Prefatory Note

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

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

Report to the FOMC on Economic Conditions and Monetary Policy

Book A

Economic and Financial Conditions: Current Situation and Outlook

October 23, 2013

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

(This page is intentionally blank.)

Domestic Economic Developments and Outlook

Based on the news we have received since the previous Tealbook—which is more limited than normal because of the data delays caused by the federal government shutdown—economic activity appears to have been increasing a little more slowly than we had expected. Spending by consumers appears to have risen less than we had anticipated, and we think a portion of this weakness will persist through the end of the year. In addition, the direct and indirect effects of the government shutdown are expected to temporarily reduce economic growth by an annual rate of about ½ percentage point in the current quarter. We now project that real GDP will rise at an annual rate of just over 2 percent in both the third and fourth quarters, which, coupled with the downward revisions to the second quarter, leave real GDP growth in 2013 at 2 percent, ¼ percentage point less than the September forecast.

We have slightly revised up our forecast for real GDP growth over the medium term, however, as recent financial market developments have led us to adjust our key conditioning assumptions for the foreign exchange value of the dollar, interest rates, and household wealth to be a bit more supportive of economic growth than in the September Tealbook. Combining the weaker economic growth anticipated for this year and the slightly stronger projected pace of economic expansion in the next two years, the level of real GDP at the end of 2016 is expected to be just a little lower than in the September Tealbook.

We read the employment report for September as a bit weaker, on balance, than we expected, but it and the other labor market data remain broadly consistent with our projection of continued gradual improvements in labor market conditions. As in our September Tealbook forecast, the unemployment rate is projected to cross the Committee's 6½ percent threshold in the first quarter of 2015 and to end 2016 at just under 5½ percent.

The limited data that we have received on consumer prices have been largely as we had anticipated.[1] With longer-run inflation expectations assumed to remain stable, a

[1] The CPI report for September, delayed because of the government shutdown, is now scheduled to be published on October 30, the second day of the FOMC meeting.

projected pickup in import prices over the medium term, and gradually diminishing margins of slack in labor and product markets anticipated over the next few years, we expect core PCE inflation to increase slowly from 1¼ percent in 2013 to 1¾ percent in 2016; this forecast is the same as in the September Tealbook. We continue to expect energy prices to edge down over the forecast period, and thus headline inflation still is projected to run a bit below core inflation over the medium term.

As always, numerous risks surround our outlook. We see several risks stemming from federal fiscal policy, including the uncertain repercussions of the ongoing budget consolidation and tax increases put in place at the beginning of this year, the potential for greater fallout from the government shutdown, and the uncertain path for fiscal policy going forward. Regarding private demand, consumer spending growth could remain sluggish and not pick up as we anticipate, and the increase in mortgage rates since the spring could weigh on residential construction by more than we currently expect. Also, the pace of economic activity abroad continues to be a substantial risk, especially given the vulnerabilities of many emerging market economies (EMEs). However, it is possible, as suggested by the most recent four-quarter change in GDI, that economic activity has in fact been rising more rapidly than indicated by the current GDP data. With regard to inflation, the very low rates of core inflation seen earlier this year appear to have passed as expected, but some risk remains that inflation could stay stubbornly low. That said, there is also the risk that inflation could pick up by more than we expect, perhaps stemming from an unanticipated and persistent firming in energy or other commodity prices. Finally, with the federal funds rate at its effective lower bound, monetary policy likely has less capacity to counteract the effects of downside developments with respect to either real activity or inflation.

Key Background Factors

Monetary Policy

- With the unemployment rate still projected to fall below the Committee's 6½ percent threshold in the first quarter of 2015, we continue to assume that the federal funds rate will begin to rise from its effective lower bound in the second quarter of 2015. The path of the federal funds rate after liftoff is also about unchanged from the September Tealbook, averaging 2 percent in the final quarter of 2016.

- Our assumption for asset purchases is also broadly unchanged from the September Tealbook, as we continue to assume that purchases of long-term securities under the current LSAP program will end by the middle of 2014. However, we nudged up the cumulative amount of purchases under this program by about $90 billion, to $1.3 trillion.

Other Interest Rates

- The 10-year Treasury yield has fallen about 40 basis points since the September Tealbook. We attribute about half of that decline to a shift in market expectations toward more accommodative paths for both Federal Reserve asset purchases and the federal funds rate. Market participants appear to expect somewhat more accommodative monetary policy than is consistent with staff assumptions, and we anticipate that market expectations will move into line with our forecast over time. The remainder of the decline in Treasury yields since the September Tealbook reflects a reduction in the term premium beyond what we think can be ascribed to a change in expectations for asset purchases and has led us to revise down our projection for the 10-year Treasury yield over the next several quarters.

- Over the medium term, the forecast still calls for Treasury yields to rise significantly, primarily to reflect the movement of the 10-year valuation window through the period of extremely low short-term interest rates and a gradual waning of the effects of the FOMC's balance sheet policies.

- Yields on investment-grade corporate bonds and rates on conventional 30-year fixed-rate mortgages have fallen roughly in line with yields on comparable maturity Treasury securities. As a result, our forecasts for corporate bond yields and mortgage rates in the medium term have been revised essentially in line with Treasury yields.

Equity Prices and Home Prices

- Equity prices have risen about 4 percent since the time of the September Tealbook, about 3 percentage points more than we anticipated. We have carried forward the higher stock prices over the next few quarters, but because we think that the recent gains largely reflect a narrowing of the equity risk premium that we anticipated to occur later in the projection, our forecast for stock prices is essentially unrevised by the end of 2016. As in the September Tealbook, we expect stock prices to move up at an average annual rate of about 7½ percent over the next few years—a pace that, we think, will move the equity risk premium some way toward more typical levels.

- House prices have risen by a bit more than we projected in the September Tealbook, and we now expect them to rise at an annual rate of 9½ percent over the second half of this year. We continue to expect a slowing in house price appreciation to an average rate of about 4 percent per year from 2014 to 2016.

Fiscal Policy

- The federal government was partially shut down from October 1 through October 16 because of a temporary lapse in budget appropriations for the current fiscal year. Beyond the near-term effects of the shutdown, the staff's assumptions for fiscal policy are little changed. (See the box "Fiscal Policy Developments" for a discussion of the continuing budget resolution and the extension of the federal debt limit that ended the shutdown, along with our estimates of the effects of the shutdown on economic activity.)

Foreign Economic Activity and the Dollar

- Our outlook for total foreign economic growth is little changed from the September Tealbook. Real GDP growth in the foreign economies is estimated to have moved up to an annual rate of 2¾ percent in the third quarter, supported by a pickup in the EMEs. Looking ahead, foreign GDP is expected to increase to 3¼ percent next year and 3½ percent in 2015 and 2016, supported by waning fiscal drag and further improvement of financial conditions in the euro area, the effect on EME exports of stronger economic growth in the advanced economies, and a gradual abatement of financial stresses in the most vulnerable EMEs.

- The broad nominal dollar index depreciated about 1¾ percent since the previous Tealbook, having declined against the currencies of both the advanced foreign economies and the EMEs. We project that the broad real dollar will depreciate at an annual rate of about 2¼ percent over the medium term, in part reflecting a further abatement of financial stress in the euro area.

Fiscal Policy Developments

Political wrangling over budget appropriations for fiscal year 2014 and the federal debt limit led to a partial shutdown of the federal government. The shutdown ended when a temporary continuing resolution was passed to fund the government programs covered by discretionary appropriations through January 15. During the shutdown, about half of defense civilian workers were furloughed for one week and about 40 percent of nondefense civilian workers were furloughed for almost two and a half weeks. We estimate that the reduction in hours worked by these federal employees will reduce real government output, subtracting 0.3 percentage point from the annual rate of real GDP growth in the fourth quarter of 2013 and boosting economic growth by the same amount in the first quarter of 2014 as government output returns to baseline.[1] Because government employees will be paid retroactively for the days they were furloughed, nominal compensation will be unaffected by the shutdown and the GDP deflator will be increased by the same amount that real GDP will be decreased. Government purchases for goods and services excluding compensation were also reduced during the shutdown, but we assume that these purchases will be made up before the end of the year. However, there is some risk that the disruptions in federal purchases could last longer than we have assumed.

The temporary continuing resolution funds the government at levels consistent with maintaining the full effects of the budget caps and sequestration. We assume that the Congress will pass legislation to fund the government at levels consistent with the sequestration through the rest of the fiscal year without further shutdowns.[2] The Congress also reached an agreement to raise the federal debt limit through February 7 (though this limit will likely not be binding until the middle of 2014). We assume that the debt limit will eventually be extended for a longer period before significant market disruptions occur.

Our assumptions for fiscal policy beyond the near term are similar to those in the September Tealbook. Specifically, we continue to assume that the sequestration and spending caps from the Budget Control Act will remain in effect and, together with further downward pressure on defense expenditures from reduced overseas military operations, will restrain discretionary federal spending over the medium term. Moreover, we continue to anticipate some small degree of additional fiscal tightening from higher taxes and lower mandatory spending as the bonus depreciation provisions for businesses and the Emergency Unemployment Compensation program end at the beginning of next year. Our estimate of total fiscal impetus, which excludes multiplier effects, indicates that changes in federal, state, and local fiscal policies will subtract 1.1 percentage points from real GDP growth in 2013, 0.6 percentage point in 2014, 0.3 percentage point in 2015, and will be roughly neutral for economic growth in 2016; these assumptions are little changed from the September Tealbook forecast.

---

[1] These direct effects plus the spillover effects of the shutdown into private-sector spending are expected, in total, to reduce real GDP growth by about ½ percentage point in the fourth quarter and then to add ½ percentage point to GDP growth in the first quarter of next year.

[2] Starting January 15, the level of funding consistent with the sequestration will be about $20 billion lower than in 2013.

This pace is a little slower than we had projected in the September Tealbook, but the recent decline in the dollar leaves its level lower throughout the projection.

Oil and Other Commodity Prices

- The spot price for Brent crude oil has declined slightly since the time of the September Tealbook, likely reflecting an easing of geopolitical tensions in the Middle East, although futures prices for oil at longer-dated maturities are a little higher. Consistent with these market developments, the price of imported oil is projected to fall from about $105 per barrel this quarter to $93 per barrel by the end of 2016, a flatter trajectory than in the September Tealbook.

- A broad index of nonfuel commodity prices has declined about 3 percent since the September Tealbook. From this lower level, we expect prices to move up modestly over the projection period.

Recent Developments and the Near-Term Outlook for Real GDP

As a result of the federal government shutdown, we have received fewer economic data releases than usual since the September Tealbook. (See the box "Effects of the Government Shutdown on Economic Data" for more details.) The information we did receive, particularly for consumer spending, in conjunction with our estimates of the direct and spillover effects on economic activity of the government shutdown, led us to reduce our forecast for real GDP growth in the second half of the year by ¼ percentage point to an annual rate of just over 2 percent.[2]

- With incoming data weaker than expected, we now estimate real PCE growth to have slowed in the third quarter to an annual rate of just 1½ percent.[3] We continue to anticipate that the increases in net wealth and personal income, along with the waning effects of the tax increases put in place at the beginning of the year, will contribute to a pickup in spending growth in the fourth quarter. However, the recent data on consumer outlays suggest a shallower

[2] In addition, real GDP growth in the second quarter was revised down about ½ percentage point to an annual rate of 2½ percent.

[3] The retail sales report for September is now scheduled to be published on October 29, the first day of the FOMC meeting.

trajectory moving into the quarter. Also weighing on our projection for spending this quarter are a sizable drop in September vehicle sales that appears likely to be only slightly reversed this month, the decline in consumer sentiment in September and early October, and a small reduction in outlays related to the government shutdown. In response, we have trimmed the forecast for real PCE growth in the current quarter by ½ percentage point, to 2½ percent.

- The rise in mortgage rates since the spring appears to be damping housing activity, but not by more than we had anticipated. New home sales and applications for home purchase mortgages decreased modestly, on net, from June to August. In addition, existing home sales edged down in September, though the level remained higher than in the spring. In all, we expect real residential investment to rise at an annual rate of 9½ percent in the second half of this year, somewhat less than the pace seen in the first half of the year.
    - We anticipate that the decline in mortgage rates since the September Tealbook will, in coming months, reverse part of the recent drag on single-family home sales and construction.
    - Activity in the multifamily sector appears to have softened somewhat, and we have lowered our near-term forecast for construction of these units.
- With the latest available readings on orders and shipments somewhat weaker than we had expected, we revised down our estimate of the growth in business spending on equipment and intangibles in the third quarter to an annual rate of 2½ percent, 1 percentage point below our projection in the September Tealbook. Given the generally positive tone of survey measures of business conditions, we still expect the growth of equipment outlays to pick up in the fourth quarter, but at a slower pace than in our previous projection.
- We reduced our estimate of net exports in the third quarter based on available data showing a larger-than-expected rise in imports, but we anticipate that surprise to be reversed this quarter, leaving the second-half contribution of net exports to real GDP growth at an annual rate of about ¼ percentage point, little revised on net.

Effects of the Government Shutdown on Economic Data

The federal government shutdown has affected the collection, processing, and publication of key economic data. Here we describe the effects of the shutdown on selected data releases from the Bureau of Labor Statistics (BLS) and the Census Bureau—specifically, the Employment Situation, the Consumer Price Index, Retail Sales, and reports on orders and shipments of capital goods—as well as the implications of delays in data releases for derived data products, such as industrial production and real GDP.

The table on the next page lists a broader array of data releases affected by the shutdown and shows their previously scheduled release dates, along with an updated release calendar.

The Employment Situation. The September employment report, which comprises the payroll survey (Current Employment Statistics, or CES) and the household survey (Current Population Survey, or CPS), was due to be released on October 4. The September data were collected and mostly processed prior to the shutdown. As a result, the employment report for September was released on October 22, fairly soon after the federal government reopened.

The report containing the October data has been postponed by a week to November 8. The quality of the employment and related data in the CES should not be substantially affected, as they are based on employer payroll records.[1] However, the CPS for October—including the unemployment rate and participation rate—may be less reliable than usual. Data collection for the October CPS was scheduled to begin on October 13 but was delayed a week. While the reference week for the survey was not changed, the delay in collecting the data could affect the results, for example, because of recall bias.

Consumer Price Index (CPI). The CPI data for September were scheduled to be released on October 16 and will instead be released on October 30. However, the collection of the underlying price data was unaffected by the shutdown, so there should be no adverse effects on the quality of the published CPI for September.

Data collection for the CPI data occurs throughout the month and concludes on the last business day. Consequently, the government shutdown will affect the timing and number of price quotes included in the sample, and, thus, the October CPI release may not be as reliable as usual.[2]

Retail Sales. Data on retail sales for September (and the revised data for July and August) were scheduled to be released on October 11 by the Census Bureau. The retail sales data are based on direct mail and Internet surveys of firms, with follow-up interviews performed by the Census Bureau. While the paper-copy responses are currently available for tabulation by Census Bureau employees, online responders were unable to submit the requisite information while the Census website was inoperable. Nonetheless, the Census Bureau has indicated that the September data will be released October 29.

---

[1] The BLS Electronic Data Interchange Center did not allow the transmission of data files during the shutdown, but it reopened on the morning of October 17. It is possible that some establishments will be less likely to report because of the downtime.

[2] Because some items in the CPI are priced only in alternate months, and rents are only priced every 6 months, some portion of any problems with the October CPI may carry through until April of next year.

Manufacturers' Shipments, Inventories, and Orders. The Census Bureau released the August Advance Durables report at the end of September, just prior to the government shutdown. The collection of survey responses for the Bureau's full report for August—the Manufacturers' Shipments, Inventories, and Orders Survey—was mostly completed before the shutdown. Although the quality of the August data should be minimally affected, the report, which was scheduled for October 3, will not be issued; instead, the August data for the full manufacturing sector will only be released with the September report on November 4.

The September Advance Durables report was scheduled to be released on October 25 and will be released on time. However, the Census Bureau was unable to collect online responses because of server downtime during the shutdown; therefore, response rates and data quality might be affected.

Derived data. In addition to the four primary data releases discussed above, several important derived data releases have been delayed because of the government shutdown. The Federal Reserve's G.17 statistical release on Industrial Production and Capacity Utilization was not published as scheduled on October 17; the production indexes incorporate a range of data from other government agencies that were delayed (notably including manufacturing production worker hours from the employment report). The G.17 release with data for September will be issued on October 28.

Finally, the Bureau of Economic Analysis (BEA) estimates of gross domestic product for the third quarter of 2013 and personal income and spending for September also incorporate a range of other data that have been delayed. These BEA releases were scheduled to be published on October 30 and 31, respectively, but with the delays in the underlying source data and the furloughs of BEA staff, these data releases have been postponed until November 7 and 8.

Statistical Release Schedule

		Release dates	
Release	**Reference date**	**Old**	**New**
CPIP	August	10/1	10/22
Manufacturers' Shipments, Inventories, & Orders	August	10/3	11/4
Employment Situation	September	10/4	10/22
U.S. Merchandise Trade	August	10/8	10/24
JOLTS	August	10/8	10/24
U.S. Import and Export Prices	September	10/10	10/23
Retail Sales	September	10/11	10/29
PPI	September	10/11	10/29
CPI	September	10/16	10/30
Housing starts & permits (New Res. Construction)	September	10/17	11/26
Industrial Production (G.17)	September	10/17	10/28
New home sales (New Res. Sales)	September	10/24	12/4
Advance Durables	September	10/25	10/25
Residential vacancies	Q3	10/29	11/5
GDP; Personal Income and Outlays	Q3 (advance); September	10/30; 10/31	11/7; 11/8
Employment Cost Index	Q3	10/31	11/19
Monthly Treasury Statement	September	late October	late October

- The available data suggest that manufacturing IP rose at an annual rate of just 1¾ percent in the third quarter, but the pace of production appears to have picked up, on net, in August and September. As a result of its recent trajectory, the new orders components of the latest manufacturing surveys, and the motor vehicle assembly schedules in hand, we expect factory output to rise 3¼ percent this quarter. This increase is a bit less than the September projection, in part from new data on Boeing commercial aircraft schedules.

The Medium-Term Outlook for Real GDP

Our forecast for real GDP growth over the medium term is just a little higher than in the September Tealbook. We expect real GDP growth to step up to 3¼ percent in 2014 and 3½ percent in 2015, then to ease slightly to 3¼ percent in 2016.

- On the positive side, the lower trajectories for interest rates and the dollar, together with the higher paths for house prices and the stock market, are anticipated to provide a greater lift to real output growth than in the previous projection. In addition, the reversal of the government shutdown effects will boost GDP growth early next year.

- However, these positive forces were partly offset by our decision to trim the acceleration in real PCE for next year. In particular, we now assume that some of the factors that we believe have been holding down consumer outlays in recent quarters, such as tight credit conditions and pessimism about future income prospects, will weigh on spending over the coming quarters by more than we had previously expected.

- Coupled with the downward revisions to 2013, these changes leave the level of GDP a touch lower at the end of the medium-term projection.

- We have made no material changes to our supply-side assumptions this round. Thus, the small revisions we made to the GDP forecast carry through to the GDP gap, leaving the gap just a little wider at the end of the medium term compared with the September projection.

THE OUTLOOK FOR THE LABOR MARKET

The available readings on labor market indicators remain consistent with our projection of a continued gradual improvement in the coming months.

- Total nonfarm payrolls rose 148,000 in September, in line with our expectations in the September Tealbook.[4] However, we took more signal from private payrolls, which rose only 125,000 last month, somewhat lower than expected in the September projection. In response, we marked down our projection for private payroll gains in the fourth quarter to 160,000 per month, 15,000 less than in the September Tealbook.[5]

- The unemployment rate edged down in September to 7.2 percent. We anticipate that the furlough of government employees will temporarily push up the unemployment rate to 7.5 percent in October, but we expect the jobless rate to return to 7.2 percent in November and December.

- Other labor market indicators that we have received also appear consistent with a gradual ongoing labor market recovery. The staff's labor market conditions index, which summarizes the movements in 19 labor market indicators, edged up further in September.

As in our previous projection, the labor market is anticipated to gradually improve over the medium term in line with the overall pace of economic activity.

- The path of the unemployment rate is slightly higher than in the previous projection and ends 2016 at just under 5½ percent, a little above the staff's estimate of the natural rate of unemployment.

- Our forecast for payroll employment is close to the September Tealbook projection. We expect total payroll gains to step up to a pace of 200,000 per

[4] In late September, the BLS released the preliminary estimate of the benchmark revision to the level of payroll employment in March 2013. Abstracting from a change in the scope of the payroll survey, which boosted the level of employment by around 475,000 workers, total nonfarm payroll employment is expected to be revised down by 124,000, or 0.1 percent, a relatively small revision.

[5] We anticipate that the government shutdown will reduce private employment gains in October by 25,000 and will provide an offsetting boost in November, leaving no imprint on the quarterly figures. Because the government workers returned before the end of the relevant pay period, we do not expect that government employment will be affected by the shutdown.

month in 2014 and to 250,000 per month in 2015, then to edge back down to about 200,000 per month in 2016.

- As shown in the "Labor Market Data and Projections" exhibit, compared with our projection in September 2012, when the Committee first tied its asset purchases to an improvement in the outlook for labor market conditions, the current projection for the unemployment rate in mid-2014 is about 1 percentage point lower. By contrast, the monthly change in payrolls currently projected for mid-2014 is little different from the September 2012 forecast. The *level* of total payroll employment, however, in mid-2014 in this projection is nearly 1 million jobs (roughly ¾ percent) higher than in the September 2012 Tealbook, partly due to faster-than-expected job growth during the second half of last year and the first half of this year and partly reflecting last year's benchmark revision.

THE OUTLOOK FOR INFLATION

Our forecast for inflation is little changed from the September Tealbook.

- After having been held down in the first half of the year by declines in energy prices and by unusually low core inflation, total PCE price inflation is projected to pick up to an annual rate of 2 percent in the third quarter before slowing to 1 percent in the fourth.

- The available data appear consistent with our view that the low readings on core PCE inflation earlier this year were transitory. We continue to expect core PCE prices to rise 1½ percent in the second half of this year, up from the 1 percent pace registered in the first half of the year.

- We project consumer energy prices to rise at an annual rate of 3¼ percent over the second half of this year, down 2¾ percentage points from the September Tealbook as a result of the recent decline in oil prices. Given the downward tilt to our projected path for oil prices, we continue to expect that consumer energy prices will move lower over the medium term.

- Core PCE inflation is anticipated to edge up gradually over the medium term, from 1¼ percent in 2013 to 1¾ percent in 2016. Reflecting the projected declines in consumer energy prices, total PCE inflation is expected to run a bit below core price inflation over the forecast period.

THE LONG-TERM OUTLOOK

- In the long-term outlook, the federal funds rate continues to be set according to the prescriptions of an inertial version of the Taylor (1999) rule. As a result, the federal funds rate gradually rises from 2 percent at the end of 2016 to 4 percent by 2020. The Federal Reserve's holdings of securities continue to put downward pressure on longer-term interest rates, and the process of returning the SOMA portfolio to a normal size is expected to be completed by 2021.

- Increasing household and business confidence, diminishing uncertainty, further improvements in credit availability, and a declining equity premium support real GDP growth of 2¾ percent in 2017, when the unemployment rate reaches its natural rate of 5.2 percent. Thereafter, the pace of gains in real GDP gradually moves down toward the longer-run growth rate of potential output of 2¼ percent. Despite the low level of the federal funds rate in 2016 and the gradual increase thereafter, the unemployment rate does not fall notably below the natural rate. (See the box "Headwinds and the Federal Funds Rate in 2016" for further discussion.)

- With long-run inflation expectations assumed to remain well anchored and essentially no margins of slack in labor and product markets, consumer price inflation moves up to 2 percent by 2019.

Headwinds and the Federal Funds Rate in 2016

In the staff's baseline forecast, the federal funds rate stays at its effective lower bound until the second quarter of 2015, one quarter after the unemployment rate moves below the Committee's 6½ percent threshold; thereafter, it is set according to an inertial version of the Taylor (1999) rule. As a result of this procedure, the federal funds rate in the baseline projection is 2 percent at the end of 2016, well below its assumed long-run value of 4 percent. This outcome may at first seem surprising because, at the end of 2016, the output gap is nearly closed, the unemployment rate is close to its assumed natural rate, and core inflation is only about ¼ percentage point below its long-run target. However, in our analysis, important headwinds continue to weigh on economic activity even in 2016, and a continued accommodative stance of monetary policy is required to achieve the economic outcomes we project.

Moreover, while the federal funds rate is lower than its assumed long-run value in 2016, in the staff projection, the unemployment rate falls only slightly below the natural rate and inflation rises gradually to its target level over the 2016–20 period. The lack of any significant undershooting of the unemployment rate or overshooting of inflation suggests that the monetary accommodation in the staff projection is just sufficient to return the economy close to full employment and 2 percent inflation in 2018 and to keep it there going forward. In other words, the projected level of the federal funds rate during those years is running close to a notion of an equilibrium, or neutral, funds rate.[1]

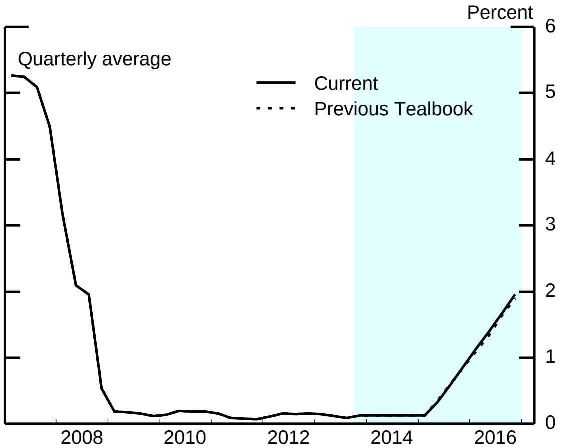
In the staff's view, the economy continues to be faced with substantial headwinds that lift only gradually through 2016. Thus, such factors as household and business confidence, perceptions of uncertainty, and credit availability still have some room for improvement, even at the end of 2016. Similarly, although the equity premium is forecast to narrow over the next three years, it is still above our estimate of its longer-run value in 2016. Stimulative monetary policy can serve to offset the adverse effects of these factors, and under the staff outlook, with the federal funds rate at only 2 percent in 2016, inflation and employment are closer to their objectives than would be the case under a higher path for the federal funds rate.

Fiscal policy has been a factor supporting the *level* of economic activity since the beginning of the recession, but it has become increasingly less accommodative in recent years—thus restraining economic *growth*—as the earlier fiscal stimulus policies wind down and policy changes have been implemented to bring the federal budget deficit back toward a sustainable level. These forces are expected to continue over the next several years. As a result, in the staff's view, fiscal policy will be providing only a small degree of support to the level of economic activity at the end of 2016. After 2016, however, the staff expects pressures from the aging of the population and rising health-care costs to put the debt-to-GDP ratio on a rising trajectory and to put upward pressure on the level of the federal funds rate needed to maintain full employment and price stability.

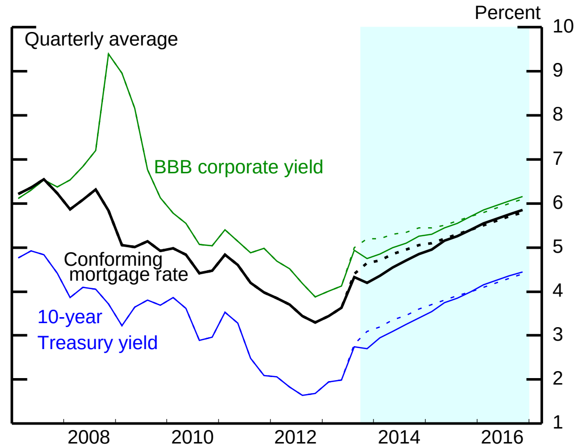
[1] It is worth noting that under a different set of economic conditions, the inertial Taylor (1999) rule with thresholds could deliver an outcome involving substantial undershooting of the unemployment rate or overshooting of inflation.

Key Background Factors underlying the Baseline Staff Projection

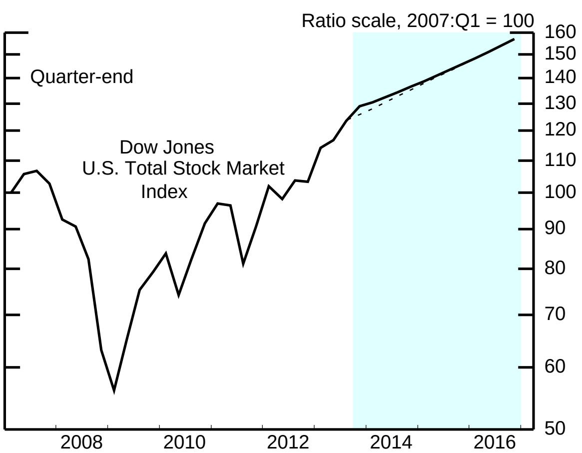
Federal Funds Rate



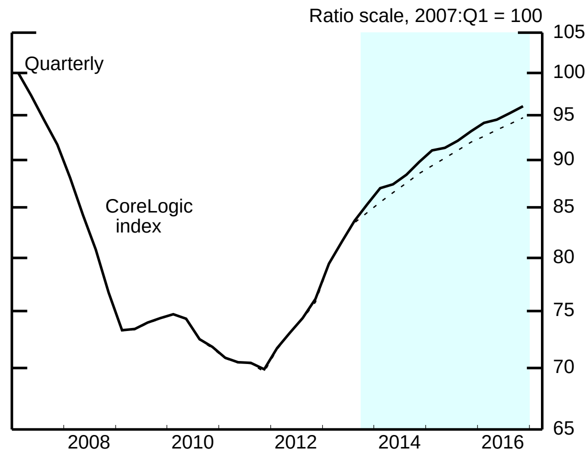
Long-Term Interest Rates



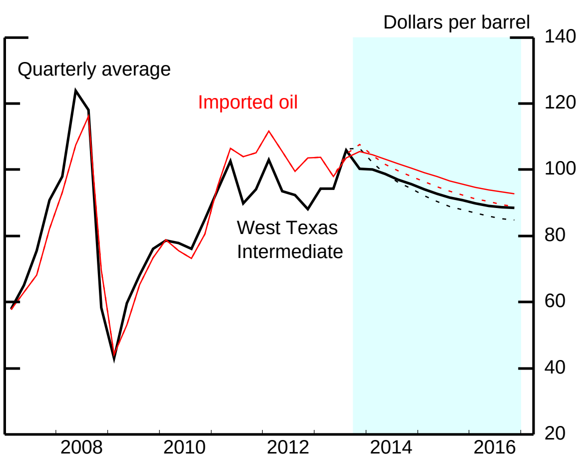
Equity Prices



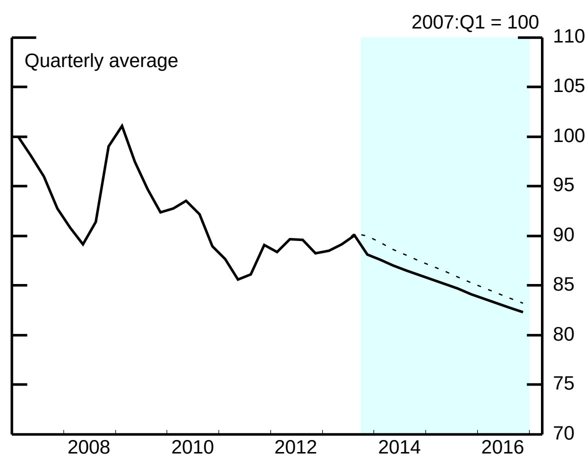
House Prices



Crude Oil Prices



Broad Real Dollar



Summary of the Near-Term Outlook

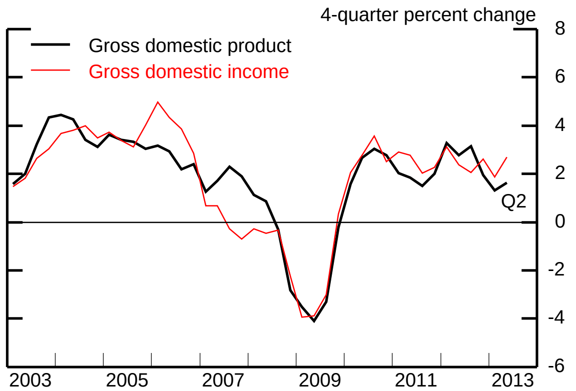
(Percent change at annual rate except as noted)

Measure	2013:H1		2013:Q3		2013:Q4	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	**2.0**	**1.8**	**2.2**	**2.2**	**2.7**	**2.1**
Private domestic final purchases	2.2	2.1	2.3	2.1	3.7	3.0
Personal consumption expenditures	2.2	2.0	2.0	1.5	3.1	2.6
Residential investment	13.3	13.4	2.6	7.8	12.0	11.0
Nonres. private fixed investment	-.2	-.1	3.7	4.0	5.1	3.6
Government purchases	-2.3	-2.3	-2.5	-1.7	-2.7	-4.2
Contributions to change in real GDP						
Inventory investment[1]	.8	.7	.4	.8	.2	.0
Net exports[1]	-.1	-.2	.4	.0	-.1	.4
Unemployment rate[2]	**7.5**	**7.5**	**7.3**	**7.3**	**7.2**	**7.3**
PCE chain price index	**.6**	**.5**	**1.9**	**2.0**	**1.3**	**1.1**
Ex. food and energy	1.1	1.0	1.5	1.5	1.3	1.4

1. Percentage points.
2. Percent. For 2013:H1, the 2013:Q2 value is shown.

Recent Nonfinancial Developments (1)

Real GDP and GDI

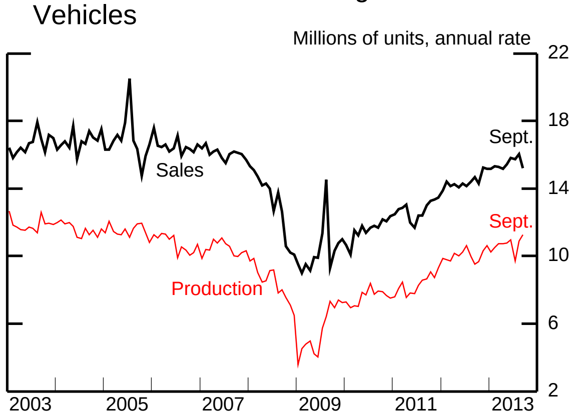


Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Manufacturing IP ex. Motor Vehicles and Parts

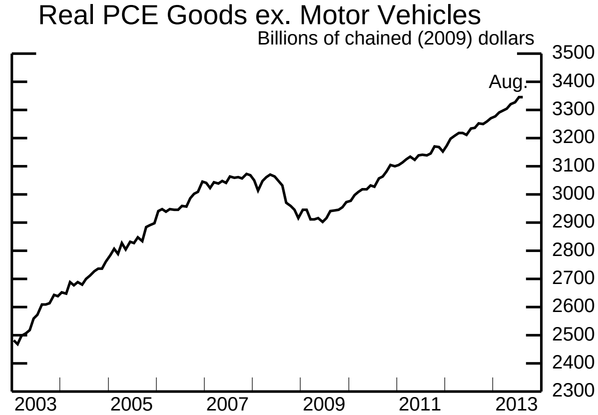
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Sales and Production of Light Motor Vehicles



Source: Ward's Auto Infobank.

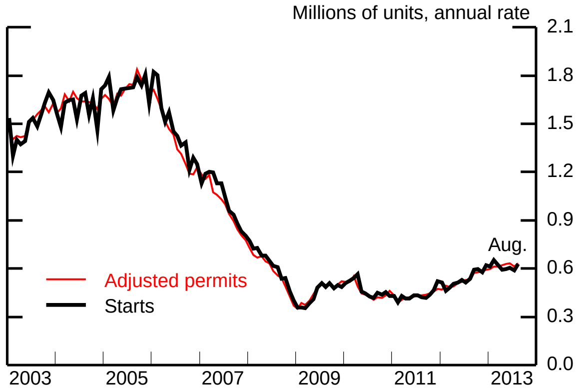
Real PCE Goods ex. Motor Vehicles



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

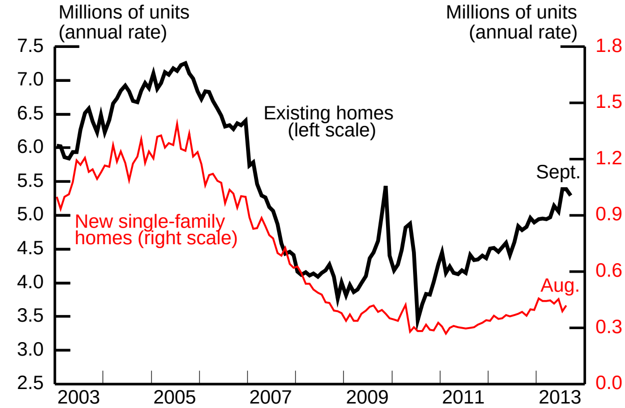
Recent Nonfinancial Developments (2)

Single-Family Housing Starts



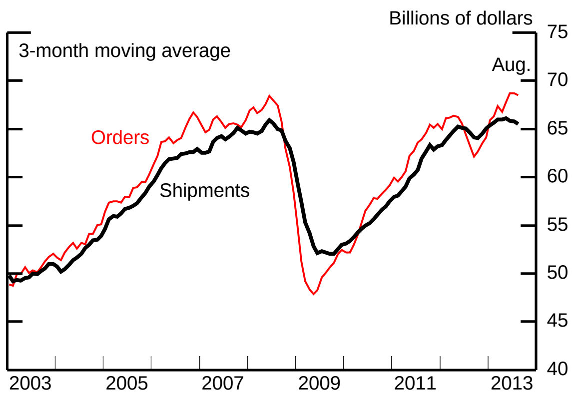
Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.
Source: U.S. Census Bureau.

Home Sales



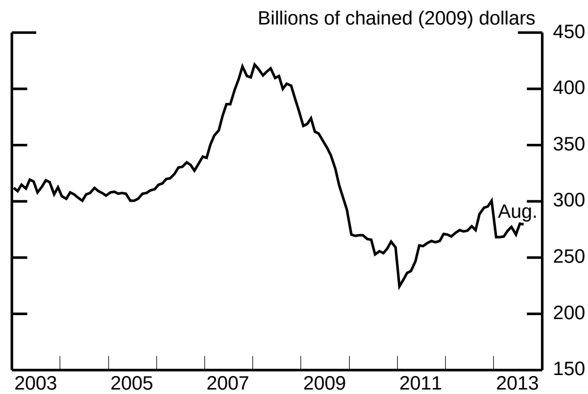
Source: For existing, National Association of Realtors; for new, U.S. Census Bureau.

Nondefense Capital Goods ex. Aircraft



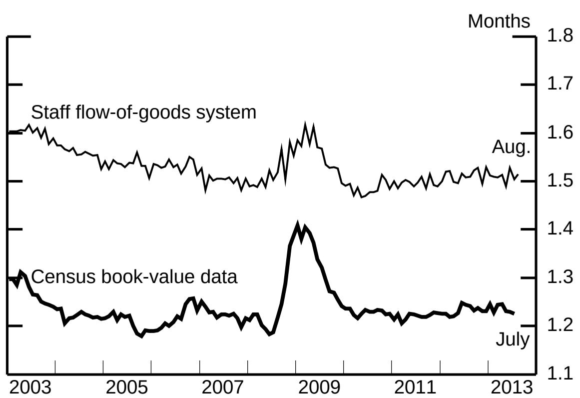
Source: U.S. Census Bureau.

Nonresidential Construction Put in Place



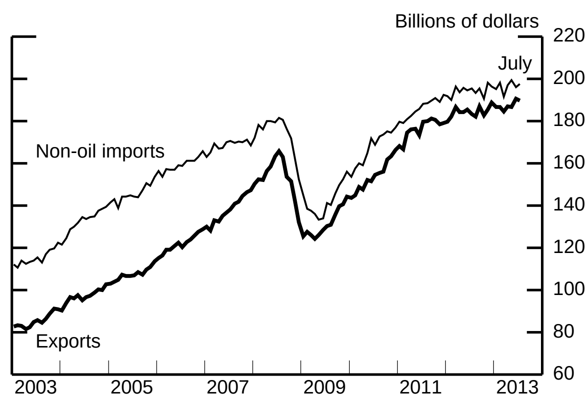
Note: Nominal CPIP deflated by BEA prices through 2013:Q2 and by staff's estimated deflator thereafter.
Source: U.S. Census Bureau.

Inventory Ratios ex. Motor Vehicles



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

Exports and Non-oil Imports



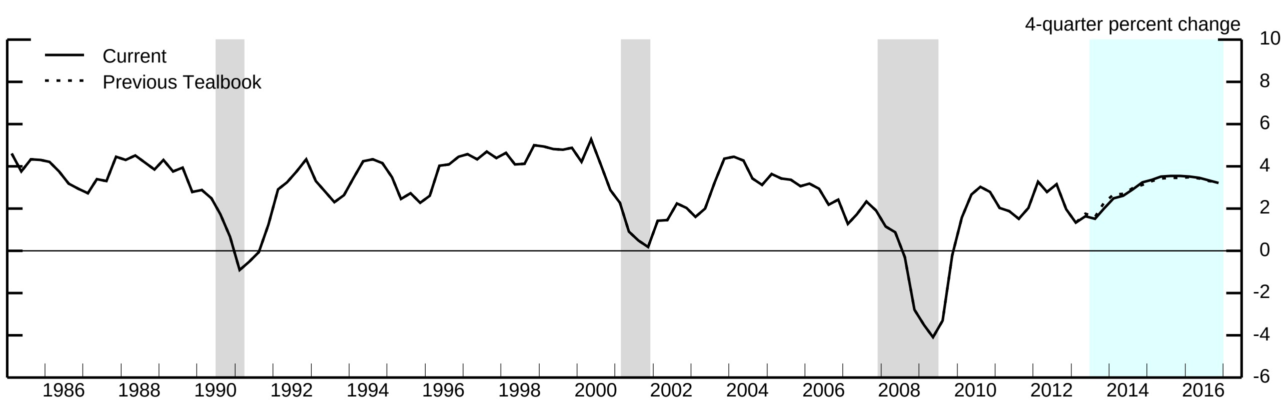
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Domestic Econ Devel & Outlook

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

Measure	2013	2013 H1	2013 H2	2014	2015	2016
Real GDP	**2.0**	**1.8**	**2.2**	**3.2**	**3.5**	**3.2**
Previous Tealbook	2.3	2.0	2.5	3.1	3.4	3.2
Final sales	1.5	1.1	1.8	3.3	3.7	3.3
Previous Tealbook	1.7	1.3	2.2	3.1	3.6	3.5
Personal consumption expenditures	2.0	2.0	2.1	3.4	3.8	3.1
Previous Tealbook	2.4	2.2	2.6	3.6	3.8	3.1
Residential investment	11.4	13.4	9.4	17.5	14.1	5.8
Previous Tealbook	10.2	13.3	7.2	15.8	14.8	8.9
Nonresidential structures	-.1	-6.5	6.7	2.5	2.9	2.6
Previous Tealbook	-1.0	-6.4	4.6	2.7	2.7	2.5
Equipment and intangibles	2.4	1.9	3.0	5.6	6.1	5.5
Previous Tealbook	3.0	1.7	4.4	5.3	5.9	5.7
Federal purchases	-6.8	-5.1	-8.6	-4.3	-3.8	.0
Previous Tealbook	-5.8	-5.1	-6.5	-5.4	-3.8	.0
State and local purchases	.2	-.4	.9	.3	1.1	1.5
Previous Tealbook	-.2	-.4	.1	.3	1.1	1.5
Exports	3.7	3.2	4.2	5.1	6.5	6.9
Previous Tealbook	3.5	3.2	3.8	4.4	6.1	7.0
Imports	3.0	3.7	2.3	3.8	5.1	4.7
Previous Tealbook	2.8	3.4	2.1	4.4	5.1	4.6
	Contributions to change in real GDP (percentage points)					
Inventory change	.5	.7	.4	.0	-.1	-.1
Previous Tealbook	.5	.8	.3	.0	-.2	-.2
Net exports	.0	-.2	.2	.1	.0	.2
Previous Tealbook	.0	-.1	.2	-.1	.0	.2

Real GDP

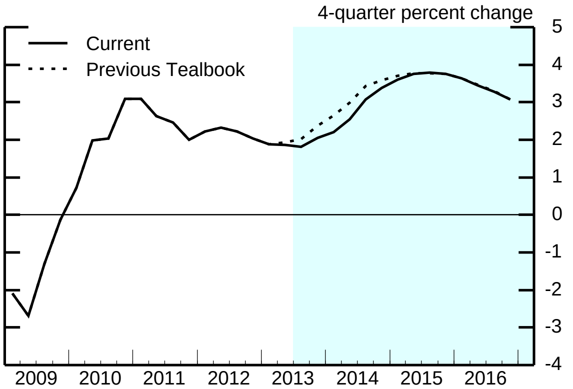


Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

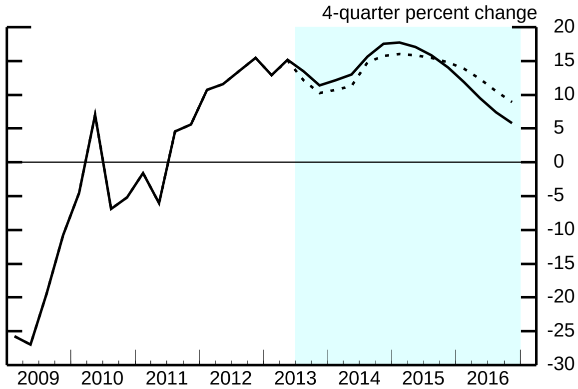
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Components of Final Demand

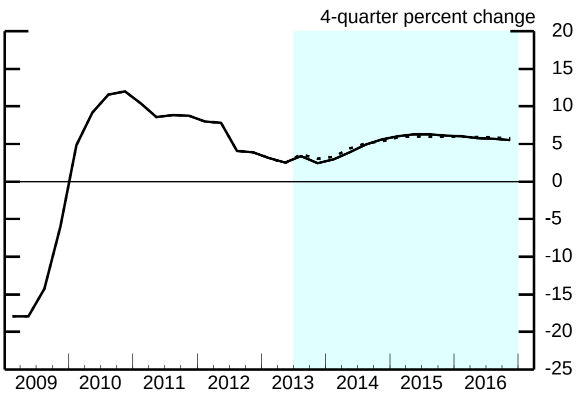
Personal Consumption Expenditures



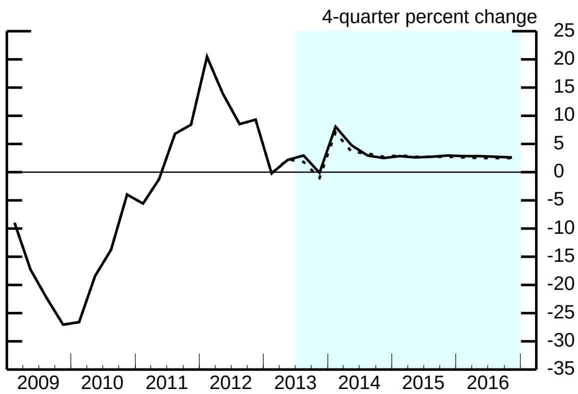
Residential Investment



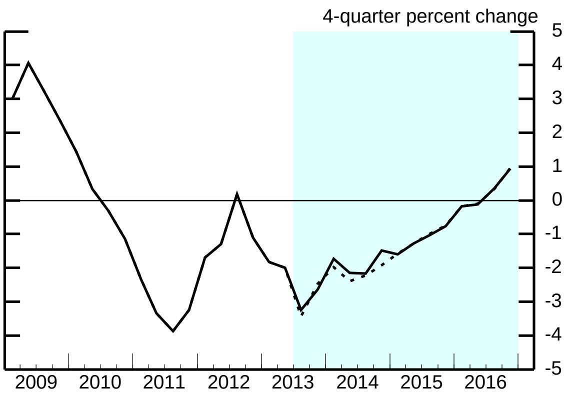
Equipment and Intangibles



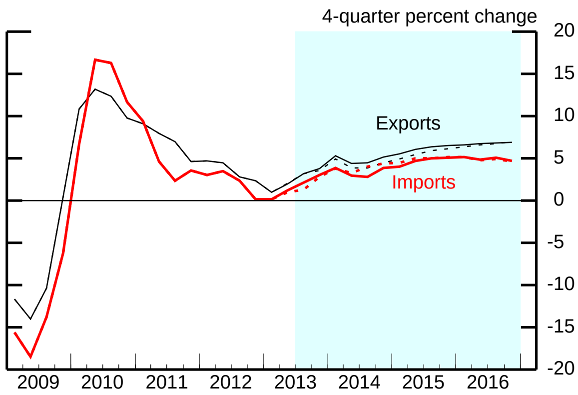
Nonresidential Structures



Government Consumption & Investment



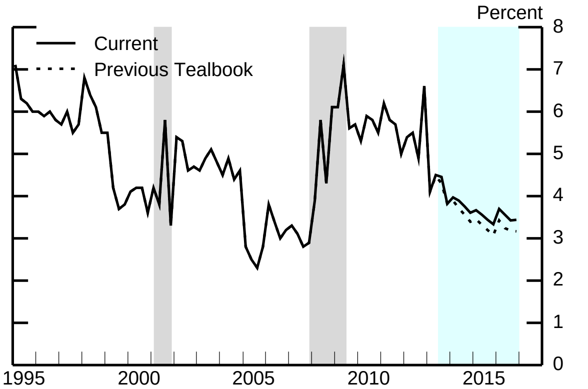
Exports and Imports



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

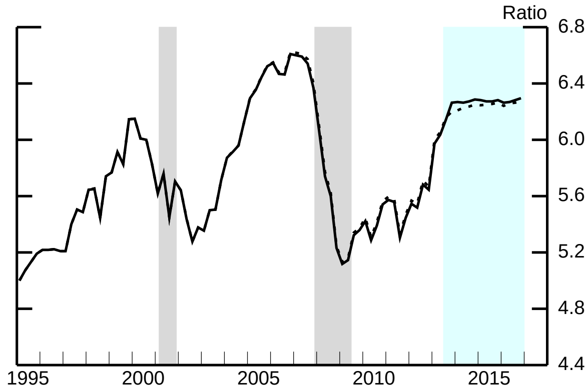
Aspects of the Medium-Term Projection

Personal Saving Rate



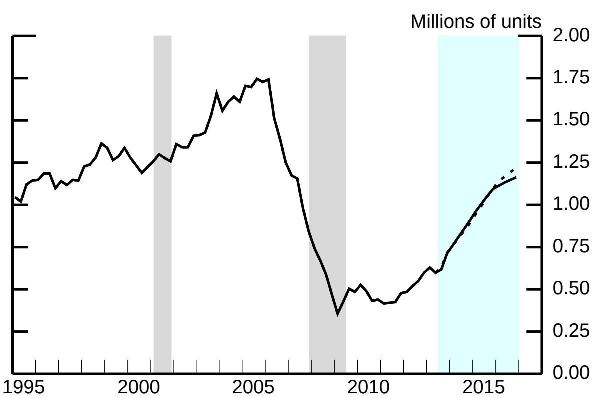
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



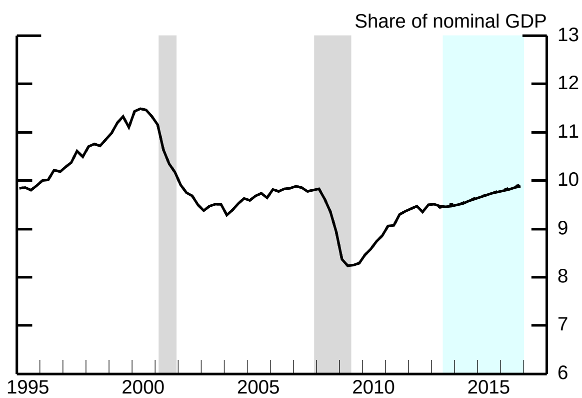
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



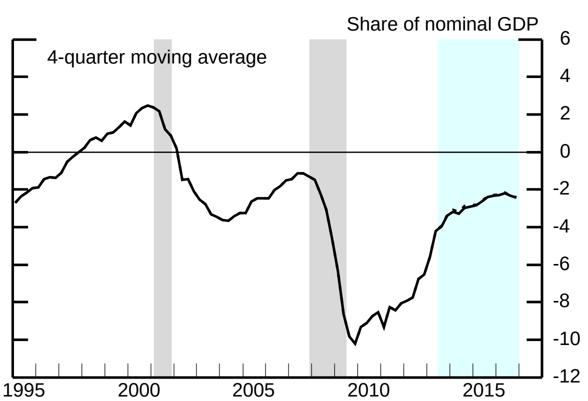
Source: U.S. Census Bureau.

Equipment and Intangibles Spending



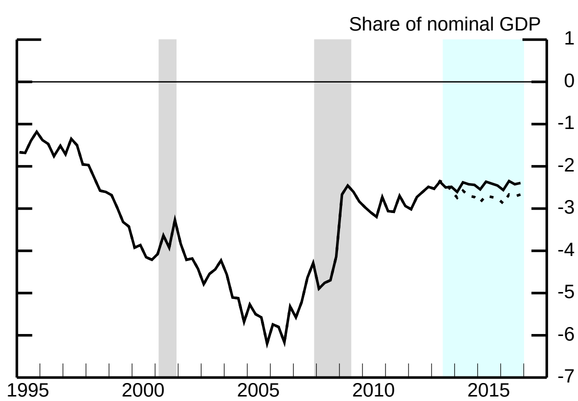
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Federal Surplus/Deficit



Source: *Monthly Treasury Statement.*

Current Account Surplus/Deficit



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

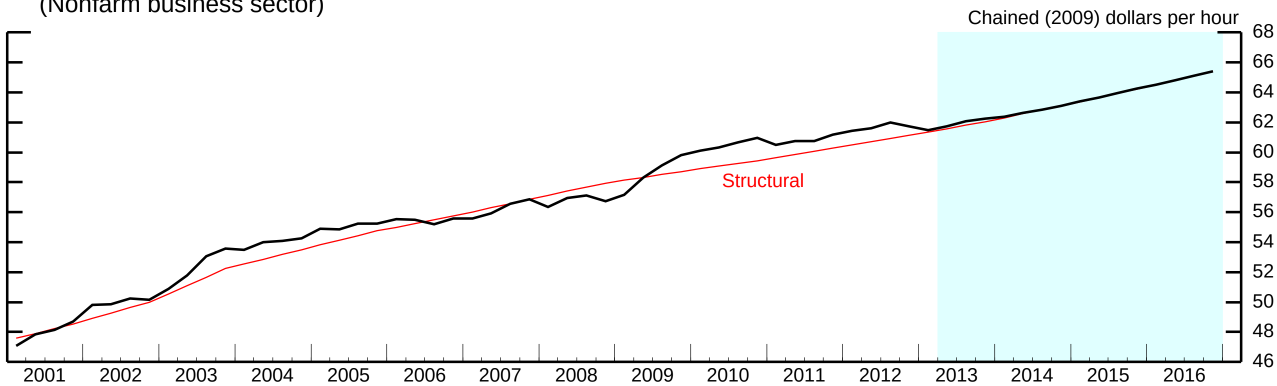
Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

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

Measure	1974-95	1996-2000	2001-11	2012	2013	2014	2015	2016
Potential real GDP	3.1	3.4	2.2	1.9	2.1	2.2	2.2	2.1
Previous Tealbook	3.1	3.4	2.2	1.9	2.1	2.2	2.2	2.1
Selected contributions[1]								
Structural labor productivity[2]	1.5	2.7	2.2	1.4	1.5	1.7	1.8	1.9
Previous Tealbook	1.5	2.7	2.2	1.4	1.5	1.7	1.8	1.9
Structural hours	1.5	1.0	.6	.7	.7	.6	.6	.5
Previous Tealbook	1.5	1.0	.6	.7	.7	.6	.6	.5
Labor force participation	.4	.0	-.3	-.3	-.5	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.3	-.5	-.3	-.3	-.3
Memo:								
GDP gap[3]	-2.4	1.9	-3.6	-3.6	-3.6	-2.6	-1.3	-.3
Previous Tealbook	-2.4	1.9	-3.6	-3.6	-3.4	-2.5	-1.3	-.2

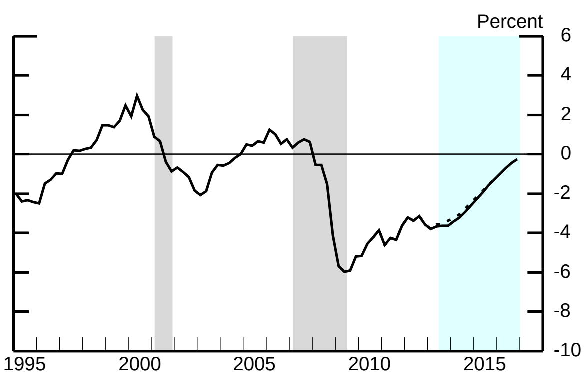
Note: For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.
1. Percentage points.
2. Because of substantial revisions from the Bureau of Economic Analysis to productive investment as part of the latest comprehensive revision, staff estimates of the components of structural productivity are not available for this Tealbook.
3. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential.

Structural and Actual Labor Productivity
(Nonfarm business sector)



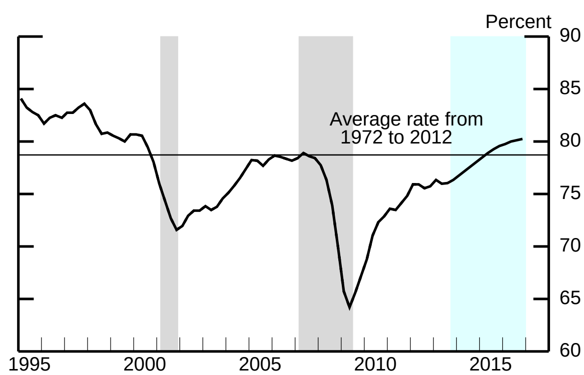
Source: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; staff assumptions.

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, BEA; staff assumptions.

Manufacturing Capacity Utilization Rate



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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

The Outlook for the Labor Market

Measure	2013	2013 H1	2013 H2	2014	2015	2016
Output per hour, nonfarm business[1]	.8	.0	1.7	1.4	1.8	1.9
Previous Tealbook	1.1	.3	1.9	1.4	1.5	1.8
Nonfarm private employment[2]	173	201	145	199	245	195
Previous Tealbook	181	201	162	202	241	198
Labor force participation rate[3]	63.2	63.4	63.2	63.2	63.1	63.0
Previous Tealbook	63.3	63.4	63.3	63.3	63.2	63.1
Civilian unemployment rate[3]	7.3	7.5	7.3	6.6	5.9	5.4
Previous Tealbook	7.2	7.5	7.2	6.6	5.8	5.3

1. Percent change from final quarter of preceding period at annual rate.
2. Thousands, average monthly changes.
3. Percent, average for the final quarter in the period.
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

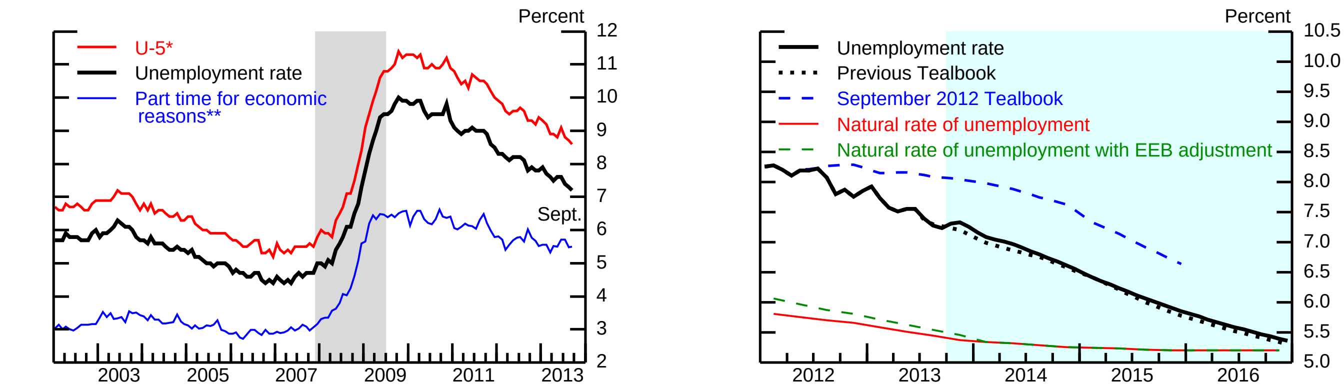
Inflation Projections
(Percent change at annual rate from final quarter of preceding period)

Measure	2013	2013 H1	2013 H2	2014	2015	2016
PCE chain-weighted price index	1.0	.5	1.6	1.4	1.5	1.6
Previous Tealbook	1.1	.6	1.6	1.2	1.4	1.6
Food and beverages	1.1	.9	1.2	.6	1.3	1.4
Previous Tealbook	.9	.9	1.0	.7	1.3	1.4
Energy	-2.4	-7.8	3.2	-.7	-1.1	-.5
Previous Tealbook	-1.1	-7.7	6.0	-3.1	-1.4	-.7
Excluding food and energy	1.2	1.0	1.5	1.5	1.6	1.7
Previous Tealbook	1.2	1.1	1.4	1.5	1.6	1.7
Prices of core goods imports[1]	-1.1	-1.0	-1.1	1.7	1.6	1.6
Previous Tealbook	-1.0	-1.0	-1.0	1.5	1.5	1.6

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

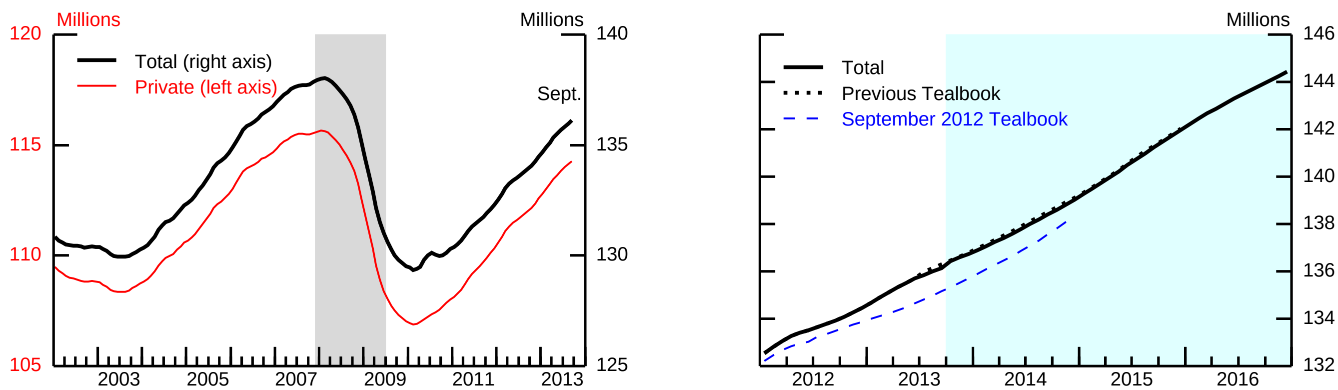
Labor Market Developments and Outlook

Measures of Labor Underutilization



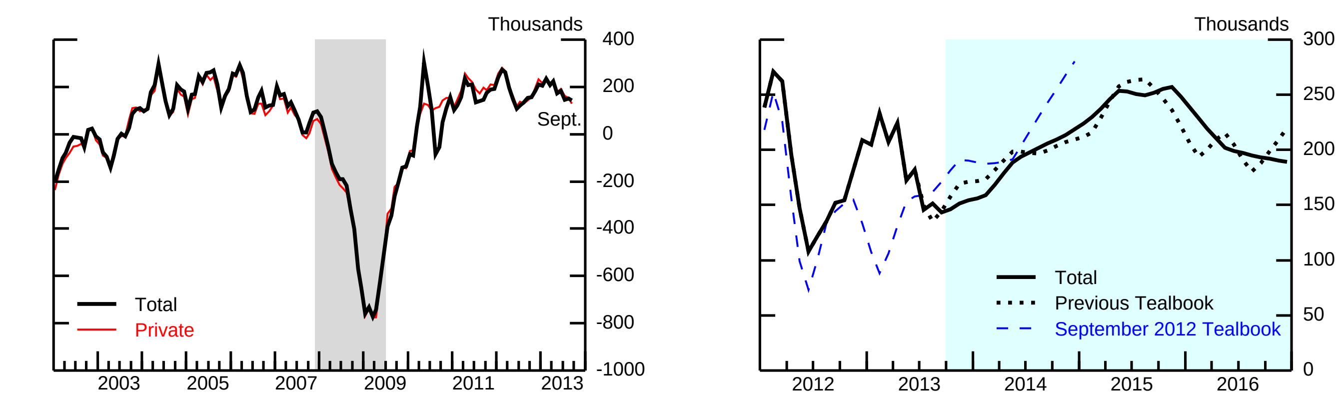
* U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.
** Percent of Current Population Survey employment.
EEB Extended and emergency unemployment benefits.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Level of Payroll Employment*



* 3-month moving averages in history; average levels in each quarter during the forecast period.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Change in Payroll Employment*

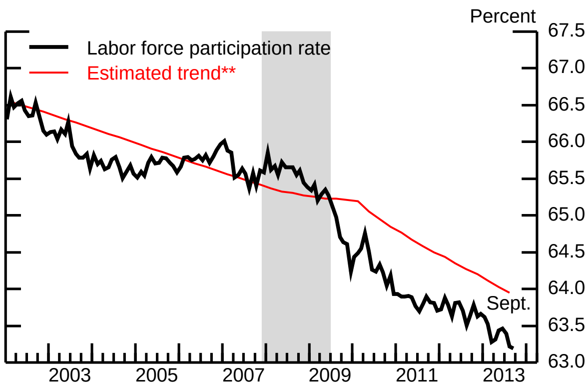


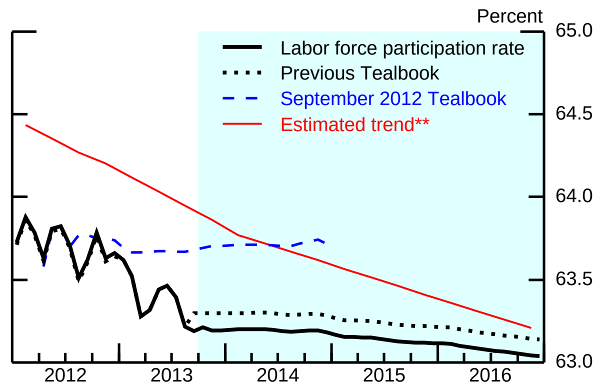
* 3-month moving averages in history; average monthly changes in each quarter during the forecast period.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Note: In September 2012, judgmental projections were prepared through 2015 for the Summary of Economic Projections variables, including the unemployment rate, while projections for other variables, including the labor force participation rate and payroll employment, were prepared only through 2014. This exhibit therefore reports a 2015 projection from the September 2012 Tealbook only for the unemployment rate.

Labor Market Developments and Outlook (2)

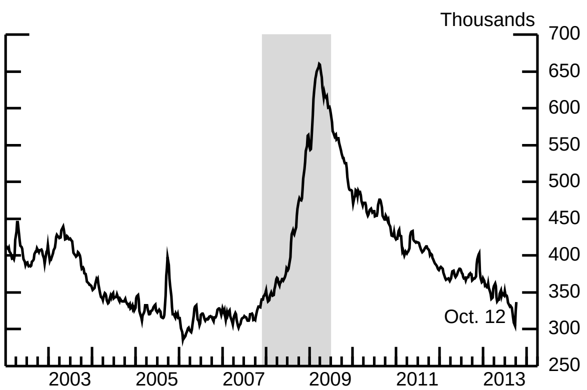
Labor Force Participation Rate*





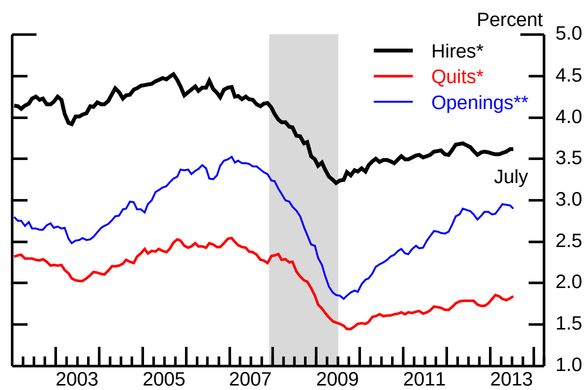
* Published data adjusted by staff to account for changes in population weights.
** Includes staff estimate of the effect of extended and emergency unemployment benefits.
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

Initial Unemployment Insurance Claims*



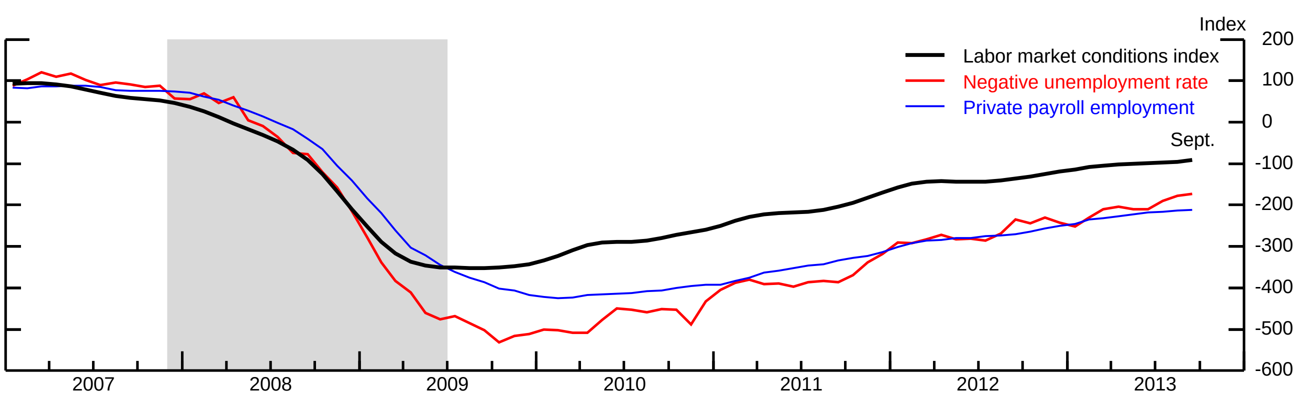
* 4-week moving average.
Source: U.S. Department of Labor, Employment and Training Administration.

Private Hires, Quits, and Job Openings



* Percent of private nonfarm payroll employment, 3-month moving average.
** Percent of private nonfarm payroll employment plus unfilled jobs, 3-month moving average.
Source: Job Openings and Labor Turnover Survey.

Indexes of Selected Labor Market Indicators



Note: Labor market conditions index estimated by staff; indexes for unemployment rate and private payroll employment are deviation from estimated trend normalized to have mean zero and unit standard deviation over the period July 1976 to September 2008, multiplied by 100.

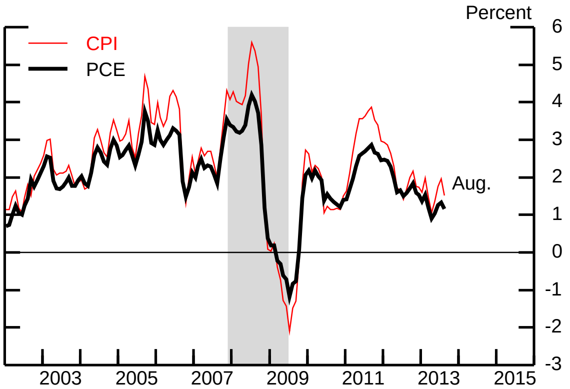
Labor Market Data and Projections

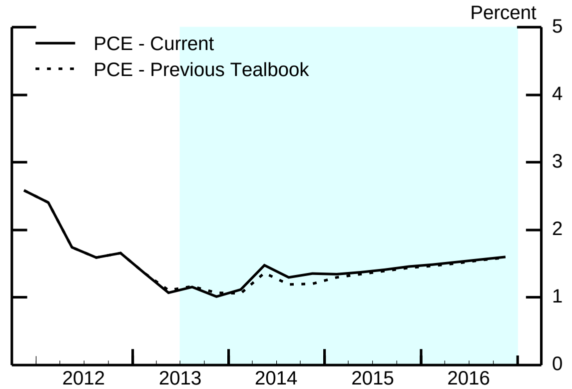
Indicator	Aug. 2012[1]	Projection for mid-2014[2] in the Tealbook dated:			
		Sept. 2012	Dec. 2012	Sept. 2013[3]	Oct. 2013[3]
Unemployment rate (percent)	8.1	7.8	7.6	6.8	6.9
Labor force participation rate (percent)	63.5	63.7	63.7	63.3	63.2
Monthly change in payroll employment (thousands, three-month averages)					
Total	94	212	197	197	194
Private	109	210	195	205	202
Level of total payroll employment (millions)	133.3	137.0	137.1	138.0	137.9
Total hours worked (percent change)[4]	1.0	2.3	2.0	2.5	2.4
Total hours worked (billions)[4]	184.6	190.3	190.8	193.0	193.0

1. The figures for August 2012 refer to data as originally published in the September employment situation release along with the staff's real-time translation of those data into hours worked. These were the latest available data at the time of the September FOMC meeting.
2. Calculated as the mean of the 2014:Q2 and 2014:Q3 projections.
3. Projections of payrolls and hours worked include the effects of the benchmark revision to the payroll survey.
4. Total hours worked are aggregate hours in the nonfarm business sector. Because that series is available only on a quarterly basis, the August 2012 figures refer to the quarterly percent change and level in 2012:Q3. The percent changes and levels in hours are at annual rates.
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff projections.

Inflation Developments and Outlook
(Percent change from year-earlier period)

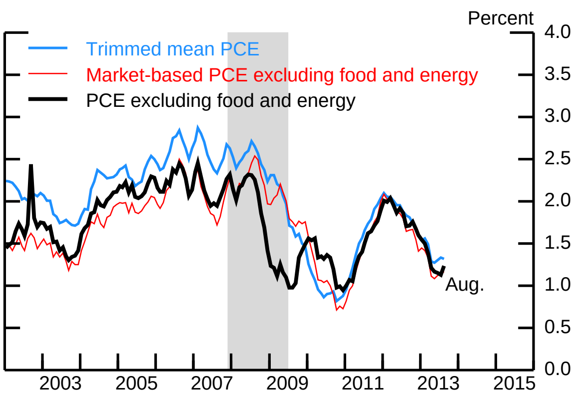
Headline Consumer Price Inflation

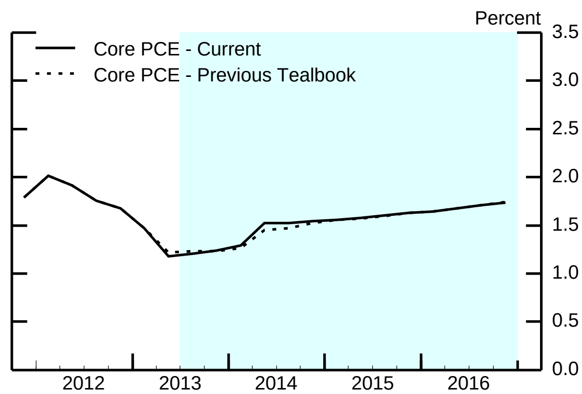




Source: For CPI, U.S. Department of Labor, Bureau of Labor Statistics; for PCE, U.S. Department of Commerce, Bureau of Economic Analysis.

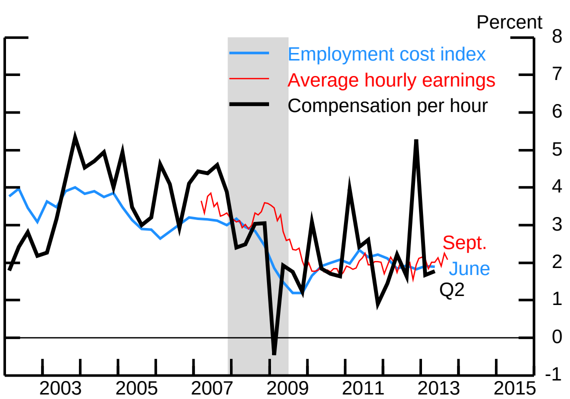
Measures of Underlying PCE Price Inflation

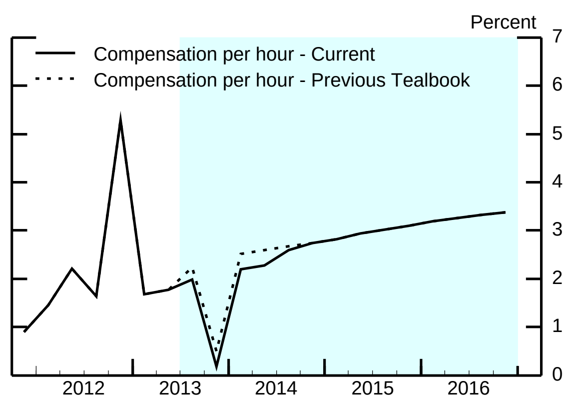




Source: For trimmed mean PCE, Federal Reserve Bank of Dallas; otherwise, U.S. Department of Commerce, Bureau of Economic Analysis.

Labor Cost Growth (Private Industry)



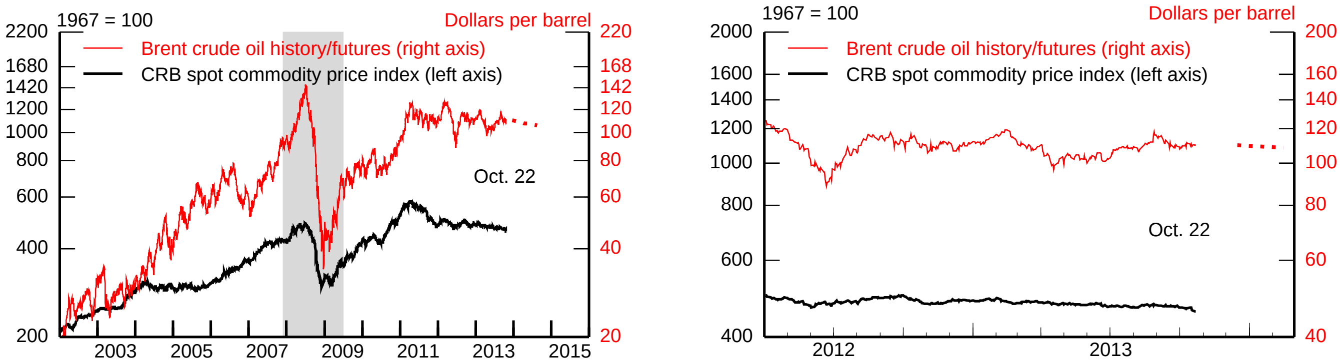


Note: The compensation per hour value for 2013:Q2 is a staff estimate.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Inflation Developments and Outlook (2)

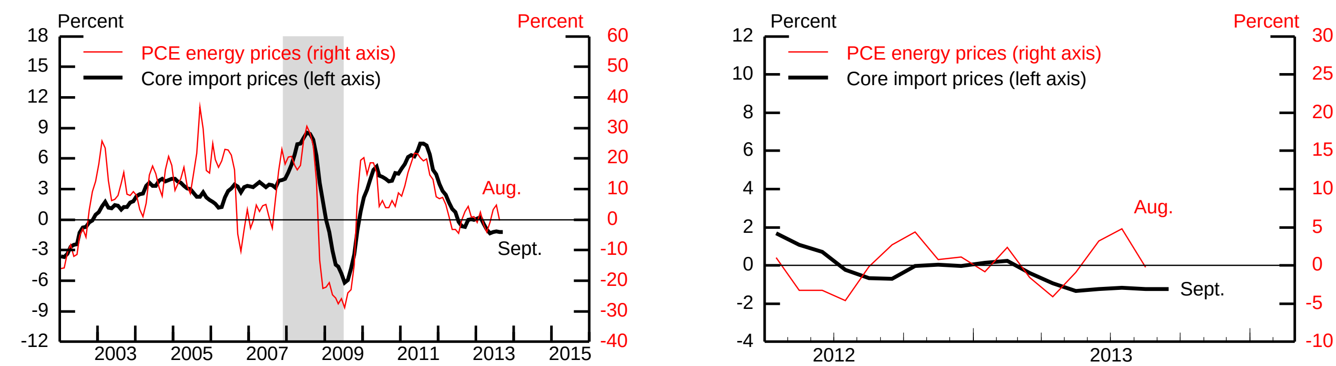
(Percent change from year-earlier period, except as noted)

Commodity and Oil Price Levels



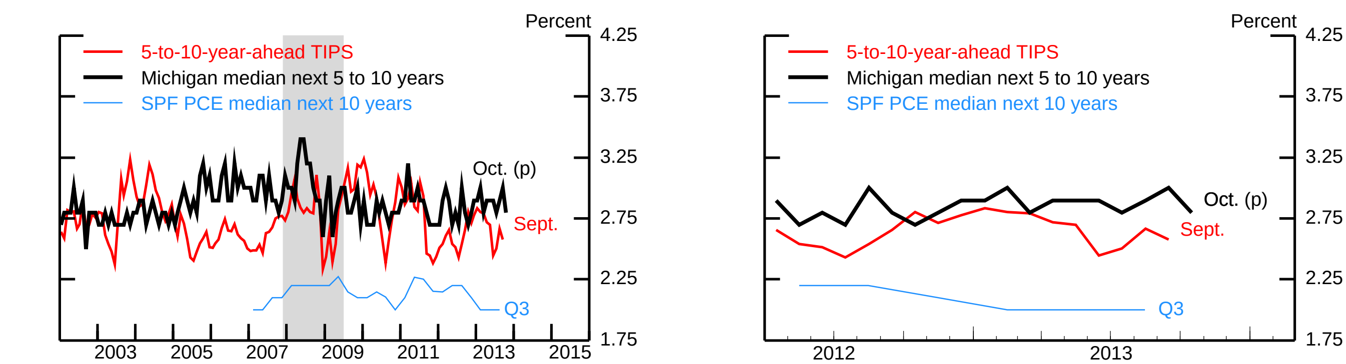
Note: Futures prices are the latest observations on monthly futures contracts.
Source: For oil prices, U.S. Department of Energy, Energy Information Agency; for commodity prices, Conference Research Board (CRB).

Energy and Import Price Inflation



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

Long-Term Inflation Expectations



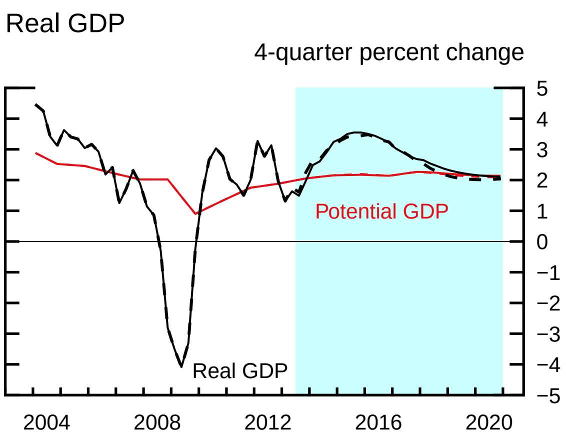
Note: Based on a comparison of an estimated TIPS (Treasury inflation-protected securities) yield curve with an estimated nominal off-the-run Treasury yield curve, with an adjustment for the indexation-lag effect.
p Preliminary.
SPF Survey of Professional Forecasters.
Source: For Michigan, Thomson Reuters/University of Michigan Surveys of Consumers; for SPF, the Federal Reserve Bank of Philadelphia; for TIPS, Federal Reserve Board staff calculations.

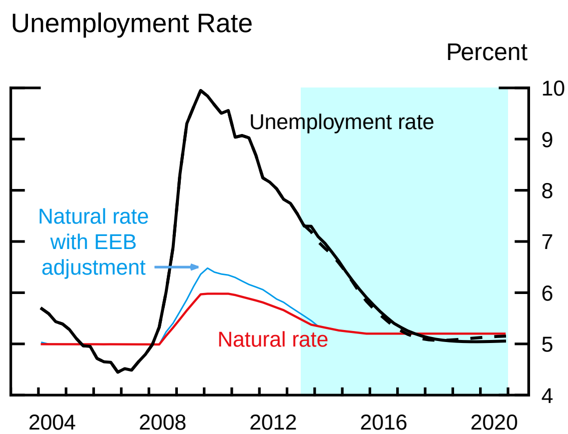
The Long-Term Outlook

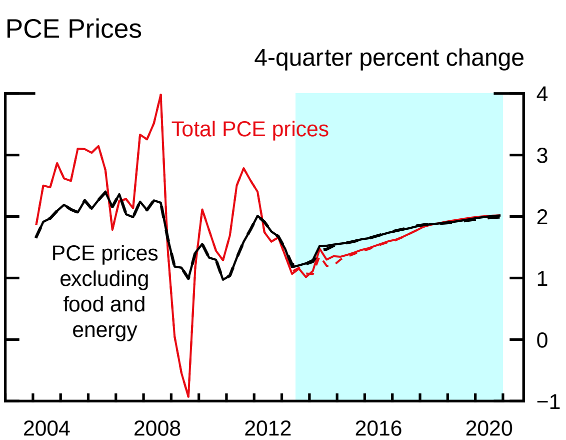
(Percent change, Q4 to Q4, except as noted)

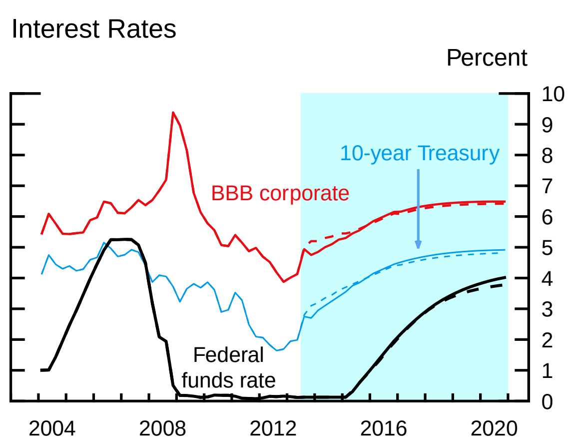
Measure	2013	2014	2015	2016	2017	2018	Longer run
Real GDP	2.0	3.2	3.5	3.2	2.7	2.4	2.3
Previous Tealbook	2.3	3.1	3.4	3.2	2.6	2.2	2.3
Civilian unemployment rate[1]	7.3	6.6	5.9	5.4	5.2	5.1	5.2
Previous Tealbook	7.2	6.6	5.8	5.3	5.1	5.1	5.2
PCE prices, total	1.0	1.4	1.5	1.6	1.8	1.9	2.0
Previous Tealbook	1.1	1.2	1.4	1.6	1.8	1.9	2.0
Core PCE prices	1.2	1.5	1.6	1.7	1.8	1.9	2.0
Previous Tealbook	1.2	1.5	1.6	1.7	1.8	1.9	2.0
Federal funds rate[1]	.1	.1	.9	2.0	2.8	3.4	4.0
Previous Tealbook	.1	.1	.8	1.9	2.8	3.3	4.0
10-year Treasury yield[1]	2.7	3.4	4.0	4.4	4.7	4.8	4.8
Previous Tealbook	3.1	3.6	4.0	4.4	4.6	4.7	4.8

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





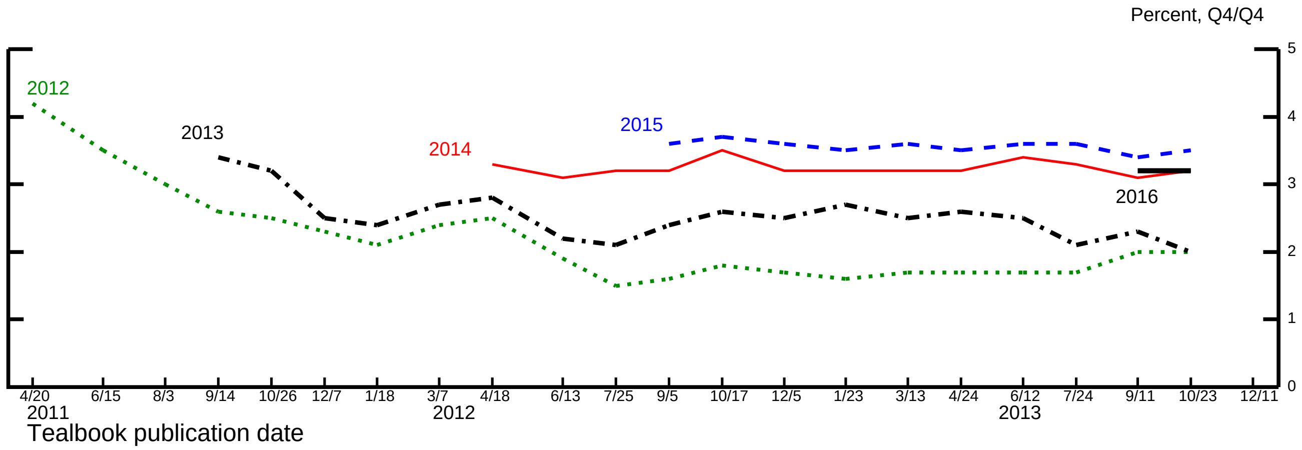




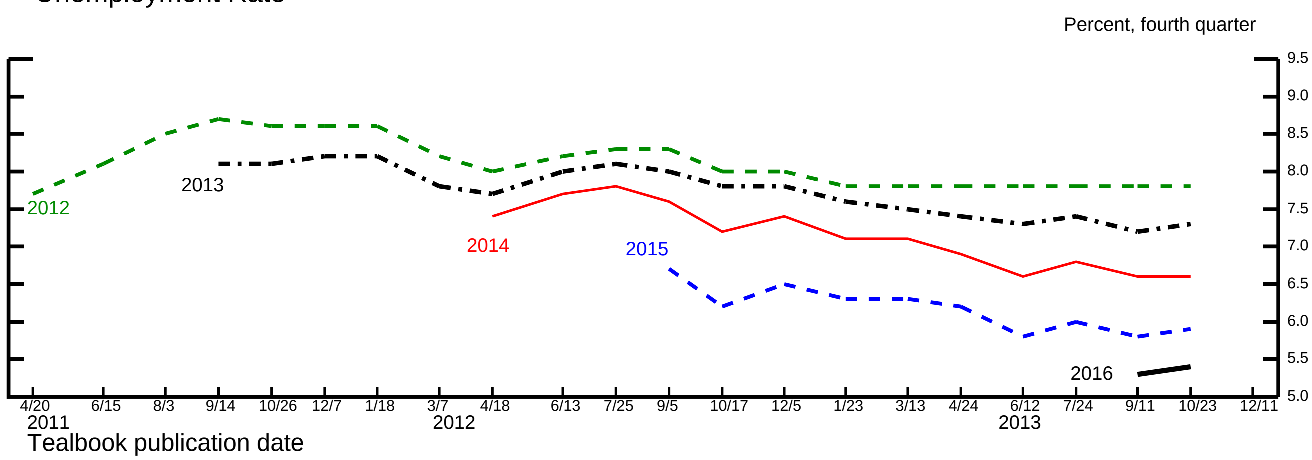
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

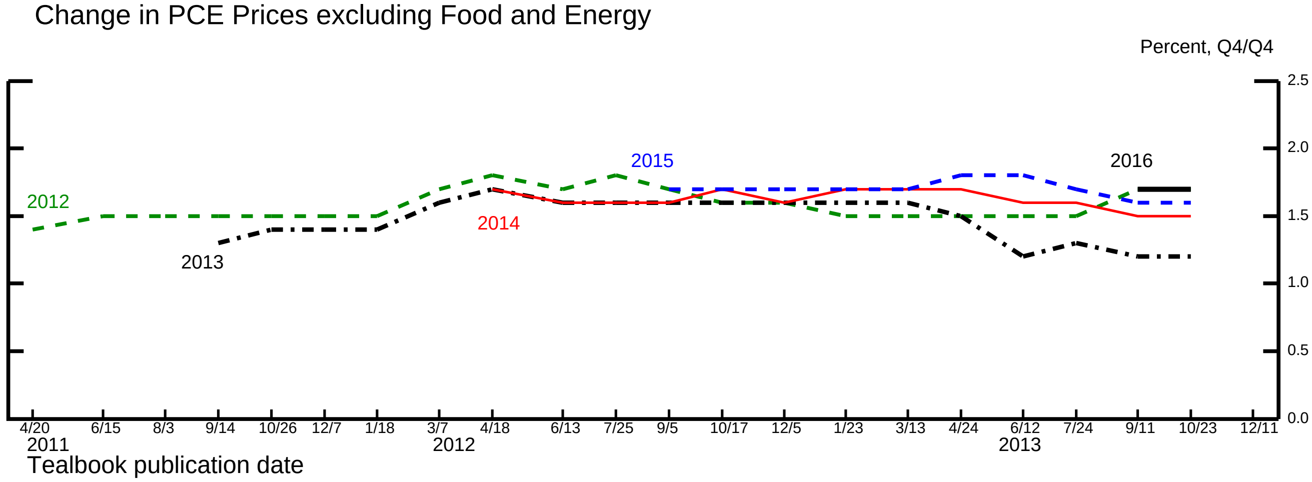
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



(This page is intentionally blank.)

International Economic Developments and Outlook

We estimate that foreign real GDP growth increased to a near-trend pace of 2¾ percent at an annual rate in the third quarter from 2¼ percent in the second quarter, largely reflecting an acceleration of activity in China, Mexico, and Canada. Growth appears to have moderated in Europe and Japan, but we had expected this slowing in our September Tealbook forecast. Overall, our third-quarter estimate for the foreign economies is slightly higher than we wrote down in September, mainly reflecting China's unexpectedly strong performance.

We expect total foreign growth to rise further over the forecast period, to 3¼ percent next year and 3½ percent in 2015 and 2016. In the advanced foreign economies (AFEs), several factors should support the increase in growth, including accommodative monetary policies, diminishing drag from fiscal consolidation, and further reduction of financial stresses in the euro area. The anticipated recovery in the advanced economies, including the United States, should support an acceleration of output in the emerging market economies (EMEs), as should a fading of the near-term drag from stressed financial conditions in the more vulnerable EMEs. Relative to the previous Tealbook, our foreign growth outlook is up slightly in 2014 on account of stronger activity in the United States, and little changed thereafter.

As always, the foreign outlook is subject to important risks. The euro area's exit from recession has been encouraging, but the recovery remains fragile and any number of shocks could undermine it. In the EMEs, we have been heartened that the financial stresses that emerged in May have eased somewhat in the past two months, but the risk of a generalized emerging market crisis has not gone away. The forecast has some upside risks as well. For example, the welcome rebound in both EME and AFE growth in the past several quarters suggests that a positive, self-reinforcing dynamic could be materializing, engendering a faster rebound in global consumer and investor sentiment, and thus resulting in more vigorous global economic growth than assumed in our baseline. These latter two risks—the upside risk and the risk of a possible crisis in the EMEs—are explored in the Risks and Uncertainty section.

With economic resource slack persisting and commodity prices projected to remain quiescent over the forecast period, we expect that foreign inflation will remain subdued at an annual rate of roughly 2½ percent, little changed from our previous forecast. In this low-inflation environment, monetary policy remains generally accommodative. Recent policy guidance has led us to push back our anticipated first policy rate hike for the ECB from mid-2015 to early 2016. In the EMEs, we now expect the Bank of Mexico to cut its policy rate again soon, following last month's rate cut, to support growth. In contrast, the central banks of Brazil, India, and Indonesia—some of the more vulnerable EMEs—raised policy rates, citing concerns about inflation, and we expect them to raise rates again before the end of the year.

ADVANCED FOREIGN ECONOMIES

- ***Euro area***. Recent activity indicators support our estimate that GDP growth stepped down in the third quarter to ½ percent after transitory factors boosted growth during the second quarter to 1 percent. Nevertheless, data on PMIs and confidence suggest that the underlying strength of the economy continued to improve. We expect GDP growth to pick up to 1¼ percent in 2014 and then rise to 2 percent in 2015 and 2016, supported by diminishing drag from fiscal consolidation and further reduction of financial stresses. Our near-term projection is a touch higher than in the September Tealbook, reflecting slightly better-than-expected economic data and financial conditions. Recently, the ECB signaled more explicitly its willingness to keep interest rates low for an extended period. Thus with inflation projected to remain comfortably below 2 percent for the foreseeable future, we now expect the ECB to wait until early 2016 (two quarters later than in the September Tealbook) to begin raising its policy rate.

- ***United Kingdom***. Third-quarter GDP growth is estimated to be about 2½ percent, down a little from the second-quarter pace, as August data showed surprising pullbacks in industrial activity and construction. Still, PMI readings point to continued strength, and we project that GDP growth will remain around 2½ percent through the rest of the forecast period. Higher-than-expected core consumer prices and announced increases in utility prices led us to revise up our projection of inflation in the second half of the year to 3 percent, but we expect inflation to settle down at an average rate of 2 percent from 2014 onward, amid persistent economic slack. Although the mapping of GDP growth into lower unemployment will depend on the uncertain path of productivity growth, we continue to expect the unemployment rate to fall to the Bank of England's 7 percent threshold in mid-2015, with the first rate hike following later that year.

- ***Japan***. Following a strong performance in the first half of the year on the back of Abenomics-related exchange rate depreciation and rising confidence, we estimate that growth slowed to a 2 percent pace in the third quarter. Private consumption growth was sluggish through August and merchandise exports were down for the quarter as a whole. September data on consumer confidence, car registrations, and corporate sentiment, suggest that growth will pick up to 3½ percent in the current quarter. However, growth should decline markedly next year in response to April's hike in the consumption tax, which Prime Minister Abe recently confirmed will occur as scheduled. Although Abe also announced a new fiscal stimulus package, we estimate that it will boost 2014 GDP by less than ½ percentage point, offsetting only about one-fourth of the drag from the consumption tax hike and the expiration of previous fiscal stimulus measures. All told, we see growth averaging slightly above 1 percent over the next three years. Although this is a paltry performance by the standards of most other economies, it is nearly double the pace of Japan's estimated potential growth, and thus helps narrow its output gap. Accordingly, and assuming continued monetary policy stimulus in 2014 and 2015, we project that inflation will settle at 1½ percent in 2016, just below the Bank of Japan's 2 percent target.

- ***Canada***. Data on monthly GDP and the manufacturing PMI suggest that growth bounced back to about 2½ percent in the third quarter, as projected in the September Tealbook, following flood-related weakness in the second quarter. As the rebound dissipates, we see growth moderating to 2 percent in the current quarter before rising to 2¾ percent by mid-2015, supported by improvements in global economic conditions. Following a flat reading in the second quarter due largely to falling food and energy prices, inflation rebounded to 1½ percent in the third quarter, and we expect it to edge up to 2 percent in 2016.

EMERGING MARKET ECONOMIES

- ***China***. Third-quarter GDP data suggest that the Chinese economy grew at an annual rate of 9½ percent, up from a 7 percent average pace over the first half of the year and 1¾ percentage point higher than we expected at the time of the September Tealbook. The surge from relatively weak to above-trend growth reflected a strong acceleration in industrial production, as well as solid investment and retail sales growth, which were supported by continued accommodative policy. We expect growth to moderate to a more sustainable 8 percent pace in the current and next quarter. This projection is supported by a somewhat softer tone of the September data and also reflects our belief that authorities will again attempt to rein in the shadow banking sector, damping credit growth. We then see Chinese growth gradually edging down to 7½ percent in 2016 in line with our estimate of downward-trending potential growth. This projection is up a bit in the current quarter from the previous Tealbook and little changed thereafter. Inflation is projected to be around 3 percent throughout the forecast period.

- ***Other Emerging Asia***. We estimate that GDP in the rest of emerging Asia expanded at a 3¾ percent pace in the third quarter, about the same rate as in the previous quarter, and ½ percent faster than our previous Tealbook projection. The region appears to have benefited from the strong growth in China, which supported an increase in exports in the third quarter following a second-quarter contraction. Industrial production and the PMIs also have picked up in much of the region. However, in India and Indonesia—where financial stress remained elevated—recent indicators, on balance, point to a further slowing of growth after a weak second quarter. Despite subdued growth, central banks in both countries raised policy rates, primarily to curb inflationary pressures. Going forward, we see growth in the region rising to about 4½ percent in 2015 and 2016, supported by a pickup in external demand from the advanced economies.

- ***Latin America***. After contracting in the second quarter, **Mexico**'s GDP likely grew 2¼ percent in the third quarter. Our expectation of renewed growth is supported by the upbeat tone of several recent Mexican indicators, including the index of overall domestic economic activity, industrial production, and exports. With economic slack still noticeable and inflation pressures relatively subdued, the Bank of Mexico cut its policy rate early last month and we expect another rate cut soon. Supported by the expansion of activity in the United States, we see Mexican GDP accelerating to 3¾ percent next year, a bit faster than projected in the September Tealbook, before settling at 3½ percent thereafter, broadly in line with the contour of U.S. manufacturing output.

After **Brazilian** GDP growth surged to 6 percent in the second quarter, recent indicators—including industrial production, PMIs, and exports—suggest that GDP was flat in the third quarter, about as we had expected in September. We expect GDP growth to rise to 1¾ percent in the current quarter and further to 3½ percent in 2015 and 2016, as the drag from financial stresses wanes and global economic growth picks up. Despite the recent slowdown, the Brazilian central bank raised its main policy rate earlier this month by 50 basis points to 9.5 percent, a cumulative increase of 225 basis points since April, citing concerns about inflationary pressures, and we expect another rate hike before the end of the year. Although 12-month headline inflation moderated to 5.9 percent in September, it remains significantly above 4.5 percent—the midpoint of the inflation target range and the central bank's ultimate goal.

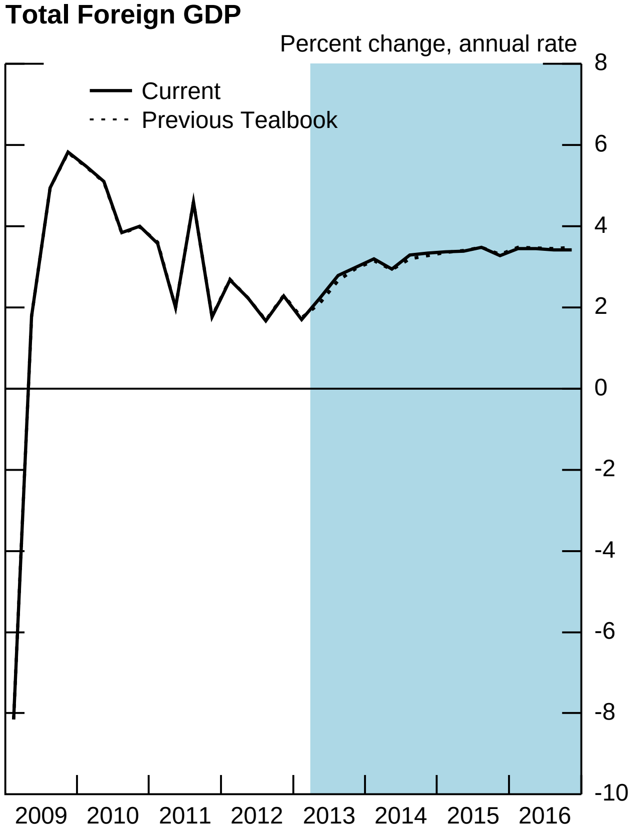
The Foreign GDP Outlook

Real GDP* Percent change, annual rate

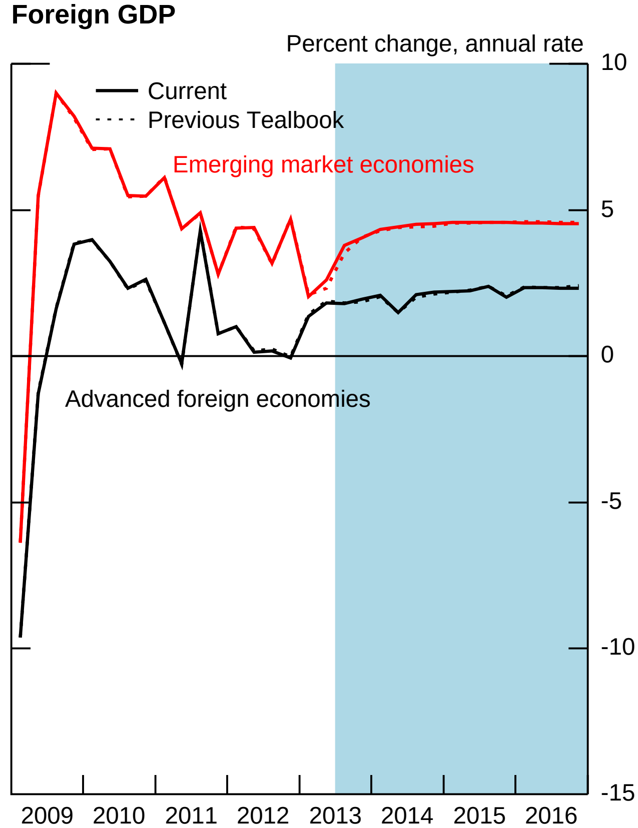
	2013				2014		2015	2016
	Q1	Q2	Q3	Q4	H1	H2		
1. Total Foreign	**1.7**	**2.2**	**2.8**	**3.0**	**3.1**	**3.3**	**3.4**	**3.4**
Previous Tealbook	*1.8*	*2.1*	*2.7*	*3.0*	*3.0*	*3.2*	*3.4*	*3.5*
2. Advanced Foreign Economies	**1.4**	**1.8**	**1.8**	**1.9**	**1.8**	**2.1**	**2.2**	**2.3**
Previous Tealbook	*1.4*	*1.9*	*1.8*	*1.9*	*1.8*	*2.1*	*2.2*	*2.4*
3. Canada	2.2	1.7	2.6	2.1	2.4	2.6	2.6	2.7
4. Euro Area	-0.9	1.1	0.4	1.0	1.2	1.5	1.9	2.0
5. Japan	4.1	3.8	2.1	3.4	0.4	1.9	0.8	1.2
6. United Kingdom	1.5	2.7	2.4	2.5	2.3	2.4	2.5	2.5
7. Emerging Market Economies	**2.1**	**2.6**	**3.8**	**4.1**	**4.4**	**4.5**	**4.6**	**4.6**
Previous Tealbook	*2.1*	*2.3*	*3.5*	*4.1*	*4.3*	*4.4*	*4.6*	*4.6*
8. China	6.5	7.5	9.4	8.1	7.8	7.7	7.6	7.5
9. Emerging Asia ex. China	1.8	3.8	3.8	4.0	4.0	4.4	4.6	4.6
10. Mexico	0.1	-2.9	2.2	3.0	3.7	3.7	3.6	3.4
11. Brazil	2.6	6.0	0.0	1.7	2.9	3.3	3.5	3.5

* GDP aggregates weighted by shares of U.S. merchandise exports.

Total Foreign GDP



Foreign GDP



The Foreign Inflation Outlook

Consumer Prices*

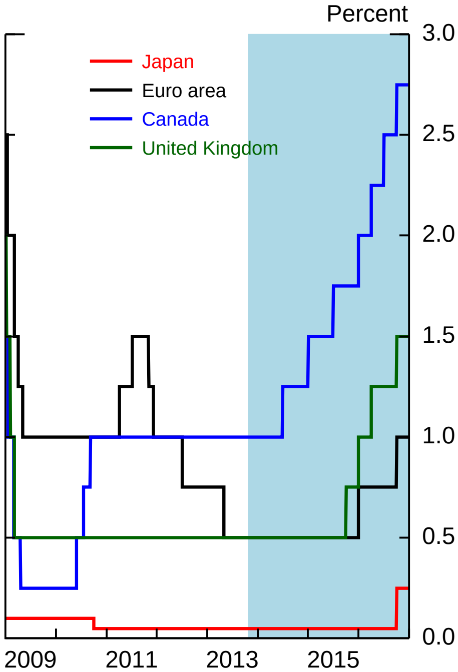
Percent change, annual rate

		2013				2014		2015	2016
		Q1	Q2	Q3	Q4	H1	H2		
1.	**Total Foreign**	**2.2**	**1.9**	**2.8**	**2.6**	**2.8**	**2.5**	**2.7**	**2.6**
	Previous Tealbook	*2.2*	*1.9*	*2.6*	*2.6*	*2.8*	*2.5*	*2.7*	*2.6*
2.	**Advanced Foreign Economies**	**0.9**	**0.4**	**2.1**	**1.4**	**2.1**	**1.5**	**1.8**	**1.8**
	Previous Tealbook	*0.9*	*0.5*	*1.9*	*1.5*	*2.1*	*1.5*	*1.8*	*1.8*
3.	Canada	1.6	0.0	1.6	1.7	1.8	1.8	1.8	2.1
4.	Euro Area	0.7	0.6	1.9	1.4	1.3	1.4	1.5	1.7
5.	Japan	-0.4	0.8	2.9	0.7	4.6	0.8	2.5	1.4
6.	United Kingdom	2.3	1.5	3.1	3.0	1.7	2.2	2.0	1.8
7.	**Emerging Market Economies**	**3.3**	**3.0**	**3.3**	**3.5**	**3.3**	**3.3**	**3.3**	**3.3**
	Previous Tealbook	*3.3*	*3.0*	*3.1*	*3.4*	*3.3*	*3.3*	*3.3*	*3.3*
8.	China	3.2	2.1	3.4	3.0	3.0	3.0	3.0	3.0
9.	Emerging Asia ex. China	3.5	1.8	3.9	4.1	3.4	3.4	3.4	3.4
10.	Mexico	3.2	5.3	2.0	3.6	3.5	3.4	3.4	3.4
11.	Brazil	7.0	5.8	4.6	5.5	5.7	5.3	5.3	5.3

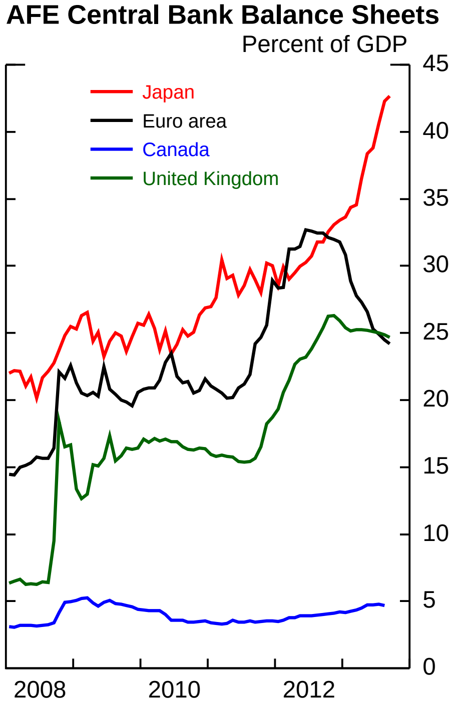
* CPI aggregates weighted by shares of U.S. non-oil imports.

Foreign Monetary Policy

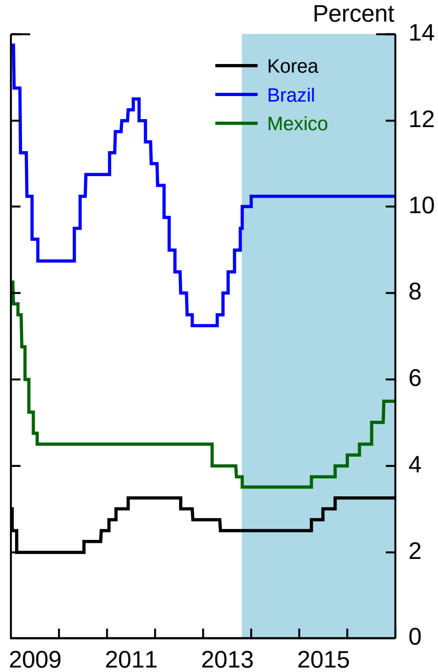
AFE Policy Rates



AFE Central Bank Balance Sheets

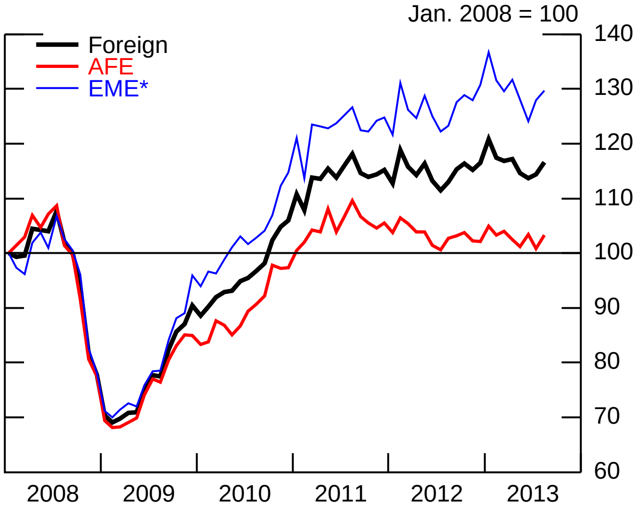


EME Policy Rates



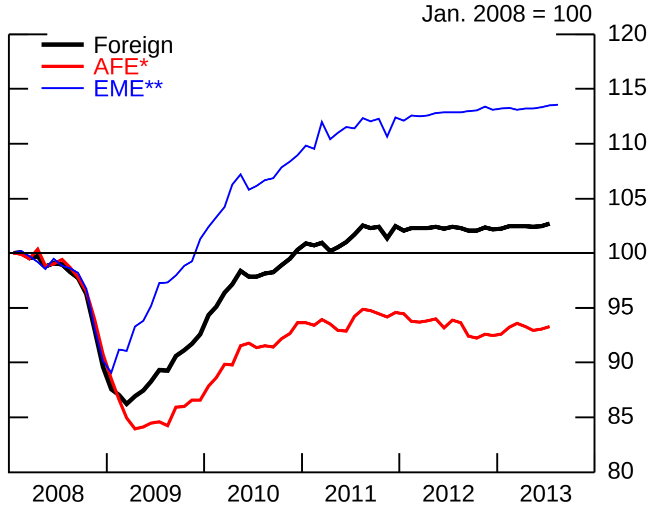
Recent Foreign Indicators

Nominal Exports



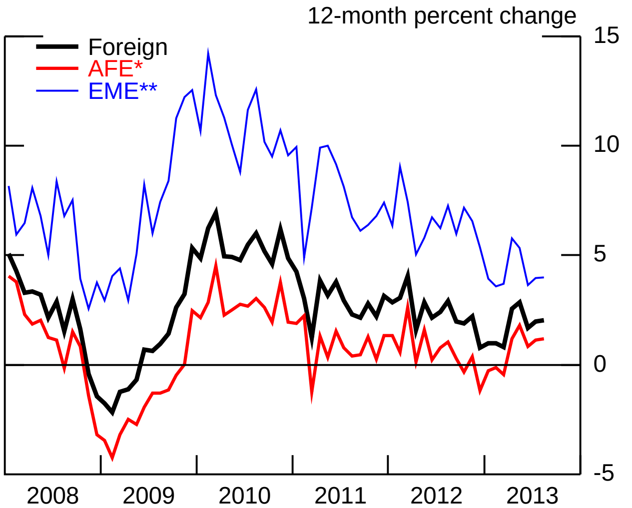
* Excludes Venezuela.

Industrial Production



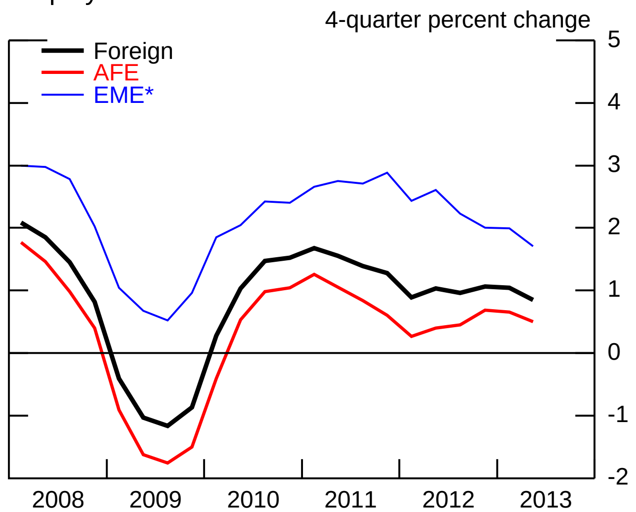
* Excludes Australia and Switzerland.
** Excludes Colombia, Hong Kong, the Philippines, and Venezuela.

Retail Sales



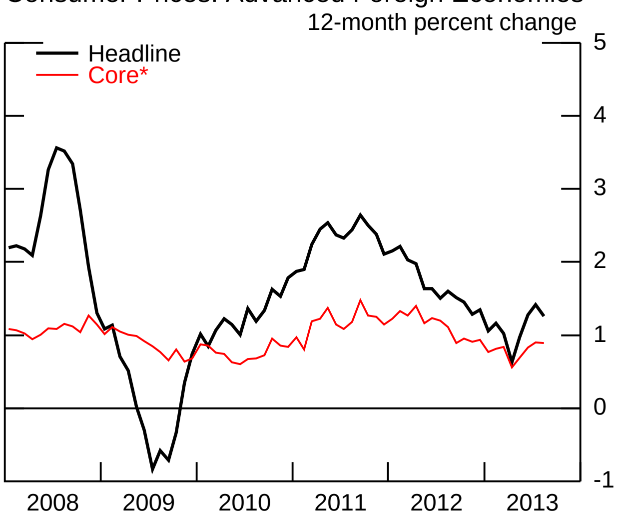
* Excludes Australia and Switzerland.
** Includes Brazil, China, Indonesia, Korea, Singapore, and Taiwan.

Employment



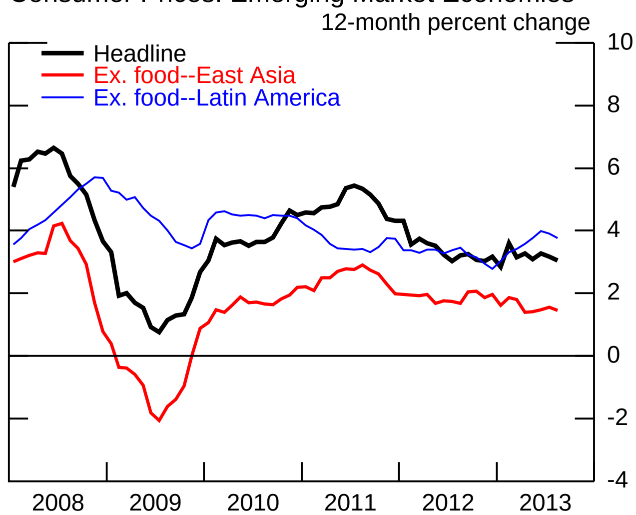
* Excludes Argentina and Mexico.

Consumer Prices: Advanced Foreign Economies



Note: Excludes Australia, Sweden, and Switzerland.
* Excludes all food and energy; staff calculation.

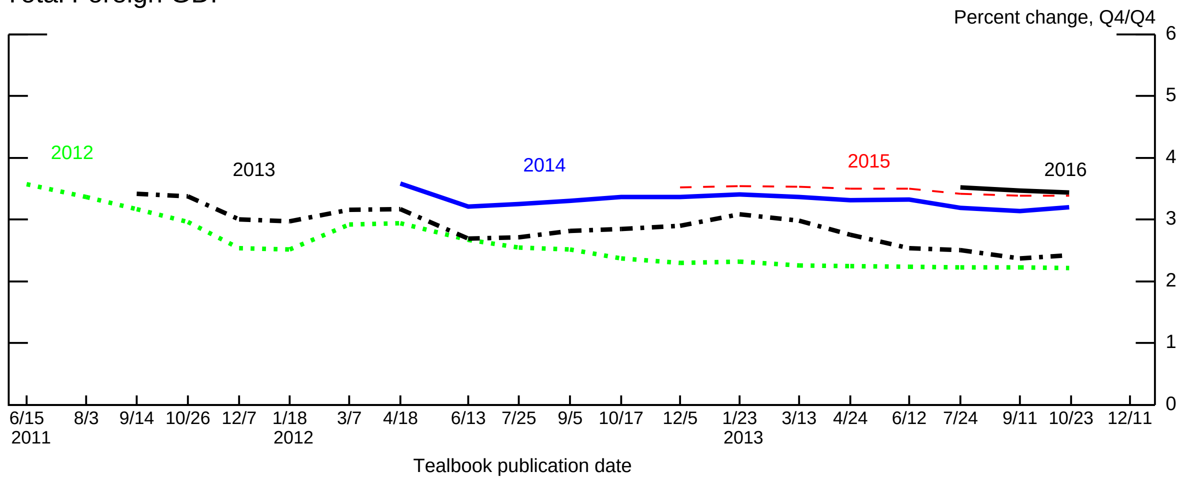
Consumer Prices: Emerging Market Economies



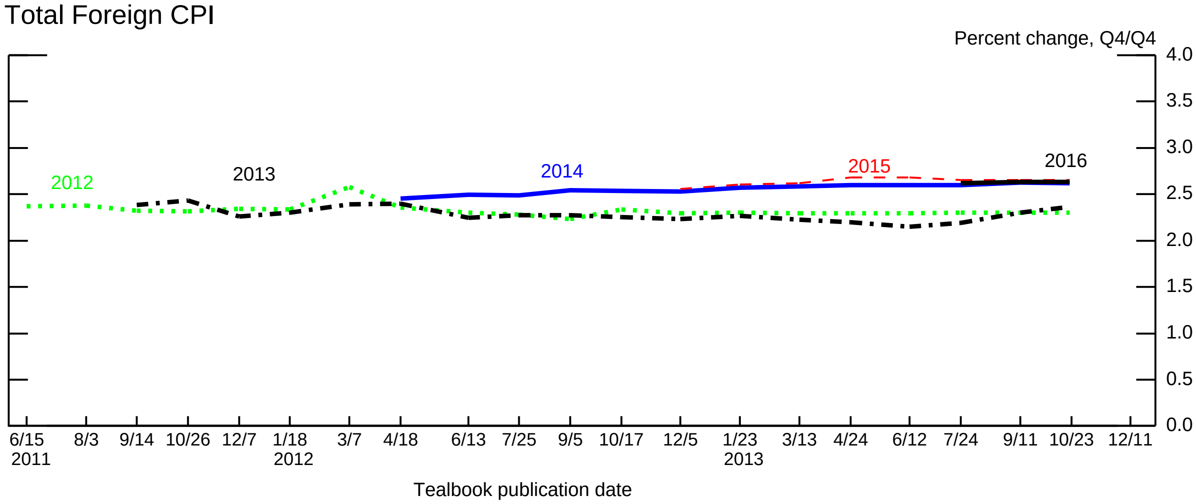
Source: Haver Analytics and CEIC.

Evolution of Staff's International Forecast

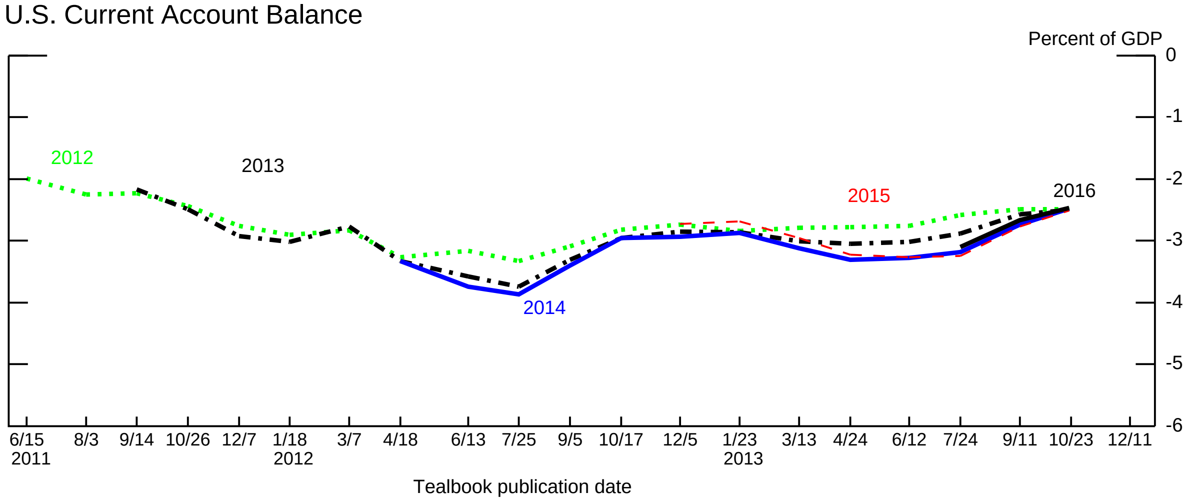
Total Foreign GDP



Total Foreign CPI



U.S. Current Account Balance



Int'l Econ Devel & Outlook

(This page is intentionally blank.)

Financial Developments

Largely in response to expectations for more-accommodative monetary policy, conditions in domestic financial markets eased, on balance, over the intermeeting period, with longer-term interest rates lower, stock prices higher, and the foreign exchange value of the dollar down. That said, financial markets—particularly the Treasury bill and short-term funding markets—were adversely affected for a time by investors' concerns about the outcome of the fiscal standoff and uncertainty about its effects on the economy; however, strains eased quickly after a deal was reached in the Congress on October 16. (See the box "Financial Market Effects of the U.S. Fiscal Standoff.")

- Investors pushed out their anticipated timing of a change in monetary policy—both the first reduction in the pace of asset purchases and the first hike in the target federal funds rate—in response to three factors: Federal Reserve communications at the time of the September FOMC meeting, which were seen as more accommodative than expected; uncertainty about the economic outlook and the fiscal situation in coming months; and somewhat weaker-than-expected economic data releases.

- Borrowing by nonfinancial businesses slowed somewhat during the fiscal standoff amid increased market volatility; however, access to credit remained ample for large firms, and equity prices rose, on net, over the intermeeting period.

- Household financial flows appeared little affected by the fiscal standoff. House prices showed further improvement in August, while mortgage rates declined about 45 basis points over the intermeeting period.

- Financial conditions also eased in the advanced foreign economies on balance: Equity prices moved higher, sovereign bond yields fell, and expectations for policy rates declined. In emerging market economies (EMEs), financial conditions continued to improve.

Financial Market Effects of the U.S. Fiscal Standoff

Investors began to focus on the U.S. debt ceiling debate as the October 17 deadline announced by the Treasury approached.[1] Market participants reportedly anticipated that the Treasury would run out of cash by the end of October if the debt ceiling was not raised. Reflecting these concerns, yields on Treasury bills maturing between mid-October and early November rose sharply (top-left figure on the following page), some Treasury bill auctions in early October saw reduced demand, and liquidity in the T-bill market deteriorated, especially for certain securities that were seen as "at risk" of delayed payment. In addition, one- and five-year U.S. sovereign credit default swap (CDS) spreads rose notably, and the CDS curve inverted, as in 2011.[2] In the weeks leading up to the deadline, implied volatility in the equity market rose considerably, but the S&P 500 index declined only marginally and for a brief period, a notable contrast with 2011, when debt ceiling concerns were compounded in part by the escalating fiscal and financial crisis in Europe.

Conditions in secured dollar funding markets were particularly strained for a time. Overnight general collateral (GC) repo rates on Treasury and agency MBS collateral rose markedly (top-right figure on the following page), reaching highs similar to those seen in 2011, and term repo rates also moved higher. Rates implied by general collateral financing futures for October and November also rose notably. Rates on unsecured commercial paper (CP) rose sharply as well, and financial CP outstanding declined in the days immediately before the deadline. By contrast, federal funds and Eurodollar markets showed little reaction to debt ceiling concerns.

Outflows from institutional taxable money market funds (MMFs) accelerated in the two weeks leading up to the October 17 deadline, although the magnitude of these outflows, at roughly $70 billion in aggregate, was somewhat smaller than in 2011 (bottom figures on the following page).[3] Market participants noted that the sharp rise in short-dated T-bill yields likely was due in part to MMFs offloading at-risk securities, and the funds' aggregate holdings of Treasury securities declined notably in the two weeks prior to the deadline.[4] MMFs also pared back holdings of CP leading up to the deadline. Consistent with these flows, deposit balances appeared to rise sharply at custodian banks.[5]

Financial Developments

---

[1] The Treasury had been operating under a debt issuance suspension period and using extraordinary measures to avoid breaching the debt limit since May 20, 2013. Treasury Secretary Lew stated in a letter to the Congress on August 26, 2013, that the Treasury expected to exhaust extraordinary measures in the middle of October and revised the estimated date to "no later than October 17" in a follow-up letter on September 25, 2013.

[2] U.S. CDS are not very liquid, as indicated by the infrequent quotes and wide average bid–asked spreads in the market. Market participants note that U.S. CDS are often traded to hedge positions or to take macro views rather than for hedging sovereign risk.

[3] In the two weeks before the 2011 debt ceiling deadline, institutional U.S. government MMFs had net outflows of $63 billion, while institutional prime funds had $67 billion in net outflows. Over a similar period prior to the October 17, 2013, deadline, institutional government and prime funds had net outflows of $54 billion and $19 billion, respectively.

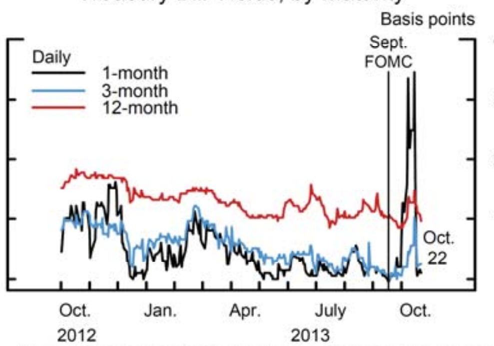
[4] As of September 30, 2013, MMFs' holdings included $156 billion in securities maturing between October 17 and November 15 and another $125 billion in securities maturing later in 2013.

[5] See note 4 in the main text of the Financial Developments section.

The debt ceiling impasse also raised some operational issues. There had been reports of market participants considering amending legal documentation in repo contracts to exclude certain at-risk securities from eligibility as collateral. Some central clearing counterparties also apparently considered whether to prohibit members from providing as collateral Treasury securities perceived to be at risk of delayed payment. Three exchanges announced other margin and haircut changes.[6] In addition, investors expressed some uncertainties about the eligibility of at-risk securities at the Federal Reserve's discount window and in open market operations.

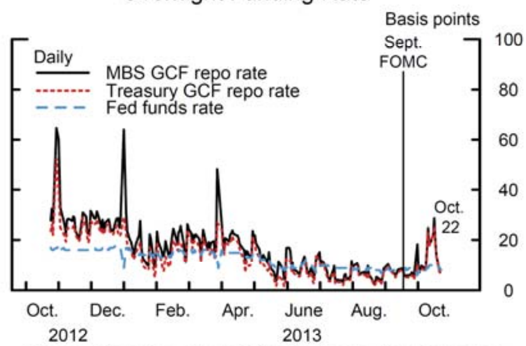
Shortly after the agreement to raise the debt ceiling was reached on October 16, strains in Treasury bill and secured funding markets eased significantly and institutional MMF assets rebounded smartly. U.S. sovereign CDS spreads also declined somewhat. Nonetheless, market participants noted the potential for financial market strains to reemerge leading up to the next debt ceiling deadline in 2014.[7]

Treasury Bill Yields, by Maturity



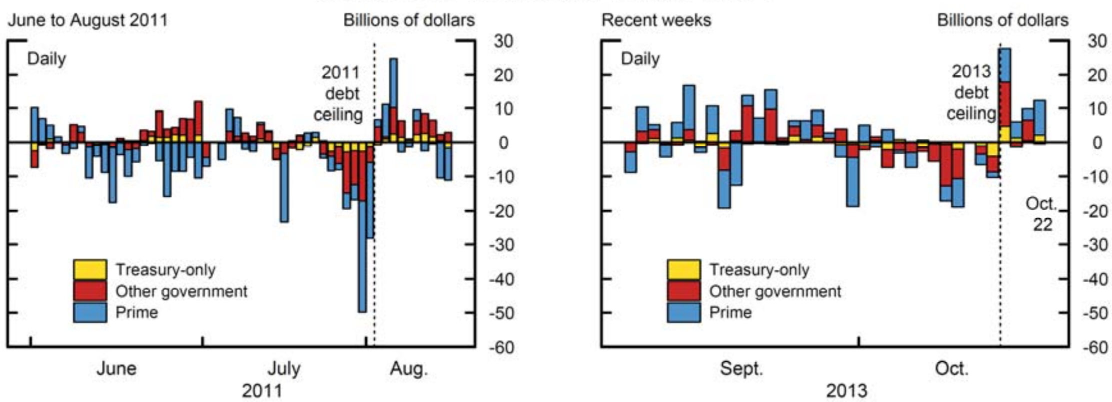
Note: Based on generic bill indexes, which track the yield on the most recently auctioned bill at each tenor.
Source: Bloomberg.

Overnight Funding Rate



Source: Depository Trust & Clearing Corporation; Bloomberg; Federal Reserve.

Net Flows to Institutional Taxable MMFs



Source: Investment Company Institute and iMoneyNet.

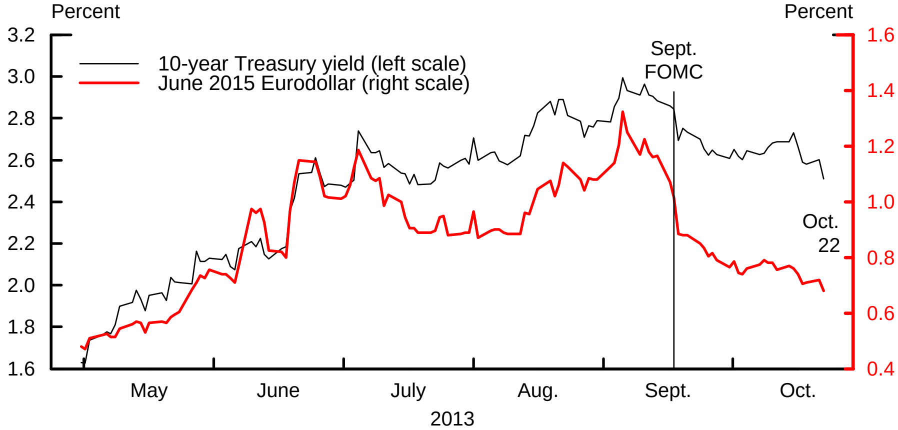
---

[6] The Hong Kong Exchange increased haircuts on U.S. Treasury bills from 1 percent to 3 percent on October 10, while the Intercontinental Exchange raised haircuts on U.S. Treasury notes and bonds on October 17. On October 15, the Chicago Mercantile Exchange announced a temporary increase in margin requirements on over-the-counter interest rate swaps.

[7] The debt ceiling was raised through early February, although the Treasury Department's use of extraordinary measures could extend the deadline considerably further.

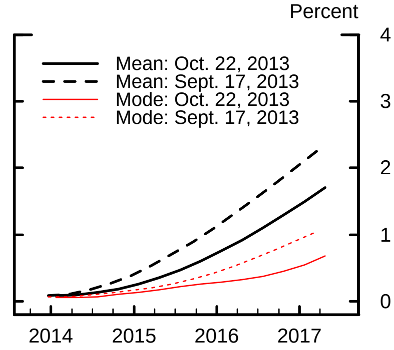
Policy Expectations and Treasury and Agency MBS Yields

Selected Interest Rates



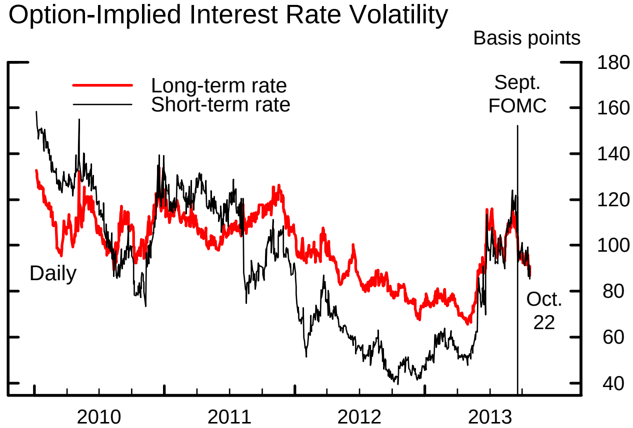
Source: Bloomberg.

Implied Federal Funds Rate



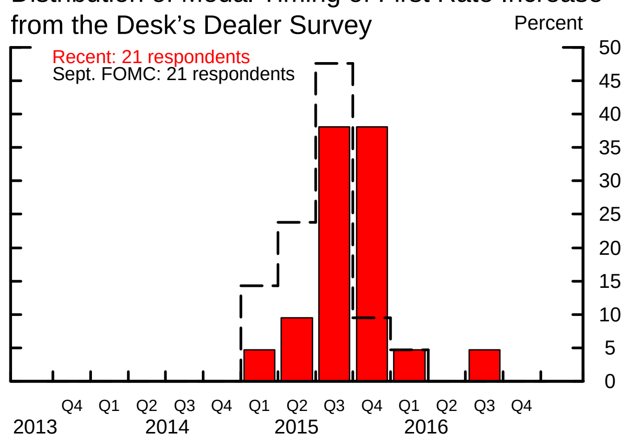
Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.
Source: Bloomberg; CME Group.

Option-Implied Interest Rate Volatility



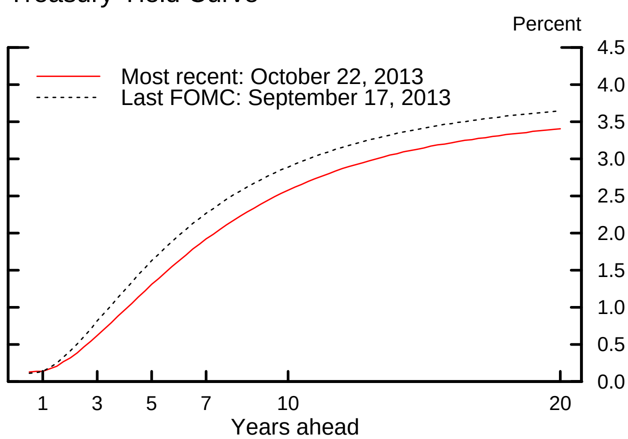
Note: Implied volatility of the long-term rate is based on options on the 10-year swap rate that expire in 6 months, while the short-term rate is based on options on the 1-year swap rate that expire in 2 years.
Source: Staff calculations from Bloomberg data.

Distribution of Modal Timing of First Rate Increase from the Desk's Dealer Survey



Source: Desk's dealer survey from October 22, 2013.

Treasury Yield Curve



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

Inflation Compensation

Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.
* Adjusted for lagged indexation of Treasury inflation-protected securities (carry effect).
Source: Barclays PLC; staff estimates.

POLICY EXPECTATIONS AND TREASURY AND AGENCY MBS YIELDS

Implied rates on money market futures contracts and Treasury yields declined sharply on the September FOMC announcement, the release of results from the Summary of Economic Projections, and the press conference, which market participants viewed as more accommodative than expected. Investors had reportedly put fairly high odds on a reduction in the pace of asset purchases at the September meeting and so were surprised by the FOMC's decision to "await more evidence that progress will be sustained before adjusting the pace of its purchases." Implied volatility on interest rate options that expire within three to six months moved markedly lower, while implied volatility on interest rate options that expire at longer horizons declined by less.

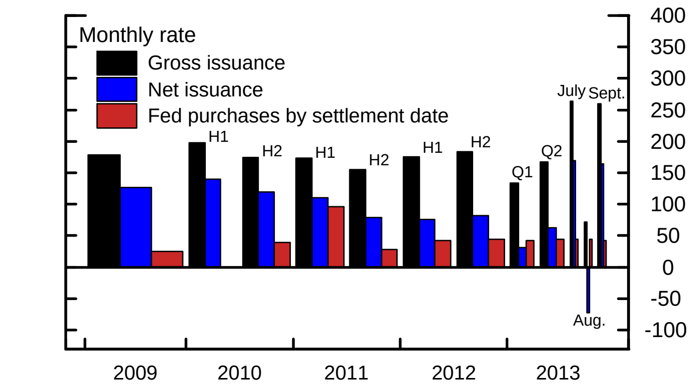
Intermediate- and longer-term interest rates subsequently fluctuated within narrow ranges amid limited and mixed domestic data releases, as investors increasingly focused on the fiscal standoff and its implications for monetary policy. Toward the end of the period, interest rates declined in response to the delayed and somewhat weaker-than-expected September employment report. Other FOMC communications during the intermeeting period, including the September FOMC minutes, were reportedly viewed as largely in line with expectations and elicited limited reactions in financial markets. Over the period as a whole, the federal funds rate path implied by overnight index swap (OIS) quotes shifted down and flattened, with the rate at the end of 2015 falling about 40 basis points.[1] This decline likely reflected, in part, lower term premiums associated with reduced intermediate-term uncertainty on the policy rate, as implied volatilities on swaptions with short-term underlying interest rates and on options on Eurodollar futures moved markedly lower. Based on an assumption of a term premium of zero basis points per month, OIS quotes suggest that investors now expect liftoff to occur around the second quarter of 2015 and the federal funds rate to rise about 20 basis points per quarter for the subsequent two years.

Consistent with the market-based quotes, median responses to the Open Market Desk's October Survey of Primary Dealers, which was closed after the release of the September employment report, indicated that dealers pushed out their projected liftoff date for the federal funds rate and revised down the subsequent path of the policy rate relative to the September survey. The fraction of dealers expecting a liftoff in the first

[1] The effective federal funds rate averaged 9 basis points over the intermeeting period, with the intraday standard deviation averaging about 5 basis points.

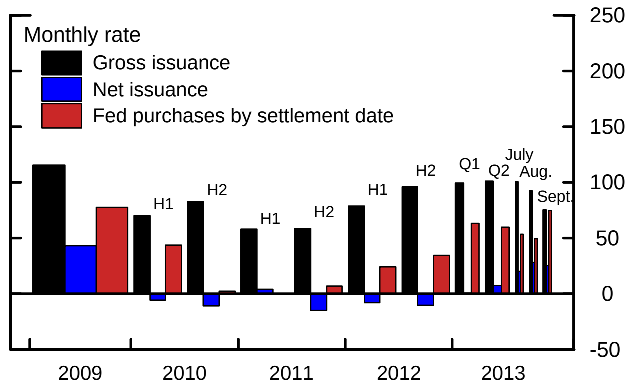
Treasury and Agency Finance and Market Functioning

Nominal Treasury Issuance and Fed Purchases



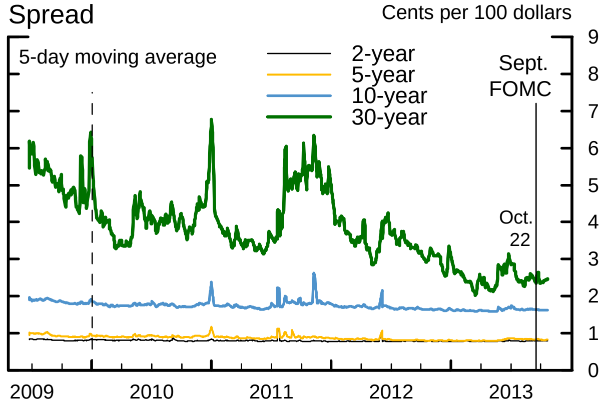
Note: Excludes bills.
Source: U.S. Department of the Treasury; Federal Reserve Bank of New York.

Agency MBS Issuance and Fed Purchases



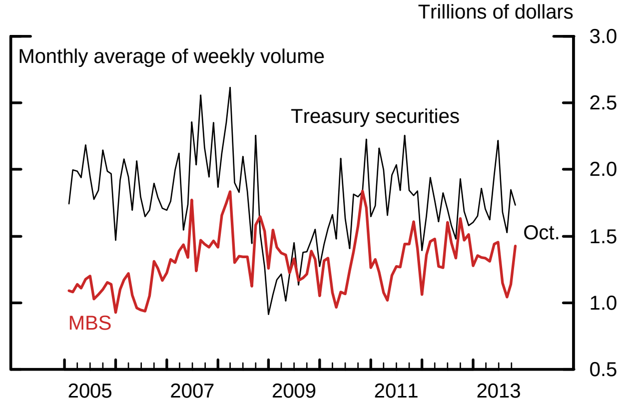
Note: Issuance and purchases of 30-year fixed-rate agency MBS.
Source: Federal Reserve Bank of New York.

Average Nominal On-the-Run Daily Bid-Asked Spread



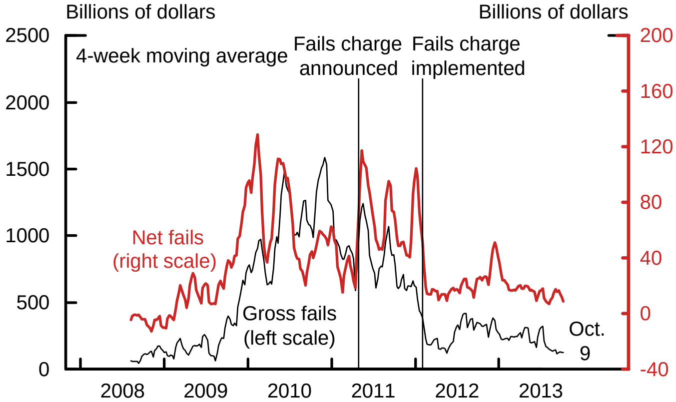
Note: Series contain breaks and are considered more reliable starting on January 1, 2010 (indicated by the dashed vertical line), and going forward.
Source: BrokerTec.

Treasury and MBS Trading Volume



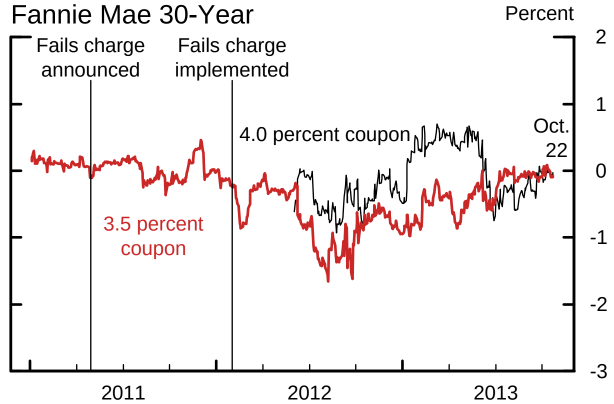
Note: Excludes bills.
Source: Federal Reserve Board, FR 2004, Government Securities Dealers Reports.

Agency MBS Fails



Note: Par value. Gross fails are the sum of fails-to-receive and fails-to-deliver, while net fails are the difference.
Source: Federal Reserve Board, FR 2004, Government Securities Dealers Reports.

Dollar-Roll-Implied Financing Rates (Front Month), Fannie Mae 30-Year



Source: J.P. Morgan.

half of 2015 declined notably, while the fraction expecting a liftoff in the fourth quarter of that year rose significantly. In addition, survey respondents pushed out the timing of the first reduction in the pace of asset purchases into 2014, consistent with results from recent surveys conducted by private-sector institutions. While dealers placed only a 10 percent probability on a reduction in the purchase pace later this year and an additional 20 percent on a reduction at the January meeting, they assigned about a 35 percent chance on the March 2014 meeting and another 30 percent chance on the meetings later next year. The total amounts of Treasury and MBS purchases during 2013 and 2014 were projected to be around $840 billion and $760 billion, respectively, $200 billion and $175 billion higher than at the time of the September survey and $125 billion and $80 billion higher than at the time of the "flash" survey conducted immediately following the September meeting.

Five-, 10-, and 30-year Treasury yields dropped about 30, 30, and 20 basis points, respectively, on net, over the intermeeting period. Decreases in forward rates were particularly pronounced at three- to five-year horizons, suggesting the largest change in expectations about the federal funds rate in that time frame.

The reduction in longer-term Treasury yields since the September FOMC meeting was reflected in other longer-term rates. Agency MBS yields declined somewhat more than the 10-year Treasury yield, while the option-adjusted spread for production-coupon MBS tightened noticeably. On net, 30-year conforming mortgage rates ended the period about 45 basis points lower at 4.0 percent. In addition, yields on Treasury inflation-protected securities (TIPS) declined about in line with their nominal counterparts, leaving TIPS-based inflation compensation little changed over the intermeeting period.

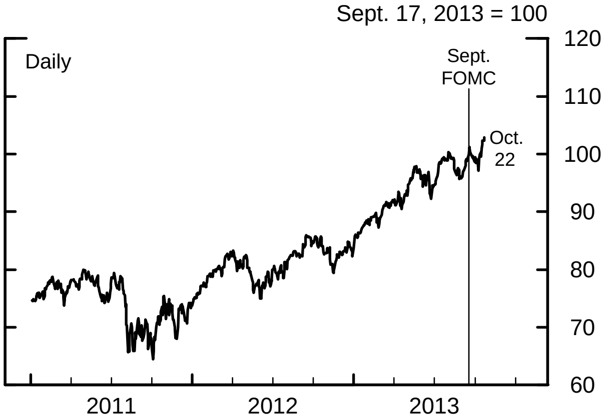
TREASURY AND AGENCY FINANCE AND MARKET FUNCTIONING

The Desk conducted outright purchases of Treasury securities and agency MBS as planned, and the operations did not appear to have material adverse effects on market functioning.[2]

[2] Over the intermeeting period, the Desk purchased $54 billion of Treasury securities under the flow-based Treasury purchase program and $67 billion of agency MBS under the flow-based MBS program and the reinvestment program.

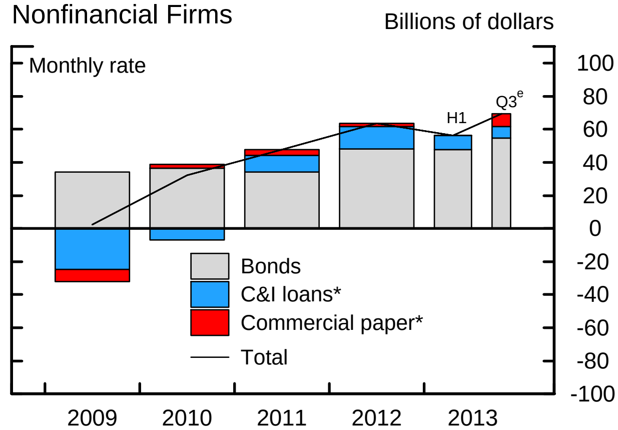
Equity Prices and Business and Municipal Finance

S&P 500 Stock Price Index



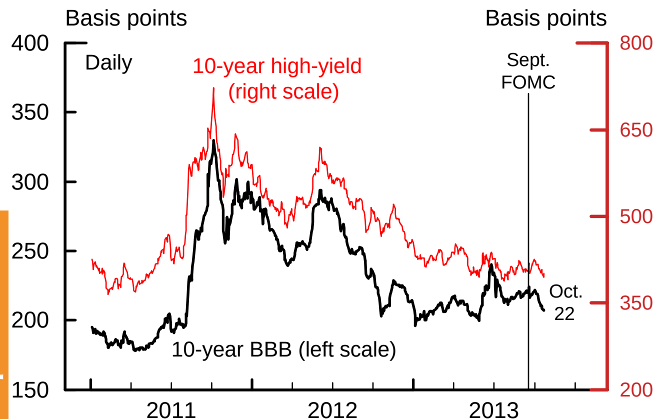
Source: Bloomberg.

Selected Components of Net Debt Financing, Nonfinancial Firms



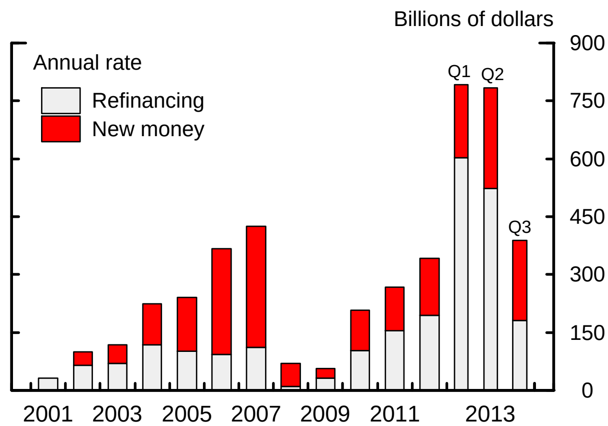
e Staff estimate of net corporate bond issuance.
* Period-end basis, seasonally adjusted.
Source: Depository Trust & Clearing Corporation; Thomson Reuters Financial; Federal Reserve Board.

Corporate Bond Spreads



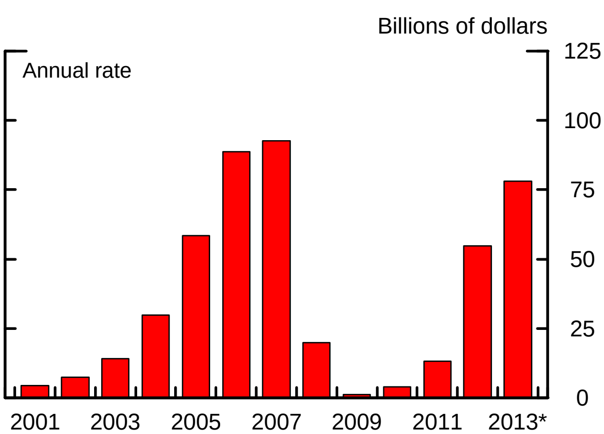
Note: Spreads over 10-year Treasury yield.
Source: Staff estimates of smoothed corporate yield curves based on Merrill Lynch data and smoothed Treasury yield curve.

Institutional Leveraged Loan Issuance



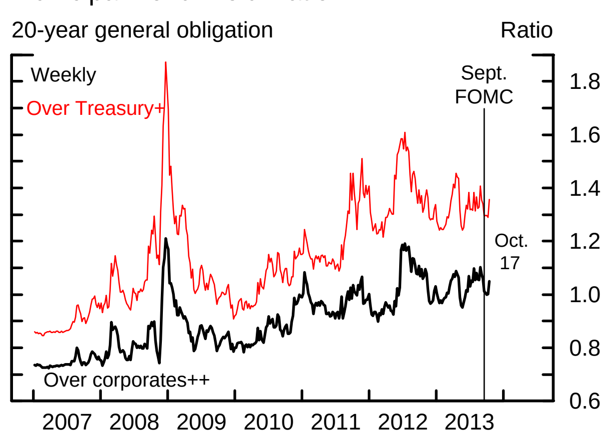
Source: Thomson Reuters LPC LoanConnector.

U.S. CLO Issuance



Note: CLO is collateralized loan obligation.
* Annualized year-to-date 2013 data.
Source: Thomson Reuters LPC LoanConnector.

Municipal Bond Yield Ratio



+ Bond Buyer GO 20-year index over 20-year Treasury.
++ Bond Buyer GO 20-year index over estimated AAA 20-year yield.
Source: Bond Buyer; Merrill Lynch.

Notwithstanding the strains in the Treasury bill market during the fiscal standoff, liquidity conditions in the Treasury coupon security market remained within historical ranges over the intermeeting period. In particular, the Desk saw no evidence of a material increase in securities considered at risk of delayed payment being offered into its securities lending or purchase operations during the fiscal standoff. Liquidity conditions in the agency MBS market improved modestly further following the deteriorations seen during the summer, although they remain below long-term averages. Dollar-roll-implied financing rates for 30-year Fannie Mae 3.5 percent and 4 percent coupon securities increased and stayed near their recent high levels, consistent with limited settlement pressures.

EQUITY PRICES AND BUSINESS AND MUNICIPAL FINANCE

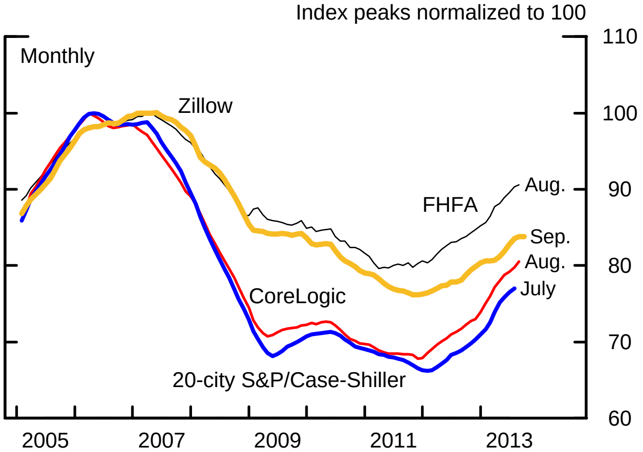
The S&P 500 index increased 2.9 percent over the period despite elevated volatility during the fiscal standoff. Share prices for nonfinancial firms have slightly outperformed the broader market, increasing 3.0 percent over the same period. Third-quarter earnings reports for nonfinancial firms have been coming in, on balance, about as expected and suggest only modest growth on a seasonally adjusted basis relative to the second quarter.

Despite a temporary slowing of business borrowing during the fiscal standoff, financial markets generally remained accommodative. Issuance of nonfinancial corporate bonds and commercial paper, which had been particularly strong in September, weakened temporarily in October amid the elevated financial market volatility. Nevertheless, financing conditions for larger firms eased somewhat over the intermeeting period, as corporate bond yields declined a little more than longer-term Treasury yields, leaving both investment- and speculative-grade corporate bond spreads moderately narrower over the period.

Smoothing through the monthly moves, our most recent data indicate that commercial and industrial (C&I) loans continued to advance, on balance, in the third quarter at about the pace posted in the previous quarter. More recently, C&I loans jumped temporarily in early October as some banks reported funding firms' precautionary draws on credit lines. In response to the October Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), a modest net fraction of banks indicated they had eased standards on C&I loans over the third quarter, and survey respondents reportedly continued to ease many of the surveyed loan terms on net.

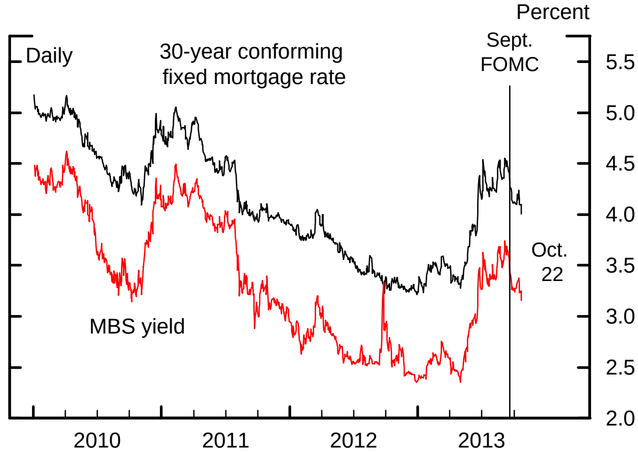
Household Finance

Prices of Existing Homes



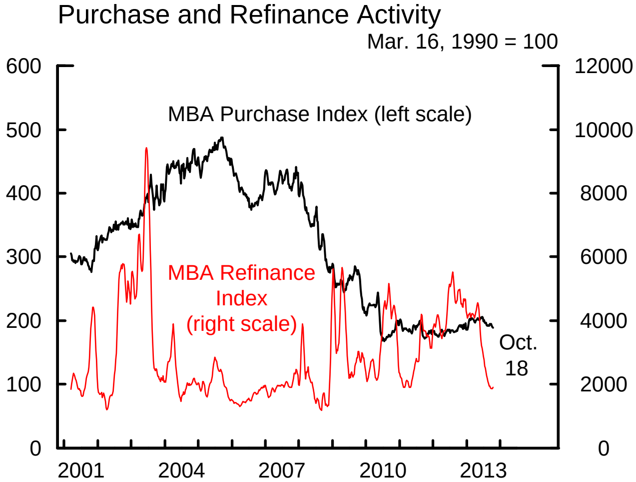
Source: For FHFA, Federal Housing Finance Agency; for CoreLogic, CoreLogic; for S&P/Case-Shiller, Standard & Poor's; for Zillow, Zillow.

Mortgage Rate and MBS Yield



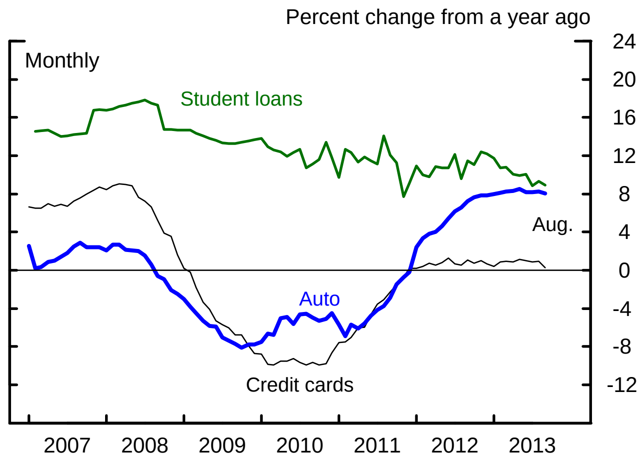
Note: The MBS yield is the Fannie Mae 30-year current-coupon rate.
Source: For MBS yield, Barclays; for mortgage rate, Loansifter.

Purchase and Refinance Activity



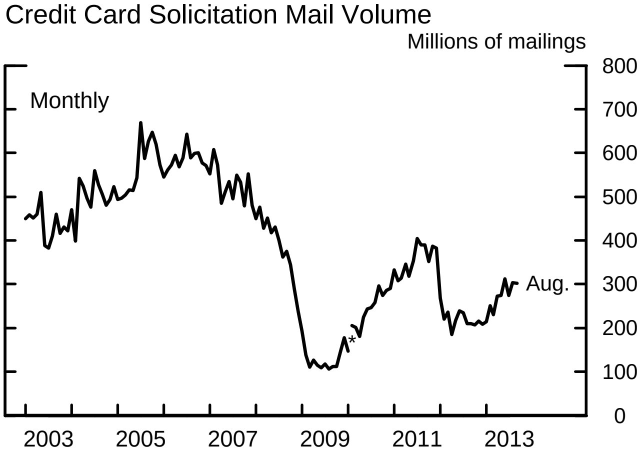
Note: The data are weekly and seasonally adjusted by FRB staff.
Source: Mortgage Bankers Association.

Consumer Credit



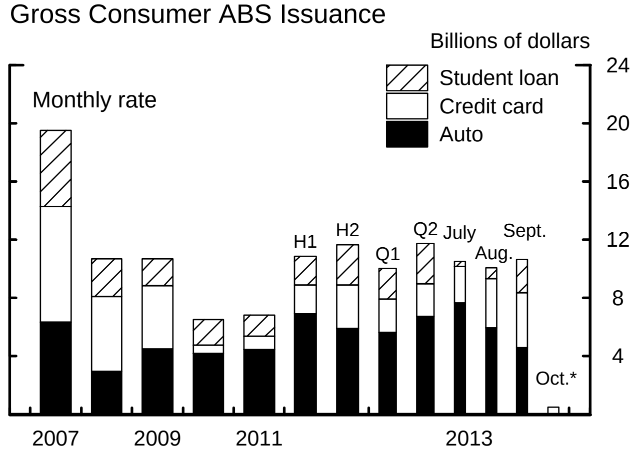
Note: The data are not seasonally adjusted.
Source: Federal Reserve Board.

Credit Card Solicitation Mail Volume



*Break in series.
Source: Mintel.

Gross Consumer ABS Issuance



*Month-to-date data as of October 18.
Source: Inside MBS & ABS; Merrill Lynch; Federal Reserve Board.

However, banks reported no significant change in demand for C&I loans. (See the memo "The October 2013 Senior Loan Officer Opinion Survey on Bank Lending Practices," which will be distributed to FOMC participants on October 24, 2013.) Leveraged loan issuance continued to be robust in September, boosted by a number of M&A and LBO transactions. In the first three quarters of the year, issuance of collateralized loan obligations reached $80 billion at an annual rate, similar to the pace seen prior to the financial crisis.

Financing conditions in commercial real estate (CRE) markets continued to improve slowly. CRE loans at banks rose moderately in September and early October, and banks again indicated in the SLOOS that they had eased standards on CRE loans over the past three months. CMBS issuance remained strong, as fundamentals in the CRE market continued to improve gradually.

Funding conditions in the municipal bond market improved on balance. Outflows from tax-exempt bond funds slowed. Issuance for new capital projects remained solid, while refunding issuance declined amid elevated financial market volatility related to the fiscal standoff. Yields on 20-year general obligation municipal bonds decreased largely in line with long-term Treasury yields, leaving the ratio between the yields of municipal bonds and Treasury securities of comparable maturities little changed on net. In contrast, the yield on general obligation bonds issued by Puerto Rico rose to a new high over the intermeeting period as investors continued to avoid those securities amid increasing concern over the territory's fiscal situation. Tax-exempt bond mutual funds are important investors in bonds issued by Puerto Rican government entities. Money market funds also own Puerto Rican debt, but most of those holdings are insured by large U.S. or global banks.

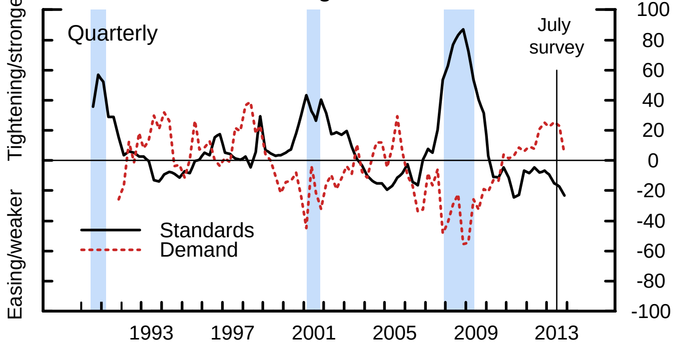
HOUSEHOLD FINANCE

Developments affecting financing for the household sector were generally favorable over the intermeeting period.[3] House prices posted further gains in August but increased at a slower pace relative to the beginning of the year. New delinquencies on

[3] The government shutdown is expected to have had little impact on mortgage originations and issuance. The effect of scaled-down FHA and Ginnie Mae operations is expected to be modest, and the GSEs temporarily extended the time allowed for income verification through the IRS to the loan delivery date.

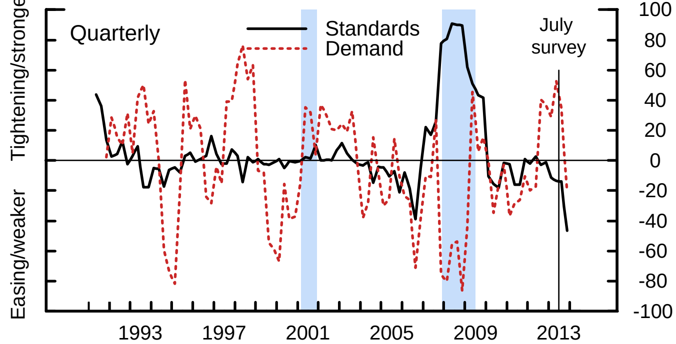
Banking Developments and Money

Change in Standards and Demand across Core Loan Categories



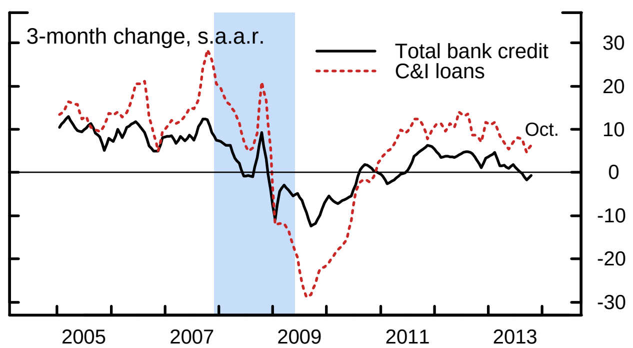
Note: A composite index that represents the net percentage of loans on respondents' balance sheets that were in categories for which banks reported tighter lending standards or stronger loan demand over the past 3 months, with results weighted by survey respondents' holdings of loans in each category.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Change in Standards and Demand across Residential Real Estate Loans



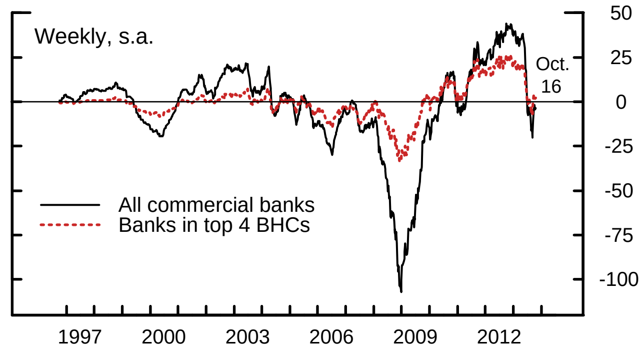
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Change in Bank Credit



Note: The data have been adjusted to remove the estimated effects of certain changes to accounting standards and nonbank structure activity of $5 billion or more. C&I is commercial and industrial loans.
Source: Federal Reserve Board.

Net Unrealized Gains on Available-for-Sale Securities at Commercial Banks



Note: The top 4 BHCs are Bank of America, Citigroup, JPMorgan Chase, and Wells Fargo.
Source: Federal Reserve Board.

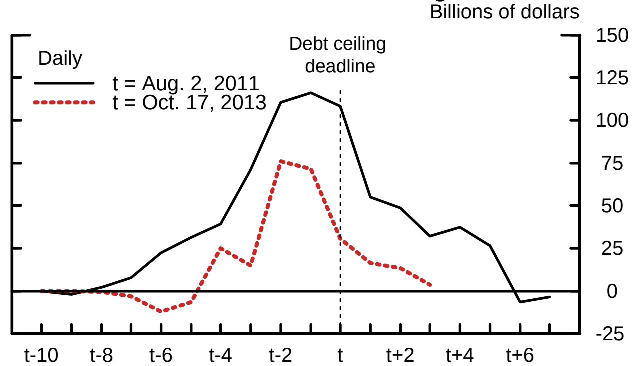
Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMFs	Curr.
2012	7.6	11.3	-16.9	-5.3	9.0
2013:H1	4.7	6.4	-14.5	.3	6.0
2013:Q3	7.4	9.2	-22.1	11.1	8.1
Sept.	5.7	6.7	-19.6	10.0	7.7

Note: Retail MMFs are retail money market funds.
Source: Federal Reserve Board.

Cumulative Change in Reserve Balances of Custodial Banks around Debt Ceiling Deadlines



Note: Data extend through October 22, 2013. The 2011 crisis period was also affected by typical month-end inflows to custodians.
Source: Federal Reserve Board.

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

mortgages stayed near historical lows, owing in part to the tight underwriting standards for new mortgages that have prevailed over the past several years. Mortgage rates declined about 45 basis points over the intermeeting period but are still about 70 basis points above their early-May lows, and the higher rates continued to weigh on mortgage refinancing applications. Purchase applications moved a bit lower, although, on a seasonally adjusted basis, they remained only about 6 percent below their levels prior to the rise in mortgage rates last spring and summer. Respondents to the SLOOS also indicated that they had experienced a much smaller decline in purchase applications than refinancing applications since the spring. Moreover, a large fraction of banks reported having eased standards on home-purchase loans to prime borrowers, on net, though comments from some banks suggest that the easing was narrowly concentrated in specific sectors.

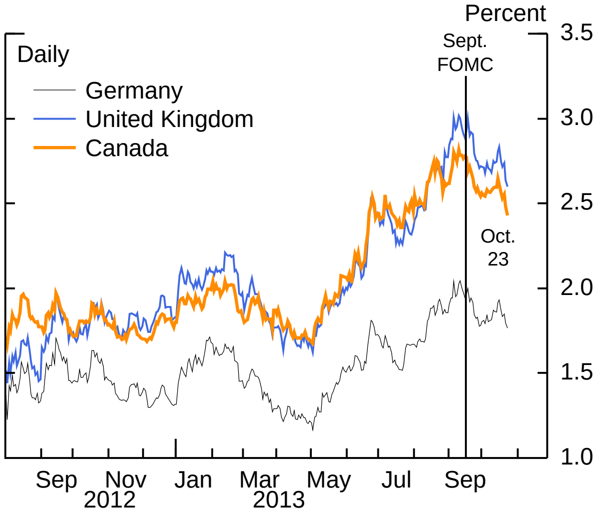
Nonmortgage credit flows were little changed in August relative to earlier in the summer. Auto loans and student loans continued to expand at a robust pace, while credit card debt stayed about flat—a pattern consistent with changes in bank credit through early October. In the October SLOOS, a moderate fraction of banks reported having eased standards on, and experienced stronger demand for, credit card and auto loans on balance. More generally, auto credit remained widely available, even for subprime loans. Credit card solicitation mail volume moved sideways at moderate levels through August, but underwriting standards for such loans reportedly remained tight compared with longer-term norms. Consumer ABS issuance stayed robust during the third quarter but slowed noticeably in early October, reflecting in part some deals being delayed amid heightened market uncertainty related to the fiscal standoff.

Banking Developments and Money

Bank credit declined slightly during the third quarter. Growth of core loans slowed, primarily because of a sizable decline in outstanding balances of closed-end residential mortgages on banks' books. The reduction in mortgage refinancing activity likely reduced the stock of loans held by banks prior to securitization. Banks' securities holdings declined sharply, likely reflecting in part sales in response to the rise in longer-term interest rates in the third quarter. Consistent with the reduction in longer-term interest rates since the September FOMC meeting, unrealized losses on securities held in banks' available-for-sale portfolios declined.

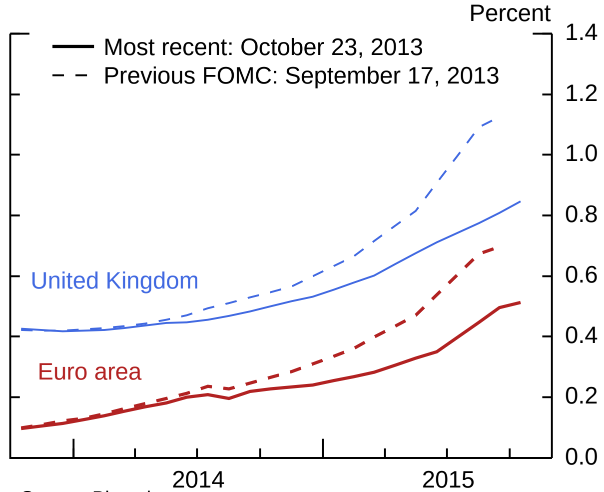
Foreign Developments

AFE 10-Year Nominal Benchmark Yields



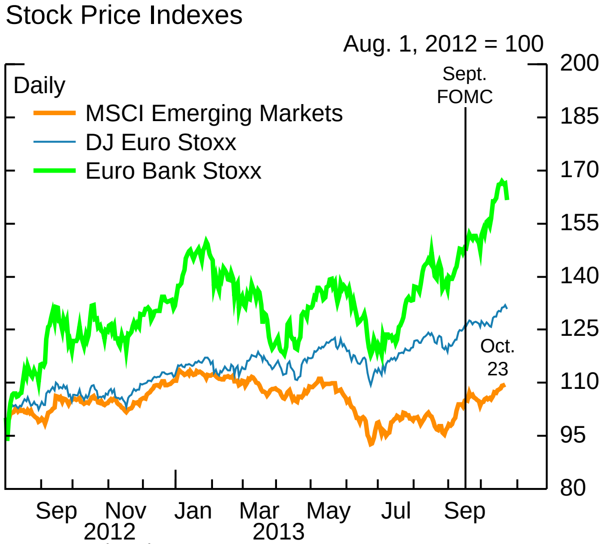
Source: Bloomberg.

Policy Expectations Based on OIS Rates



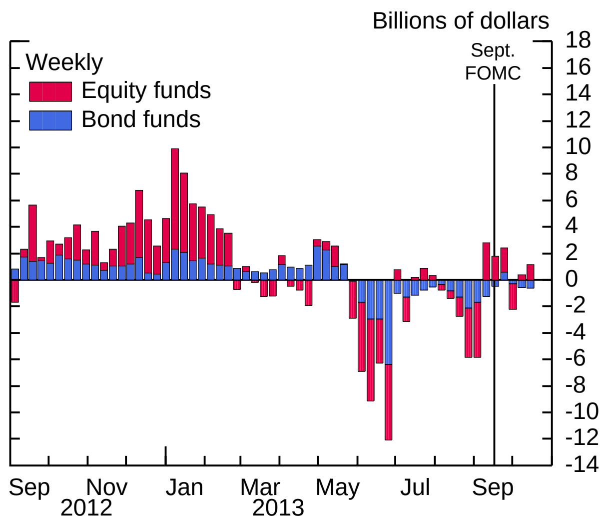
Source: Bloomberg.

Stock Price Indexes



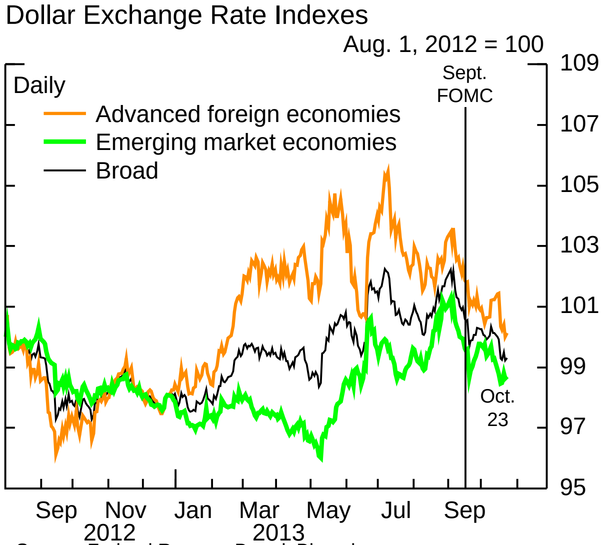
Source: Bloomberg.

Flows to Emerging Market Economies Funds



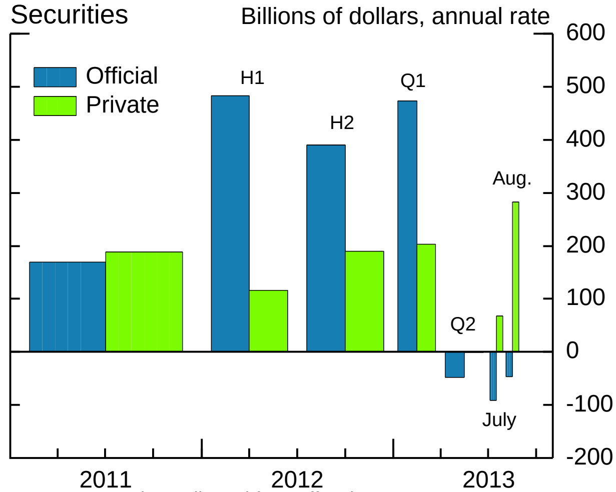
Source: Emerging Portfolio Fund Research.

Dollar Exchange Rate Indexes



Source: Federal Reserve Board; Bloomberg.

Foreign Net Purchases of U.S. Treasury Securities



Source: TIC data adjusted for staff estimates.

Third-quarter earnings reports for large banks generally met or exceeded analysts' modest expectations. Earnings were reduced by elevated litigation expenses and weak trading income. Banks also reported flat or lower net interest margins and substantially lower revenue in mortgage banking due to lower refinancing volumes, with several announcing sizable reductions in mortgage staff. However, the release of loan loss reserves due to substantial improvements in credit quality, especially for residential mortgages, continued to support bank profitability.

Preliminary data indicate that M2 growth picked up temporarily in the days leading up to the debt ceiling deadline, after growing moderately in September. Deposits appeared to increase sharply at major custodian banks as institutional investors shifted from money fund shares to bank deposits, and as money funds liquidated short-dated Treasury securities and increased their bank deposits in anticipation of possible redemptions.[4] These inflows to M2 are estimated to have quickly reversed following the October 16 settlement.

FOREIGN DEVELOPMENTS

The immediate reaction in foreign financial markets to the September FOMC announcement was substantial, with foreign stock prices rising, yields and spreads declining, and the dollar depreciating against most currencies. Although the partial shutdown of the U.S. government and heightened concerns over the debt ceiling temporarily reversed these moves, foreign markets reacted positively to the resolution of the crisis on October 16.

Like U.S. Treasury yields, 10-year benchmark yields in Germany, the United Kingdom, and Canada declined, on net, over the period, falling 20 to 30 basis points. Implied future short-term interest rates one to two years ahead also declined for those countries, suggesting that market participants scaled back somewhat their expectations for future monetary policy tightening.

Equity market indexes in the advanced foreign economies ended the period higher. Euro-area stock prices outperformed, with bank stock prices rising 10 percent,

[4] Reserve balances at major custodian banks rose sharply, which is estimated to have been the result of large deposit inflows, for which data lag. Complete data for the 2011 debt ceiling episode show that increases in deposit and reserve balances at these institutions were synchronous.

led by those in Spain and Italy. In emerging market economies, stock prices have recovered from the financial turmoil of early May and June. Mutual fund flows to emerging markets have stabilized, following large outflows earlier this year.

The dollar depreciated about 1 percent over the period, with declines against both advanced economy and emerging market currencies, as market participants pushed out their expectations for the timing of the next change in U.S. monetary policy. In addition, several EMEs continued to intervene to support their currencies, and the central banks of Brazil and India increased their benchmark policy rates.

Although demand by some EMEs for U.S. Treasury securities has been weak, particularly in those economies that have been facing depreciation pressures, recent data on custody holdings at the FRBNY suggest that foreign official investors continued to purchase Treasury securities in September and October, notwithstanding concerns about the debt ceiling.

Risks and Uncertainty

ALTERNATIVE SCENARIOS

To illustrate some of the risks to the outlook, we construct a number of alternatives to the baseline projection using simulations of staff models. The first scenario considers the possibility that the substantial decline in the unemployment rate seen over the past year is a more accurate signal of the pace of the recovery than the modest gains in real GDP, and that, going forward, GDP rises more strongly than in the baseline. In the second scenario, by contrast, the combination of steady declines in the unemployment rate and tepid GDP growth in recent years reflects greater damage to the supply side than assumed in the baseline. The third scenario articulates why several of the factors we believe have held down consumer spending growth in the past could be more persistent than we anticipate, preventing the projected acceleration in the baseline from materializing. The fourth scenario considers the risk that the softness in consumer price inflation seen earlier this year reemerges and proves to be more persistent than anticipated. The final two scenarios consider downside and upside risks to the U.S. economy from foreign economic developments—first, that financial stresses experienced by EMEs escalate substantially, and, second, that the pace of economic growth abroad could increase more rapidly than assumed in the baseline.

We generate the first four scenarios using the FRB/US model and the last two using the multicountry SIGMA model. In the FRB/US simulations, as in the baseline forecast, the federal funds rate follows an inertial version of the Taylor (1999) rule, subject to the FOMC's thresholds for the unemployment rate and projected inflation. For the SIGMA simulations, we use a broadly similar policy rule, subject to the same thresholds, but employ an alternative concept of resource utilization.[1] In all cases, we assume that the size and composition of the SOMA portfolio follow their baseline paths.

Faster Recovery

In the staff's view, recent weakness in GDP growth reflects headwinds that will continue to restrain aggregate demand. However, it is possible that measured GDP may

[1] The SIGMA policy rule uses a measure of slack equal to the difference between actual output and the model's estimate of the level of output that would occur in the absence of slow adjustment of wages and prices.

Alternative Scenarios

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

Measure and scenario	2013 H2	2014	2015	2016	2017-18
Real GDP					
Extended Tealbook baseline	2.2	3.2	3.5	3.2	2.5
Faster recovery	2.6	4.0	4.1	3.4	2.4
Supply-side damage	2.1	2.9	2.6	2.0	1.7
Consumer restraint	2.2	2.5	2.3	2.7	2.8
Low inflation	2.2	3.0	2.9	3.0	2.9
EME financial crisis	2.1	2.0	3.3	3.6	2.8
Higher global growth	2.3	3.7	3.8	3.1	2.2
Unemployment rate[1]					
Extended Tealbook baseline	7.3	6.6	5.9	5.4	5.1
Faster recovery	7.3	6.2	5.2	4.6	4.6
Supply-side damage	7.3	6.2	5.1	4.8	5.2
Consumer restraint	7.3	6.8	6.7	6.7	6.2
Low inflation	7.3	6.7	6.2	5.9	5.1
EME financial crisis	7.3	7.0	6.5	5.9	5.3
Higher global growth	7.3	6.4	5.5	5.0	4.9
Total PCE prices					
Extended Tealbook baseline	1.6	1.4	1.5	1.6	1.8
Faster recovery	1.6	1.4	1.5	1.7	1.9
Supply-side damage	1.6	1.6	1.9	2.0	2.2
Consumer restraint	1.6	1.4	1.4	1.4	1.5
Low inflation	1.3	.5	.3	.2	.3
EME financial crisis	1.3	.1	1.2	1.8	2.2
Higher global growth	1.8	2.1	2.2	1.9	1.7
Core PCE prices					
Extended Tealbook baseline	1.5	1.5	1.6	1.7	1.9
Faster recovery	1.5	1.5	1.6	1.8	2.0
Supply-side damage	1.5	1.7	2.0	2.1	2.3
Consumer restraint	1.5	1.5	1.5	1.5	1.6
Low inflation	1.2	.6	.4	.3	.4
EME financial crisis	1.5	1.1	1.3	1.7	2.1
Higher global growth	1.5	1.7	1.9	2.0	2.0
Federal funds rate[1]					
Extended Tealbook baseline	.1	.1	.9	2.0	3.4
Faster recovery	.1	.2	1.7	3.1	4.5
Supply-side damage	.1	.4	2.3	3.6	4.3
Consumer restraint	.1	.1	.1	.1	1.1
Low inflation	.1	.1	.1	.4	1.3
EME financial crisis	.1	.1	.1	1.2	3.3
Higher global growth	.1	.1	1.4	2.8	4.0

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

Risks & Uncertainty

be understating the true strength of the economy, and other indicators—such as GDI and labor market conditions—may be sending a more accurate signal. This scenario adopts a more optimistic view of aggregate demand conditions. With headwinds assumed to be easing more rapidly than in the baseline, a faster, broad-based recovery is able to gain momentum, as improvements in household wealth and consumer and business sentiment boost spending, and the increase in spending, in turn, leads to increased employment, higher incomes, and further spending gains. All told, real GDP rises at an annual pace of 4 percent in 2014 and 2015. The unemployment rate falls below the 6½ percent threshold by the fourth quarter of 2014, prompting liftoff in the federal funds rate one quarter ahead of baseline. Despite tight labor markets, inflation rises only marginally above the baseline, reaching 2 percent in 2018.

Supply-Side Damage

In this scenario, the observations of sluggish real GDP growth and a falling unemployment rate in recent years indicate not that the estimates of GDP understate the strength of the economy, as in the previous scenario, but rather that the damage to aggregate supply during the past several years is greater than is estimated in the baseline. Accordingly, we assume a slower growth of structural productivity such that potential output has expanded at an annual rate of only 1¼ percent since 2011, ½ percentage point lower than in the baseline, and continues to rise more slowly than in the baseline through 2018. As a result, the current output gap is 1½ percentage points narrower than in the baseline. Real GDP rises at a rate of 2¾ percent per year, on average, through 2015, but the unemployment rate nonetheless continues to decline at roughly the same pace as it has since late 2010—and thus more steeply than in the baseline—and it falls below 6½ percent by the third quarter of 2014.[2] With resource slack substantially narrower and productivity gains smaller than in the baseline, inflation rises to 2 percent in 2016, and the federal funds rate begins to rise from its effective lower bound in the fourth quarter of 2014, two quarters earlier than in the baseline.

Consumer Restraint

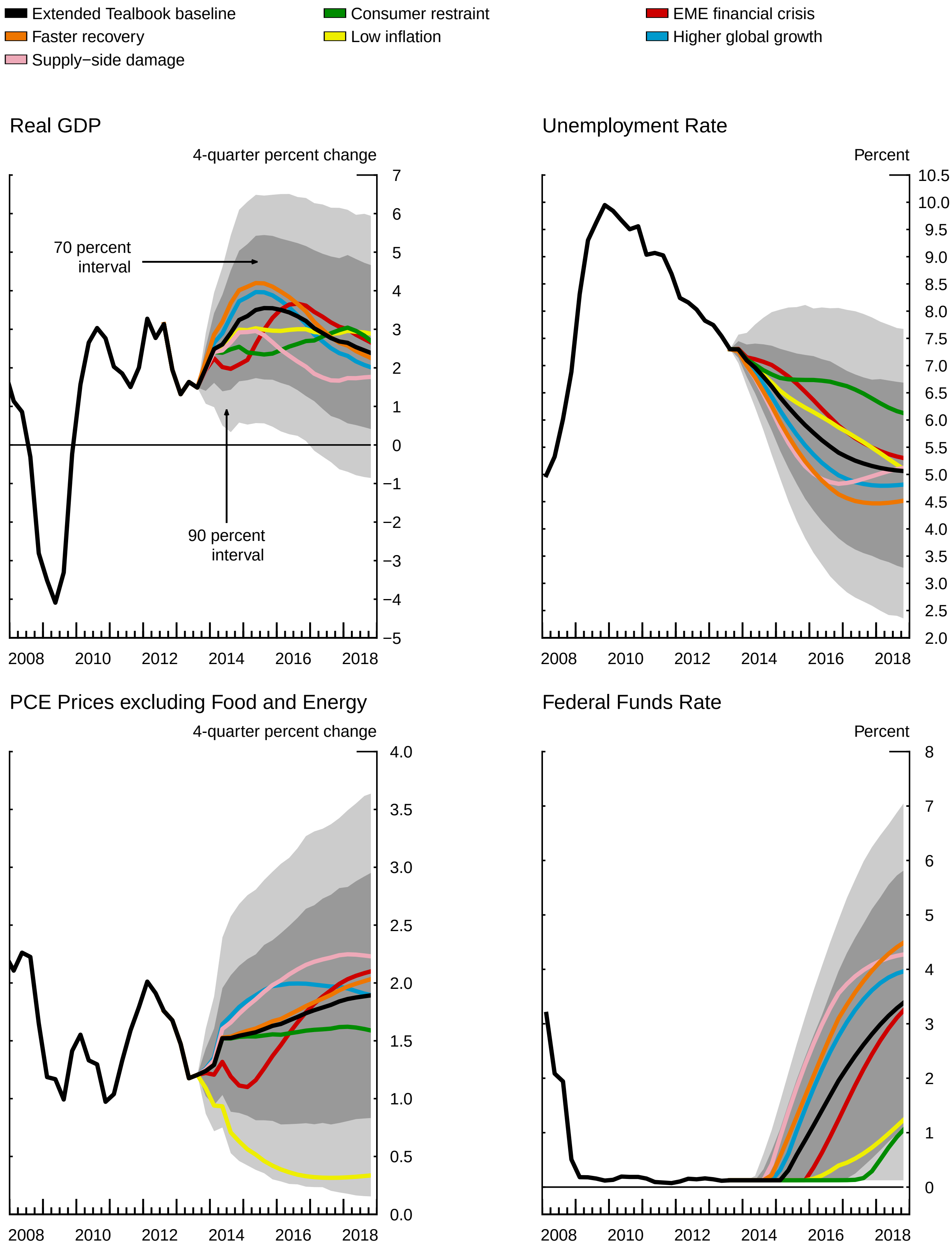
The staff projects that consumer spending will accelerate appreciably in 2014, based on a judgment that the forces restraining the growth in household expenditures are likely to begin to lift. However, for a number of reasons, the expected acceleration could

[2] Although the projection of the unemployment rate is below the baseline, living standards are lower in this scenario as a result of slower productivity growth.

Risks & Uncertainty

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations



be smaller and may not materialize at all. For example, the unexpectedly sluggish recovery to date may indicate that households have become more pessimistic in forming expectations of their permanent income, or less willing to spend out of increases in wealth. In addition, increased financial regulation and the disappearance of certain credit products may permanently reduce credit availability. In this scenario, consumer spending continues to increase at a 2 percent annual pace over the coming years, similar to the pace over the past two years. As a consequence, GDP growth remains subdued relative to the baseline, and the rate of labor market improvement slows significantly. With the unemployment rate lingering above the 6½ percent threshold until 2017, the federal funds rate remains at the effective lower bound for an additional two and a half years. The inflation rate remains almost ½ percentage point below the Committee's target at the end of the forecast horizon.

Low Inflation

In the baseline forecast, the low readings on core inflation seen earlier this year are assumed to have been largely transitory, and over the next few years as the recovery continues, inflation gradually moves back toward 2 percent. In this scenario, the recent performance of inflation proves to be a harbinger of a longer-lasting decline in actual inflation, bringing down longer-run inflation expectations and thereby leading to a mutually reinforcing downward dynamic. Inflation is below 1 percent next year and edges down further thereafter, falling close to zero. In this environment, investors become increasingly concerned that the economy is mired in a weak state with price behavior verging on deflation and monetary policy remaining constrained by the effective lower bound for the federal funds rate. As a result, risk premiums rise and put upward pressure on real long-term interest rates, modestly restraining household and business spending and boosting unemployment relative to the baseline over the next few years. The unemployment rate falls below its 6½ percent threshold in the second quarter of 2015, but because inflation is so low, the policy rule does not prescribe the first increase in the federal funds rate until mid-2016. While the unemployment rate is nearing its natural rate by that time, the persistent downward shift in inflation expectations means that inflation remains well below the FOMC's long-run objective. As a consequence, the pace of rate tightening after liftoff is substantially below that in the baseline.

Financial Crisis in the Emerging Market Economies

Financial market stresses in the EMEs eased over the intermeeting period and are expected to diminish gradually over the forecast period. However, with investors focused

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

Measure	2013	2014	2015	2016	2017	2018
Real GDP						
(percent change, Q4 to Q4)						
Projection	2.0	3.2	3.5	3.2	2.7	2.4
Confidence interval						
Tealbook forecast errors	1.5–2.5	1.5–5.0	1.5–5.5	. . .	. . .	. . .
FRB/US stochastic simulations	1.4–2.5	1.7–5.0	1.7–5.4	1.3–5.2	.7–4.8	.4–4.6
Civilian unemployment rate						
(percent, Q4)						
Projection	7.3	6.6	5.9	5.4	5.2	5.1
Confidence interval						
Tealbook forecast errors	7.2–7.4	5.9–7.3	4.9–6.9	. . .	. . .	. . .
FRB/US stochastic simulations	7.1–7.4	5.8–7.4	4.6–7.2	3.8–7.0	3.5–6.7	3.3–6.7
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	1.0	1.4	1.5	1.6	1.8	1.9
Confidence interval						
Tealbook forecast errors	.8–1.2	.1–2.6	.2–2.7	. . .	. . .	. . .
FRB/US stochastic simulations	.7–1.4	.5–2.3	.4–2.5	.4–2.7	.6–2.9	.7–3.1
PCE prices excluding food and energy						
(percent change, Q4 to Q4)						
Projection	1.2	1.5	1.6	1.7	1.8	1.9
Confidence interval						
Tealbook forecast errors	1.0–1.5	.9–2.2	.8–2.4	. . .	. . .	. . .
FRB/US stochastic simulations	1.0–1.4	.9–2.1	.8–2.4	.8–2.6	.8–2.8	.8–3.0
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.9	2.0	2.8	3.4
Confidence interval						
FRB/US stochastic simulations	.1–.1	.1–.7	.1–2.4	.1–4.0	.5–5.1	1.1–5.8

Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2012 set of model equation residuals.

Intervals derived from Tealbook forecast errors are based on projections made from 1979 to 2012, except for PCE prices excluding food and energy, where the sample is 1981–2012.

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

on both EME vulnerabilities and the prospective effects of policy normalization in advanced economies, the risk of a substantial ratcheting up in financial stress in EMEs remains significant. In this scenario, we consider the effects of a financial crisis in one or more of the most vulnerable of these economies, which then spills over to the EMEs more broadly. Sovereign and private borrowing costs in these countries soar, and the confidence of their households and businesses weakens significantly. These events cause EME currencies to depreciate almost 7 percent, on average, against the dollar relative to the baseline, even though EME central banks are assumed to raise policy rates to attenuate capital outflows. All told, real GDP in the EMEs declines 4½ percent relative to the baseline by early 2015. The financial stress in the EMEs is assumed to have some financial spillovers to the rest of the world, including the United States: Corporate bond spreads rise and equity prices decline relative to the baseline, while flight-to-safety flows push down term premiums on government bond yields. In addition, weaker foreign economic activity and the stronger exchange value of the dollar depress U.S. net exports. As a result, U.S. real GDP growth is only 2 percent in 2014, and the unemployment rate stays above 7 percent until the end of 2014 before beginning to gradually decline. With substantially greater resource slack and lower import prices, core U.S. PCE inflation dips to around 1 percent in 2014. Under these conditions, the federal funds rate remains at its effective lower bound through the end of 2015.

Higher Global Growth

The headwinds facing many of our foreign trading partners—including financial stresses in the EMEs and credit constraints in Europe—may ease more rapidly than envisioned in our baseline, spurring a faster recovery abroad. In this scenario, foreign output expands at an annual pace about 1 percentage point above the baseline through the end of 2015 as improvements in financial conditions and sentiment lead to higher business and household spending. Moreover, the broad real dollar depreciates about 5 percent relative to the baseline as confidence in foreign economies improves and monetary policy abroad tightens. The stronger foreign activity and the weaker dollar cause U.S. real net exports to rise relative to the baseline. As a result, U.S. real GDP rises at a 3¾ percent annual rate in 2014 and 2015, and the unemployment rate falls below 6½ percent by the end of 2014. Higher import prices and stronger activity boost core PCE inflation to close to 2 percent in 2015. The federal funds rate lifts off from its effective lower bound in the first quarter of 2015, one quarter sooner than in the baseline, and rises more quickly thereafter.

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

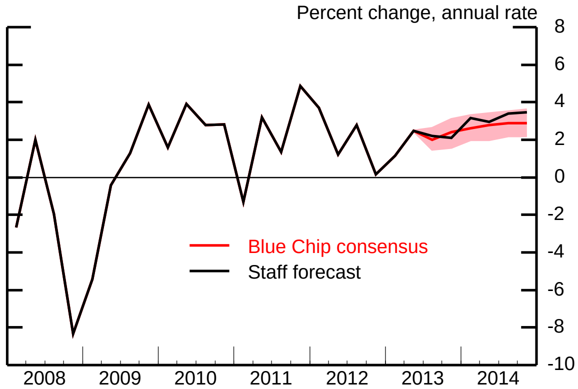
Measure and projection	2013		2014		2015	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP						
Staff	2.3	2.0	3.1	3.2	3.4	3.5
FRB/US	1.7	1.5	1.8	2.2	2.3	2.6
EDO	2.2	2.1	3.0	3.1	3.0	3.0
Blue Chip	2.1	2.0	2.8	2.8	...	...
Unemployment rate[1]						
Staff	7.2	7.3	6.6	6.6	5.8	5.9
FRB/US	7.4	7.4	7.9	7.4	7.9	7.1
EDO	7.5	7.4	7.3	7.2	7.1	7.0
Blue Chip	7.3	7.3	6.8	6.8	...	...
Total PCE prices						
Staff	1.1	1.0	1.2	1.4	1.4	1.5
FRB/US	1.0	.9	.8	.9	.8	1.0
EDO	1.1	1.1	1.4	1.3	1.5	1.5
Blue Chip[2]	1.5	1.4	2.0	2.0	...	...
Core PCE prices						
Staff	1.2	1.2	1.5	1.5	1.6	1.6
FRB/US	1.2	1.2	1.1	1.1	1.0	1.1
EDO	1.2	1.2	1.4	1.3	1.5	1.5
Blue Chip	...	...	...	...	...	...
Federal funds rate[1]						
Staff	.1	.1	.1	.1	.8	.9
FRB/US	.1	.1	.1	.1	.1	.1
EDO	.4	.4	1.4	1.4	2.1	2.1
Blue Chip[3]	.1	.1	.2	.2	...	...

Note: Blue Chip forecast completed on October 10, 2013.
1. Percent, average for Q4.
2. Consumer price index.
3. Treasury bill rate.
... Not applicable. The Blue Chip forecast typically extends about 2 years.

Risks & Uncertainty

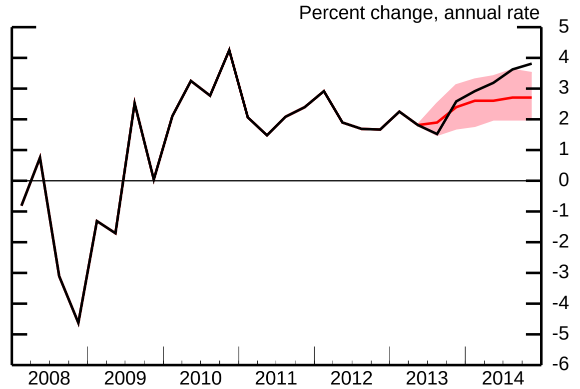
Tealbook Forecast Compared with Blue Chip
(Blue Chip survey released October 10, 2013)

Real GDP

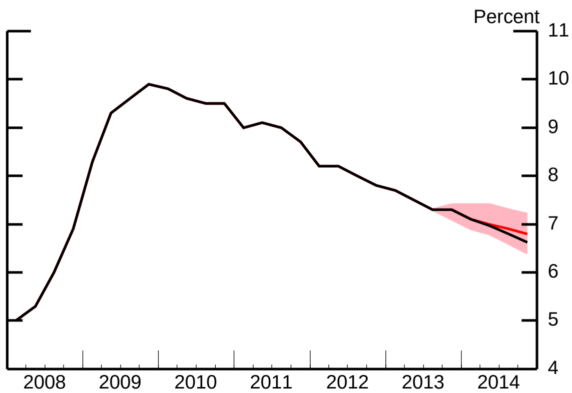


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

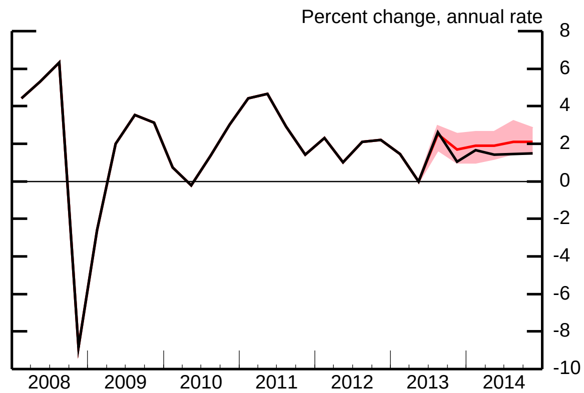
Real PCE



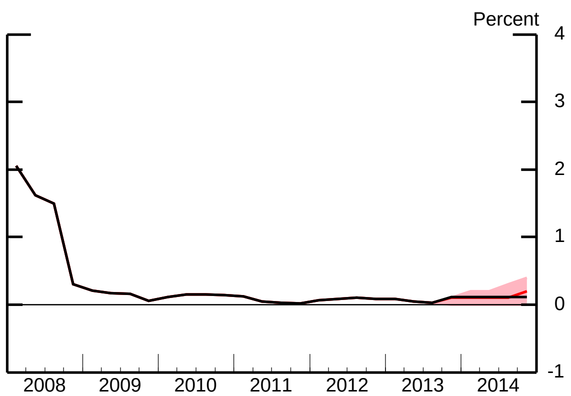
Unemployment Rate



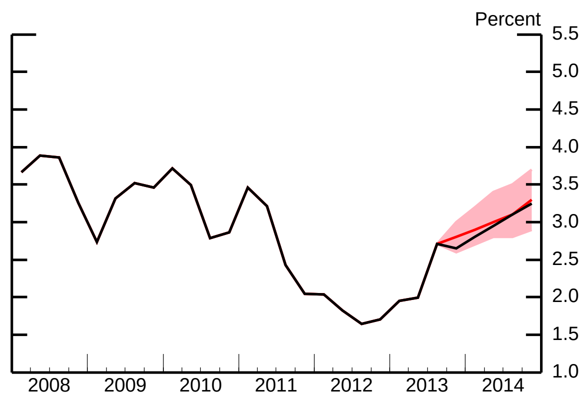
Consumer Price Index



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.

Risks & Uncertainty

Assessment of Key Macroeconomic Risks (1)

Probability of Inflation Events
(4 quarters ahead—2014:Q3)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
Greater than 3 percent				
Current Tealbook	.03	.01	.06	.05
Previous Tealbook	.02	.01	.06	.04
Less than 1 percent				
Current Tealbook	.34	.53	.36	.20
Previous Tealbook	.39	.56	.37	.21

Probability of Unemployment Events
(4 quarters ahead—2014:Q3)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
Increase by 1 percentage point				
Current Tealbook	.01	.08	.19	.02
Previous Tealbook	.01	.15	.19	.02
Decrease by 1 percentage point				
Current Tealbook	.21	.03	.21	.19
Previous Tealbook	.25	.01	.21	.16

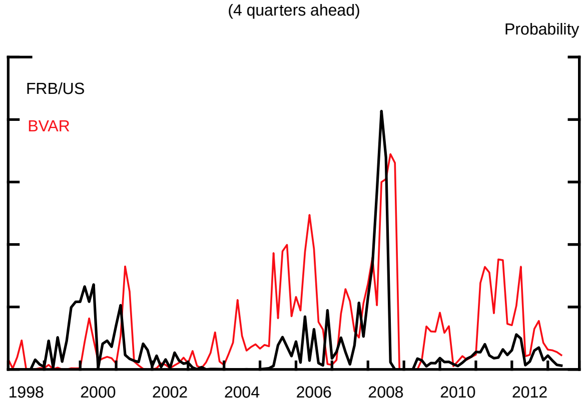
Probability of Near-Term Recession

Probability that real GDP declines in each of 2013:Q4 and 2014:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.02	.05	.05	.06	.09
Previous Tealbook	.02	.08	.04	.05	.09

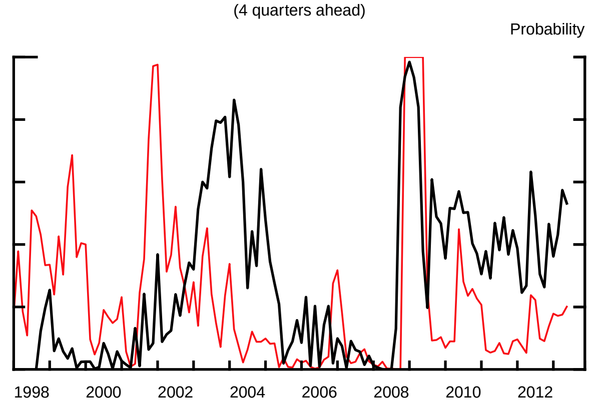
Note: "Staff" represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. Data for the current quarter are taken from the staff estimate for the second Tealbook in each quarter; if the second Tealbook for the current quarter has not yet been published, the preceding quarter is taken as the latest historical observation.

Assessment of Key Macroeconomic Risks (2)

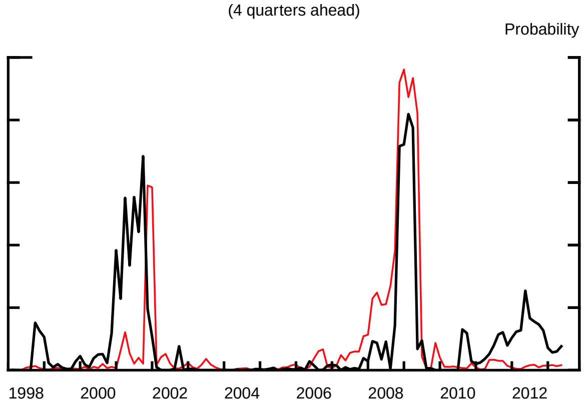
Probability that Total PCE Inflation Is above 3 Percent
(4 quarters ahead)



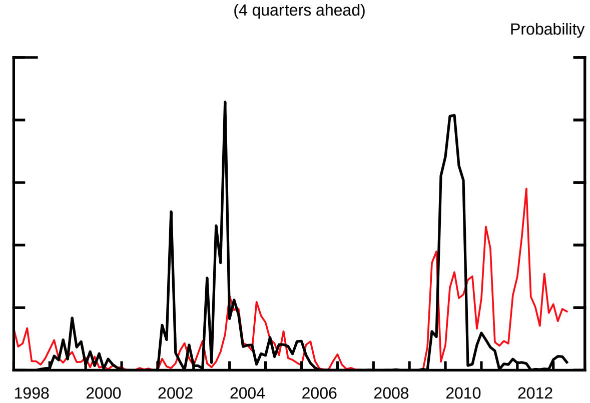
Probability that Total PCE Inflation Is below 1 Percent
(4 quarters ahead)



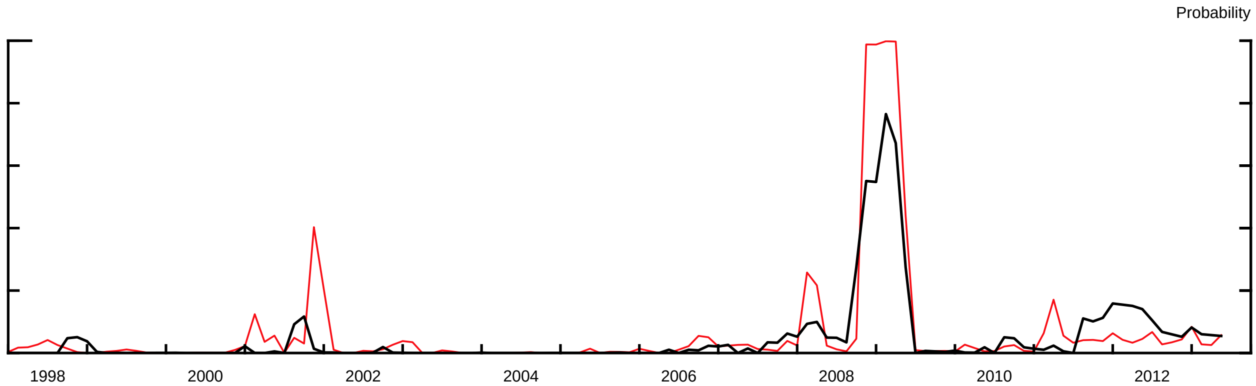
Probability that the Unemployment Rate Increases 1 ppt
(4 quarters ahead)



Probability that the Unemployment Rate Decreases 1 ppt
(4 quarters ahead)



Probability that Real GDP Declines in Each of the Next Two Quarters



Note: See notes on facing page. Recession and inflation probabilities for FRB/US and the BVAR are real-time estimates. See Robert J. Tetlow and Brian Ironside (2007), "Real−Time Model Uncertainty in the United States: The Fed, 1996−2003," *Journal of Money and Banking*, vol. 39 (October), pp. 1533−61.

(This page is intentionally blank.)

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]	
	09/11/13	10/23/13	09/11/13	10/23/13	09/11/13	10/23/13	09/11/13	10/23/13	09/11/13	10/23/13
Quarterly										
2013:Q1	2.8	2.8	1.1	1.1	1.1	1.1	1.4	1.4	7.7	7.7
Q2	3.7	3.1	2.9	2.5	.0	-.1	.8	.6	7.5	7.5
Q3	4.2	4.2	2.2	2.2	1.9	2.0	1.5	1.5	7.3	7.3
Q4	4.1	3.3	2.7	2.1	1.3	1.1	1.3	1.4	7.2	7.3
2014:Q1	4.2	4.4	2.7	3.2	1.0	1.5	1.5	1.6	7.0	7.1
Q2	4.5	4.5	3.0	3.0	1.2	1.3	1.5	1.6	6.9	7.0
Q3	4.8	4.9	3.4	3.4	1.3	1.3	1.5	1.5	6.7	6.8
Q4	4.8	5.0	3.3	3.5	1.3	1.3	1.5	1.5	6.6	6.6
2015:Q1	5.0	5.4	3.4	3.6	1.4	1.4	1.6	1.6	6.4	6.4
Q2	5.1	5.2	3.5	3.6	1.4	1.4	1.6	1.6	6.2	6.2
Q3	5.2	5.3	3.5	3.6	1.4	1.5	1.6	1.6	6.0	6.1
Q4	5.0	5.1	3.4	3.4	1.5	1.5	1.6	1.6	5.8	5.9
Two-quarter[2]										
2013:Q2	3.3	3.0	2.0	1.8	.6	.5	1.1	1.0	-.3	-.3
Q4	4.1	3.8	2.5	2.2	1.6	1.6	1.4	1.5	-.3	-.2
2014:Q2	4.3	4.4	2.9	3.1	1.1	1.4	1.5	1.6	-.3	-.3
Q4	4.8	4.9	3.4	3.4	1.3	1.3	1.5	1.5	-.3	-.4
2015:Q2	5.1	5.3	3.4	3.6	1.4	1.4	1.6	1.6	-.4	-.4
Q4	5.1	5.2	3.4	3.5	1.5	1.5	1.6	1.6	-.4	-.3
Four-quarter[3]										
2012:Q4	3.8	3.8	2.0	2.0	1.7	1.7	1.7	1.7	-.9	-.9
2013:Q4	3.7	3.4	2.3	2.0	1.1	1.0	1.2	1.2	-.6	-.5
2014:Q4	4.6	4.7	3.1	3.2	1.2	1.4	1.5	1.5	-.6	-.7
2015:Q4	5.1	5.2	3.4	3.5	1.4	1.5	1.6	1.6	-.8	-.7
2016:Q4	5.0	5.0	3.2	3.2	1.6	1.6	1.7	1.7	-.5	-.5
Annual										
2012	4.6	4.6	2.8	2.8	1.8	1.8	1.8	1.8	8.1	8.1
2013	3.3	3.1	1.7	1.6	1.2	1.1	1.3	1.3	7.4	7.5
2014	4.3	4.2	2.9	2.8	1.2	1.3	1.4	1.5	6.8	6.9
2015	5.0	5.1	3.4	3.5	1.4	1.4	1.6	1.6	6.1	6.2
2016	5.0	5.1	3.4	3.4	1.5	1.5	1.7	1.7	5.5	5.6

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	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2013[1]	2014[1]	2015[1]	2016[1]
Real GDP	2.5	2.2	2.1	3.2	3.0	3.4	3.5	3.6	3.6	3.6	3.4	2.0	3.2	3.5	3.2
Previous Tealbook	2.9	2.2	2.7	2.7	3.0	3.4	3.3	3.4	3.5	3.5	3.4	2.3	3.1	3.4	3.2
Final sales	2.1	1.4	2.2	2.9	3.0	3.6	3.7	3.8	3.7	3.8	3.6	1.5	3.3	3.7	3.3
Previous Tealbook	2.4	1.9	2.5	2.5	3.0	3.4	3.5	3.6	3.5	3.8	3.7	1.7	3.1	3.6	3.5
Priv. dom. final purch.	2.6	2.1	3.0	3.5	4.0	4.5	4.6	4.6	4.6	4.4	4.2	2.3	4.2	4.5	3.5
Previous Tealbook	2.9	2.3	3.7	3.7	4.2	4.5	4.5	4.5	4.5	4.5	4.4	2.6	4.2	4.4	3.6
Personal cons. expend.	1.8	1.5	2.6	2.9	3.2	3.6	3.8	3.8	3.8	3.8	3.6	2.0	3.4	3.8	3.1
Previous Tealbook	2.1	2.0	3.1	3.3	3.5	3.8	3.8	3.8	3.8	3.8	3.7	2.4	3.6	3.8	3.1
Durables	6.2	6.7	8.1	9.3	9.4	9.8	10.2	9.1	8.7	8.6	8.3	6.7	9.7	8.7	6.3
Nondurables	1.6	2.6	2.2	2.1	2.4	2.8	2.9	3.0	3.1	3.0	2.9	2.3	2.5	3.0	2.5
Services	1.2	.3	1.8	2.2	2.4	2.9	3.1	3.2	3.2	3.2	3.1	1.2	2.6	3.2	2.7
Residential investment	14.2	7.8	11.0	15.9	17.7	18.3	18.3	16.8	14.9	13.5	11.2	11.4	17.5	14.1	5.8
Previous Tealbook	14.1	2.6	12.0	14.7	16.3	16.3	15.9	15.9	15.3	14.6	13.4	10.2	15.8	14.8	8.9
Nonres. priv. fixed invest.	4.7	4.0	3.6	3.8	5.0	5.4	5.4	5.3	5.6	5.4	5.2	1.8	4.9	5.4	4.9
Previous Tealbook	4.4	3.7	5.1	3.2	4.9	5.6	5.3	5.1	5.2	5.2	5.3	2.1	4.7	5.2	5.0
Equipment & intangibles	1.3	2.4	3.5	4.5	5.3	6.3	6.4	6.0	6.4	6.2	5.9	2.4	5.6	6.1	5.5
Previous Tealbook	.9	3.6	5.2	3.6	5.3	6.4	6.0	5.8	5.9	6.0	6.1	3.0	5.3	5.9	5.7
Nonres. structures	17.6	9.6	3.9	1.6	4.0	2.1	2.3	2.8	3.0	2.9	2.9	-.1	2.5	2.9	2.6
Previous Tealbook	18.1	4.2	5.0	1.8	3.5	2.7	2.8	2.9	2.7	2.6	2.5	-1.0	2.7	2.7	2.5
Net exports[2]	-424	-425	-410	-410	-408	-402	-399	-395	-397	-392	-389	-420	-405	-394	-372
Previous Tealbook[2]	-420	-406	-408	-416	-421	-426	-425	-425	-433	-428	-426	-414	-422	-428	-409
Exports	8.0	5.2	3.3	4.7	4.4	5.5	6.0	6.3	6.5	6.7	6.4	3.7	5.1	6.5	6.9
Imports	6.9	4.3	.3	3.9	3.3	3.7	4.4	4.7	5.8	4.9	4.9	3.0	3.8	5.1	4.7
Gov't. cons. & invest.	-.4	-1.7	-4.2	-.6	-2.1	-1.8	-1.5	-1.0	-.8	-.8	-.4	-2.6	-1.5	-.8	.9
Previous Tealbook	-.4	-2.5	-2.7	-2.3	-2.1	-1.8	-1.5	-.9	-.8	-.7	-.5	-2.5	-1.9	-.7	1.0
Federal	-1.6	-6.2	-10.9	-1.9	-5.7	-5.1	-4.6	-4.2	-3.9	-3.9	-3.1	-6.8	-4.3	-3.8	.0
Defense	-.6	-7.0	-9.5	-5.4	-6.3	-5.7	-5.3	-4.9	-4.2	-3.9	-3.3	-7.2	-5.6	-4.1	-.1
Nondefense	-3.1	-5.0	-13.1	4.0	-4.6	-4.2	-3.6	-3.2	-3.4	-3.9	-2.7	-6.3	-2.2	-3.3	.1
State & local	.4	1.4	.4	.3	.3	.3	.4	1.0	1.1	1.1	1.1	.2	.3	1.1	1.5
Change in priv. inventories[2]	57	82	81	94	93	87	78	77	74	68	63	65	88	70	59
Previous Tealbook[2]	58	75	81	95	97	97	91	90	91	81	69	64	95	83	51
Nonfarm[2]	33	64	62	79	80	74	65	74	72	66	60	45	75	68	57
Farm[2]	19	19	19	15	13	13	13	2	2	2	2	18	13	2	2

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
2. Billions of chained (2009) 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	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Real GDP	1.9	-2.8	-.2	2.8	2.0	2.0	2.0	3.2	3.5	3.2
Previous Tealbook	1.9	-2.8	-.2	2.8	2.0	2.0	2.3	3.1	3.4	3.2
Final sales	2.0	-2.2	-.4	2.0	1.8	2.5	1.5	3.3	3.7	3.3
Previous Tealbook	2.0	-2.2	-.4	2.0	1.8	2.5	1.7	3.1	3.6	3.5
Priv. dom. final purch.	.8	-4.1	-2.3	3.5	3.0	2.9	2.3	4.2	4.5	3.5
Previous Tealbook	.8	-4.1	-2.3	3.5	3.0	2.9	2.6	4.2	4.4	3.6
Personal cons. expend.	1.5	-2.0	-.1	3.1	2.0	2.0	2.0	3.4	3.8	3.1
Previous Tealbook	1.5	-2.0	-.1	3.1	2.0	2.0	2.4	3.6	3.8	3.1
Durables	4.1	-12.9	2.5	9.3	5.7	7.8	6.7	9.7	8.7	6.3
Nondurables	.1	-2.7	.2	3.3	.7	1.6	2.3	2.5	3.0	2.5
Services	1.5	.2	-.6	2.1	1.9	1.3	1.2	2.6	3.2	2.7
Residential investment	-21.3	-24.3	-10.8	-5.2	5.6	15.5	11.4	17.5	14.1	5.8
Previous Tealbook	-21.3	-24.3	-10.8	-5.2	5.6	15.5	10.2	15.8	14.8	8.9
Nonres. priv. fixed invest.	7.1	-8.9	-12.2	8.1	8.6	5.0	1.8	4.9	5.4	4.9
Previous Tealbook	7.1	-8.9	-12.2	8.1	8.6	5.0	2.1	4.7	5.2	5.0
Equipment & intangibles	3.9	-11.8	-6.0	12.0	8.7	3.9	2.4	5.6	6.1	5.5
Previous Tealbook	3.9	-11.8	-6.0	12.0	8.7	3.9	3.0	5.3	5.9	5.7
Nonres. structures	17.1	-1.2	-27.1	-4.0	8.3	9.3	-.1	2.5	2.9	2.6
Previous Tealbook	17.1	-1.2	-27.1	-4.0	8.3	9.3	-1.0	2.7	2.7	2.5
Net exports[1]	-704	-547	-392	-463	-446	-431	-420	-405	-394	-372
Previous Tealbook[1]	-704	-547	-392	-463	-446	-431	-414	-422	-428	-409
Exports	9.8	-2.9	.4	9.8	4.6	2.4	3.7	5.1	6.5	6.9
Imports	.7	-5.9	-6.2	11.7	3.5	.1	3.0	3.8	5.1	4.7
Gov't. cons. & invest.	1.8	3.3	2.3	-1.1	-3.3	-1.1	-2.6	-1.5	-.8	.9
Previous Tealbook	1.8	3.3	2.3	-1.1	-3.3	-1.1	-2.5	-1.9	-.7	1.0
Federal	2.7	8.4	3.9	3.2	-3.9	-2.3	-6.8	-4.3	-3.8	.0
Defense	2.5	9.4	3.6	2.0	-4.2	-5.0	-7.2	-5.6	-4.1	-.1
Nondefense	2.9	6.5	4.6	5.5	-3.3	2.6	-6.3	-2.2	-3.3	.1
State & local	1.2	.2	1.3	-4.0	-2.8	-.3	.2	.3	1.1	1.5
Change in priv. inventories[1]	36	-34	-148	58	34	58	65	88	70	59
Previous Tealbook[1]	36	-34	-148	58	34	58	64	95	83	51
Nonfarm[1]	37	-35	-146	66	40	69	45	75	68	57
Farm[1]	-1	1	-2	-7	-4	-7	18	13	2	2

1. Billions of chained (2009) dollars.

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

Item	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2013[1]	2014[1]	2015[1]	2016[1]
Real GDP	2.5	2.2	2.1	3.2	3.0	3.4	3.5	3.6	3.6	3.6	3.4	2.0	3.2	3.5	3.2
Previous Tealbook	2.9	2.2	2.7	2.7	3.0	3.4	3.3	3.4	3.5	3.5	3.4	2.3	3.1	3.4	3.2
Final sales	2.1	1.4	2.1	2.9	3.0	3.5	3.7	3.8	3.7	3.7	3.6	1.5	3.3	3.7	3.3
Previous Tealbook	2.4	1.9	2.5	2.4	3.0	3.4	3.5	3.6	3.5	3.8	3.7	1.7	3.1	3.6	3.5
Priv. dom. final purch.	2.2	1.8	2.5	3.0	3.3	3.7	3.9	3.9	3.9	3.8	3.6	2.0	3.5	3.8	3.0
Previous Tealbook	2.4	1.9	3.1	3.1	3.5	3.8	3.8	3.8	3.8	3.8	3.7	2.2	3.5	3.8	3.1
Personal cons. expend.	1.2	1.1	1.8	2.0	2.2	2.5	2.6	2.6	2.6	2.6	2.5	1.4	2.3	2.6	2.1
Previous Tealbook	1.5	1.4	2.1	2.3	2.4	2.6	2.6	2.6	2.6	2.6	2.5	1.6	2.5	2.6	2.1
Durables	.5	.5	.6	.7	.7	.7	.8	.7	.7	.7	.6	.5	.7	.7	.5
Nondurables	.3	.4	.4	.3	.4	.4	.4	.5	.5	.5	.4	.4	.4	.5	.4
Services	.5	.2	.8	1.0	1.1	1.3	1.4	1.5	1.5	1.5	1.4	.6	1.2	1.4	1.2
Residential investment	.4	.2	.3	.5	.6	.6	.6	.6	.5	.5	.4	.3	.6	.5	.2
Previous Tealbook	.4	.1	.4	.4	.5	.5	.5	.6	.5	.5	.5	.3	.5	.5	.4
Nonres. priv. fixed invest.	.6	.5	.4	.5	.6	.7	.7	.6	.7	.7	.7	.2	.6	.7	.6
Previous Tealbook	.5	.5	.6	.4	.6	.7	.6	.6	.6	.6	.7	.3	.6	.6	.6
Equipment & intangibles	.1	.2	.3	.4	.5	.6	.6	.6	.6	.6	.6	.2	.5	.6	.5
Previous Tealbook	.1	.3	.5	.3	.5	.6	.6	.5	.6	.6	.6	.3	.5	.6	.6
Nonres. structures	.4	.3	.1	.0	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.1
Previous Tealbook	.4	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.1
Net exports	-.1	.0	.4	.0	.1	.1	.1	.1	-.1	.1	.1	.0	.1	.0	.2
Previous Tealbook	.0	.4	-.1	-.2	-.1	-.1	.0	.0	-.2	.1	.0	.0	-.1	.0	.2
Exports	1.0	.7	.4	.6	.6	.7	.8	.8	.9	.9	.9	.5	.7	.9	.9
Imports	-1.1	-.7	.0	-.6	-.5	-.6	-.7	-.8	-.9	-.8	-.8	-.5	-.6	-.8	-.8
Gov't. cons. & invest.	-.1	-.3	-.8	-.1	-.4	-.3	-.3	-.2	-.1	-.1	-.1	-.5	-.3	-.1	.2
Previous Tealbook	-.1	-.5	-.5	-.4	-.4	-.3	-.3	-.2	-.1	-.1	-.1	-.5	-.4	-.1	.2
Federal	-.1	-.5	-.8	-.1	-.4	-.4	-.3	-.3	-.3	-.2	-.2	-.5	-.3	-.2	.0
Defense	.0	-.3	-.4	-.2	-.3	-.2	-.2	-.2	-.2	-.2	-.1	-.3	-.2	-.2	.0
Nondefense	-.1	-.1	-.4	.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.2	-.1	-.1	.0
State & local	.1	.2	.1	.0	.0	.0	.0	.1	.1	.1	.1	.0	.0	.1	.2
Change in priv. inventories	.4	.8	.0	.3	-.1	-.2	-.3	-.2	-.1	-.2	-.1	.5	.0	-.1	-.1
Previous Tealbook	.6	.4	.2	.3	.0	.0	-.1	-.2	.0	-.2	-.3	.5	.0	-.2	-.2
Nonfarm	.3	.8	-.1	.5	.0	-.2	-.2	.2	-.1	-.2	-.1	.3	.0	.0	-.1
Farm	.1	-.1	.0	-.2	-.1	.0	.0	-.4	.0	.0	.0	.2	-.1	-.1	.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	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2013[1]	2014[1]	2015[1]	2016[1]
GDP chain-wt. price index	.6	2.0	1.2	1.2	1.5	1.4	1.5	1.7	1.6	1.6	1.6	1.3	1.4	1.6	1.7
Previous Tealbook	.8	1.9	1.3	1.4	1.5	1.4	1.4	1.6	1.6	1.6	1.6	1.4	1.4	1.6	1.7
PCE chain-wt. price index	-.1	2.0	1.1	1.5	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.0	1.4	1.5	1.6
Previous Tealbook	.0	1.9	1.3	1.0	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.1	1.2	1.4	1.6
Energy	-11.9	11.1	-4.2	1.3	-1.5	-1.2	-1.2	-1.0	-1.3	-1.2	-1.0	-2.4	-.7	-1.1	-.5
Previous Tealbook	-11.9	10.6	1.5	-5.4	-3.1	-2.1	-1.7	-1.3	-1.7	-1.5	-1.1	-1.1	-3.1	-1.4	-.7
Food	.5	1.5	.9	.6	.6	.7	.7	1.0	1.3	1.3	1.4	1.1	.6	1.3	1.4
Previous Tealbook	.5	1.2	.8	.6	.6	.7	.8	1.1	1.3	1.3	1.4	.9	.7	1.3	1.4
Ex. food & energy	.6	1.5	1.4	1.6	1.6	1.5	1.5	1.6	1.6	1.6	1.6	1.2	1.5	1.6	1.7
Previous Tealbook	.8	1.5	1.3	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.2	1.5	1.6	1.7
Ex. food & energy, market based	.5	1.5	1.2	1.5	1.6	1.5	1.5	1.6	1.6	1.6	1.6	1.2	1.5	1.6	1.7
Previous Tealbook	.6	1.5	1.2	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.2	1.5	1.6	1.7
CPI	.0	2.6	1.0	1.7	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.3	1.5	1.6	1.7
Previous Tealbook	.0	2.5	1.5	1.0	1.3	1.4	1.4	1.6	1.6	1.6	1.5	1.4	1.3	1.6	1.7
Ex. food & energy	1.4	1.8	1.7	1.8	1.8	1.8	1.9	2.0	1.9	1.9	1.8	1.7	1.8	1.9	1.9
Previous Tealbook	1.4	1.8	1.6	1.8	1.8	1.8	1.9	2.0	1.9	1.9	1.8	1.7	1.8	1.9	1.9
ECI, hourly compensation[2]	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.2	2.5	2.7	3.0
Previous Tealbook[2]	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.2	2.5	2.7	3.0
Nonfarm business sector															
Output per hour	1.8	2.2	1.1	.9	1.4	1.6	1.6	1.8	1.6	1.9	1.8	.8	1.4	1.8	1.9
Previous Tealbook	2.5	2.7	1.1	1.1	1.3	1.6	1.5	1.4	1.6	1.7	1.5	1.1	1.4	1.5	1.8
Compensation per hour	2.3	1.5	2.3	2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	.2	2.7	3.1	3.4
Previous Tealbook	2.3	2.5	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	.5	2.7	3.1	3.4
Unit labor costs	.5	-.7	1.2	1.7	1.2	1.2	1.2	1.2	1.5	1.2	1.4	-.7	1.3	1.3	1.5
Previous Tealbook	-.1	-.1	1.5	1.6	1.3	1.2	1.4	1.6	1.5	1.4	1.7	-.6	1.4	1.6	1.5
Core goods imports chain-wt. price index[3]	-2.4	-3.0	.8	1.9	1.5	1.8	1.5	1.6	1.6	1.6	1.6	-1.1	1.7	1.6	1.6
Previous Tealbook[3]	-2.5	-2.3	.2	1.1	1.5	1.8	1.5	1.6	1.5	1.5	1.5	-1.0	1.5	1.5	1.6

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	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GDP chain-wt. price index	2.5	1.9	.4	1.8	1.8	1.8	1.3	1.4	1.6	1.7
Previous Tealbook	2.5	1.9	.4	1.8	1.8	1.8	1.4	1.4	1.6	1.7
PCE chain-wt. price index	3.3	1.5	1.2	1.3	2.6	1.7	1.0	1.4	1.5	1.6
Previous Tealbook	3.3	1.5	1.2	1.3	2.6	1.7	1.1	1.2	1.4	1.6
Energy	19.1	-8.2	2.3	6.4	11.7	2.1	-2.4	-.7	-1.1	-.5
Previous Tealbook	19.1	-8.2	2.3	6.4	11.7	2.1	-1.1	-3.1	-1.4	-.7
Food	4.9	6.9	-1.8	1.3	5.1	1.2	1.1	.6	1.3	1.4
Previous Tealbook	4.9	6.9	-1.8	1.3	5.1	1.2	.9	.7	1.3	1.4
Ex. food & energy	2.2	1.6	1.4	1.0	1.8	1.7	1.2	1.5	1.6	1.7
Previous Tealbook	2.2	1.6	1.4	1.0	1.8	1.7	1.2	1.5	1.6	1.7
Ex. food & energy, market based	2.1	2.2	1.8	.7	1.9	1.5	1.2	1.5	1.6	1.7
Previous Tealbook	2.1	2.2	1.8	.7	1.9	1.5	1.2	1.5	1.6	1.7
CPI	4.0	1.6	1.5	1.2	3.3	1.9	1.3	1.5	1.6	1.7
Previous Tealbook	4.0	1.6	1.5	1.2	3.3	1.9	1.4	1.3	1.6	1.7
Ex. food & energy	2.3	2.0	1.7	.6	2.2	1.9	1.7	1.8	1.9	1.9
Previous Tealbook	2.3	2.0	1.7	.6	2.2	1.9	1.7	1.8	1.9	1.9
ECI, hourly compensation[1]	3.0	2.4	1.2	2.1	2.2	1.8	2.2	2.5	2.7	3.0
Previous Tealbook[1]	3.0	2.4	1.2	2.1	2.2	1.8	2.2	2.5	2.7	3.0
Nonfarm business sector										
Output per hour	2.3	-.2	5.4	1.9	.4	.9	.8	1.4	1.8	1.9
Previous Tealbook	2.3	-.2	5.4	1.9	.4	.9	1.1	1.4	1.5	1.8
Compensation per hour	3.9	3.0	1.2	1.6	.9	5.3	.2	2.7	3.1	3.4
Previous Tealbook	3.9	3.0	1.2	1.6	.9	5.3	.5	2.7	3.1	3.4
Unit labor costs	1.6	3.2	-4.0	-.3	.5	4.4	-.7	1.3	1.3	1.5
Previous Tealbook	1.6	3.2	-4.0	-.3	.5	4.4	-.6	1.4	1.6	1.5
Core goods imports chain-wt. price index[2]	3.0	3.9	-1.9	2.3	4.2	.1	-1.1	1.7	1.6	1.6
Previous Tealbook[2]	3.0	3.9	-1.9	2.3	4.2	.1	-1.0	1.5	1.5	1.6

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

Other Macroeconomic Indicators

Item	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2013[1]	2014[1]	2015[1]	2016[1]
Employment and production															
Nonfarm payroll employment[2]	.6	.4	.5	.5	.5	.6	.6	.7	.7	.8	.8	2.1	2.2	2.9	2.5
Unemployment rate[3]	7.5	7.3	7.3	7.1	7.0	6.8	6.6	6.4	6.2	6.1	5.9	7.3	6.6	5.9	5.4
Previous Tealbook[3]	7.5	7.3	7.2	7.0	6.9	6.7	6.6	6.4	6.2	6.0	5.8	7.2	6.6	5.8	5.3
Natural rate of unemployment[3]	5.5	5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.4	5.3	5.2	5.2
Previous Tealbook[3]	5.5	5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2	5.4	5.3	5.2	5.2
GDP gap[4]	-3.7	-3.6	-3.6	-3.4	-3.2	-2.9	-2.6	-2.3	-1.9	-1.6	-1.3	-3.6	-2.6	-1.3	-.3
Previous Tealbook[4]	-3.6	-3.5	-3.4	-3.2	-3.0	-2.7	-2.5	-2.2	-1.9	-1.5	-1.3	-3.4	-2.5	-1.3	-.2
Industrial production[5]	.7	2.2	4.5	4.9	4.7	3.4	3.7	4.4	4.0	3.0	3.5	2.9	4.2	3.7	2.8
Previous Tealbook[5]	.4	2.5	5.6	5.9	5.0	4.0	3.4	4.3	4.1	3.7	3.8	3.1	4.6	4.0	3.5
Manufacturing industr. prod.[5]	-.4	1.8	3.3	4.2	4.2	4.0	4.1	4.4	4.5	4.0	3.8	2.4	4.1	4.2	3.2
Previous Tealbook[5]	-.7	2.2	4.0	4.5	3.9	3.5	3.6	4.1	4.5	3.9	4.1	2.6	3.9	4.2	3.7
Capacity utilization rate - mfg.[3]	76.0	76.0	76.3	76.8	77.2	77.6	78.0	78.5	78.9	79.3	79.6	76.3	78.0	79.6	80.2
Previous Tealbook[3]	75.9	76.0	76.5	77.0	77.4	77.7	78.1	78.5	78.9	79.3	79.7	76.5	78.1	79.7	80.8
Housing starts[6]	.9	.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6	.9	1.2	1.5	1.6
Light motor vehicle sales[6]	15.5	15.7	15.5	15.8	15.9	16.0	16.2	16.3	16.4	16.5	16.5	15.5	16.0	16.4	16.6
Income and saving															
Nominal GDP[5]	3.1	4.2	3.3	4.4	4.5	4.9	5.0	5.4	5.2	5.3	5.1	3.4	4.7	5.2	5.0
Real disposable pers. income[5]	3.5	1.1	-.1	3.6	2.8	3.1	3.2	4.1	3.4	3.3	3.2	-.9	3.2	3.5	3.2
Previous Tealbook[5]	3.4	1.3	1.0	3.6	2.8	3.1	3.1	4.0	3.3	3.2	3.2	-.7	3.1	3.4	3.2
Personal saving rate[3]	4.5	4.5	3.8	4.0	3.9	3.8	3.6	3.7	3.6	3.4	3.3	3.8	3.6	3.3	3.4
Previous Tealbook[3]	4.5	4.3	3.8	3.9	3.7	3.6	3.4	3.5	3.3	3.2	3.1	3.8	3.4	3.1	3.2
Corporate profits[7]	13.9	-1.4	5.0	4.7	3.8	7.2	7.3	5.5	6.7	7.0	5.5	2.9	5.7	6.2	6.8
Profit share of GNP[3]	12.3	12.2	12.2	12.2	12.2	12.3	12.4	12.4	12.4	12.5	12.5	12.2	12.4	12.5	12.8
Net federal saving[8]	-660	-717	-772	-708	-690	-682	-672	-682	-662	-650	-637	-750	-688	-658	-700
Net state & local saving[8]	-198	-216	-202	-203	-181	-172	-158	-153	-133	-128	-118	-211	-179	-133	-101
Gross national saving rate[3]	17.6	17.5	17.7	17.7	17.9	18.0	18.2	18.2	18.4	18.5	18.6	17.7	18.2	18.6	18.9
Net national saving rate[3]	2.4	3.4	2.7	2.8	3.0	3.2	3.3	3.4	3.7	3.8	3.9	2.7	3.3	3.9	4.4

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

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

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Employment and production										
Nonfarm payroll employment[1]	1.2	-2.8	-5.6	.8	2.0	2.2	2.1	2.2	2.9	2.5
Unemployment rate[2]	4.8	6.9	9.9	9.5	8.7	7.8	7.3	6.6	5.9	5.4
Previous Tealbook[2]	4.8	6.9	9.9	9.5	8.7	7.8	7.2	6.6	5.8	5.3
Natural rate of unemployment[2]	5.0	5.3	6.0	6.0	5.8	5.7	5.4	5.3	5.2	5.2
Previous Tealbook[2]	5.0	5.3	6.0	6.0	5.8	5.7	5.4	5.3	5.2	5.2
GDP gap[3]	.6	-4.1	-5.2	-3.9	-3.6	-3.6	-3.6	-2.6	-1.3	-.3
Previous Tealbook[3]	.6	-4.1	-5.2	-3.9	-3.6	-3.6	-3.4	-2.5	-1.3	-.2
Industrial production[4]	2.7	-8.9	-5.5	6.2	3.3	2.8	2.9	4.2	3.7	2.8
Previous Tealbook[4]	2.7	-8.9	-5.5	6.2	3.3	2.8	3.1	4.6	4.0	3.5
Manufacturing industr. prod.[4]	2.9	-11.6	-6.1	6.4	3.3	2.8	2.4	4.1	4.2	3.2
Previous Tealbook[4]	2.9	-11.6	-6.1	6.4	3.3	2.8	2.6	3.9	4.2	3.7
Capacity utilization rate - mfg.[2]	78.4	69.9	67.2	72.9	74.8	75.7	76.3	78.0	79.6	80.2
Previous Tealbook[2]	78.4	69.9	67.2	72.9	74.8	75.7	76.5	78.1	79.7	80.8
Housing starts[5]	1.4	.9	.6	.6	.6	.8	.9	1.2	1.5	1.6
Light motor vehicle sales[5]	16.1	13.1	10.4	11.5	12.7	14.4	15.5	16.0	16.4	16.6
Income and saving										
Nominal GDP[4]	4.4	-1.0	.1	4.6	3.9	3.8	3.4	4.7	5.2	5.0
Real disposable pers. income[4]	1.2	1.1	-.6	2.5	1.4	3.6	-.9	3.2	3.5	3.2
Previous Tealbook[4]	1.2	1.1	-.6	2.5	1.4	3.6	-.7	3.1	3.4	3.2
Personal saving rate[2]	2.9	6.1	5.7	5.5	5.0	6.6	3.8	3.6	3.3	3.4
Previous Tealbook[2]	2.9	6.1	5.7	5.5	5.0	6.6	3.8	3.4	3.1	3.2
Corporate profits[6]	-9.0	-30.8	54.5	17.0	8.4	2.7	2.9	5.7	6.2	6.8
Profit share of GNP[2]	9.9	6.9	10.7	11.9	12.4	12.3	12.2	12.4	12.5	12.8
Net federal saving[7]	-267	-635	-1,250	-1,330	-1,248	-1,110	-750	-688	-658	-700
Net state & local saving[7]	-73	-165	-272	-237	-213	-253	-211	-179	-133	-101
Gross national saving rate[2]	16.3	15.0	14.7	15.2	15.8	16.9	17.7	18.2	18.6	18.9
Net national saving rate[2]	1.0	-1.6	-1.6	-.4	.5	1.7	2.7	3.3	3.9	4.4

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				2013				2014				2015			
	2013	2014	2015	2016	Q1[a]	Q2[a]	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Not seasonally adjusted											
Unified budget																
Receipts[1]	2,776	3,019	3,241	3,444	581	891	688	670	630	956	763	739	665	1,012	825	778
Outlays[1]	3,436	3,531	3,677	3,890	888	800	839	872	908	887	864	935	937	918	888	965
Surplus/deficit[1]	-660	-512	-436	-446	-307	91	-151	-202	-278	69	-101	-196	-272	94	-63	-187
Previous Tealbook	*-653*	*-500*	*-428*		*-307*	*91*	*-143*	*-201*	*-270*	*69*	*-99*	*-196*	*-269*	*99*	*-62*	*-188*
On-budget	-701	-546	-454	-450	-303	36	-123	-229	-262	16	-70	-219	-253	45	-28	-205
Off-budget	40	34	19	4	-4	55	-27	27	-16	53	-31	23	-19	49	-34	18
Means of financing:																
Borrowing	697	492	556	566	336	-17	64	291	62	8	131	226	302	-64	93	217
Cash decrease	-3	18	0	0	14	-56	46	8	58	-48	0	0	0	0	0	0
Other[2]	-34	1	-120	-120	-43	-18	40	-97	158	-30	-30	-30	-30	-30	-30	-30
Cash operating balance, end of period	88	70	70	70	79	135	88	80	22	70	70	70	70	70	70	70
					Seasonally adjusted annual rates											
NIPA federal sector																
Receipts	2,964	3,130	3,336	3,523	2,900	3,160	3,085	3,007	3,134	3,169	3,208	3,253	3,317	3,363	3,412	3,457
Expenditures	3,791	3,843	4,003	4,208	3,753	3,820	3,802	3,779	3,842	3,860	3,890	3,925	3,998	4,026	4,062	4,094
Consumption expenditures	978	936	913	912	982	976	961	951	940	931	923	916	917	912	906	902
Defense	618	593	580	579	620	616	606	600	595	590	586	581	583	580	577	575
Nondefense	360	343	332	333	363	360	355	350	345	341	337	334	335	332	329	327
Other spending	2,812	2,907	3,090	3,296	2,771	2,844	2,841	2,829	2,902	2,929	2,967	3,010	3,081	3,114	3,156	3,192
Current account surplus	-827	-713	-667	-685	-853	-660	-717	-772	-708	-690	-682	-672	-682	-662	-650	-637
Gross investment	277	260	246	239	273	277	275	268	261	257	254	250	247	245	242	240
Gross saving less gross investment[3]	-838	-702	-636	-642	-860	-670	-724	-770	-699	-676	-662	-648	-652	-629	-613	-597
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-632.7	-493.0	-491.1	-582.1	-649.4	-460.9	-510.9	-555.1	-480.8	-467.0	-469.1	-473.8	-494.5	-494.4	-501.9	-508.2
Change in HEB, percent of potential GDP	-2.2	-.9	-.1	.4	-1.6	-1.1	.3	.2	-.4	-.1	.0	.0	.1	.0	.0	.0
Fiscal impetus (FI), percent of GDP	-1.3	-.6	-.4	-.1	-2.0	-.7	-1.1	-1.4	-.7	-.8	-.6	-.4	-.6	-.4	-.2	-.2
Previous Tealbook	*-1.2*	*-.7*	*-.4*		*-2.0*	*-.7*	*-1.1*	*-1.0*	*-1.0*	*-.8*	*-.6*	*-.4*	*-.6*	*-.4*	*-.2*	*-.2*

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 natural rate of unemployment. 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 (2009) dollars, scaled by real GDP. The FI estimates are calendar year contributions to Q4/Q4 real GDP growth. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. Quarterly figures for change in HEB and FI are not at annual rates.
a Actual.

Greensheets

Foreign Real GDP and Consumer Prices: Selected Countries
(Quarterly percent changes at an annual rate)

Measure and country	2013 Q1	2013 Q2	2013 Q3 (Projected)	2013 Q4 (Projected)	2014 Q1 (Projected)	2014 Q2 (Projected)	2014 Q3 (Projected)	2014 Q4 (Projected)	2015 Q1 (Projected)	2015 Q2 (Projected)	2015 Q3 (Projected)	2015 Q4 (Projected)
***Real GDP*[1]**												
Total foreign	1.7	2.2	2.8	3.0	3.2	2.9	3.3	3.3	3.4	3.4	3.5	3.3
Previous Tealbook	*1.8*	*2.1*	*2.7*	*3.0*	*3.2*	*2.9*	*3.2*	*3.3*	*3.4*	*3.4*	*3.5*	*3.3*
Advanced foreign economies	1.4	1.8	1.8	1.9	2.1	1.5	2.1	2.2	2.2	2.2	2.4	2.0
Canada	2.2	1.7	2.6	2.1	2.3	2.4	2.6	2.6	2.5	2.6	2.7	2.7
Japan	4.1	3.8	2.1	3.4	3.9	-2.9	1.9	2.0	1.6	1.1	2.2	-1.7
United Kingdom	1.5	2.7	2.4	2.5	2.3	2.2	2.3	2.5	2.5	2.5	2.6	2.6
Euro area	-.9	1.1	.4	1.0	1.1	1.4	1.4	1.6	1.8	1.9	1.9	2.0
Germany	.0	2.9	1.3	1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.5
Emerging market economies	2.1	2.6	3.8	4.1	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.6
Asia	3.4	5.1	5.7	5.4	5.3	5.4	5.5	5.5	5.6	5.7	5.6	5.6
Korea	3.4	4.5	4.0	3.7	3.6	3.9	4.1	4.2	4.3	4.5	4.6	4.6
China	6.5	7.5	9.4	8.1	7.9	7.8	7.8	7.7	7.7	7.7	7.6	7.6
Latin America	.7	.1	1.9	2.8	3.5	3.5	3.6	3.6	3.5	3.5	3.5	3.5
Mexico	.1	-2.9	2.2	3.0	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6
Brazil	2.6	6.0	.0	1.7	2.8	3.1	3.3	3.3	3.5	3.5	3.5	3.5
***Consumer prices*[2]**												
Total foreign	2.2	1.9	2.8	2.6	2.5	3.1	2.5	2.5	2.5	2.5	2.6	3.0
Previous Tealbook	*2.2*	*1.9*	*2.6*	*2.6*	*2.4*	*3.1*	*2.5*	*2.5*	*2.5*	*2.5*	*2.6*	*3.0*
Advanced foreign economies	.9	.4	2.1	1.4	1.3	2.8	1.4	1.5	1.5	1.5	1.6	2.7
Canada	1.6	.0	1.6	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9
Japan	-.4	.8	2.9	.7	.7	8.7	.7	.9	1.0	1.1	1.2	6.7
United Kingdom	2.3	1.5	3.1	3.0	1.7	1.6	1.7	2.7	1.7	1.7	1.8	2.8
Euro area	.7	.6	1.9	1.4	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6
Germany	1.4	.7	2.7	1.7	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Emerging market economies	3.3	3.0	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Asia	3.3	2.0	3.5	3.4	3.2	3.1	3.1	3.1	3.2	3.2	3.2	3.2
Korea	.6	.3	1.4	2.4	3.0	3.0	3.0	3.1	3.2	3.2	3.2	3.1
China	3.2	2.1	3.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Latin America	3.5	5.4	2.6	3.9	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Mexico	3.2	5.3	2.0	3.6	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Brazil	7.0	5.8	4.6	5.5	5.7	5.6	5.4	5.3	5.3	5.3	5.3	5.3

[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	2008	2009	2010	2011	2012	2013	2014	2015	2016
						----------Projected			----------
Real GDP[1]									
Total foreign	-.7	.9	4.6	3.0	2.2	2.4	3.2	3.4	3.4
Previous Tealbook	*-.7*	*.9*	*4.6*	*3.0*	*2.2*	*2.4*	*3.1*	*3.4*	
Advanced foreign economies	-1.5	-1.5	3.0	1.5	.3	1.7	2.0	2.2	2.3
Canada	.1	-1.4	3.6	2.4	1.0	2.2	2.5	2.6	2.7
Japan	-4.8	-.5	3.5	.1	.3	3.3	1.2	.8	1.2
United Kingdom	-4.3	-2.5	1.8	1.1	-.2	2.3	2.3	2.5	2.5
Euro area	-2.1	-2.3	2.3	.7	-1.0	.4	1.3	1.9	2.0
Germany	-1.8	-2.2	4.2	2.2	.3	1.5	1.9	2.4	2.5
Emerging market economies	.3	3.9	6.3	4.5	4.2	3.1	4.5	4.6	4.6
Asia	.8	8.0	7.8	4.9	5.3	4.9	5.4	5.6	5.6
Korea	-3.2	6.3	5.0	3.4	1.4	3.9	3.9	4.5	4.5
China	7.6	11.3	9.7	8.7	7.8	7.8	7.8	7.6	7.5
Latin America	-.4	-.1	4.7	4.0	3.1	1.4	3.5	3.5	3.4
Mexico	-1.3	-1.2	4.4	4.1	3.2	.6	3.7	3.6	3.4
Brazil	.9	5.3	5.3	1.4	1.4	2.5	3.1	3.5	3.5
Consumer prices[2]									
Total foreign	3.3	1.2	3.2	3.4	2.3	2.4	2.6	2.7	2.6
Previous Tealbook	*3.3*	*1.2*	*3.2*	*3.4*	*2.3*	*2.3*	*2.6*	*2.7*	
Advanced foreign economies	2.0	.2	1.7	2.2	1.3	1.2	1.8	1.8	1.8
Canada	1.8	.8	2.2	2.7	.9	1.2	1.8	1.8	2.1
Japan	1.1	-2.0	-.2	-.3	-.2	1.0	2.7	2.5	1.4
United Kingdom	3.9	2.2	3.4	4.6	2.6	2.5	1.9	2.0	1.8
Euro area	2.3	.4	2.0	2.9	2.3	1.2	1.3	1.5	1.7
Germany	1.7	.3	1.6	2.6	2.0	1.6	1.7	1.8	1.9
Emerging market economies	4.6	2.1	4.3	4.3	3.1	3.3	3.3	3.3	3.3
Asia	3.7	1.3	4.3	4.5	2.6	3.0	3.1	3.2	3.2
Korea	4.5	2.4	3.2	3.9	1.7	1.2	3.0	3.2	3.2
China	2.5	.6	4.7	4.6	2.1	2.9	3.0	3.0	3.0
Latin America	6.6	3.9	4.4	4.0	4.3	3.9	3.7	3.7	3.7
Mexico	6.2	4.0	4.3	3.5	4.1	3.5	3.4	3.4	3.4
Brazil	6.2	4.2	5.6	6.7	5.6	5.7	5.5	5.3	5.3

[1] Foreign GDP aggregates calculated using shares of U.S. exports.
[2] Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

U.S. Current Account

Quarterly Data

	2013				Projected 2014				Projected 2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Billions of dollars, s.a.a.r.											
U.S. current account balance	**-419.6**	**-395.6**	**-421.0**	**-423.9**	**-447.6**	**-413.2**	**-426.9**	**-435.3**	**-459.7**	**-432.5**	**-446.6**	**-458.7**
Previous Tealbook	*-420.5*	*-393.4*	*-406.9*	*-438.6*	*-473.3*	*-448.5*	*-474.9*	*-487.7*	*-514.3*	*-494.3*	*-505.9*	*-518.2*
Current account as percent of GDP	-2.5	-2.4	-2.5	-2.5	-2.6	-2.4	-2.4	-2.4	-2.6	-2.4	-2.4	-2.5
Previous Tealbook	*-2.5*	*-2.4*	*-2.4*	*-2.6*	*-2.8*	*-2.6*	*-2.7*	*-2.7*	*-2.9*	*-2.7*	*-2.7*	*-2.8*
Net goods & services	-490.5	-471.1	-491.3	-498.1	-501.7	-474.5	-477.0	-482.6	-482.7	-463.6	-465.3	-472.5
Investment income, net	211.6	221.1	220.1	215.5	212.2	202.4	194.8	188.6	181.2	172.3	163.4	155.1
Direct, net	276.6	279.9	289.6	300.1	300.7	300.0	300.0	303.6	308.1	312.3	318.0	324.9
Portfolio, net	-65.0	-58.9	-69.5	-84.6	-88.5	-97.6	-105.1	-115.0	-127.0	-140.1	-154.6	-169.8
Other income and transfers, net	-140.6	-145.5	-149.8	-141.3	-158.1	-141.1	-144.7	-141.3	-158.1	-141.1	-144.7	-141.3

Annual Data

	2008	2009	2010	2011	2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
	Billions of dollars								
U.S. current account balance	**-681.3**	**-381.6**	**-449.5**	**-457.7**	**-440.4**	**-415.0**	**-430.8**	**-449.4**	**-471.2**
Previous Tealbook	*-681.3*	*-381.6*	*-449.5*	*-457.7*	*-440.4*	*-414.8*	*-471.1*	*-508.2*	
Current account as percent of GDP	-4.6	-2.6	-3.0	-2.9	-2.7	-2.5	-2.5	-2.4	-2.4
Previous Tealbook	*-4.6*	*-2.6*	*-3.0*	*-2.9*	*-2.7*	*-2.5*	*-2.7*	*-2.8*	
Net goods & services	-702.3	-383.7	-499.4	-556.8	-534.7	-487.8	-483.9	-471.0	-451.4
Investment income, net	157.8	132.3	185.7	240.7	232.3	217.1	199.5	168.0	126.5
Direct, net	284.3	257.7	288.0	310.6	293.5	286.6	301.1	315.8	338.8
Portfolio, net	-126.5	-125.4	-102.3	-69.8	-61.2	-69.5	-101.5	-147.9	-212.3
Other income and transfers, net	-136.9	-130.2	-135.8	-141.6	-138.0	-144.3	-146.3	-146.3	-146.3

Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
BLS	Bureau of Labor Statistics
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CPI	consumer price index
CRE	commercial real estate
Desk	Open Market Desk
ECB	European Central Bank
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDI	gross domestic income
GDP	gross domestic product
IP	industrial production
LBO	leveraged buyout
LSAP	large-scale asset purchase
M&A	mergers and acquisitions
MBS	mortgage-backed securities
OIS	overnight index swap
PCE	personal consumption expenditures
PMI	purchasing managers index
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
S&P	Standard & Poor’s
TIPS	Treasury inflation-protected securities

(This page is intentionally blank.)