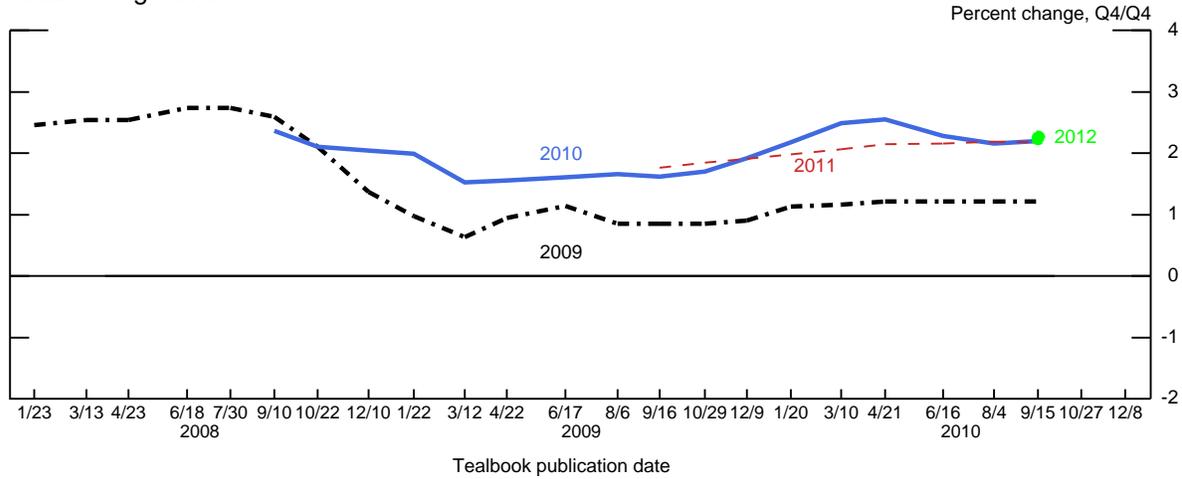
In contrast to Mexico, GDP growth slowed in Brazil in the second quarter from its unsustainable double-digit pace in the first. We forecast that Brazilian economic growth will move down further to 3½ percent in the second half of this year, partly reflecting the withdrawal of tax incentives for purchases of autos and other consumer durables and as the recent tightening of monetary policy takes hold. For Latin America as a whole, we project that real GDP growth will move down to about 2½ percent in the second half of this year and then rise to about 4 percent by the end of 2012, as Brazil and Mexico grow close to trend.

Evolution of Staff's International Forecast

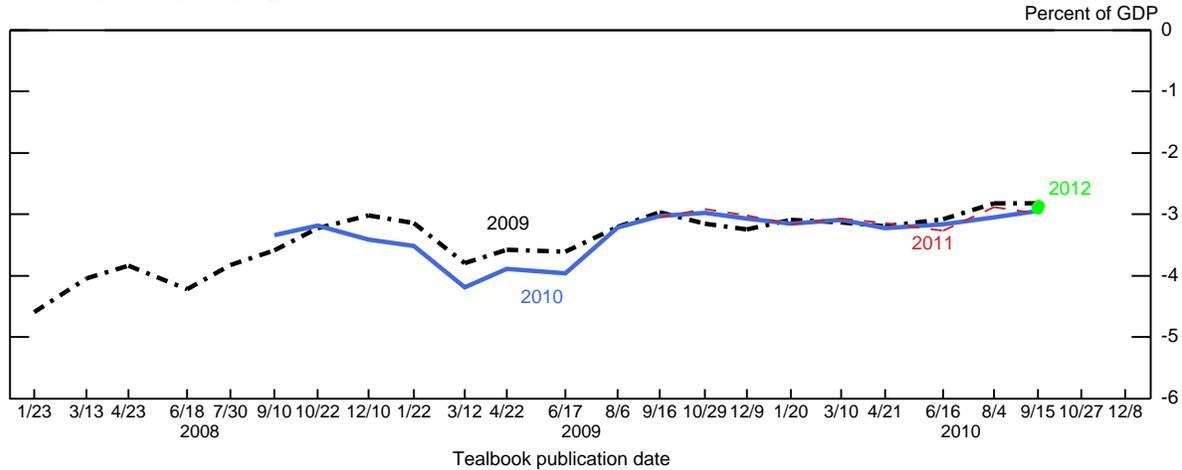
Total Foreign GDP



Total Foreign CPI



U.S. Current Account Balance



Int'l Econ Devel & Outlook

Financial Developments

Since the August FOMC meeting, investors have focused intently on news concerning the global economic outlook and on communications by Federal Reserve officials. Early in the period, against the backdrop of the more-cautious tone in the August FOMC statement, investors marked down their outlook considerably in response to weaker-than-expected incoming data. Subsequently, they took some comfort from the Chairman's Jackson Hole speech and from more-positive data on manufacturing activity and the labor market. On balance, however, market participants appear to have pared their expectations for economic growth. The anticipated path of the federal funds rate shifted down somewhat over the intermeeting period, and survey information suggests that investors now see greater odds that the Federal Reserve will resume asset purchases than at the time of the August meeting. In this environment, the Treasury yield curve flattened, with yields about unchanged at the short end and down as much as 25 basis points at the long end. TIPS-based inflation compensation for the next 5 years moved down, reflecting in part lower oil prices, while inflation compensation 5-to-10 years ahead increased slightly on net. Stock prices edged down and risk spreads on corporate bonds were about unchanged; the broad nominal value of the dollar also posted little net change. Meanwhile, conditions in short-term funding markets generally eased a bit over the intermeeting period.

Credit conditions for business and households continued to be mixed. Borrowing by nonfinancial corporations was strong in August and indicators of corporate credit quality remained solid. Commercial mortgage debt contracted further in the second quarter, and conditions in commercial real estate markets have generally remained strained over the intermeeting period, though some signs of stabilization are evident. For households, low mortgage rates supported a relatively high level of refinancing activity, but many borrowers remain unable to refinance because of negative equity and weak credit scores. Mortgage debt and consumer credit contracted in the second quarter, and consumer credit decreased further in July. On the positive side, measures of credit quality for both prime residential mortgages and consumer loans continued to show some improvement.

Total loans at commercial banks contracted at a slower pace in July and August than earlier in the year. M2 expanded moderately, on average, over the two months as

growth in liquid deposits and currency continued to more than offset declines in small time deposits and retail money market mutual funds.

POLICY EXPECTATIONS AND TREASURY YIELDS

Policy expectations moved down, on balance, over the intermeeting period.¹ Early in the period, money market futures rates fell significantly in response to economic data that came in below expectations, as well as to the August FOMC statement, which investors seemed to read as providing a somewhat more-downbeat assessment of the economic outlook than expected. The Chairman's Jackson Hole speech was reportedly viewed as being more encouraging about economic prospects and as providing more clarity regarding the nontraditional policy options the Federal Reserve has at its disposal, but did not appear to have any sustained effect on policy expectations. The release of the minutes of the August FOMC meeting also prompted little market reaction. The expected path for policy retraced a large part of its earlier decline following the ISM manufacturing report, the employment report, and the data on initial jobless claims released early this month, but the path has shifted back down over the past few days.

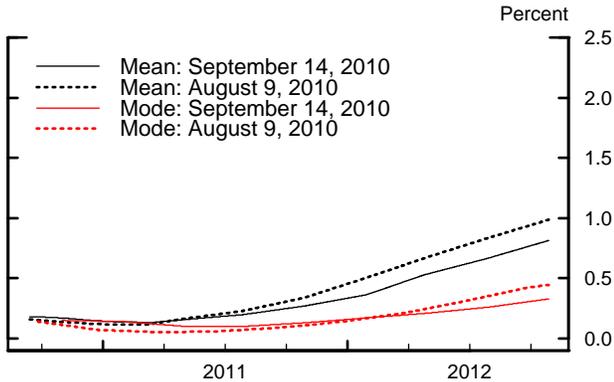
On balance, futures quotes, combined with the usual staff assumptions for term premiums, indicate that the expected policy path moved down somewhat in the second half of 2011 and more noticeably in 2012. The implied federal funds rate in the fourth quarter of 2012 now stands at 80 basis points, down from about 100 basis points at the time of the August FOMC meeting. Quotes on interest rate caps suggest that the modal path of the federal funds rate revised less than the expected path, with the modal path continuing to rise above the current target range in the middle of 2012.

Results from the September survey of primary dealers indicate that market participants lowered their expectations for the path of the federal funds rate in tandem with a downward revision to their forecast for economic growth through 2012. Respondents reported an average probability of about 90 percent that the first tightening would not occur until the third quarter of 2011 or later, compared with a probability of about 70 percent in the August survey. In addition, the dealers assigned a probability of about 40 percent to the Federal Reserve expanding its balance sheet through additional purchases before the end of the year, compared with a probability of about 20 percent in the previous survey. The survey respondents indicated that expanding the Federal

¹ The effective federal funds rate averaged 19 basis points over the intermeeting period, with the intraday standard deviation averaging about 3 basis points.

Policy Expectations and Treasury Yields

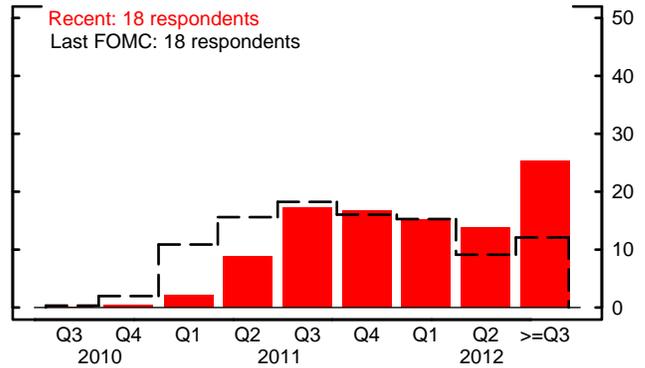
Implied Federal Funds Rate



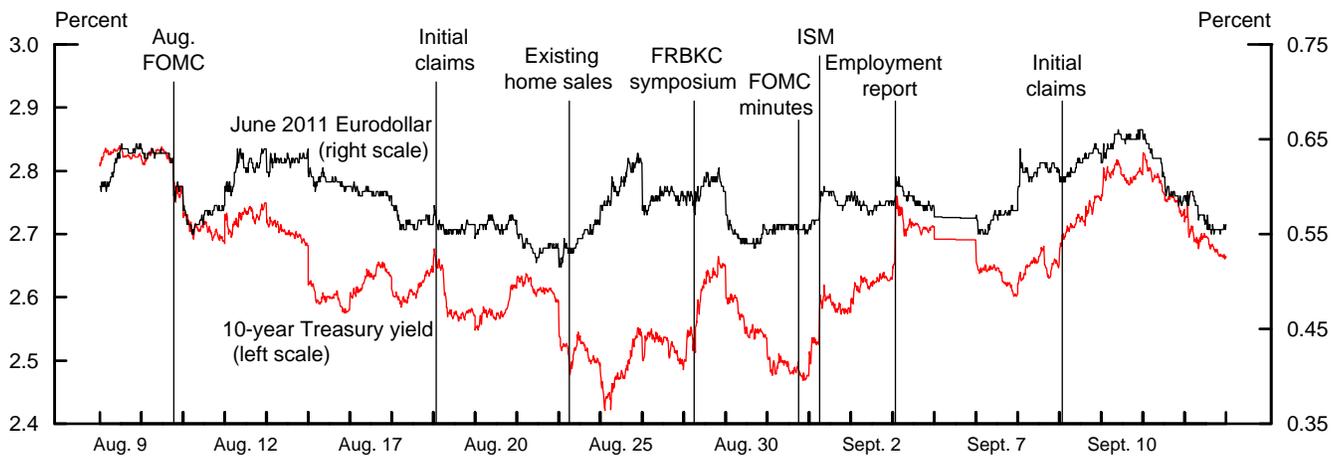
Note: Mean is estimated from federal funds and Eurodollar futures. Mode is estimated from distribution of federal funds rate implied by interest rate caps. Both include an allowance for term premiums and other adjustments.

Source: Bloomberg and CME Group.

Implied Expectation of Quarter of First Rate Increase from the Desk's Dealer Survey



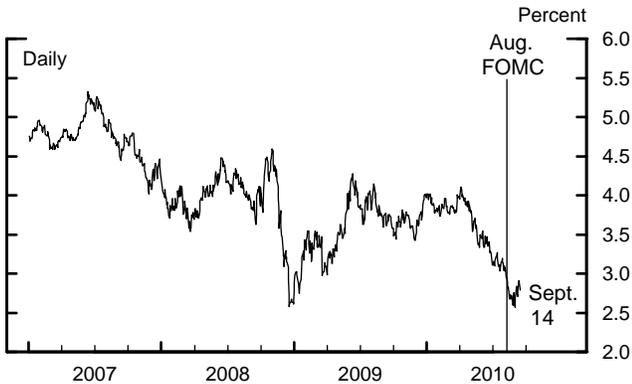
Interest Rates



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

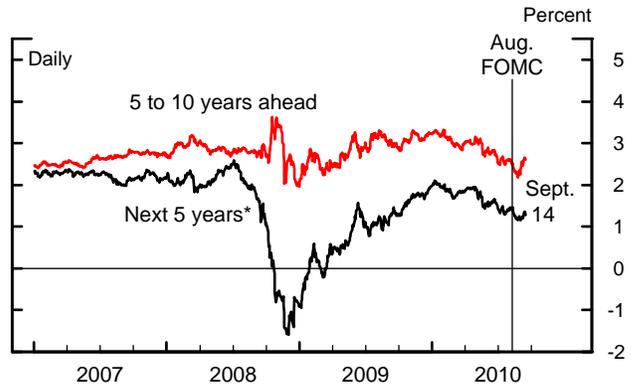
Source: Bloomberg.

10-Year Off-the-Run Treasury Yield



Note: Par yield estimates based on smoothed nominal Treasury yield curve.

Inflation Compensation



Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.

*Adjusted for the indexation-lag (carry) effect.

Source: Barclays PLC and staff estimates.

Reserve's balance sheet through purchases of Treasury securities was far more likely than through purchases of agency MBS or agency debt over the next two years.

The nominal Treasury yield curve flattened somewhat, on balance, over the intermeeting period. Yields for maturities up to two years were little changed, while yields at maturities of 5, 10, and 20 years fell 8 basis points, 16 basis points, and 24 basis points, respectively. Among the factors contributing to the drop in longer-term yields, market participants pointed to a weaker outlook for the economy, greater odds of additional large-scale asset purchases by the Federal Reserve, and strong demand for long-duration assets by institutional investors.

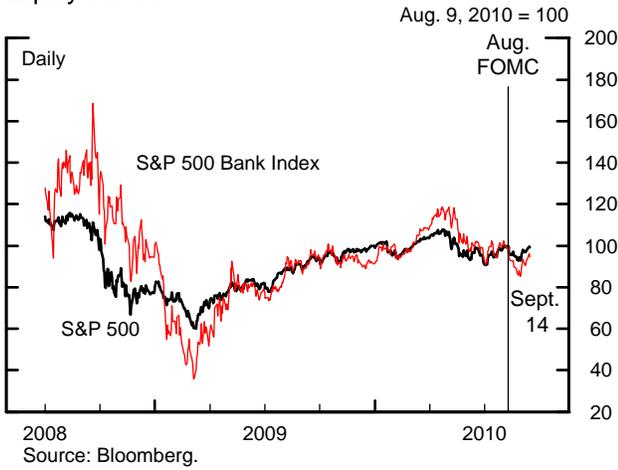
TIPS-based inflation compensation over the next 5 years fell about 15 basis points over the intermeeting period, amid lower oil prices, while inflation compensation 5-to-10 years ahead increased about 10 basis points. Forward TIPS-based inflation compensation might have been boosted by a partial unwinding of recent safe-haven flows in response to more-positive economic releases in the second half of the intermeeting period; the unwinding of these flows would tend to raise nominal Treasury yields more than TIPS yields, thus increasing measured inflation compensation. Both 5-year and 5- to 10-year inflation compensation based on inflation swaps, measures that should be largely unaffected by special factors that may have influenced the Treasury market, declined somewhat on net over the intermeeting period. (See the box "Have Inflation Expectations Moved Lower?" for an analysis of the substantial decline in inflation compensation since the spring.)

ASSET MARKET DEVELOPMENTS

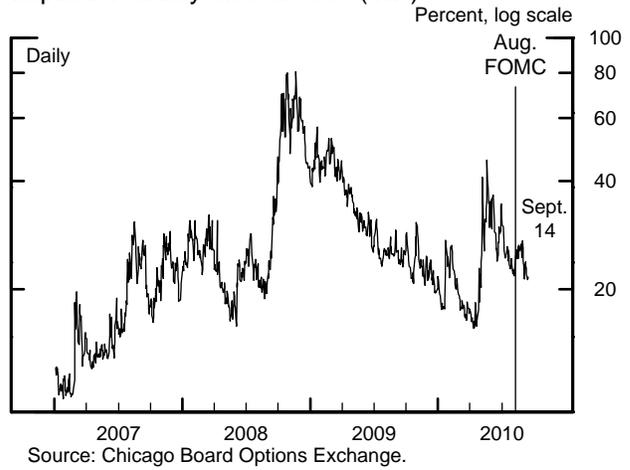
Broad stock price indexes edged down, on balance, over the intermeeting period, and option-implied volatility for the S&P 500 index was little changed on net. The spread between the staff's estimate of the expected real return on equity for S&P 500 firms and an estimate of the real 10-year Treasury yield—a rough measure of the equity risk premium—remained at an elevated level. One factor that appears to have kept the equity premium high is a reluctance by households to invest in stocks given the large losses incurred during the financial crisis and the lingering uncertainty about the economic outlook. Consistent with this interpretation, there continued to be sizable net outflows from equity mutual funds and strong net inflows toward bond funds in August.

Asset Market Developments

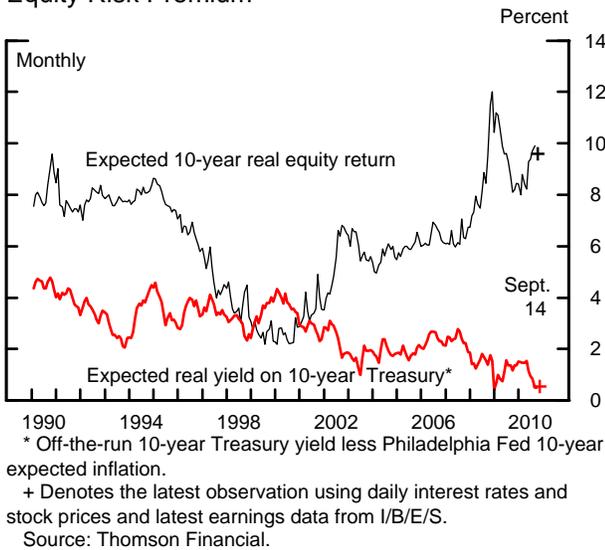
Equity Prices



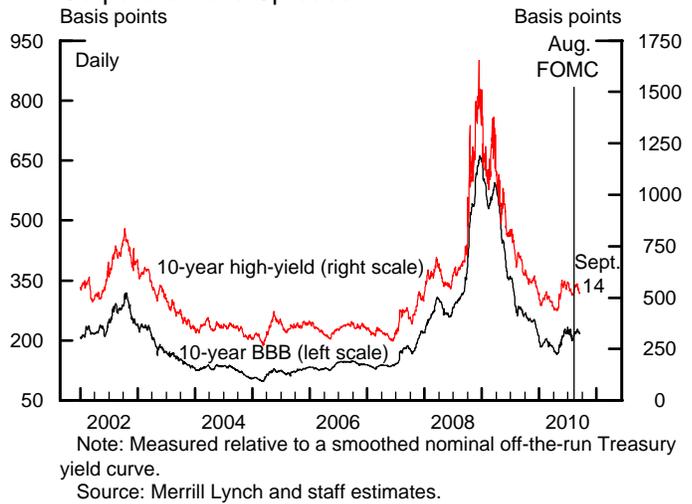
Implied Volatility on S&P 500 (VIX)



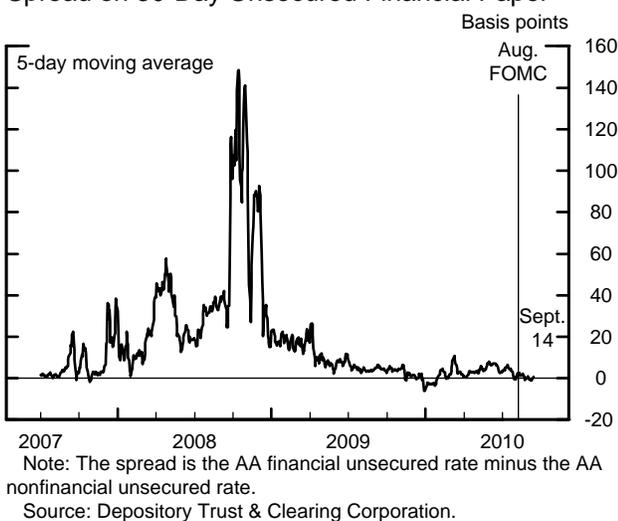
Equity Risk Premium



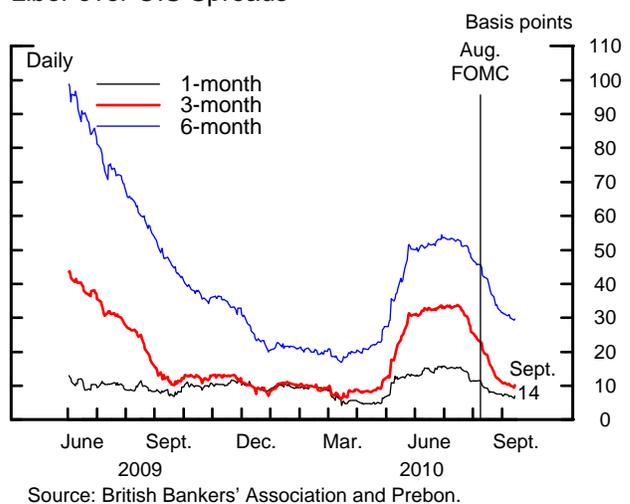
Corporate Bond Spreads



Spread on 30-Day Unsecured Financial Paper



Libor over OIS Spreads



Financial Developments

Have Inflation Expectations Moved Lower?

Since late April, TIPS-based inflation compensation, defined as the difference between yields on nominal Treasury securities and those on comparable-maturity TIPS, has decreased significantly. As shown in the chart below, inflation compensation over the next 5 years (adjusted for carry effects) and 5-to-10 years ahead fell about 60 and 50 basis points, respectively, with the largest declines occurring around periods of heightened investor concerns about the implications of the European financial strains and around the releases of weaker-than-expected economic data. Inflation compensation based on inflation swaps has declined by a slightly larger amount since spring.

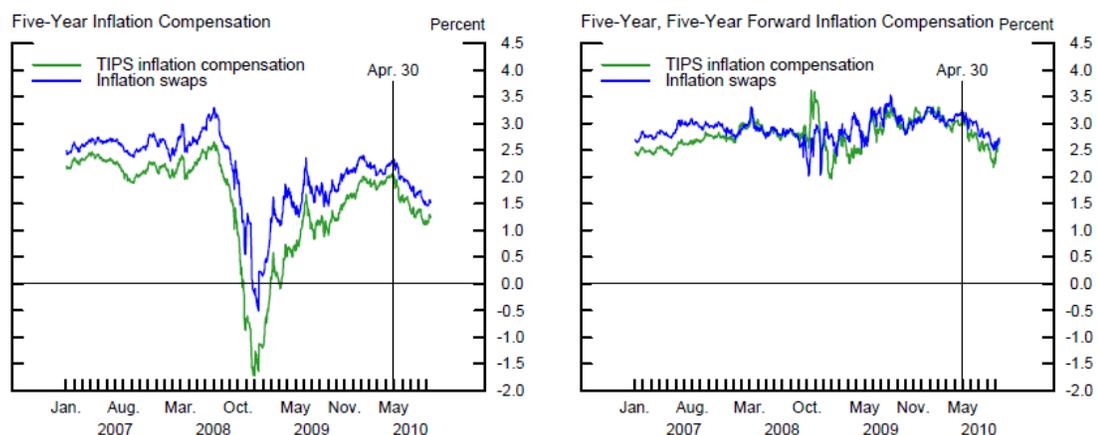
As can be seen from the table to the right, the staff's term structure model attributes about two-thirds of the decline in inflation compensation since April to lower inflation expectations, plotted in the second set of charts, while reduced inflation risk premiums accounted for about one-third of the change.

However, survey measures of longer-term inflation expectations (also shown in the second set of charts) have been generally stable since April. These observations suggest that the decline in measured inflation compensation since spring might have been partially driven by special factors that are not well

captured by the term structure model rather than by a shift in inflation expectations. In particular:

- Safe-haven demands for nominal Treasury securities may have caused nominal yields to decline more than TIPS yields and hence put some downward pressure on inflation compensation.
- Anecdotal evidence suggests that investors might now assign higher odds to additional large-scale asset purchases than in April. The associated increase in the expected future demand for nominal Treasury securities relative to TIPS might have contributed to a narrowing in inflation compensation.
- Market participants indicate that liquidity conditions in the TIPS market have worsened somewhat since April, as trading volumes have declined, while trading conditions in nominal Treasury securities remained stable. As a result, the TIPS liquidity premium may have increased, causing a decline in inflation compensation.
- Mortgage refinancing activity has picked up in recent months as long-term interest rates have fallen. In the past, an increase in refinancing has at times led to mortgage-related hedging flows that reinforced the decline in nominal Treasury yields

TIPS- and Swaps-Based Inflation Compensation



**Table 1: Model Decomposition of Declines in TIPS Inflation Compensation
(April 30, 2010 to September 14, 2010)**

	5-year	5-year, 5-year forward
Changes in inflation expectations	-43	-40
Changes in inflation risk premium	-23	-26
Changes in residuals	4	15
Total change	-62	-52

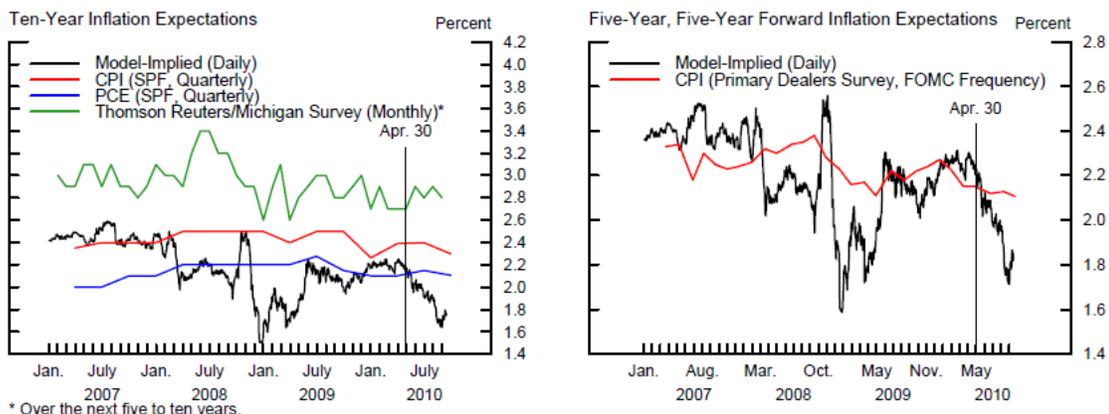
but had minimal effect on the TIPS market. This pattern would push inflation compensation lower.

Regression analysis suggests that proxies for the first three special factors can account for a portion of the decline in measured inflation compensation in recent months. In contrast, mortgage-related hedging demand reportedly has been limited in part because the Federal Reserve’s purchases of mortgage-backed securities (MBS) have left a relatively small amount of recently issued and more interest rate-sensitive MBS in private hands; refinancing activity on seasoned mortgages is reportedly lower, in part because such mortgages typically have higher loan-to-value ratios and so are more difficult to refinance.

That said, our proxies for the special factors can explain only a fairly small part of the decline in inflation compensation. Thus, a part of the decline might well reflect a downward shift in inflation

expectations among financial market participants, in contrast to the apparent stability of expectations reported in surveys of private forecasters and households. In part, this divergence between inflation expectations based on TIPS and survey readings of inflation expectations may reflect differences in views across different sets of economic agents. In addition, the survey measures may reflect the modal expectations of those surveyed, while TIPS inflation compensation may capture mean expectations. Thus, an increase in downside risks to the inflation outlook could have pulled inflation compensation down relative to the survey measures. Indeed, the weaker economic data that has come in since spring has led some to worry about the possibility of deflation, and estimated probabilities of deflation measured from TIPS have moved up since April, though they remain low.

Model-Implied and Survey-Based Inflation Expectations



Financial Developments

Over the intermeeting period, bank stocks underperformed the broader equity market, while continuing to be more volatile. Although bank stocks are generally more sensitive to a markdown in the economic outlook, the greater volatility over the intermeeting period was also reportedly due to uncertainty about domestic and international financial regulatory reform efforts, some of which was resolved with the recent announcement of the Basel III capital requirements.²

Pricing and conditions in corporate debt markets were stable, on net, over the intermeeting period. Corporate bond spreads were little changed for both investment-grade and speculative-grade securities. Far-term forward spreads moved up a bit over the intermeeting period and currently stand in the middle part of the range seen during economic expansions; these spreads are likely to be largely unaffected by fluctuations in expected defaults and thus provide a relatively clean gauge of risk premiums demanded by investors in the corporate bond market. Measures of liquidity in secondary markets for corporate bonds remained stable, while the average bid price moved up and bid-ask spreads edged down further in the secondary market for syndicated leveraged loans.

Conditions in short-term funding markets continued to normalize from recent stresses related to concerns about European financial stability. In secured funding markets, repo rates and haircuts on various types of collateral held steady, and spreads on 30-day asset-backed commercial paper remained low. Spreads on unsecured 30-day financial commercial paper were also little changed at a low level. In dollar funding markets, spreads of Libor rates over those on overnight index swaps (OIS) fell further over the intermeeting period; the one-month and three-month spreads have fully retraced the rise prompted by the euro-area concerns, while the six-month spread remains slightly above the level seen before these concerns emerged. Based on rates on short-term Eurodollar deposits and other money market instruments, market participants do not appear to expect any significant strains in funding markets over the coming quarter-end.

²The Group of Governors and Heads of Supervision announced an agreement on higher global minimum capital standards on September 12 that will be phased in between 2013 and January 2019. Banks will see capital standards tightened through exclusions from the definition of regulatory capital, higher risk weights on some assets, higher minimum regulatory capital ratios, and by the introduction of a “conservation” buffer. When fully phased in, the minimum ratios for Tier 1 capital and total capital relative to risk-weighted assets will be 6 percent and 8 percent, respectively, with the common equity component of Tier 1 capital representing at least 4½ percent of risk-weighted assets. In addition, banks will be required to maintain a conservation buffer of 2½ percent above each of these three minimums to avoid restrictions on cash distributions.

In the September Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS), dealers indicated, on net, that they had loosened credit terms applicable to several important classes of counterparties and types of collateral over the past three months, amid increased demand for funding for most types of securities covered in the survey. (See the appendix for additional information on the September SCOOS.) Consistent with the SCOOS results, tri-party repo activity increased during the summer, with the total average daily volume for August reaching a new post-crisis high. Nonetheless, the risk appetite of levered investors seems to have remained muted since the sharp pullback from risky assets that occurred in May and early June, and overall leverage provided through dealer-intermediated transactions remains well below the levels reached prior to the financial crisis.

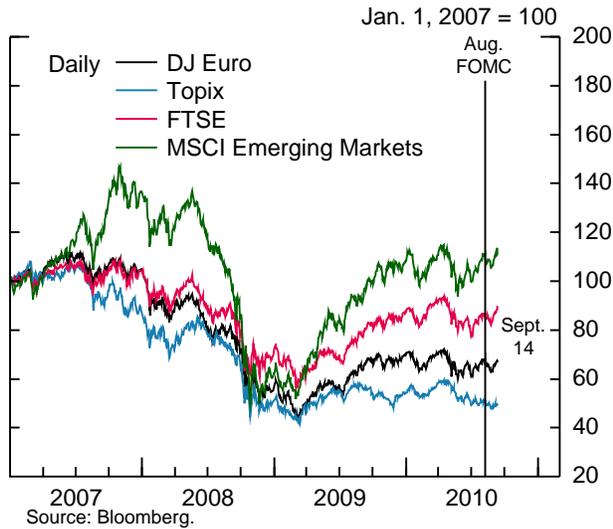
FOREIGN DEVELOPMENTS

Throughout the month of August, concerns about the possibility of a sharper deceleration in the pace of economic activity in the United States and China led investors to reprice risky assets. As a result, equity prices and sovereign bond yields in advanced foreign economies registered substantial drops, and the dollar appreciated against most major currencies on safe-haven demands. Since the beginning of September, however, these price movements have been largely reversed as better macro data releases in the United States and abroad have led to some improvement in investor sentiment.

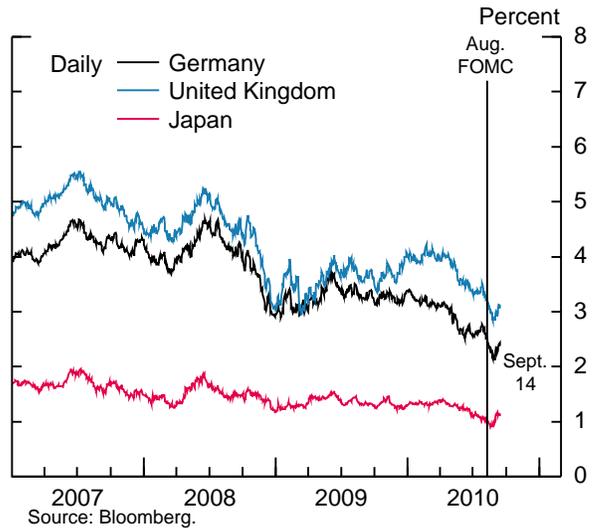
Headline equity indexes in the advanced foreign economies ended the period little changed, while benchmark German and U.K. sovereign yields declined 15 to 20 basis points; Japanese rates rose slightly. Yield spreads relative to German bunds on the 10-year sovereign bonds of Greece, Ireland, and Portugal widened to near record levels amid the general repricing of risky assets in August, but, in contrast to the subsequent overall market upswing noted above, they narrowed only slightly in September. The rise in Greek spreads also seemed to owe importantly to Greece's deepening recession, while Irish spreads widened further after Standard & Poor's lowered Ireland's long-term sovereign rating, citing the ballooning cost to the Irish government of supporting its banking sector. (See the box in the International Economic Developments and Outlook section, "Recent Developments in the Irish Banking System.") Spanish and Italian debt spreads, in contrast, did not rise substantially, and both countries issued sizable amounts of long-term debt over the period.

Foreign Developments

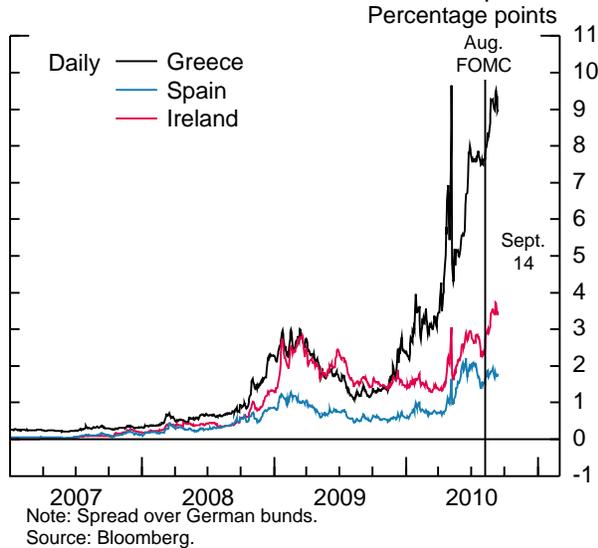
Stock Price Indexes



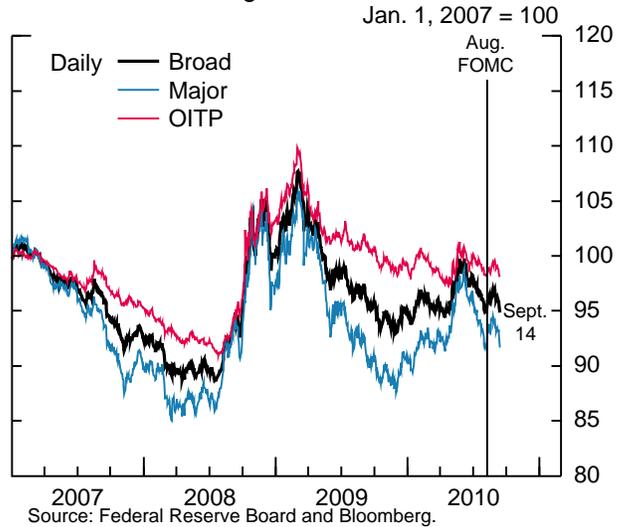
Nominal 10-Year Government Bond Yields



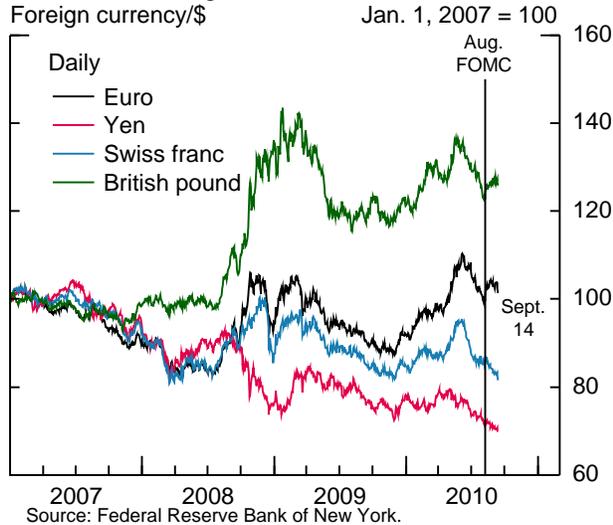
Euro-Area 10-Year Government Bond Spreads



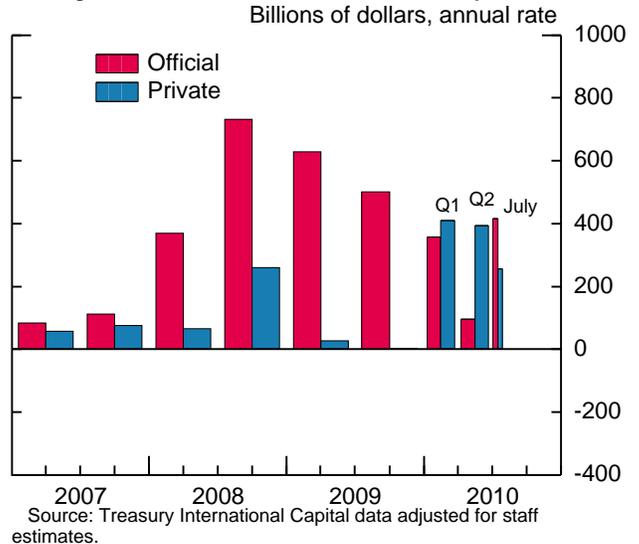
Nominal Trade-Weighted Dollar Indexes



Bilateral Exchange Rates



Foreign Net Purchases of U.S. Treasury Securities



During the intermeeting period, euro-area bank stock prices fell on continued concerns about banking sector soundness, particularly in the peripheral European countries. Two nationalized banks, Anglo Irish Bank (an Irish lender) and Hypo Real Estate (a German lender), announced that they would require additional government support. Some of the price decline was reversed late in the period, in part on news that the Basel III capital requirements would be phased in over an extended period. Still, on net, banking sector share prices in the euro area dropped 4 percent.

The broad dollar index was little changed on net on a nominal basis. Throughout the period, on days with worrisome economic news, even when the news emanated from the United States, the dollar tended to appreciate against the euro, sterling, and most emerging market currencies. In contrast, on such days, the dollar tended to depreciate against the Japanese yen and the Swiss franc. Over the period, the dollar rose about 2 percent on net against the euro and sterling, but it declined 3 percent versus the yen and 5 percent against the Swiss franc.³

With the yen at a 15-year high against the dollar in nominal terms, Japanese authorities intervened in currency markets on September 15, just after this part of the Tealbook had closed. Japan's Ministry of Finance announced that it had purchased dollars overnight to weaken the value of the yen, its first intervention operation since March 2004. The operation, which market participants estimated as amounting to between \$10 and \$20 billion but could be larger, caused the yen to immediately depreciate about 3 percent against the dollar, reversing its rise over the intermeeting period. The intervention, which was not coordinated with foreign authorities, seemed to catch markets by surprise even though Japanese officials had publicly discussed the possibility of intervention for some time. There have been conflicting statements from Japanese officials as to whether the intervention is a one-time event. (The box in the International Economic Developments and Outlook section, "The Recent Appreciation of the Yen," discusses the yen's recent rise and its impacts on the Japanese economy.)

³ The Swiss National Bank (SNB) revealed in August that it had suffered very large valuation losses on the foreign exchange reserves it had accumulated as the result of its intervention earlier this year and in 2009. However, these losses, totaling 14.3 billion Swiss francs (\$14 billion), almost 3 percent of Swiss GDP, were offset in large part by valuation gains on the SNB's gold reserves, by gains related to its support of UBS, and by interest income on its bond holdings, leaving a total loss of only 2.8 billion Swiss francs. The reaction to the SNB's announcement in the press and in markets was muted.

Market expectations of overnight rates through 2011 declined moderately over the intermeeting period in the euro area and the United Kingdom; they were little changed for Japan. The European Central Bank (ECB) kept its policy rate unchanged but said that it would continue to provide term liquidity by offering several more full-allotment three-month refinancing operations through the end of the year. Citing “uncertainty about the future, especially for the U.S. economy,” the Bank of Japan (BOJ), announced at a special meeting of its Policy Board that it would provide 10 trillion yen (about \$120 billion) of six-month liquidity at the policy rate target of 10 basis points. This program, which is similar to the BOJ’s existing program of three-month operations, was widely seen as timid by market participants, and Japanese sovereign yields rose in response. In contrast to the continued accommodative stance of the ECB and the BOJ, the Bank of Canada increased its target for the overnight rate 25 basis points, to 1 percent, its third hike since June. Sweden’s Riksbank also tightened policy, increasing its main policy rate 25 basis points, to 75 basis points.

Headline equity indexes rose in most emerging market economies, and exchange rate movements against the dollar were generally small. The Chinese renminbi depreciated against the dollar early in the intermeeting period following the release of weaker-than-expected Chinese data, but it ended the period up slightly on net. The central banks of Chile, Thailand, and Indonesia tightened monetary policy over the intermeeting period.

Data on custody holdings at the Federal Reserve Bank of New York show a further pickup in foreign official holdings of Treasury securities in August, following strong purchases in July.

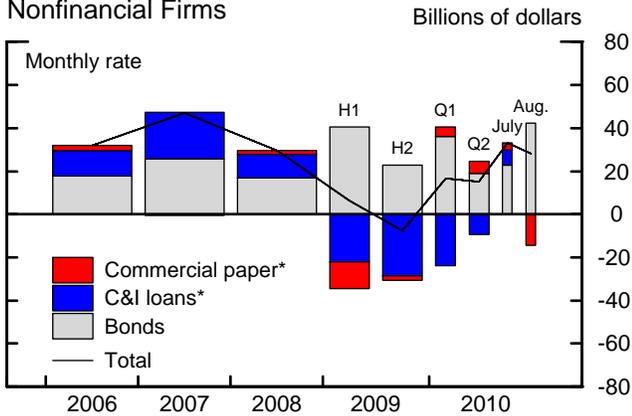
. Foreign official holdings of agency securities, however, declined a bit in August.

BUSINESS FINANCE

Net debt financing of nonfinancial corporations remained robust in August. Bond issuance was strong, a pattern that has so far persisted in September, while nonfinancial commercial paper outstanding contracted, in part reflecting substitution toward long-term debt amid extremely low levels of corporate bond yields. Commercial and industrial (C&I) loans outstanding increased on net over July and August, a notable turnaround from the steep declines posted during the first half of the year.

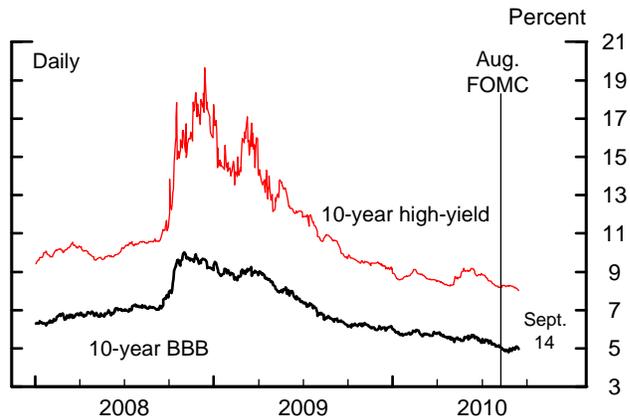
Business Finance

Selected Components of Net Debt Financing, Nonfinancial Firms



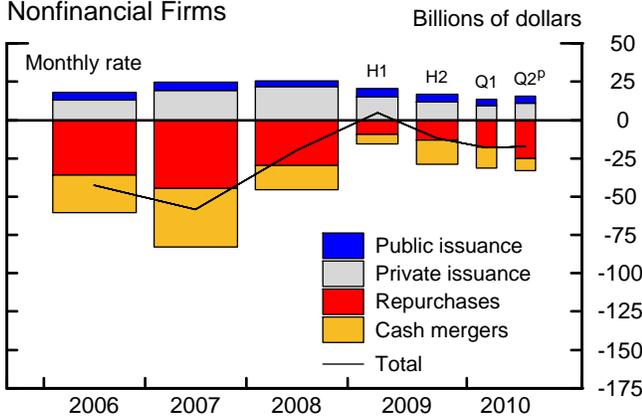
* Seasonally adjusted, period-end basis.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

Corporate Bond Yields



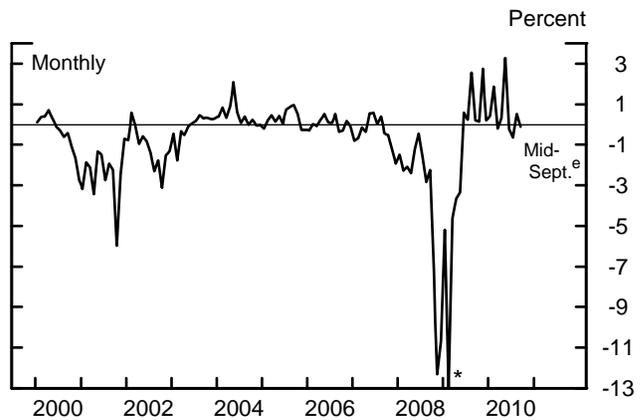
Source: Staff estimates of smoothed yield curves based on Merrill Lynch bond data.

Selected Components of Net Equity Issuance, Nonfinancial Firms



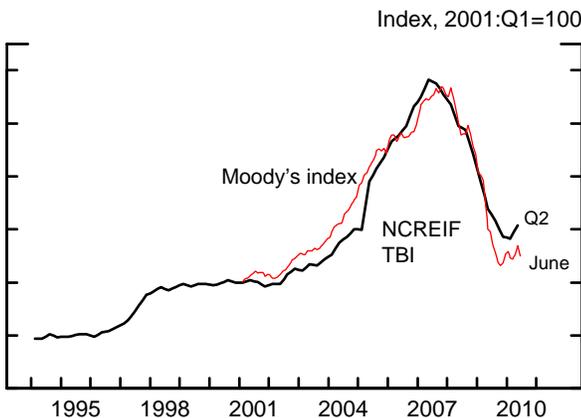
p Preliminary.
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

Revisions to Expected S&P 500 Earnings



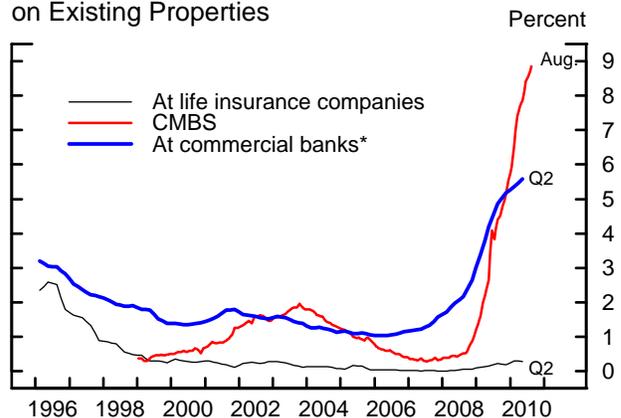
Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample.
* Revision in Feb. 2009 was -17.2%.
e Estimate.
Source: Thomson Financial.

Prices of Commercial Real Estate



Note: NCREIF TBI series re-weighted by staff to exclude multifamily.
Source: NCREIF; MIT Center for Real Estate; Moody's Investors Service.

Delinquency Rates on Commercial Mortgages on Existing Properties



Note: CMBS are commercial mortgage-backed securities. All series are seasonally adjusted.
* Excluding farmland.
Source: Citigroup; Call Report data; ACLI.

Financial Developments

The pace of initial public offerings and seasoned equity offerings by nonfinancial firms slowed in August, partly reflecting typical seasonal patterns. In the second quarter, equity retirements were about unchanged as cash-financed mergers and acquisitions decreased slightly, while share repurchases are estimated to have picked up. As a result, net equity issuance by nonfinancial corporations is projected to have remained negative in the second quarter. Although the recent level of net retirements does not approach the pace seen before the financial crisis, announcements of new cash-financed mergers and share repurchase programs increased notably in July and August, suggesting a pickup in equity retirements is in the offing.

Preliminary second-quarter estimates in the national income and product accounts showed solid profit growth for the U.S. corporate sector as a whole. For S&P 500 firms, most second-quarter earnings reports exceeded analyst forecasts by a substantial margin. However, the forward guidance offered by firms for the third quarter has been considerably less buoyant. As of mid-September, analysts had not significantly revised their forecasts of year-ahead earnings from those in July.

The credit quality of nonfinancial corporations appears to have remained solid. Preliminary estimates for the second quarter suggest that the aggregate ratio of debt to assets for nonfinancial corporations declined a bit further and the aggregate liquid asset ratio remained near its highest level in over 20 years. Upgrades by Moody's of nonfinancial corporate bonds were moderate but still outpaced downgrades in July and August. The six-month trailing bond default rate for nonfinancial firms increased slightly in August, but remained near its historical lows, while the KMV expected year-ahead default rate for nonfinancial firms remained somewhat elevated through mid-September, reflecting relatively high volatility and low valuations of equities.

Commercial real estate markets continued to be under pressure, although some further signs of stabilization have emerged. The available data suggest that prices of commercial properties edged up in the first half of the year, and the volume of commercial real estate sales rose again in August. Two small CMBS deals issued over the intermeeting period were well received by investors and several more are expected to come to market this fall, consistent with the easing of conditions and renewed interest in the market for CMBS since the beginning of 2010 reported in the SCOOS. Nonetheless, the volume of CMBS issuance this year remains minuscule compared with that before the

onset of the financial crisis, and total commercial mortgage debt has continued to contract amid further increases in delinquency rates on commercial mortgages.

HOUSEHOLD FINANCE

Although mortgage interest rates touched historical lows during the intermeeting period and applications for refinancing have stayed relatively high, many households remained unable to refinance because of negative equity and weak credit scores. In addition, mortgage applications for home purchases continued to be sluggish. The average interest rate on 30-year conforming fixed-rate mortgages declined to just a shade above 4¼ percent in early September, but daily data on mortgage offerings (not shown in the exhibit) suggest that rates have increased since then. The spread between the primary mortgage rate and the 10-year Treasury rate moved higher, at least in part because capacity constraints have provided mortgage lenders little incentive to lower their rates; the spreads of current-coupon MBS rates to Treasury securities also increased over the period. Meanwhile, incoming house price data were mixed, with the Federal Housing Finance Agency (FHFA) and CoreLogic indexes turning down in recent months, while the 20-city S&P/Case-Shiller index inched higher in June for the third month in a row.⁴

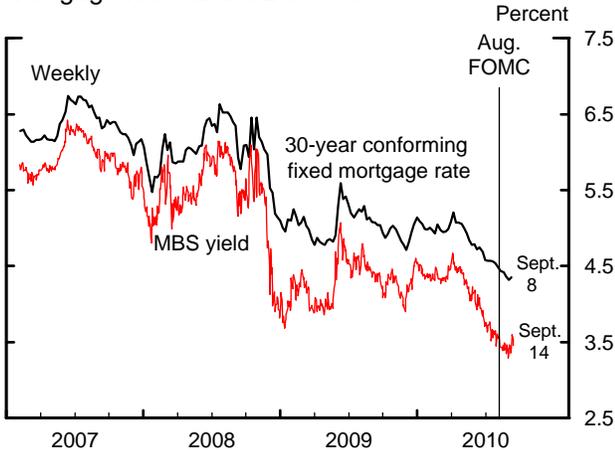
Home mortgage debt decreased at an annual rate of about 2 percent in the second quarter, similar to the pace of decline seen over the preceding year. Delinquencies on outstanding prime mortgages fell further in July, as the share of current mortgages transitioning into delinquency, though volatile from month to month, has trended down over the past year. A part of the decline in delinquency rates also reflects the reclassification of delinquent mortgages entering loan modification programs as being “current,” though the size of this effect is difficult to determine.

Consumer credit is estimated to have contracted at an annual rate of 1¾ percent in July, similar to the rate of decline in the second quarter, as another decrease in revolving credit more than offset a small rise in nonrevolving credit. However, consumer ABS issuance proceeded at a moderate pace in August, as it had in July. Spreads of consumer interest rates to the yield on the two-year Treasury note were little changed on balance. The credit quality of consumer loans continued to improve, with most delinquency rates dropping further in recent months, perhaps contributing to some thawing of credit

⁴ The First American Corporation, the parent of LoanPerformance, spun off its house price and mortgage analytics group as a new company known as CoreLogic. We have changed the source shown for the house price index and mortgage delinquency data accordingly.

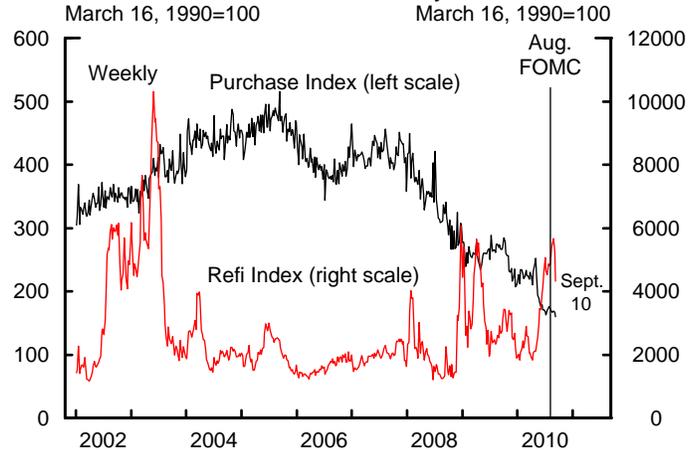
Household Finance

Mortgage Rate and MBS Yield



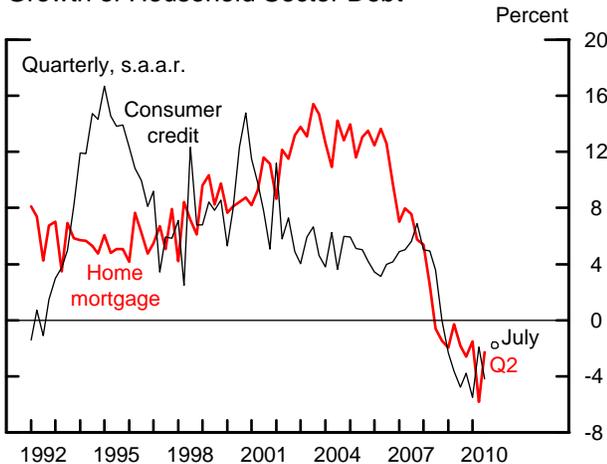
Note: For MBS yield, Fannie Mae 30-year current coupon rate.
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Purchase and Refinance Activity



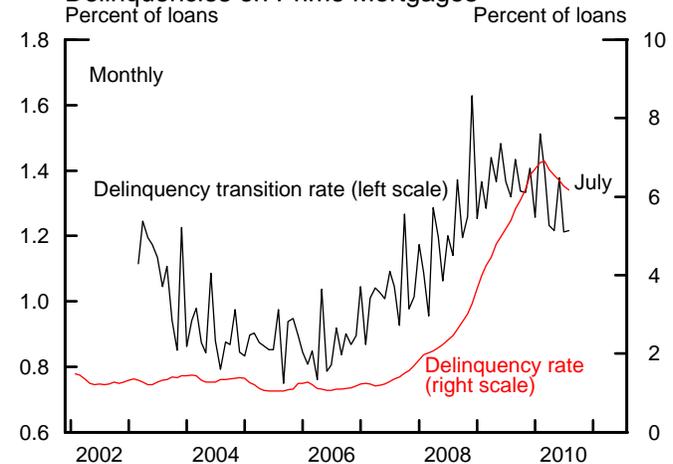
Note: Seasonally adjusted by FRB staff.
Source: Mortgage Bankers Association.

Growth of Household Sector Debt



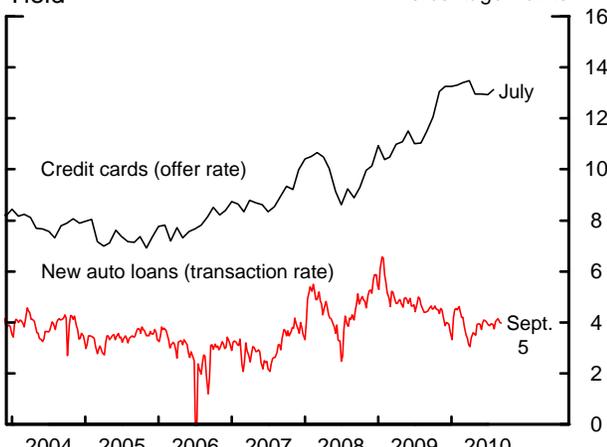
Source: Federal Reserve Board.

Delinquencies on Prime Mortgages



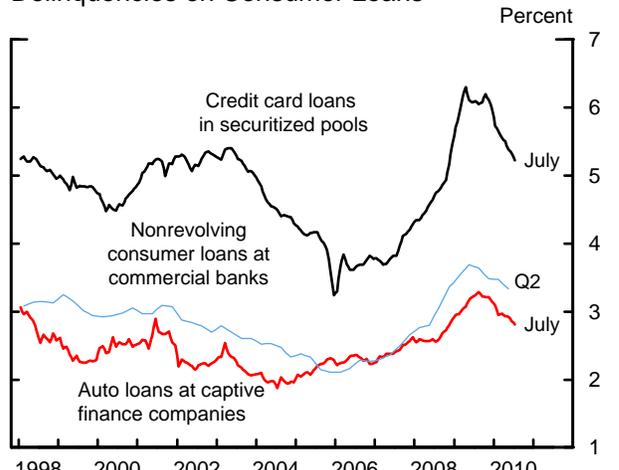
Note: For delinquency rate, percent of loans 90 or more days past due or in foreclosure. For transition rate, percent of previously current mortgages that transition to being at least 30 days delinquent each month.
Source: LPS Applied Analytics.

Spread of Consumer Interest Rates to Treasury Yield



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

Delinquencies on Consumer Loans



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

Financial Developments

conditions as reflected by a further increase in the mail volume of new credit card offers in July.

GOVERNMENT FINANCE

During the intermeeting period, the Treasury issued \$243 billion of nominal coupon securities across the maturity spectrum and \$17 billion of inflation-protected securities with 10- and 30-year maturities. The Treasury has continued to extend the average maturity of its liabilities by gradually reducing the size of its shorter-maturity coupon auctions; the Treasury's increased TIPS issuance has also had the effect of lengthening the duration of its liabilities. The auctions over the intermeeting period were generally well received.

Gross issuance of short-term municipal bonds was very strong in August, likely reflecting continued shortfalls in state and local government revenue; issuance of long-term municipal bonds remained solid. The number of municipal bonds downgraded by Moody's in the second quarter continued to outpace the number of upgrades. Yields on municipal bonds declined over the intermeeting period, and the ratio of yields on long-term municipal bonds to those on comparable-maturity Treasury securities was little changed on net at a relatively high level.

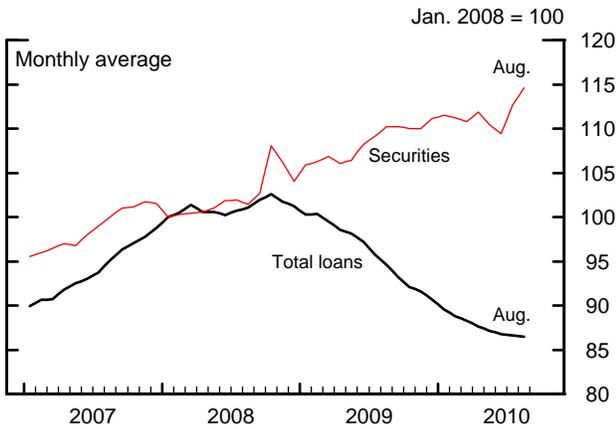
COMMERCIAL BANKING AND MONEY

Bank credit expanded in August, reflecting significant purchases of Treasury securities and agency MBS by some large banks that offset a modest further decrease in total loans. Consumer loans fell sharply in August, which some banks attributed to charge-offs and paydowns that fueled a steep decline in credit card balances. In addition, both home equity loans and commercial real estate loans continued to contract. However, holdings of closed-end residential loans grew moderately in August, reportedly spurred by refinancing activity. C&I loans also rose slightly in both July and August, the first increases on a month-average basis since late 2008. The allowance for loan and lease losses continued to decline over the past two months, on average, indicating that loss provisioning has not kept pace with charge-offs.

The Survey of Terms of Business Lending conducted in the first week of August showed that the weighted-average interest rate on C&I loans of less than \$25 million fell slightly compared with the May survey. The weighted-average spread on those loans was

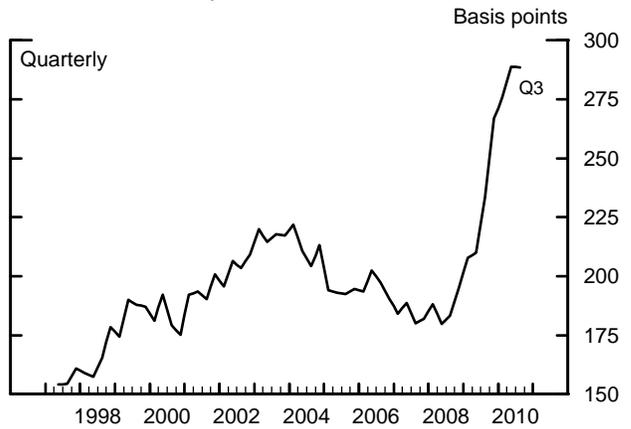
Commercial Banking and Money

Bank Credit



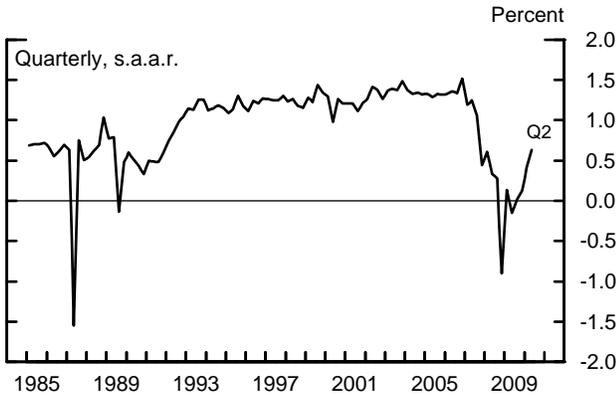
Note: The data have been adjusted to remove the effects of consolidations of assets under FAS 166 and FAS 167.
Source: Federal Reserve Board.

C&I Loan Rate Spread



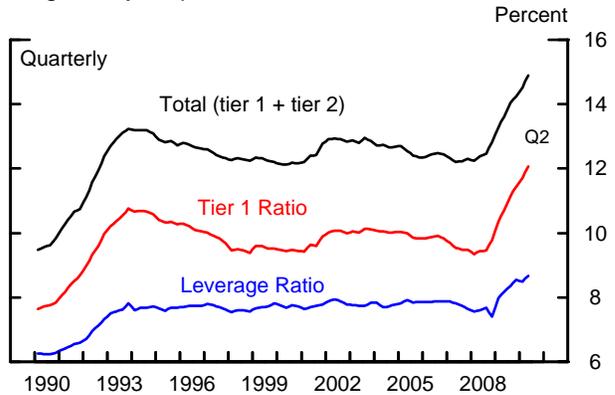
Note: The rate on C&I loans less than \$25 million over a market interest rate on an instrument of comparable maturity.
Source: Survey of Terms of Business Lending.

Return on Assets



Source: Call Reports.

Regulatory Capital Ratios



Note: All series are seasonally adjusted.
Source: Call Reports.

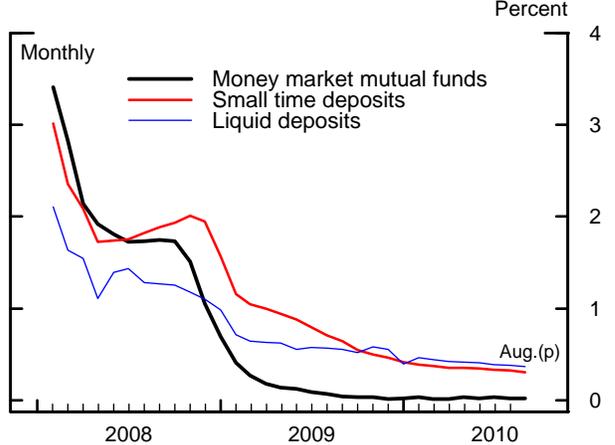
Financial Developments

Growth of M2 and Its Components

Percent, s.a.a.r.	M2	Liquid deposits	Small time deposits	RMMF	Curr.
2008	8.6	6.9	12.3	13.6	5.8
2009					
H1	7.6	16.4	-6.1	-15.4	10.8
H2	2.4	16.5	-26.4	-31.0	2.9
2010					
Q1	0.0	9.2	-25.0	-27.1	2.1
Q2	2.0	8.4	-18.6	-20.2	6.4
July	0.0	3.7	-16.8	-11.0	4.5
Aug. (p)	6.6	14.6	-20.8	-20.9	8.5

Note: RMMF are retail money market mutual funds.
p Preliminary.
Source: Federal Reserve Board.

Interest Rates on Selected Components of M2



p Preliminary.
Source: Federal Reserve Board.

unchanged from May at an elevated level, after having increased for eight consecutive quarters. The weighted-average spread on loans with commitment sizes under \$1 million—a proxy for lending to smaller firms—moved slightly higher after falling in May, but the increase was mainly driven by changes in the spread on loans in the highest risk category.

The most recent commercial bank Call Reports indicate that bank profitability remained low but increased modestly in the second quarter, reflecting a widespread decrease in loan loss provisioning. In the aggregate, delinquency and charge-off rates were, however, little changed from the first quarter. Regulatory capital ratios edged up further from already high levels boosted by hefty retained earnings and a continued decline in risk-weighted assets. The total of unused commitments for core loan categories continued to contract and, by the end of the second quarter, was down 40 percent from its peak at the end of 2007.⁵

On average over July and August, M2 expanded at an annual rate of 3¼ percent, slightly above its pace in the second quarter. Liquid deposits, the largest component of M2, expanded at an average pace of 9 percent during July and August, reflecting in part a compositional shift from other lower-yielding M2 assets. Currency also trended higher over the two months, while small time deposits and retail money market mutual funds continued to contract, as yields on these assets remained at extremely low levels. The monetary base edged down at a 1½ percent pace, on average, over the two months as reserve balances, which account for about half of the base, declined, more than offsetting the increase in currency (see the box, “Balance Sheet Developments over the Intermeeting Period”).

⁵ This measure of unused commitments is adjusted for changes in the commercial bank universe and changes in accounting and reporting requirements.

Balance Sheet Developments over the Intermeeting Period

Total assets of the Federal Reserve edged down over the intermeeting period to \$2.31 trillion. In line with the FOMC's decision at the August meeting to reinvest principal payments on agency mortgage-backed securities (MBS) and agency debt in longer-term U.S. Treasury securities, holdings of Treasury securities rose while those of the other securities fell. The timing of these transactions, however, did not align perfectly, and so securities held outright decreased slightly on net. The Trading Desk at the Federal Reserve Bank of New York (FRBNY) conducted nine operations to reinvest repayments of principal on agency MBS over the intermeeting period. The operations, which covered a range of maturities for nominal securities, as well as one operation in TIPS, totaled about \$17.6 billion.

Lending through liquidity facilities remained at a negligible level, with little change in the amount of primary credit outstanding and a slight decline in the foreign central bank liquidity swaps outstanding under the reestablished arrangements.

Lending through other credit facilities declined slightly over the period. On August 30, 2010, following the payment of accrued professional fees and the termination or expiration of existing contractual arrangements, the Federal Reserve dissolved the Commercial Paper Funding Facility LLC (CPFF LLC), a limited liability company created to purchase commercial paper under the Commercial Paper Funding Facility. The last commercial paper held by the CPFF LLC matured on April 26, 2010. Total Term Asset-

Backed Securities Loan Facility (TALF) loans outstanding declined by about \$6 billion over the intermeeting period, reflecting the improved conditions in some securitization markets and the resulting increase in prepayments on TALF loans.

Support for specific institutions decreased a little over the period, driven mainly by repayment of approximately \$3.95 billion by American International Group, Inc. (AIG), on its revolving credit facility with the FRBNY. This paydown represented the single-largest cash payment that AIG has made since the inception of the facility and, under the terms of the arrangement, the paydown also reduced the maximum amount available through the facility from about \$34 billion to about \$30 billion. Preferred interests in AIA Aurora LLC and ALICO Holdings LLC remained unchanged. Net portfolio holdings for each of the Maiden Lane LLCs declined slightly.

On the liability side of the Federal Reserve's balance sheet, the U.S. Treasury's supplementary financing account held steady at \$200 billion, while the Treasury's general account decreased \$31 billion on balance over the period. Reserve balances of depository institutions increased \$2 billion. Term deposits remained at \$2 billion; on September 8, 2010, the Board announced a program of regular small-value TDF auctions that will offer \$5 billion of 28-day deposits about every other month.

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (09/13/10)	Maximum level	Date of maximum level
Total assets	-18	2,311	2,364	05/13/10
Selected assets:				
Liquidity programs for financial firms	-1	+0	677	11/06/08
Primary, secondary, and seasonal credit	+0	+0	114	10/28/08
Foreign central bank liquidity swaps	-1	+0	586	12/04/08
Lending through other credit facilities	-6	33	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility (CPFF LLC)	-0	0	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	-6	33	49	03/11/10
Support for specific institutions	-4	113	121	05/05/10
Credit extended to AIG, net	-3	20	91	10/27/08
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	0	26	26	09/13/10
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-1	68	75	12/30/08
Securities held outright*	-4	2,051	2,073	06/14/10
U.S. Treasury securities	14	791	791	09/13/10
Agency debt securities	-3	156	169	03/11/10
Agency mortgage-backed securities	-15	1,103	1,129	06/14/10
Total liabilities	-18	2,253	2,309	05/13/10
Selected liabilities:				
Federal Reserve notes in circulation	5	911	914	09/08/10
Reserve balances of depository institutions	2	1,044	1,249	02/24/10
Term deposits held by depository institutions	0	2	4	07/28/10
U.S. Treasury, general account	-31	7	187	12/31/09
U.S. Treasury, supplementary financing account	+0	200	559	10/22/08
Other deposits	8	10	81	03/12/10
Total capital	-0	58	60	08/03/10

Note: +0 (-0) denotes positive (negative) value rounded to zero.

* Par value.

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Appendix

Senior Credit Officer Opinion Survey on Dealer Financing Terms

Overall, the responses to the September 2010 Senior Credit Officer Opinion Survey on Dealer Financing Terms indicated an easing in credit terms with respect to counterparty relationships and securities financing transactions over the previous three months.¹ Dealers also noted an increase in demand for funding for most types of securities. By contrast, respondents reported little change in the terms and conditions prevalent in over-the-counter (OTC) derivatives markets over the reference period.²

- Dealers indicated that they had loosened credit terms offered to each of the distinct classes of counterparties—including hedge funds and other private pools of capital, insurance companies and other institutional investors, and nonfinancial firms—considering all transaction types covered in the survey. Respondents also noted an increase in the intensity of efforts by each class of client to negotiate more-favorable terms. Modest net fractions of dealers suggested that they expected terms applicable to hedge funds and other similar private pools of capital and to insurance companies and other institutional investors to ease over the coming three months.
- Only a few respondents to the September survey indicated that they had increased the amount of resources and attention devoted to management of concentrated credit exposures to dealers and other financial intermediaries, a notable contrast to results from the June survey in which more than one-half of the respondents reported doing so.

¹ The September survey collected qualitative information on changes over the previous three months in credit terms and conditions in securities financing and over-the-counter derivatives markets. In addition to the core set of questions, this survey included a set of special questions about changes in funding conditions in the commercial mortgage-backed securities and commercial real estate markets since the beginning of 2010. A second set of special questions focused on funding conditions in the collateralized loan obligation and bank loan markets. A final special question asked about respondents' assessments of changes in their clients' appetite to bear risk since the beginning of 2010 and over the past three months. The 20 institutions participating in the survey account for almost all of the dealer financing of dollar-denominated securities to nondealers and are the most active intermediaries in the over-the-counter derivatives markets. The survey was conducted during the period from August 16, 2010, to September 3, 2010. The core questions ask about changes between June 2010 and August 2010.

² For questions that ask about credit terms, reported net percentages equal the percentage of institutions that reported tightening terms ("tightened considerably" or "tightened somewhat") minus the percentage of institutions that reported loosening terms ("loosened considerably" or "loosened somewhat"). For questions that ask about demand, reported net fractions equal the percentage of institutions that reported increased demand ("increased considerably" or "increased somewhat") minus the percentage of institutions that reported decreased demand ("decreased considerably" or "decreased somewhat").

- Responses to questions about OTC derivatives transactions suggested that nonprice terms were little changed across different types of underlying asset classes (underlyings), including those for both “plain vanilla” and customized derivatives.
- With respect to securities financing transactions, respondents reported an easing of terms applicable to the funding of several types of collateral. Dealers also noted that demand for funding for most types of securities had increased, although to a somewhat smaller degree than in the June survey.
- Responses to special questions about funding of commercial mortgage-backed securities (CMBS) and warehousing of commercial real estate (CRE) loans for securitization pointed to an easing of conditions and renewed investor interest in these markets since the beginning of 2010. Responses to special questions about funding of collateralized loan obligations (CLOs) and warehousing of bank loans for securitization suggested that investor demand for these instruments has increased over the same period. Terms on warehouse funding were reportedly eased, on net, since the beginning of 2010.
- Dealer responses to a special question regarding their overall assessments of changes in their clients’ appetite to bear risk since the beginning of the year and over the past three months were mixed. Among the nine largest firms, a majority reported a decrease in client risk appetite since the start of the year and over the past three months.

COUNTERPARTY TYPES

Dealers and other financial intermediaries

The vast majority of respondents reported that the amount of resources and attention devoted to management of concentrated exposures to dealers and other financial intermediaries had remained basically unchanged over the past three months, with only two institutions pointing to an increase in this activity. By contrast, in the June survey, over one-half of the institutions had reported an increase in the resources and attention devoted to management of concentrated credit exposures to these counterparties. Most respondents to the September survey also noted that the volume of mark and collateral disputes with dealers and other financial intermediaries had remained basically unchanged over the previous three months.

Hedge funds, private equity firms, and other similar pools of capital

As in the June survey, the responses indicated that across all types of transactions covered in the survey, dealers provided somewhat more-favorable credit terms over the past three months to hedge funds, private equity firms, and other similar private pools of capital (private pools of capital). A small net fraction of respondents eased price terms, which include most importantly financing rates. One-fourth of institutions reported having eased nonprice terms, which include haircuts, maximum maturity, covenants, cure periods, and cross-default provisions or other documentation features. The institutions that reported an easing of terms pointed to an

improvement in the current or expected financial strength of counterparties, more-aggressive competition from other institutions, and improvement in general market liquidity and functioning as the main reasons for having done so.³ One-half of the respondents to the September survey noted an increase in the intensity of efforts by private pools of capital to negotiate more-favorable price and nonprice terms over the past three months. Looking forward over the next three months, while most dealers expected price and nonprice terms for private pools of capital to remain about unchanged, a modest net fraction of respondents indicated that they anticipate somewhat looser terms. This development marks a shift from the results of the previous survey, in which a small net portion of dealers had anticipated somewhat tighter terms.

Insurance companies, pension funds, and other institutional investors

The survey indicated that dealers also provided more-favorable credit terms for insurance companies, pension funds, and other institutional investors (institutional investors). A small net fraction of respondents reported having eased price terms over the past three months, while one-fourth indicated that they had eased nonprice terms. The most important reasons cited for easing terms were more-aggressive competition from other institutions and improvements in market liquidity and functioning. Nearly one-half of the dealers reported an increase in the intensity of efforts by institutional investors to negotiate more-favorable price and nonprice terms over the past three months. Looking forward over the next three months, one-fourth of respondents, on net, expected credit terms applicable to institutional investors to ease somewhat. By contrast, in the June survey, the number of dealers that expected terms to ease had been roughly balanced by the number expecting terms to tighten.

Nonfinancial corporations

The responses to questions about credit terms applicable to nonfinancial corporations also pointed to an easing over the past three months. A small portion of respondents, on balance, indicated that they had eased price terms, while one-fifth noted that they had eased nonprice terms. The three factors that exerted the greatest influence on dealers' lending policies toward nonfinancial corporations over the past three months included more-aggressive competition from other firms, improvements in the current or expected financial strength of counterparties, and improvement in general market liquidity and functioning. About one-third of respondents indicated that there had been an increase in the intensity of efforts by nonfinancial corporations to negotiate more-favorable price and nonprice terms over the past three months. Looking forward over the next three months, the vast majority of dealers noted that they expected credit terms to remain basically unchanged. In the June survey, by contrast, dealers had anticipated, on balance, a further loosening of the terms in their transactions with nonfinancial corporations.

³ An ordinal ranking of reasons for loosening or tightening is produced by adding the number of respondents characterizing each reason as "very important" to the number characterizing the reason as "somewhat important" and then sorting the sums in descending order.

OVER-THE-COUNTER DERIVATIVES

As in the June survey, responses to questions dealing with OTC derivatives trades pointed to little change over the past three months in the terms for “plain vanilla” and customized derivatives across the various underlyings—foreign exchange, interest rates, equities, credit, commodities, and total return swaps referencing nonsecurities (such as mortgages and other bank loans). Of note, however, about one-fifth, on balance, of the dealers active in OTC foreign exchange derivative markets reported an increase in the volume of mark and collateral disputes with clients over the past three months. Small net fractions of respondents active in OTC interest rate derivatives and OTC equity derivative markets also reported an increase in the volume of such disputes with clients.

SECURITIES FINANCING

In the September survey, responses to questions focused on securities financing pointed to somewhat easier terms under which a broad spectrum of securities were being funded.⁴ This reported loosening of terms was generally evident for both average clients and most favored clients. With regard to terms under which high-grade corporate bonds are funded, net shares of survey respondents ranging between 13 and 33 percent reported a decline in the financing rate; an extension in the maximum maturity; an increase in the maximum amount of funding; and an easing of requirements, timelines, and thresholds for posting additional collateral or margin. With respect to terms under which equities are funded (including through stock loans), net fractions of dealers ranging between 10 and 21 percent indicated that they had increased the maximum amount of funding, decreased the financing rate, and extended the maximum maturity of funding they would provide. Regarding terms under which agency residential mortgage-backed securities (RMBS) are funded, 24 percent of respondents noted that they had lowered the financing rate and 12 percent had decreased haircuts. Finally, with respect to terms under which asset-backed securities (ABS) other than agency RMBS are funded, net fractions of dealers, ranging between 15 and 38 percent, reported a decline in the financing rate, a decrease in haircuts, an easing of covenants and triggers, and an increase in the maximum amount of funding.⁵ This general trend toward an easing of dealer lending policies with regard to securities financing that emerged from the September survey contrasts with the results of the previous survey, in which broad trends regarding changes in terms had been more difficult to discern.

Survey respondents reported that demand for funding for most types of securities had increased over the past three months, although the net fractions so reporting were somewhat smaller than in the June survey. On balance, nearly one-third of respondents that lend against agency RMBS and about one-fourth of dealers that lend against high-grade corporate bonds and

⁴ In this survey, securities financing includes lending to clients collateralized by high-grade corporate bonds, equities, agency residential mortgage-backed securities, and other asset-backed securities.

⁵ The pace at which borrowers repaid loans to finance ABS and legacy CMBS extended under the Term Asset-Backed Securities Loan Facility stepped up notably in recent weeks, reportedly reflecting in part the improved terms on which alternative financing was available.

ABS other than agency RMBS reported an increase in demand for funding. By contrast, demand for funding of equities was little changed on net.

Forty percent of survey respondents indicated that liquidity and functioning in the high-grade corporate bond market had improved somewhat over the past three months.⁶ By contrast, the vast majority of dealers reported little change in liquidity and functioning in the agency RMBS market and in the other ABS markets.

Survey respondents generally reported little change in the volume of collateral and mark disputes with clients related to the funding of collateral of all types.

SPECIAL QUESTIONS ON THE FINANCING OF CMBS AND CLOS

Responses to special questions about the funding of CMBS and CRE loans pointed to an easing of conditions and renewed investor interest in these markets since the beginning of 2010, consistent with other available evidence. Among those dealers that have provided funding for CMBS over this period, two-thirds reported that they had eased somewhat the terms under which CMBS are funded. Eighty percent of respondents also indicated that demand for funding of CMBS increased over the same period. About three-quarters of dealers indicated that their willingness to fund CRE loans on an interim basis, through warehouse facilities intended to allow the accumulation of assets for eventual securitization, had increased somewhat since the beginning of 2010. Terms for such funding were unchanged on net. All respondents but one reported that demand for funding of CRE loans on an interim basis had increased over the same period. Among dealers with material activity in the CMBS market, three-fourths indicated that liquidity and functioning in that market had improved since the beginning of 2010, with one-fourth of the respondents noting that this improvement had been considerable.

Responses to special questions about the funding of CLOs and bank loans suggested that investor interest in these instruments also increased since the beginning of 2010. Nearly one-half of the dealers that provided funding for CLOs over this period reported that demand increased somewhat, despite the fact that the terms under which CLOs were funded were unchanged on balance. A similar net fraction of respondents also indicated that demand for funding of bank loans on an interim basis, through warehouse financing intended to allow for accumulation of assets for eventual securitization, had increased since the beginning of 2010. This increase occurred amid some easing of terms for this interim funding over the same period. Dealers' willingness to fund such loans on an interim basis was also about unchanged, on balance. Among dealers with material activity in the CLO market, all respondents but one indicated that liquidity and functioning had improved since the beginning of 2010.

⁶ Note that survey respondents are instructed to report changes in liquidity and functioning in the market for the underlying collateral to be funded through repurchase agreements and similar secured financing transactions, not changes in the funding market itself.

SPECIAL QUESTION ON DEALER'S ASSESSMENTS OF CHANGES IN THEIR CLIENTS' APPETITE TO BEAR RISK

Overall dealer responses regarding their assessments of changes in their clients' appetite to bear risk were mixed. Relative to the beginning of 2010, 40 percent of respondents indicated that their clients' appetite to bear risk had decreased, 35 percent noted that it had remained basically unchanged, and the remaining 25 percent suggested that it had increased somewhat. When considering changes over the past three months, one-half of the respondents reported that their clients' appetite to bear risk had remained basically unchanged, 30 percent indicated that it had decreased somewhat, and 20 percent noted that it had increased somewhat.

Of the nine largest firms, all of which engage in activities spanning the full range of counterparty and transaction types, seven reported a decrease in client risk appetite since the start of the year. Over the past three months, five of these nine large firms reported that risk appetite "decreased somewhat" with the remainder indicating that appetite remained "basically unchanged." By contrast, the remaining firms, which generally engage in activities that do not span multiple counterparty or transaction types, reported a net increase in their clients' appetite to bear risk.

Risks and Uncertainty

ALTERNATIVE SCENARIOS

To illustrate some of the risks to the outlook, we consider a number of alternatives to the baseline projection using simulations of staff models. In the first scenario, we consider the possibility that we have overreacted to the recent weakness in a range of inherently noisy indicators and that the economy is on track for a stronger recovery than in the baseline. The second scenario considers the contrasting risk that the generally downbeat tone of recent readings on activity instead points to an even more sluggish recovery than we are projecting. The third scenario considers another possible source of greater weakness in the real economy: less-favorable supply-side conditions that imply lower permanent income. We then turn to opposing risks to the inflation outlook—either that continued weakness in hourly compensation will damp overall price gains or that inflation will come in noticeably above our baseline projections, as most private forecasters expect. The final scenario considers the risk of weaker real activity abroad and a stronger dollar relative to the baseline projection.

In these scenarios, monetary policy responds to movements in real activity and inflation as prescribed by a simple policy rule for the federal funds rate; nontraditional policy follows the baseline path. We generate the first five scenarios using the FRB/US model and the policy rule detailed in the long-term outlook discussion in the “Domestic Economic Developments and Outlook” section. The last scenario, however, is generated using the multicountry SIGMA model, which uses a somewhat different policy rule for the federal funds rate that employs an alternative concept of resource utilization.¹

Stronger Recovery

On balance, the data we have received since the spring have led us to mark down the forecast. However, such indicators are inherently noisy and could be misleading us; in particular, the recent downbeat readings may prove to be more transitory than we have assumed. In light of this possibility, this scenario examines a sharper snapback in spending on consumer durables and in capital expenditure, reflecting a mutually

¹For the policy rule in SIGMA, the measure of slack is the difference between actual output and the model’s estimate of the level of output that would occur in the absence of slow adjustment in wages and prices.

Alternative Scenarios

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

Measure and scenario	2010	2011	2012	2013	2014-15
	H2				
<i>Real GDP</i>					
Extended Tealbook baseline	2.0	3.3	4.4	4.8	3.7
Stronger recovery	3.3	4.8	5.2	4.8	3.1
Weaker recovery	1.3	1.6	2.6	4.0	4.4
Lower potential	1.6	2.5	3.0	3.6	3.1
Wage stagnation	1.7	3.1	4.5	5.1	3.8
Higher inflation	2.0	3.2	3.9	4.3	3.6
Weaker activity abroad	1.9	2.4	3.7	5.0	4.2
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	9.7	9.1	8.0	6.9	5.7
Stronger recovery	9.6	8.4	7.0	6.0	5.3
Weaker recovery	9.8	9.8	9.3	8.5	6.5
Lower potential	9.8	9.4	8.8	8.2	7.4
Wage stagnation	9.7	9.2	8.1	6.9	5.6
Higher inflation	9.7	9.1	8.2	7.3	6.1
Weaker activity abroad	9.7	9.4	8.7	7.6	6.1
<i>Core PCE inflation</i>					
Extended Tealbook baseline	1.1	.9	.9	1.1	1.4
Stronger recovery	1.1	1.0	1.0	1.2	1.6
Weaker recovery	1.1	.8	.7	.8	1.0
Lower potential	1.3	1.3	1.3	1.5	1.8
Wage stagnation	1.0	.6	.4	.6	.9
Higher inflation	1.1	1.5	1.7	2.0	2.1
Weaker activity abroad	1.0	.5	.4	.9	1.4
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	.3	1.8	3.7
Stronger recovery	.1	.5	1.7	3.0	4.4
Weaker recovery	.1	.1	.1	.1	2.2
Lower potential	.1	1.0	1.8	2.7	4.1
Wage stagnation	.1	.1	.1	1.1	3.2
Higher inflation	.1	.5	1.6	2.7	4.1
Weaker activity abroad	.1	.1	.1	1.1	3.2

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

reinforcing dynamic of improved optimism, higher spending, greater hiring, and increasing credit availability—developments that would be more in line with the contour of our projection in the spring. The stronger activity in turn buoys financial markets, and equity prices are 11 percent above baseline by the end of next year; financial conditions improve further into 2012. The virtuous circle causes real GDP to expand 5 percent on average in 2011 and 2012, bringing the unemployment rate down to 7 percent by the end of 2012. With less slack, inflation is higher; however, the upward pressure is partially checked by more capital deepening and thus larger productivity gains. Under these conditions, the federal funds rate begins to rise in late 2011 and remains above baseline thereafter.

Weaker Recovery

The weak tone of data since the spring suggests the recovery is having difficulty gaining traction. In this scenario, the modest projected improvements in confidence, credit conditions, and the labor market underlying our baseline are delayed even further. In response, households deleverage more aggressively, pushing the saving rate to $7\frac{3}{4}$ percent by the end of 2012, while firms are more reluctant to boost capital spending. In addition, the sluggish pace of recovery leads to a reassessment of the outlook for earnings and the riskiness of equity holdings, causing equity prices to fall about 10 percent relative to the baseline by next year. In this environment, real GDP expands at an average annual rate of only $1\frac{1}{2}$ percent through the end of next year. In turn, labor market conditions stagnate, and the unemployment rate hovers near $9\frac{3}{4}$ percent through the end of 2011. Inflation falls in response to more persistent slack and remains below baseline through 2015. Under these conditions, liftoff of the federal funds rate from its effective lower bound is delayed until the middle of 2014.

Lower Potential

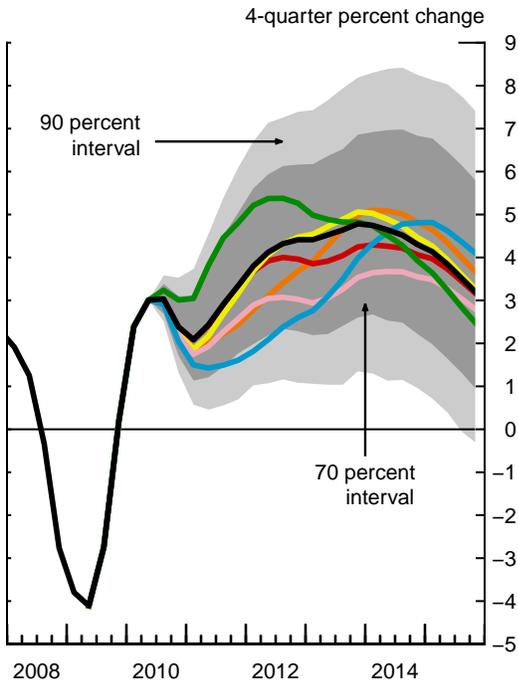
The pace of the recovery could also turn out to be unexpectedly slow if we have overestimated the economy's productive potential, given that less-favorable supply-side conditions would imply lower long-run levels of real household income and corporate earnings. While we raised the NAIRU and lowered potential output this round, there is considerable uncertainty around our estimates; given the extremely high level of long-duration unemployment and the unprecedented disturbances to the financial system, it is possible that we have not revised them enough. Indeed, some outside forecasters have noticeably lower estimates of potential output, and thus less slack. In this scenario, we assume that output is currently 4 percent below potential rather than the baseline estimate

Forecast Confidence Intervals and Alternative Scenarios

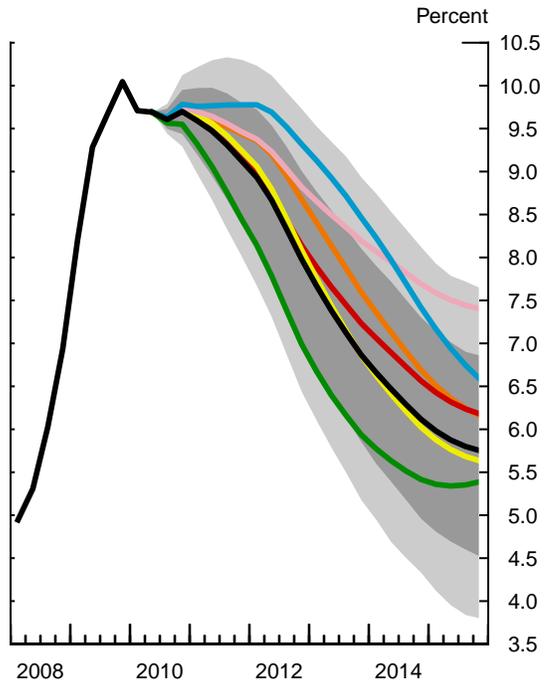
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- Stronger recovery
- Weaker recovery
- Lower potential
- Wage stagnation
- Higher inflation
- Weaker activity abroad

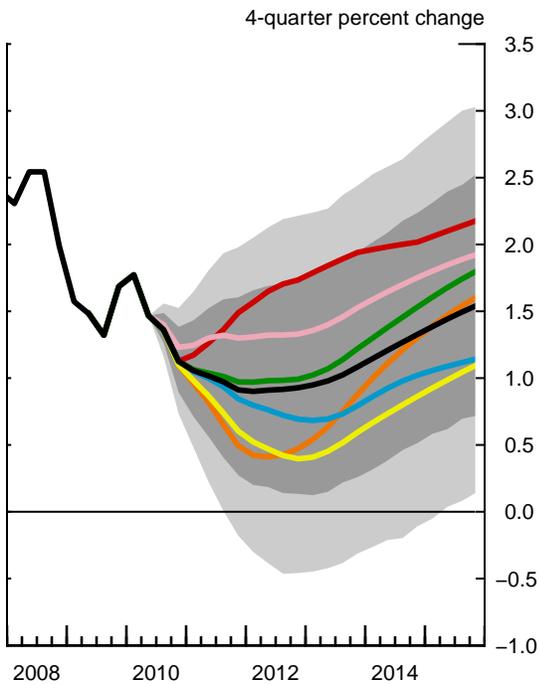
Real GDP



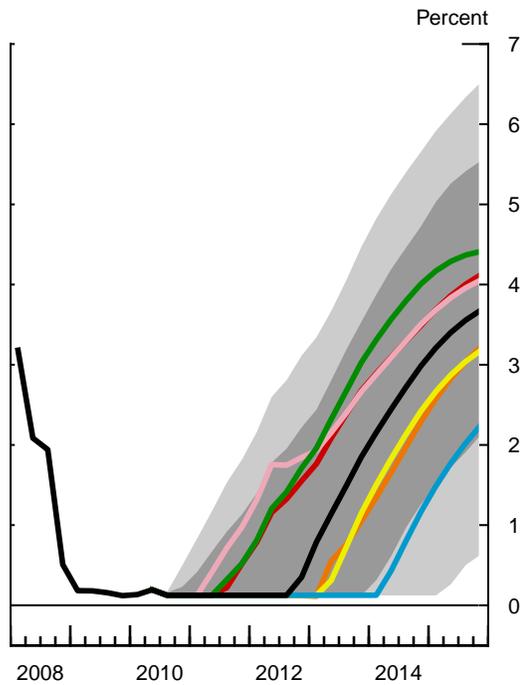
Unemployment Rate



PCE Prices excluding Food and Energy



Federal Funds Rate



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

Measure	2010	2011	2012	2013	2014	2015
<i>Real GDP</i>						
<i>(percent change, Q4 to Q4)</i>						
Projection	2.4	3.3	4.4	4.8	4.3	3.2
Confidence interval						
Tealbook forecast errors	1.5–3.2	1.5–5.2	2.5–6.3	...	...	...
FRB/US stochastic simulations	1.7–3.1	1.8–5.0	2.3–6.2	2.6–6.9	2.2–6.8	.9–5.8
<i>Civilian unemployment rate</i>						
<i>(percent, Q4)</i>						
Projection	9.7	9.1	8.0	6.9	6.1	5.7
Confidence interval						
Tealbook forecast errors	9.3–10.1	8.3–9.9	6.8–9.2	...	...	...
FRB/US stochastic simulations	9.4–10.0	8.4–9.8	7.0–9.0	5.9–8.1	5.0–7.3	4.5–6.9
<i>PCE prices, total</i>						
<i>(percent change, Q4 to Q4)</i>						
Projection	1.2	1.1	1.0	1.1	1.4	1.6
Confidence interval						
Tealbook forecast errors	.7–1.6	-.1–2.3	-.3–2.2	...	...	...
FRB/US stochastic simulations	.8–1.6	.2–2.1	-.1–2.0	.1–2.3	.3–2.6	.5–2.8
<i>PCE prices excluding food and energy</i>						
<i>(percent change, Q4 to Q4)</i>						
Projection	1.1	.9	.9	1.1	1.3	1.5
Confidence interval						
Tealbook forecast errors	.8–1.4	.2–1.6	-.1–1.9	...	...	...
FRB/US stochastic simulations	.9–1.4	.3–1.6	.1–1.8	.3–1.9	.5–2.2	.7–2.5
<i>Federal funds rate</i>						
<i>(percent, Q4)</i>						
Projection	.1	.1	.3	1.8	3.0	3.7
Confidence interval						
FRB/US stochastic simulations	.1–.2	.1–1.1	.1–2.2	.1–3.5	1.3–4.7	2.1–5.5

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2009 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979–2009, except for PCE prices excluding food and energy, where the sample is 1981–2009.

... Not applicable. The Tealbook forecast horizon has typically extended about 2 years.

of 7 percent, reflecting both a higher NAIRU and a lower level of structural productivity. The lower long-run levels of household income and corporate earnings implied by this assumption, and their effects on consumption and investment, cause real GDP to expand about 1 percentage point less per year, on average, through 2015 than in the baseline; the unemployment rate also declines more slowly. In addition, inflation picks up sooner than in the baseline, with core PCE prices rising about ½ percentage point faster than in the baseline from 2011 through 2015, reflecting both the direct effects of lower productivity on firms' costs and a smaller margin of slack. Over time, policymakers take on board the evidence of less-favorable supply-side conditions, and monetary policy begins tightening in the middle of next year.

Wage Stagnation

In the baseline projection, compensation per hour rises at an annual rate of close to 2 percent on average over the rest of this year and 2011. However, the Productivity and Cost measure of hourly compensation is now estimated to have fallen in the first half of this year, suggesting a downside risk. In this scenario, we assume that compensation per hour remains flat through the end of 2011 and that nominal wage gains remain below baseline until 2013. In the face of reduced cost pressures, core PCE inflation falls to about ½ percent in 2011, 2012, and 2013 and does not climb above 1 percent until 2015. These developments also translate into lower labor income and higher corporate profits; on net, these shifts in income work to damp aggregate demand. With lower inflation and a bit more slack, the federal funds rate lifts off its effective lower bound two quarters later than in the baseline.

Higher Inflation

Many outside forecasters anticipate higher inflation than in the staff projection. The “Lower Potential” scenario described one set of factors that could lead to higher inflation than in the staff’s projection, but there are other reasons why prices could rise faster than we anticipate. For example, we may be taking too much signal from the recent low levels of inflation, with the consequence that the deceleration in underlying inflation may have been more modest than we have implicitly assumed. Another possibility is that the acceleration in activity to above-trend growth will place more upward pressure on inflation than we expect through “speed effects,” with commodity and other prices reacting to the rate of change in activity. In this scenario, these factors cause inflation to follow a path consistent with outside forecasters’ consensus, which we read as anticipating core PCE inflation of about 1½ percent next year. In the face of this

higher inflation, the policy rule prescribes raising the federal funds rate starting in late 2011, about a year earlier than in the baseline and closer to the interest rate projections of some outside forecasters. The tighter monetary policy tempers aggregate demand, so real GDP expands somewhat more slowly than in the baseline.

Weaker Activity Abroad

In the Tealbook baseline, we project foreign economic growth to moderate from its pace in the first half of this year, albeit to a still solid rate of expansion; we also anticipate moderate depreciation of the dollar against foreign currencies. However, growth abroad could slow more sharply than we anticipate, particularly in emerging Asia, where recent data point to a marked softening in the pace of economic activity. In this scenario, we assume that weaker private demand abroad causes GDP growth to fall short of baseline by 1½ percentage points over the next two years in emerging market economies and by 1 percentage point in advanced foreign economies. In addition, the trade-weighted dollar appreciates about 8 percent relative to baseline by the first half of 2012, with this appreciation concentrated against the currencies of the emerging economies. In this simulation, U.S. real GDP growth falls below baseline by 1 percentage point in 2011 and ¾ percentage point in 2012, as real net exports decline. Core PCE inflation dips ½ percentage point below baseline in 2011 in response to lower import prices and lower resource utilization. The liftoff of the federal funds rate is delayed to mid-2013. Eventually, real GDP growth rises above baseline because of the greater monetary accommodation and a gradual improvement in economic growth abroad.

OUTSIDE FORECASTS

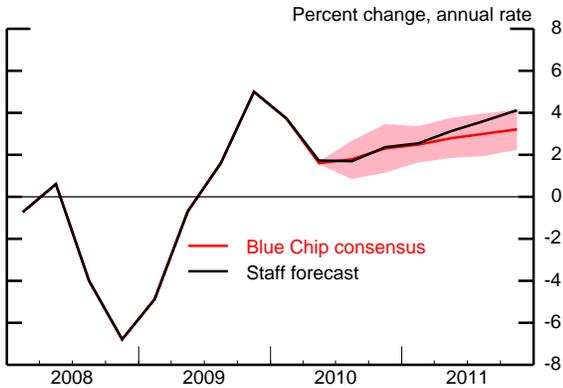
The Blue Chip consensus forecast released in early September shows real GDP increasing at an annual rate of about 2 percent in the second half of 2010 and 2.9 percent in 2011. The consensus projection for the second half of this year is down about ½ percentage point from the August survey, while the forecast for next year is down just 0.1 percentage point.² The consensus for real GDP growth is about the same as the staff's outlook for the second half of this year but weaker next year. Despite a somewhat weaker forecast for real GDP growth, the Blue Chip consensus forecast for the

² The August Blue Chip survey was released about a week after publication of the August Tealbook, and so survey respondents at the time were working with information broadly similar to that incorporated in the last Tealbook.

unemployment rate at the end of 2011 is a touch below the staff's projection. Regarding inflation, the Blue Chip consensus anticipates the CPI increasing 1.7 percent over the four quarters of 2011, the same as its projection from a month earlier and higher than the staff forecast of 1.2 percent. Finally, the Blue Chip consensus forecasts for both short- and long-term interest rates have moved down noticeably since August and are now closer to the staff assumptions.

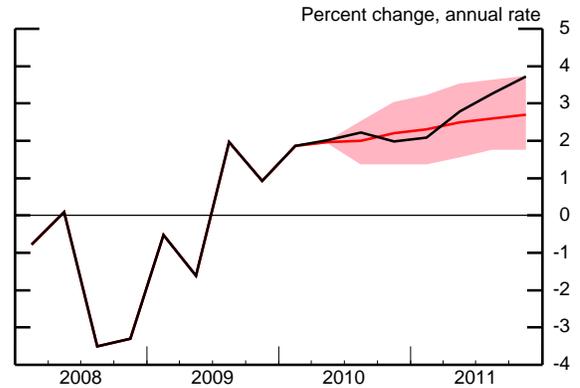
Tealbook Forecast Compared with Blue Chip (Blue Chip survey released September 10, 2010)

Real GDP

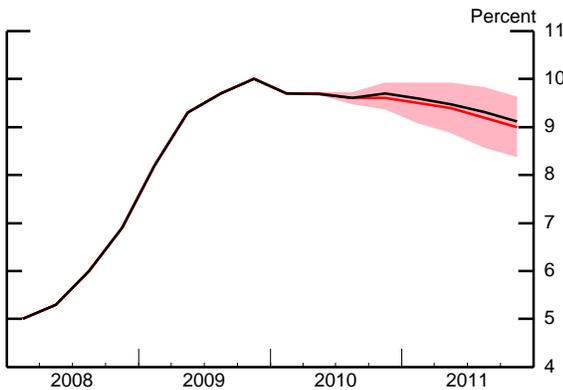


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

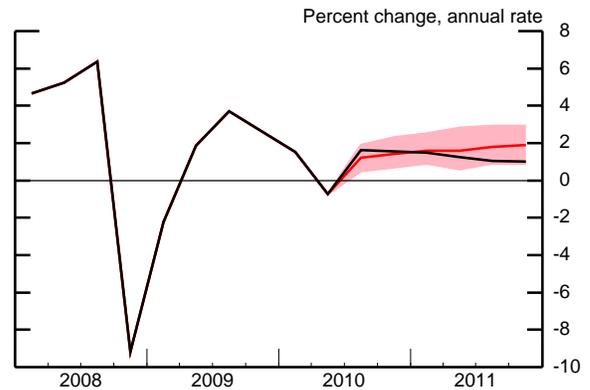
Real PCE



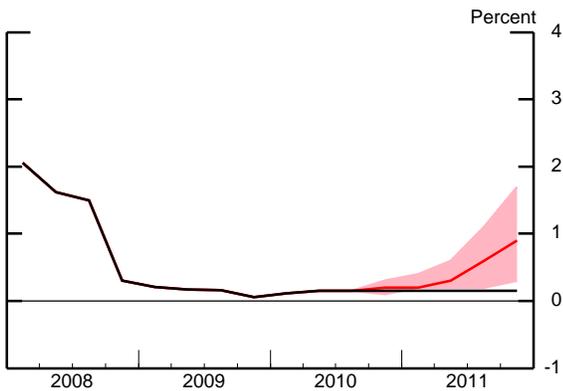
Unemployment Rate



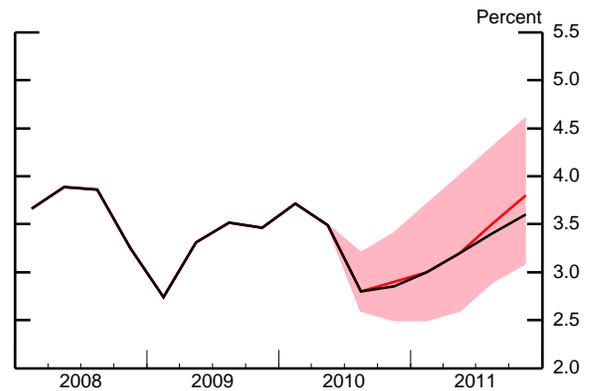
Consumer Price Index



Treasury Bill Rate



10-Year Treasury Yield



Note: The yield is for on-the-run Treasury securities. Over the forecast period, the staff's projected yield is assumed to be 15 basis points below the off-the-run yield.

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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	
	08/04/10	09/15/10	08/04/10	09/15/10	08/04/10	09/15/10	08/04/10	09/15/10	08/04/10	09/15/10
<i>Quarterly</i>										
2010:Q1	4.8	4.8	3.7	3.7	2.1	2.1	1.2	1.2	9.7	9.7
Q2	4.0	3.7	2.1	1.7	.1	.0	1.1	1.1	9.7	9.7
Q3	3.8	3.6	2.4	1.7	1.1	1.2	.9	1.1	9.7	9.6
Q4	3.4	2.7	2.6	2.4	1.8	1.4	.9	1.1	9.7	9.7
2011:Q1	4.1	3.8	3.0	2.5	1.2	1.3	.9	1.0	9.5	9.6
Q2	4.4	4.1	3.4	3.1	1.0	1.1	.9	.9	9.4	9.5
Q3	4.8	4.6	3.9	3.6	1.0	1.0	.9	.9	9.2	9.3
Q4	5.3	5.1	4.3	4.1	1.0	.9	.9	.9	8.9	9.1
2012:Q1	...	5.6	...	4.3	...	1.0	...	.9	...	8.9
Q2	...	5.6	...	4.4	...	1.0	...	.9	...	8.7
Q3	...	5.6	...	4.4	...	1.0	...	.9	...	8.3
Q4	...	5.6	...	4.5	...	1.0	...	.9	...	8.0
<i>Two-quarter²</i>										
2010:Q2	4.4	4.2	2.9	2.7	1.1	1.0	1.2	1.1	-3	-3
Q4	3.6	3.2	2.5	2.0	1.5	1.3	.9	1.1	.0	.0
2011:Q2	4.2	4.0	3.2	2.8	1.1	1.2	.9	.9	-3	-2
Q4	5.1	4.8	4.1	3.9	1.0	1.0	.9	.9	-5	-4
2012:Q2	...	5.6	...	4.4	...	1.0	...	.9	...	-4
Q4	...	5.6	...	4.5	...	1.0	...	.9	...	-7
<i>Four-quarter³</i>										
2009:Q4	.6	.6	.2	.2	1.5	1.5	1.7	1.7	3.1	3.1
2010:Q4	4.0	3.7	2.7	2.4	1.3	1.2	1.1	1.1	-3	-3
2011:Q4	4.7	4.4	3.6	3.3	1.1	1.1	.9	.9	-8	-6
2012:Q4	...	5.6	...	4.4	...	1.0	...	.9	...	-1.1
<i>Annual</i>										
2009	-1.7	-1.7	-2.6	-2.6	.2	.2	1.5	1.5	9.3	9.3
2010	3.8	3.7	2.9	2.7	1.8	1.7	1.4	1.4	9.7	9.7
2011	4.1	3.8	3.1	2.7	1.2	1.1	.9	1.0	9.3	9.4
2012	...	5.3	...	4.2	...	1.0	...	.9	...	8.5

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.

Greensheets

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
	Real GDP	3.7	1.7	1.7	2.4	2.5	3.1	3.6	4.1	4.3	4.4	4.4				4.5	2.4	3.3	4.4
<i>Previous Tealbook</i>	3.7	2.1	2.4	2.6	3.0	3.4	3.9	4.3	...	...	...	...	2.7	3.6	...
Final sales	1.1	.9	.8	3.3	2.6	3.3	3.6	4.1	4.2	4.2	4.2	4.7	1.5	3.4	4.3
<i>Previous Tealbook</i>	1.1	1.6	1.6	3.2	3.0	3.7	3.9	4.8	...	...	...	...	1.9	3.8	...
Priv. dom. final purch.	2.1	4.3	.9	2.1	2.8	3.8	4.3	4.7	4.9	5.0	5.3	5.2	2.4	3.9	5.1
<i>Previous Tealbook</i>	2.1	4.3	1.5	2.9	3.4	4.5	4.9	5.3	...	...	...	...	2.7	4.5	...
Personal cons. expend.	1.9	2.0	2.2	2.0	2.1	2.8	3.3	3.7	3.9	4.1	4.3	4.4	2.0	3.0	4.2
<i>Previous Tealbook</i>	1.9	1.6	1.6	2.0	2.5	3.4	3.9	4.2	...	...	...	...	1.8	3.5	...
Durables	8.8	6.9	9.0	6.6	5.5	7.1	8.8	11.7	10.3	9.4	11.4	8.8	7.8	8.3	10.0
Nondurables	4.2	2.3	1.0	2.3	2.4	2.8	2.9	2.8	3.2	3.6	3.0	4.0	2.4	2.7	3.5
Services	.1	1.2	1.6	1.2	1.5	2.1	2.5	2.8	3.2	3.4	3.6	3.8	1.0	2.2	3.5
Residential investment	-12.3	26.3	-27.2	3.5	11.0	21.8	21.8	22.7	18.8	18.0	17.0	16.3	-4.4	19.2	17.5
<i>Previous Tealbook</i>	-12.3	28.5	-8.6	8.3	15.6	19.3	19.6	21.5	...	...	...	...	2.8	19.0	...
Business fixed invest.	7.8	17.6	-.7	2.8	5.9	7.2	7.5	7.8	7.9	7.9	8.9	7.5	6.7	7.1	8.1
<i>Previous Tealbook</i>	7.8	19.8	3.0	7.8	7.2	8.8	8.5	9.0	...	...	...	...	9.4	8.4	...
Equipment & software	20.4	26.4	-.3	4.6	8.8	10.6	11.0	11.5	11.4	11.0	12.0	9.8	12.2	10.5	11.0
<i>Previous Tealbook</i>	20.4	26.1	3.9	10.5	10.1	12.2	11.8	12.5	...	...	...	...	14.9	11.6	...
Nonres. structures	-17.8	-2.7	-1.5	-1.8	-1.9	-1.8	-2.1	-2.2	-1.8	-1.3	-.3	.6	-6.2	-2.0	-.7
<i>Previous Tealbook</i>	-17.8	4.8	.6	.7	-2	-.3	-.6	-.8	...	...	...	...	-3.3	-.5	...
Net exports ²	-338	-446	-449	-411	-403	-399	-401	-402	-400	-403	-414	-406	-411	-401	-406
<i>Previous Tealbook</i> ²	-338	-426	-422	-395	-390	-394	-400	-391	...	...	...	...	-395	-394	...
Exports	11.4	9.1	10.8	8.5	7.7	7.5	7.6	7.5	7.6	7.4	7.4	7.5	9.9	7.6	7.5
Imports	11.2	32.7	9.1	-.6	4.5	5.4	6.6	6.2	5.8	6.7	8.0	4.8	12.5	5.7	6.3
Gov't. cons. & invest.	-1.6	3.9	.8	1.7	.4	.6	.8	.9	.8	.8	.8	1.0	1.2	.7	.9
<i>Previous Tealbook</i>	-1.6	4.5	1.4	.0	.3	.4	.5	.5	...	...	...	...	1.1	.4	...
Federal	1.8	9.1	3.4	4.5	.9	1.1	1.2	1.1	.4	.3	-.1	.2	4.7	1.1	.2
Defense	.4	7.3	5.3	6.8	-.1	.1	.3	.1	.3	.2	-.5	.0	4.9	.1	.0
Nondefense	5.0	12.9	-.3	-.2	3.0	3.1	3.1	3.1	.6	.6	.6	.6	4.2	3.1	.6
State & local	-3.8	.6	-1.0	-.1	.1	.2	.4	.7	1.1	1.2	1.5	1.6	-1.1	.4	1.3
Change in bus. inventories ²	44	70	99	71	69	62	64	66	70	78	87	80	71	65	79
<i>Previous Tealbook</i> ²	44	61	87	68	69	62	59	46	...	...	...	...	65	59	...
Nonfarm ²	37	60	94	67	65	59	60	62	67	75	84	77	64	62	76
Farm ²	8	10	6	5	4	4	4	4	3	3	3	3	7	4	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	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real GDP	3.1	2.7	2.4	2.3	-2.8	.2	2.4	3.3	4.4
<i>Previous Tealbook</i>	3.1	2.7	2.4	2.3	-2.8	.2	2.7	3.6	...
Final sales	2.8	2.7	2.8	2.5	-1.9	-3	1.5	3.4	4.3
<i>Previous Tealbook</i>	2.8	2.7	2.8	2.5	-1.9	-3	1.9	3.8	...
Priv. dom. final purch.	4.2	3.1	2.5	1.3	-3.8	-2.0	2.4	3.9	5.1
<i>Previous Tealbook</i>	4.2	3.1	2.5	1.3	-3.8	-2.0	2.7	4.5	...
Personal cons. expend.	3.5	2.7	3.3	1.7	-1.9	.2	2.0	3.0	4.2
<i>Previous Tealbook</i>	3.5	2.7	3.3	1.7	-1.9	.2	1.8	3.5	...
Durables	5.5	2.1	6.3	3.9	-12.3	4.8	7.8	8.3	10.0
Nondurables	3.0	3.3	3.2	.8	-2.9	1.1	2.4	2.7	3.5
Services	3.4	2.6	2.8	1.7	.3	-8	1.0	2.2	3.5
Residential investment	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-4.4	19.2	17.5
<i>Previous Tealbook</i>	6.6	5.3	-15.7	-20.7	-24.6	-13.4	2.8	19.0	...
Business fixed invest.	7.0	4.4	7.8	8.2	-8.3	-12.7	6.7	7.1	8.1
<i>Previous Tealbook</i>	7.0	4.4	7.8	8.2	-8.3	-12.7	9.4	8.4	...
Equipment & software	8.8	6.1	6.0	4.3	-11.8	-4.9	12.2	10.5	11.0
<i>Previous Tealbook</i>	8.8	6.1	6.0	4.3	-11.8	-4.9	14.9	11.6	...
Nonres. structures	1.7	-1	13.0	17.3	-1.5	-26.5	-6.2	-2.0	-7
<i>Previous Tealbook</i>	1.7	-1	13.0	17.3	-1.5	-26.5	-3.3	-5	...
Net exports ¹	-688	-723	-729	-655	-504	-363	-411	-401	-406
<i>Previous Tealbook¹</i>	-688	-723	-729	-655	-504	-363	-395	-394	...
Exports	7.1	6.7	10.2	10.1	-2.9	-1	9.9	7.6	7.5
Imports	10.9	5.2	4.1	.7	-6.0	-7.2	12.5	5.7	6.3
Gov't. cons. & invest.	.6	.7	1.5	1.9	3.1	.8	1.2	.7	.9
<i>Previous Tealbook</i>	.6	.7	1.5	1.9	3.1	.8	1.1	.4	...
Federal	2.3	1.2	2.2	3.1	9.2	3.6	4.7	1.1	.2
Defense	2.4	.4	4.4	2.6	9.5	3.3	4.9	.1	.0
Nondefense	2.3	2.6	-2.3	4.2	8.5	4.5	4.2	3.1	.6
State & local	-4	.4	1.2	1.2	-4	-1.0	-1.1	.4	1.3
Change in bus. inventories ¹	66	50	59	28	-38	-113	71	65	79
<i>Previous Tealbook¹</i>	66	50	59	28	-38	-113	65	59	...
Nonfarm ¹	58	50	63	29	-39	-117	64	62	76
Farm ¹	8	0	-4	-1	1	3	7	4	3

1. Billions of chained (2005) dollars.

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

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
	Real GDP	3.7	1.7	1.7	2.4	2.5	3.1	3.1	4.1	4.3	4.4	4.4				4.5	2.4	3.3	4.4
<i>Previous Tealbook</i>	3.7	2.1	2.4	2.6	3.0	3.4	3.9	4.3	...	...	...	...	2.7	3.6	...
Final sales	1.1	.9	.8	3.3	2.6	3.3	3.6	4.1	4.2	4.1	4.2	4.7	1.5	3.4	4.3
<i>Previous Tealbook</i>	1.1	1.6	1.6	3.2	3.0	3.6	3.9	4.7	...	...	...	...	1.9	3.8	...
Priv. dom. final purch.	1.7	3.5	.8	1.8	2.3	3.1	3.5	3.9	4.0	4.1	4.3	4.3	1.9	3.2	4.2
<i>Previous Tealbook</i>	1.7	3.5	1.2	2.4	2.8	3.7	4.0	4.4	...	...	...	...	2.2	3.7	...
Personal cons. expend.	1.3	1.4	1.6	1.4	1.5	2.0	2.3	2.6	2.8	2.9	3.0	3.1	1.4	2.1	2.9
<i>Previous Tealbook</i>	1.3	1.2	1.1	1.4	1.7	2.4	2.8	3.0	...	...	...	...	1.3	2.5	...
Durables	.6	.5	.6	.5	.4	.5	.6	.8	.7	.7	.8	.7	.6	.6	.7
Nondurables	.7	.4	.2	.4	.4	.4	.5	.5	.5	.6	.5	.6	.4	.4	.5
Services	.0	.6	.8	.6	.7	1.0	1.2	1.3	1.5	1.6	1.7	1.8	.5	1.1	1.7
Residential investment	-3	.6	-7	.1	.2	.5	.5	.5	.5	.5	.4	.4	-1	.4	.5
<i>Previous Tealbook</i>	-3	.6	-2	.2	.4	.4	.5	.5	...	...	...	...	.1	.5	...
Business fixed invest.	.7	1.5	-1	.3	.6	.7	.7	.7	.8	.8	.9	.7	.6	.7	.8
<i>Previous Tealbook</i>	.7	1.7	.3	.7	.7	.8	.8	.9	...	...	...	...	.9	.8	...
Equipment & software	1.2	1.6	.0	.3	.6	.7	.8	.8	.8	.8	.9	.7	.8	.7	.8
<i>Previous Tealbook</i>	1.2	1.6	.3	.7	.7	.8	.8	.9	...	...	...	...	1.0	.8	...
Nonres. structures	-5	-1	.0	.0	.0	.0	-1	-1	.0	.0	.0	.0	-2	-1	.0
<i>Previous Tealbook</i>	-5	.1	.0	.0	.0	.0	.0	.0	...	...	...	...	-1	.0	...
Net exports	-3	-3.5	-1	1.1	.2	.1	-1	.0	.0	-1	-3	.2	-7	.0	-1
<i>Previous Tealbook</i>	-3	-2.9	.1	.8	.1	-1	-2	.2	...	...	...	...	-5	.0	...
Exports	1.3	1.1	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.0
Imports	-1.6	-4.6	-1.4	.1	-7	-9	-1.1	-1.0	-1.0	-1.1	-1.3	-8	-1.8	-9	-1.1
Gov't. cons. & invest.	-3	.8	.2	.4	.1	.1	.2	.2	.2	.2	.2	.2	.2	.1	.2
<i>Previous Tealbook</i>	-3	.9	.3	.0	.1	.1	.1	.1	...	...	...	...	.2	.1	...
Federal	.2	.7	.3	.4	.1	.1	.1	.1	.0	.0	.0	.0	.4	.1	.0
Defense	.0	.4	.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
Nondefense	.1	.3	.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	.1	.1	.0
State & local	-5	.1	-1	.0	.0	.0	.1	.1	.1	.1	.2	.2	-1	.0	.2
Change in bus. inventories	2.6	.8	.9	-9	-1	-2	.0	.1	.1	.2	.3	-2	.9	.0	.1
<i>Previous Tealbook</i>	2.6	.6	.8	-6	.0	-2	-1	-4	...	...	...	...	.8	-2	...
Nonfarm	2.6	.7	1.0	-8	.0	-2	.0	.1	.1	.2	.3	-2	.9	.0	.1
Farm	.1	.1	-1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.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	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
	GDP chain-wt. price index <i>Previous Tealbook</i>	1.0	1.9	1.9	.4	1.2	1.0	.9	.9	1.2	1.2	1.1				1.1	1.3	1.0	1.2
PCE chain-wt. price index <i>Previous Tealbook</i>	1.0	1.8	1.3	.8	1.1	.9	.9	1.0	1.1	1.0	1.0	1.0	1.2	1.1	1.0
Energy <i>Previous Tealbook</i>	2.1	.0	1.2	1.4	1.3	1.1	1.0	.9	1.0	1.0	1.0	1.0	1.3	1.1	1.1
Food <i>Previous Tealbook</i>	2.1	.1	1.1	1.8	1.2	1.0	1.0	1.0	...	...	...	...	1.3	1.1	...
Ex. food & energy <i>Previous Tealbook</i>	16.4	-17.5	4.5	5.3	7.3	5.1	2.9	2.2	2.2	1.6	1.6	1.6	1.4	4.4	1.8
CPI <i>Previous Tealbook</i>	16.4	-17.5	5.1	18.2	6.8	3.9	2.6	1.9	...	...	...	...	4.5	3.8	...
Ex. food & energy <i>Previous Tealbook</i>	1.8	1.6	.3	1.3	.8	.7	.7	.7	.7	.7	.7	.7	1.2	.7	.7
ECL, hourly compensation ² <i>Previous Tealbook</i> ²	1.8	1.6	.7	1.2	.8	.7	.7	.7	...	...	...	...	1.3	.7	...
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.2	1.1	1.1	1.1	1.0	.9	.9	.9	.9	.9	.9	.9	1.1	.9	...
Compensation per hour <i>Previous Tealbook</i>	1.2	1.1	.9	.9	.9	.9	.9	.9	...	...	...	...	1.1	.9	...
Unit labor costs <i>Previous Tealbook</i>	1.5	-.7	1.6	1.5	1.5	1.3	1.0	1.0	1.1	1.0	1.1	1.1	1.0	1.2	1.1
Core goods imports chain-wt. price index ³ <i>Previous Tealbook</i> ³	1.5	-.7	1.4	2.2	1.3	1.1	1.0	1.0	...	...	...	...	1.1	1.1	...
	.0	.9	1.6	1.3	1.0	.9	.9	.9	1.0	1.0	1.0	1.0	.9	.9	1.0
	.0	.9	1.1	.9	.8	.9	.9	.9	...	...	...	...	.7	.9	...
	2.6	1.8	1.8	1.8	2.2	1.8	1.8	1.8	2.2	2.0	2.0	2.0	2.0	1.9	2.0
	2.6	1.8	1.9	1.9	2.4	1.9	1.9	1.9	...	...	...	...	2.0	2.0	...
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	3.9	-1.7	1.5	1.8	1.1	1.5	1.8	2.0	2.3	2.1	1.9	1.8	1.3	1.6	2.0
Compensation per hour <i>Previous Tealbook</i>	3.8	-1.0	1.6	1.0	.7	1.1	1.5	2.0	...	...	...	...	1.4	1.3	...
Unit labor costs <i>Previous Tealbook</i>	-.9	-.7	2.0	1.8	2.4	1.6	1.6	1.6	2.1	1.7	1.9	2.0	.5	1.8	1.9
Core goods imports chain-wt. price index ³ <i>Previous Tealbook</i> ³	.0	-.3	1.5	2.3	3.0	2.1	1.9	1.9	...	...	...	...	.9	2.2	...
	-4.6	1.0	.5	.0	1.3	.1	-.2	-.4	-.2	-.4	.0	.2	-.8	.2	-.1
	-3.7	.7	-.1	1.3	2.2	1.0	.3	-.2	...	...	...	...	-.5	.8	...
	4.2	3.1	1.3	2.2	1.7	1.1	1.0	.8	.8	.9	.9	.9	2.7	1.2	.9
	4.2	3.2	1.3	2.0	1.4	1.2	1.2	1.1	...	...	...	...	2.7	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.

Greensheets

Changes in Prices and Costs

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP chain-wt. price index <i>Previous Tealbook</i>	3.2 3.2	3.5 3.5	2.9 2.9	2.6 2.6	2.1 2.1	.5 .5	1.3 1.2	1.0 1.0	1.2 ...
PCE chain-wt. price index <i>Previous Tealbook</i>	3.0 3.0	3.3 3.3	1.9 1.9	3.5 3.5	1.7 1.7	1.5 1.5	1.2 1.3	1.1 1.1	1.0 ...
Energy <i>Previous Tealbook</i>	18.6 18.6	21.5 21.5	-3.7 -3.7	19.4 19.4	-9.0 -9.0	2.7 2.7	1.4 4.5	4.4 3.8	1.8 ...
Food <i>Previous Tealbook</i>	2.7 2.7	1.5 1.5	1.7 1.7	4.8 4.8	6.9 6.9	-1.6 -1.6	1.2 1.3	.7 .7	.7 ...
Ex. food & energy <i>Previous Tealbook</i>	2.2 2.2	2.3 2.3	2.3 2.3	2.4 2.4	2.0 2.0	1.7 1.7	1.1 1.1	.9 .9	.9 ...
CPI <i>Previous Tealbook</i>	3.4 3.4	3.7 3.7	1.9 1.9	4.0 4.0	1.6 1.6	1.5 1.5	1.0 1.1	1.2 1.1	1.1 ...
Ex. food & energy <i>Previous Tealbook</i>	2.2 2.2	2.1 2.1	2.7 2.7	2.3 2.3	2.0 2.0	1.7 1.7	.9 .7	.9 .9	1.0 ...
ECL, hourly compensation ¹ <i>Previous Tealbook¹</i>	3.8 3.8	2.9 2.9	3.2 3.2	3.0 3.0	2.4 2.4	1.2 1.2	2.0 2.0	1.9 2.0	2.0 ...
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.5 1.5	1.4 1.5	.9 1.0	2.6 2.7	-4 -3	6.2 6.3	1.3 1.4	1.6 1.3	2.0 ...
Compensation per hour <i>Previous Tealbook</i>	3.3 3.4	3.5 3.6	4.5 4.5	3.6 3.6	2.3 2.3	2.5 2.6	.5 .9	1.8 2.2	1.9 ...
Unit labor costs <i>Previous Tealbook</i>	1.9 1.9	2.0 2.0	3.5 3.5	.9 .9	2.7 2.7	-3.5 -3.5	-8 -5	.2 .8	-1 ...
Core goods imports chain-wt. price index ² <i>Previous Tealbook²</i>	3.6 3.6	2.2 2.2	2.5 2.5	2.9 2.9	3.5 3.5	-1.9 -1.9	2.7 2.7	1.2 1.2	.9 ...

1. Private-industry workers.

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

Other Macroeconomic Indicators

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
	<i>Employment and production</i>	.1	.7	-1	.1	.4	.6	.7	.8	.8	.8	.9				.9	.8	2.4	3.5
Nonfarm payroll employment ²	9.7	9.7	9.6	9.7	9.6	9.5	9.3	9.1	8.9	8.9	8.3	8.0	9.7	9.1	8.0
Unemployment rate ³	9.7	9.7	9.7	9.7	9.5	9.4	9.2	8.9	8.9	8.9	...	...	9.7	8.9	...
<i>Previous Tealbook³</i>	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
NAIRU ³	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	...	...	5.2	5.2	...
<i>Previous Tealbook³</i>	-6.8	-7.0	-7.2	-7.2	-7.2	-7.0	-6.8	-6.4	-6.4	-6.4	-5.6	-4.7	-7.2	-6.4	-4.7
GDP gap ⁴	-7.6	-7.6	-7.7	-7.6	-7.5	-7.3	-7.0	-6.6	-6.6	-6.6	...	...	-7.6	-6.6	...
<i>Previous Tealbook⁴</i>	7.1	6.5	4.3	.8	2.1	3.6	4.0	4.5	4.5	4.5	4.5	3.9	4.7	3.5	4.4
Industrial production ⁵	7.0	6.6	3.5	1.4	3.5	4.4	4.6	5.1	5.1	5.1	...	...	4.6	4.4	...
<i>Previous Tealbook⁵</i>	6.2	8.5	3.9	.6	1.9	4.7	5.1	5.7	5.7	5.7	6.0	4.4	4.7	4.3	5.2
Manufacturing industr. prod. ⁵	6.1	7.9	2.7	2.0	4.2	5.5	5.5	6.6	6.6	6.6	...	...	4.6	5.5	...
<i>Previous Tealbook⁵</i>	70.0	71.5	72.1	72.2	72.5	73.4	74.3	75.3	75.3	75.3	77.9	78.6	72.2	75.3	78.6
Capacity utilization rate - mfg. ³	70.0	71.3	71.8	72.1	72.8	73.8	74.7	75.9	75.9	75.9	...	...	72.1	75.9	...
<i>Previous Tealbook³</i>	.6	.6	.6	.6	.7	.8	.9	1.0	1.0	1.0	1.1	1.2	.6	.8	1.1
Housing starts ⁶	11.0	11.3	11.5	11.6	11.9	12.3	12.9	13.8	13.8	13.8	14.9	15.6	11.4	12.7	15.2
Light motor vehicle sales ⁶	4.8	3.7	3.6	2.7	3.8	4.1	4.6	5.1	5.1	5.1	5.6	5.6	3.7	4.4	5.6
<i>Income and saving</i>	1.3	4.4	.7	.9	1.1	3.0	3.2	3.7	3.7	3.7	4.1	4.4	1.8	2.8	4.0
Nominal GDP ⁵	1.7	4.4	1.1	1.5	1.7	3.9	4.0	4.0	4.0	4.0	...	...	2.2	3.4	...
Real disposable pers. income ⁵	5.5	6.1	5.9	5.6	5.4	5.5	5.5	5.5	5.5	5.5	5.4	5.3	5.6	5.5	5.3
Personal saving rate ³	5.5	6.2	6.3	6.2	6.0	6.2	6.2	6.2	6.2	6.2	...	...	6.2	6.2	...
<i>Previous Tealbook³</i>	48.9	16.9	7.7	1.9	3.0	6.5	5.4	5.5	5.5	5.5	4.6	3.1	17.5	5.1	3.8
Corporate profits ⁷	10.7	11.0	11.1	11.1	11.1	11.2	11.2	11.2	11.2	11.2	11.1	11.0	11.1	11.2	11.0
Profit share of GNP ³	-1,314	-1,325	-1,299	-1,299	-1,257	-1,223	-1,201	-1,187	-1,187	-1,187	-1,155	-1,122	-1,309	-1,217	-1,133
Net federal savings ⁸	29	21	25	41	46	31	19	16	16	16	9	27	29	28	23
Net state & local saving ⁸	11.1	11.5	11.6	11.6	11.7	12.0	12.1	12.2	12.2	12.2	12.4	12.6	11.6	12.2	12.7
Gross national saving rate ³	-1.8	-1.1	-9	-9	-8	-5	-4	-2	-2	-2	.1	.3	-9	-2	.4
Net national saving rate ³															

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.

Greensheets

Other Macroeconomic Indicators

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
<i>Employment and production</i>									
Nonfarm payroll employment ¹	2.0	2.4	2.1	1.2	-2.8	-5.4	.8	2.4	3.5
Unemployment rate ²	5.4	5.0	4.5	4.8	6.9	10.0	9.7	9.1	8.0
<i>Previous Tealbook²</i>	5.4	5.0	4.5	4.8	6.9	10.0	9.7	8.9	...
NAIRU ²	4.9	4.8	4.8	4.8	5.1	5.8	5.8	5.8	5.8
<i>Previous Tealbook²</i>	4.9	4.8	4.8	4.8	4.9	5.2	5.2	5.2	...
GDP gap ³	-7	-3	-3	-4	-5.3	-7.1	-7.2	-6.4	-4.7
<i>Previous Tealbook³</i>	-7	-3	-3	-5	-5.7	-7.9	-7.6	-6.6	...
Industrial production ⁴	2.9	2.3	2.5	2.3	-7.6	-3.8	4.7	3.5	4.4
<i>Previous Tealbook⁴</i>	2.9	2.3	2.5	2.3	-7.6	-3.8	4.6	4.4	...
Manufacturing industr. prod. ⁴	3.5	3.5	2.0	2.6	-10.0	-4.1	4.7	4.3	5.2
<i>Previous Tealbook⁴</i>	3.5	3.5	2.0	2.6	-10.0	-4.1	4.6	5.5	...
Capacity utilization rate - mfg. ²	77.4	78.8	79.0	79.1	70.9	68.8	72.2	75.3	78.6
<i>Previous Tealbook²</i>	77.4	78.8	79.0	79.1	70.9	68.8	72.1	75.9	...
Housing starts ⁵	2.0	2.1	1.8	1.4	.9	.6	.6	.8	1.1
Light motor vehicle sales ⁵	16.8	16.9	16.5	16.1	13.1	10.3	11.4	12.7	15.2
<i>Income and saving</i>									
Nominal GDP ⁴	6.4	6.3	5.4	5.0	-7	.6	3.7	4.4	5.6
Real disposable pers. income ⁴	3.5	.6	4.6	1.5	1.0	.4	1.8	2.8	4.0
<i>Previous Tealbook⁴</i>	3.5	.6	4.6	1.5	1.0	.4	2.2	3.4	...
Personal saving rate ²	3.6	1.5	2.5	2.1	5.2	5.5	5.6	5.5	5.3
<i>Previous Tealbook²</i>	3.6	1.5	2.5	2.1	5.2	5.5	6.2	6.2	...
Corporate profits ⁶	21.9	19.6	3.7	-8.1	-31.9	42.5	17.5	5.1	3.8
Profit share of GNP ²	10.5	11.8	11.6	10.1	6.9	9.8	11.1	11.2	11.0
Net federal saving ⁷	-379	-283	-204	-245	-616	-1252	-1309	-1217	-1133
Net state & local saving ⁷	-8	26	51	12	-47	-20	29	28	23
Gross national saving rate ²	14.3	15.5	16.3	13.6	11.8	10.8	11.6	12.2	12.7
Net national saving rate ²	2.7	3.5	4.2	1.3	-1.4	-2.3	-9	-2	.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				2010				2011				2012				
	2009 ^a	2010	2011	2012	Q1 ^a	Q2 ^a	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Unified budget																	
Receipts ¹	2104	2168	2413	2626	466	643	571	545	507	726	634	603	559	799	665	637	
Outlays ¹	3520	3466	3719	3671	795	930	865	942	956	912	909	925	964	915	867	967	
Surplus/deficit ¹	-1416	-1299	-1306	-1045	-329	-287	-295	-397	-449	-186	-274	-322	-405	-117	-202	-330	
<i>Previous Tealbook</i>																	
On-budget	-1416	-1306	-1270	n.a.	-329	-287	-302	-397	-435	-171	-267	-315	n.a.	n.a.	n.a.	n.a.	
Off-budget	-1553	-1385	-1396	-1147	-359	-351	-280	-439	-445	-249	-263	-368	-404	-186	-189	-383	
	137	86	90	102	30	64	-14	43	-4	63	-11	46	-1	69	-12	53	
Means of financing																	
Borrowing	1743	1426	1372	1065	478	344	343	434	472	176	289	312	395	142	217	320	
Cash decrease	96	5	20	0	-25	-71	19	0	15	15	-10	15	15	-20	-10	15	
Other ²	-424	-133	-86	-20	-124	14	-67	-38	-38	-5	-5	-5	-5	-5	-5	-5	
Cash operating balance, end of period	275	270	250	250	219	290	270	270	255	240	250	235	220	240	250	235	
NIPA federal sector																	
Receipts	2261	2339	2537	2718	2323	2379	2424	2444	2534	2568	2603	2639	2703	2743	2784	2826	
Expenditures	3355	3652	3782	3870	3637	3704	3723	3743	3791	3791	3804	3826	3858	3891	3906	3933	
Consumption expenditures	977	1026	1079	1114	1017	1038	1048	1062	1077	1085	1092	1100	1114	1119	1123	1128	
Defense	659	689	724	741	684	695	704	716	724	727	730	733	741	744	746	749	
Nondefense	318	337	355	373	333	343	344	346	353	358	362	367	373	375	377	379	
Other spending	2378	2625	2703	2757	2620	2665	2675	2681	2714	2707	2712	2727	2744	2772	2783	2805	
Current account surplus	-1094	-1312	-1245	-1153	-1314	-1325	-1299	-1299	-1257	-1223	-1201	-1187	-1155	-1148	-1122	-1106	
Gross investment	151	164	174	175	161	168	171	174	174	174	174	174	175	175	175	175	
Gross saving less gross investment ³	-1122	-1349	-1285	-1188	-1348	-1364	-1340	-1341	-1298	-1263	-1240	-1224	-1191	-1183	-1155	-1138	
Fiscal indicators⁴																	
High-employment (HEB) surplus/deficit	-787	-949	-873	-825	-958	-966	-934	-927	-881	-848	-836	-836	-810	-826	-825	-838	
Change in HEB, percent of potential GDP	2.0	0.9	-0.7	-0.5	0.1	-0.0	-0.3	-0.1	-0.3	-0.2	-0.1	-0.0	-0.2	0.1	-0.0	0.0	
Fiscal impetus (FI), percent of GDP	1.1	1.0	-0.1	-0.5	0.3	0.3	0.1	0.1	-0.1	-0.1	-0.0	-0.1	-0.1	-0.1	-0.3	-0.2	
<i>Previous Tealbook</i>	1.2	0.9	-0.2	n.a.	0.2	0.3	0.1	-0.0	-0.1	-0.1	-0.1	-0.1	n.a.	n.a.	n.a.	n.a.	

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.

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

Period ¹	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
<i>Year</i>								
2005	9.5	11.1	13.3	4.5	8.6	10.2	7.0	6.3
2006	9.0	10.1	11.2	4.1	10.5	8.3	3.9	5.4
2007	8.6	6.8	6.8	5.8	13.1	9.5	4.9	5.0
2008	6.0	.3	-.4	1.5	5.5	2.3	24.2	-.7
2009	3.0	-1.7	-1.6	-4.4	-2.7	4.9	22.7	.6
2010	4.4	-1.7	-3.0	-1.0	.8	3.1	20.5	3.7
2011	4.8	.9	-6	4.0	2.3	4.5	13.3	4.4
2012	5.1	2.8	.8	8.1	3.1	4.3	10.1	5.6
<i>Quarter</i>								
2009:1	4.6	-9	-3	-3.7	-0	5.6	24.4	-3.9
2	4.4	-1.9	-1.8	-4.8	-2.6	4.3	28.9	-.4
3	2.1	-2.2	-2.6	-3.9	-4.4	5.8	19.0	2.3
4	.9	-2.0	-1.5	-5.6	-3.8	3.8	11.9	4.7
2010:1	4.5	-1.7	-4.3	-1.9	.5	5.7	20.5	4.8
2	4.8	-2.3	-2.3	-2.5	.1	-1.3	24.4	3.7
3	3.2	-2.2	-3.5	-.6	1.4	2.7	13.9	3.6
4	4.9	-.7	-2.0	.9	1.3	5.1	17.6	2.7
2011:1	5.2	-1	-1.5	2.0	1.8	4.7	16.8	3.8
2	4.7	.5	-1.0	3.2	2.0	4.6	13.5	4.1
3	4.2	1.3	-.3	4.5	2.5	4.2	9.8	4.6
4	4.7	2.0	.3	5.9	2.7	4.2	10.6	5.1
2012:1	5.3	2.4	.5	6.9	2.9	4.3	11.9	5.6
2	5.2	2.7	.7	7.6	3.0	4.3	10.8	5.6
3	4.1	3.1	1.0	8.4	3.2	4.2	6.2	5.6
4	5.2	3.1	1.0	8.7	3.3	4.2	9.9	5.6

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2010: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.

Flow of Funds Projections: Highlights
(Billions of dollars at seasonally adjusted annual rates except as noted)

Category	2009	2010	2011	2012	2010				2011				2012				
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Domestic nonfinancial sectors</i>																	
Net funds raised																	
Total	950.3	1312.4	1531.7	1710.0	850.5	1548.7	1675.8	1528.4	1352.3	1570.3	1813.8	1795.3	1389.0	1841.8			
Net equity issuance	-64.7	-217.9	-200.0	-208.0	-280.0	-208.0	-200.0	-200.0	-200.0	-200.0	-208.0	-208.0	-208.0	-208.0			
Net debt issuance	1015.0	1530.2	1731.7	1918.0	1130.5	1756.7	1875.8	1728.4	1552.3	1770.3	2021.8	2003.3	1597.0	2049.8			
<i>Borrowing indicators</i>																	
Debt (percent of GDP) ¹	241.7	241.9	243.8	243.0	242.0	242.8	243.6	244.2	244.1	243.8	243.5	243.4	242.9	242.4			
Borrowing (percent of GDP)	7.2	10.5	11.4	12.0	7.7	11.9	12.6	11.4	10.2	11.5	12.9	12.6	9.9	12.6			
<i>Households</i>																	
Net borrowing ²	-241.8	-232.8	124.6	381.9	-292.1	-98.3	-14.2	69.0	173.1	270.4	318.9	361.1	417.6	430.0			
Home mortgages	-163.1	-308.4	-62.3	79.6	-354.0	-200.5	-149.7	-99.4	-29.7	29.7	49.6	69.5	99.4	99.7			
Consumer credit	-115.3	-25.1	97.1	207.8	-14.1	21.2	49.5	78.3	111.8	148.6	176.3	197.6	223.1	234.2			
Debt/DPI (percent) ³	124.4	118.8	114.6	111.5	117.8	116.7	115.9	114.7	113.8	113.0	112.3	111.6	111.1	110.5			
<i>Business</i>																	
Financing gap ⁴	-44.7	31.1	44.4	130.6	40.3	20.1	38.0	34.9	45.7	59.0	83.9	113.3	153.0	172.1			
Net equity issuance	-64.7	-217.9	-200.0	-208.0	-280.0	-208.0	-200.0	-200.0	-200.0	-200.0	-208.0	-208.0	-208.0	-208.0			
Credit market borrowing	-298.2	91.2	248.3	353.5	150.2	147.4	197.1	218.2	279.8	298.1	321.4	342.4	367.3	382.8			
<i>State and local governments</i>																	
Net borrowing	111.2	72.3	109.6	109.6	65.6	121.6	113.6	113.6	105.6	105.6	109.6	109.6	109.6	109.6			
Current surplus ⁵	248.2	262.0	258.2	259.1	251.5	268.5	274.0	260.9	250.1	248.0	242.8	257.1	264.7	272.0			
<i>Federal government</i>																	
Net borrowing	1443.9	1599.4	1249.2	1073.0	1206.8	1586.0	1579.2	1327.6	993.8	1096.2	1271.8	1190.2	702.5	1127.4			
Net borrowing (n.s.a.)	1443.9	1599.4	1249.2	1073.0	342.7	434.5	471.8	175.9	289.4	312.1	395.0	141.6	216.6	319.9			
Unified deficit (n.s.a.)	1471.3	1307.3	1231.4	1053.0	294.6	396.7	448.8	186.1	274.4	322.1	405.0	116.6	201.6	329.9			
<i>Depository institutions</i>																	
Funds supplied	-639.9	-178.7	166.2	241.9	261.9	79.5	127.5	167.0	177.8	192.4	232.4	254.1	262.1	219.1			

Note: Data after 2010: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.

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP ¹												
Total foreign	4.9	5.9	2.5	2.9	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.6
<i>Previous Tealbook</i>	4.8	4.7	3.1	3.2	3.3	3.3	3.4	3.5	...	...	...	...
Advanced foreign economies	3.7	3.0	2.2	2.0	1.9	2.0	2.1	2.2	2.2	2.4	2.5	2.6
Canada	5.8	2.0	2.4	2.5	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Japan	5.0	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.9
United Kingdom	1.3	4.9	1.8	1.2	.8	1.9	2.3	2.3	2.3	2.3	2.4	2.4
Euro area	1.3	3.9	2.0	1.5	1.3	1.3	1.4	1.5	1.6	2.0	2.3	2.6
Germany	1.9	9.0	3.0	2.0	1.8	1.8	1.9	2.0	2.0	2.2	2.5	2.8
Emerging market economies	6.4	9.7	3.0	4.0	4.4	4.5	4.6	4.7	4.8	4.8	4.9	4.9
Asia	13.7	8.4	3.8	5.0	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9
Korea	8.8	5.8	4.3	3.8	3.8	3.9	4.0	4.1	4.1	4.2	4.4	4.5
China	9.9	6.9	7.8	8.1	8.3	8.3	8.4	8.4	8.6	8.6	8.7	8.7
Latin America	-1	11.9	2.0	2.9	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.9
Mexico	-2.5	13.5	1.0	2.5	3.3	3.4	3.5	3.7	3.8	3.8	3.9	3.9
Brazil	11.3	5.1	3.5	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Consumer prices ²												
Total foreign	3.4	1.3	1.9	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3
<i>Previous Tealbook</i>	3.4	1.3	1.8	2.2	2.3	2.2	2.1	2.2	...	...	...	...
Advanced foreign economies	2.1	.1	.7	1.0	1.3	1.3	1.1	1.2	1.3	1.4	1.4	1.4
Canada	2.3	-9	1.6	1.2	1.5	2.2	2.0	2.1	2.1	2.2	2.2	2.1
Japan	.7	-9	-1.2	-1.2	-1.0	-8	-8	-7	-6	-6	-5	-4
United Kingdom	5.6	2.3	.7	1.7	5.0	1.4	1.4	1.5	1.6	1.7	1.7	1.8
Euro Area	1.8	1.4	.8	1.7	1.7	1.5	1.1	1.3	1.4	1.5	1.6	1.7
Germany	1.4	.8	.8	1.5	1.5	1.4	1.1	1.1	1.3	1.4	1.5	1.6
Emerging market economies	4.7	2.4	3.1	3.2	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1
Asia	3.6	2.0	3.3	2.9	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7
Korea	3.3	1.9	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3
China	3.0	2.6	3.8	2.8	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
Latin America	7.8	3.6	2.4	3.8	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1
Mexico	7.9	2.7	2.3	3.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.0	3.9	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

¹ Foreign GDP aggregates calculated using shares of U.S. exports.

² Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

Foreign Real GDP and Consumer Prices: Selected Countries
(Percent change, Q4 to Q4)

Measure and country	-----Projected-----									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Real GDP ¹										
Total foreign	3.9	4.1	4.0	4.2	-8	.4	4.1	3.2	3.5	
<i>Previous Tealbook</i>	3.9	4.1	3.9	4.2	-8	.4	4.0	3.4	...	
Advanced foreign economies	2.6	2.8	2.5	2.4	-1.7	-1.4	2.7	2.1	2.4	
Canada	3.7	3.1	1.9	2.5	-9	-1.1	3.2	2.6	2.7	
Japan	1.1	2.9	2.1	1.8	-4.3	-1.4	2.4	1.7	1.8	
United Kingdom	2.4	2.4	2.7	2.4	-2.7	-2.9	2.3	1.9	2.4	
Euro area	1.7	2.1	3.6	2.2	-2.1	-2.0	2.2	1.4	2.1	
Germany	.2	1.6	4.5	1.8	-2.0	-2.0	3.9	1.9	2.4	
Emerging market economies	5.6	5.9	5.9	6.5	.4	2.8	5.7	4.5	4.8	
Asia	6.0	7.8	7.2	8.4	.9	7.1	7.7	5.7	5.9	
Korea	2.7	5.2	4.6	5.7	-3.2	6.1	5.7	3.9	4.3	
China	10.0	10.5	11.0	12.6	7.2	11.5	8.2	8.3	8.6	
Latin America	5.1	3.9	4.6	4.7	-4	-9	4.1	3.4	3.8	
Mexico	4.6	3.5	3.9	3.9	-1.1	-2.3	3.4	3.5	3.8	
Brazil	5.1	3.5	4.8	6.8	1.0	4.4	5.8	3.9	4.0	
Consumer prices ²										
Total foreign	2.8	2.3	2.1	3.7	3.4	1.2	2.2	2.2	2.2	
<i>Previous Tealbook</i>	2.8	2.3	2.1	3.7	3.4	1.2	2.2	2.2	...	
Advanced foreign economies	1.8	1.6	1.4	2.2	2.0	.2	1.0	1.3	1.4	
Canada	2.3	2.3	1.4	2.5	1.9	.8	1.0	1.9	2.1	
Japan	.5	-1.0	.3	.6	1.0	-2.0	-7	-8	-5	
United Kingdom	1.4	2.1	2.7	2.1	3.9	2.1	2.6	2.3	1.7	
Euro Area	2.3	2.3	1.8	2.9	2.3	.4	1.4	1.4	1.5	
Germany	2.1	2.2	1.3	3.1	1.7	.3	1.1	1.3	1.4	
Emerging market economies	3.9	3.0	2.9	5.1	4.6	2.2	3.4	3.0	3.1	
Asia	3.1	2.6	2.4	5.5	3.7	1.3	3.0	2.6	2.7	
Korea	3.4	2.5	2.1	3.4	4.5	2.4	2.4	2.3	2.3	
China	3.2	1.4	2.1	6.6	2.6	.6	3.0	2.5	2.5	
Latin America	5.6	3.7	4.1	4.2	6.6	4.0	4.4	4.0	4.1	
Mexico	5.3	3.1	4.1	3.8	6.2	4.0	4.1	3.7	3.7	
Brazil	7.2	6.1	3.2	4.3	6.2	4.2	4.5	4.4	4.4	

¹ Foreign GDP aggregates calculated using shares of U.S. exports.

² Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

Greensheets

U.S. Current Account

Quarterly Data

	2010				2011				Projected			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. current account balance	-432.8	-502.9	-458.2	-435.8	-454.6	-446.7	-459.1	-462.4	-464.6	-471.2	-482.1	-470.6
<i>Previous Tealbook</i>	-436.0	-499.8	-469.3	-452.7	-465.8	-453.7	-461.4	-448.3	...	...	...	...
Current account as percent of GDP	-3.0	-3.4	-3.1	-2.9	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-2.9
<i>Previous Tealbook</i>	-3.0	-3.4	-3.2	-3.0	-3.1	-3.0	-3.0	-2.9	...	...	...	...
Net goods & services	-457.8	-526.4	-494.5	-486.3	-487.6	-489.8	-497.7	-503.1	-505.6	-511.3	-526.4	-521.7
Investment income, net	175.0	162.6	159.8	169.6	165.1	160.0	158.1	155.7	156.1	155.2	159.5	166.2
Direct, net	281.5	273.5	268.4	276.9	276.9	277.7	281.2	284.0	289.4	295.0	305.5	317.6
Portfolio, net	-106.5	-110.9	-108.6	-107.3	-111.9	-117.7	-123.1	-128.3	-133.3	-139.9	-146.1	-151.5
Other income and transfers, net	-150.0	-139.1	-123.5	-119.1	-132.0	-116.9	-119.5	-115.1	-115.1	-115.1	-115.1	-115.1

Billions of dollars, s.a.a.r.

Annual Data

	2004		2005		2006		2007		2008		2009		Projected	
	2004	2005	2006	2007	2008	2009	2010	2011	2011	2012				
U.S. current account balance	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-457.4	-455.7	-472.1	-472.1	-472.1	-472.1	-472.1	-472.1
<i>Previous Tealbook</i>	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-464.5	-457.3	...	...	...	...	...	...
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.1	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
<i>Previous Tealbook</i>	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.0	...	...	...	...	...	...
Net goods & services	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-491.2	-494.5	-516.2	-516.2	-516.2	-516.2	-516.2	-516.2
Investment income, net	73.4	78.8	54.7	106.6	159.3	129.2	166.7	159.7	159.2	159.2	159.2	159.2	159.2	159.2
Direct, net	150.9	173.2	174.0	241.6	287.7	252.1	275.1	280.0	301.9	301.9	301.9	301.9	301.9	301.9
Portfolio, net	-77.5	-94.4	-119.4	-134.9	-128.4	-122.8	-108.3	-120.2	-142.7	-142.7	-142.7	-142.7	-142.7	-142.7
Other income and transfers, net	-94.5	-112.2	-98.1	-122.6	-129.3	-132.8	-132.9	-120.9	-120.9	-120.9	-120.9	-120.9	-120.9	-120.9

Billions of dollars

Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
AIG	American International Group, Inc.
ARRA	American Recovery and Reinvestment Act
BEA	Bureau of Economic Analysis
BOJ	Bank of Japan
C&I	commercial and industrial
CLO	collateralized loan obligation
CMBS	commercial mortgage-backed securities
CPI	consumer price index
CRE	commercial real estate
DPI	disposable personal income
DSR	debt service ratio
ECB	European Central Bank
EDO Model	Estimated Dynamic Optimization-Based Model
EEB	extended and emergency unemployment benefits
EME	emerging market economy
E&S	equipment and software
EU	European Union
EUC	emergency unemployment compensation
FHFA	Federal Housing Finance Agency
FOMC	Federal Open Market Committee; also, the Committee
FRB	Federal Reserve Board

FRBNY	Federal Reserve Bank of New York
GDI	gross domestic income
GDP	gross domestic product
IMF	International Monetary Fund
IP	industrial production
ISM	Institute for Supply Management
Libor	London interbank offered rate
LLC	limited liability company
LSAP	large-scale asset purchase
MBS	mortgage-backed securities
NAIRU	non-accelerating inflation rate of unemployment
NBER	National Bureau of Economic Research
OIS	overnight index swaps
OTC	over the counter
PCE	personal consumption expenditures
PMI	purchasing managers index
repo	repurchase agreement
RMBS	residential mortgage-backed securities
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SNB	Swiss National Bank
TALF	Term Asset-Backed Securities Loan Facility
TDF	Term Deposit Facility
TIPS	Treasury inflation-protected securities
WTI	West Texas Intermediate