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.

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Report to the FOMC on Economic Conditions and Monetary Policy

Book A

Economic and Financial Conditions: Current Situation and Outlook

December 12, 2013

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

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Domestic Economic Developments and Outlook

The information that we have received since the October Tealbook suggests that real GDP is increasing a bit more, on average, over the second half of this year than we had previously expected. In part, the modest upgrade in our assessment reflects larger contributions from categories, such as inventory investment and government purchases, that convey little signal for the ongoing thrust of aggregate demand. But the data on private domestic final demand also appear to have been a bit better, on balance, than we had anticipated. In particular, consumer spending appears to be accelerating more in the fourth quarter than we had assumed, and business fixed investment seems to be on a slightly stronger trajectory. In contrast, housing activity has once again surprised us on the downside, as the rise in mortgage rates since the spring seems to be restraining housing activity by somewhat more than we had expected. In all, our forecast for real GDP growth over the second half of this year now stands at an average annual rate of 2½ percent, ½ percentage point more than in the previous Tealbook, and we expect growth to pick up to a 2¾ percent pace in the first quarter of next year. In the labor market, increases in payroll employment were greater in October and November than we had anticipated, and the unemployment rate declined more, on net, since September.

Our medium-term projection for real activity also is a bit stronger than in the October Tealbook, as the slight reduction in fiscal restraint from the recent federal budget deal, a lower trajectory for interest rates, and somewhat higher paths for equity prices and home values more than offset a higher path for the foreign exchange value of the dollar. We continue to expect that economic activity will expand more quickly over the next few years than it did in 2013, reflecting a still-accommodative stance of monetary policy and the waning of some of the forces—including federal fiscal policy and the stresses in Europe—that have restrained economic growth in recent years. Our current forecast has real GDP growth stepping up from a pace of 2¼ percent this year to 3 percent in 2014 and 3½ percent in both 2015 and 2016.

Consistent with the acceleration in real GDP, we project the unemployment rate to decline from about 7 percent in the current quarter to 5¼ percent at the end of 2016, thereby reaching the staff's estimate of the natural rate. As in our October Tealbook forecast, the unemployment rate crosses the Committee's 6.5 percent threshold near the beginning of 2015.

Domestic Econ Devel & Outlook

Revisions to the Staff Projection since the Previous SEP

The FOMC last published its Summary of Economic Projections (SEP) following the September FOMC meeting. The table below summarizes revisions to the staff economic projection since the September Tealbook.

The staff projection for real GDP growth is about the same as in the September Tealbook on net. The unemployment rate has come in lower than we expected in September. We have taken this lower level on board in the near term, but we still project the unemployment rate to end 2016 at 5¼ percent, in line with the essentially unrevised GDP outlook.

The staff projection for both overall and core PCE inflation has revised a little lower this year relative to the September projection. Beyond this year, however, the projection for both core and headline inflation is about unrevised, with inflation edging gradually higher.

The unemployment rate is still projected to cross the Committee's 6.5 percent threshold in early 2015, and the policy rule that governs our assumption for the federal funds rate calls for the rate to lift off from the effective lower bound in the second quarter of 2015, the same as in September. The trajectory of the federal funds rate after liftoff is also the same.

Staff Economic Projections Compared with the September Tealbook

Variable	2013 H1	2013 H2	2013	2014	2015	2016	Longer run
Real GDP[1]	1.8	2.6	2.2	3.1	3.5	3.4	2.3
September Tealbook	2.0	2.5	2.3	3.1	3.4	3.2	2.3
Unemployment rate[2]	7.5	7.1	7.1	6.5	5.9	5.3	5.2
September Tealbook	7.5	7.2	7.2	6.6	5.8	5.3	5.2
PCE inflation[1]	.5	1.3	.9	1.4	1.4	1.6	2.0
September Tealbook	.6	1.6	1.1	1.2	1.4	1.6	2.0
Core PCE inflation[1]	1.0	1.3	1.1	1.4	1.6	1.7	n.a.
September Tealbook	1.1	1.4	1.2	1.5	1.6	1.7	n.a.
Federal funds rate[2]	.12	.13	.13	.13	.82	1.92	4.00
September Tealbook	.12	.13	.13	.13	.85	1.90	4.00
Memo:							
Federal funds rate, end of period	.13	.13	.13	.13	1.00	2.00	4.00
September Tealbook	.13	.13	.13	.13	1.00	2.00	4.00

1. Percent change from final quarter of preceding period to final quarter of period indicated.
2. Percent, final quarter of period indicated.
n.a. Not available.

The data we have received on PCE prices since the October Tealbook have been softer than we had anticipated, in part reflecting lower-than-expected prices for medical services. But beyond the near term, our projection for core inflation is essentially the same as in our previous forecast, with core PCE inflation expected to rise from about 1 percent in 2013 to 1¾ percent in 2016. We continue to anticipate that energy prices will edge down over the forecast period, causing headline inflation to run a bit below core inflation.

We view the degree of uncertainty attending our projections for real GDP growth and the unemployment rate as being similar to the average over the past 20 years—the benchmark used by the FOMC.[1] We continue to view the risks to our forecast for real GDP growth as being skewed to the downside, in part because neither monetary policy nor fiscal policy appear well positioned to combat future adverse shocks to economic activity. However, we see the risks around our outlook for the unemployment rate as roughly balanced, with the risk of a higher unemployment rate from adverse demand-side developments countered by the possibility of a continuation of the downward surprises for the unemployment rate that we have seen in recent years. In addition, we regard the uncertainty around our inflation forecast as being about normal and view these risks as broadly balanced. Our assessment of the risks around our forecasts for real GDP growth and inflation is unchanged from the September Tealbook—the last time that Committee participants submitted economic projections.

KEY BACKGROUND FACTORS

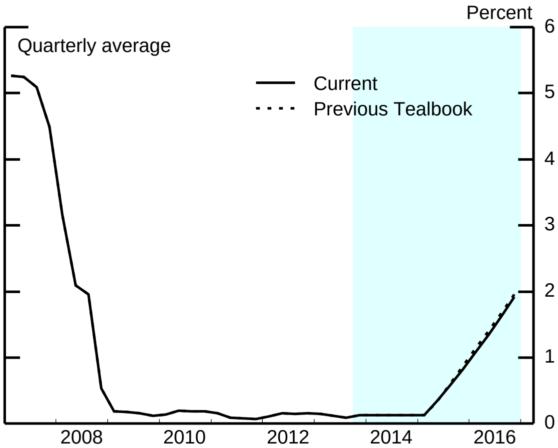
Monetary Policy

We have shifted our assumption for the slowing in purchases under the current LSAP program toward a slightly later timing than we had assumed in our October projection, thereby increasing the cumulative account of purchases under the current program by $165 billion. We now assume that the pace of purchases will begin to slow in the first quarter of 2014 and will end in the latter half of 2014, bringing the cumulative amount of purchases under the current program to $1.4 trillion.

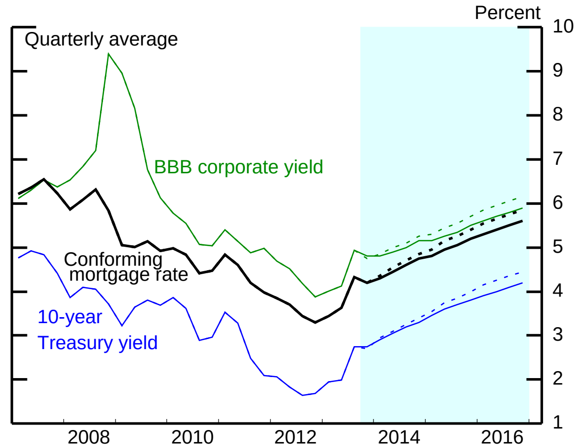
[1] Beginning with this Tealbook, in order to better align our assessment with the Committee's Summary of Economic Projections, we separately evaluate the risks and uncertainties for our forecasts of real GDP growth and the unemployment rate.

Key Background Factors underlying the Baseline Staff Projection

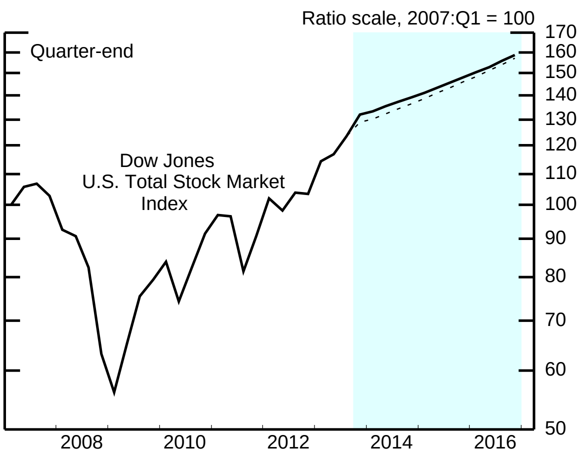
Federal Funds Rate



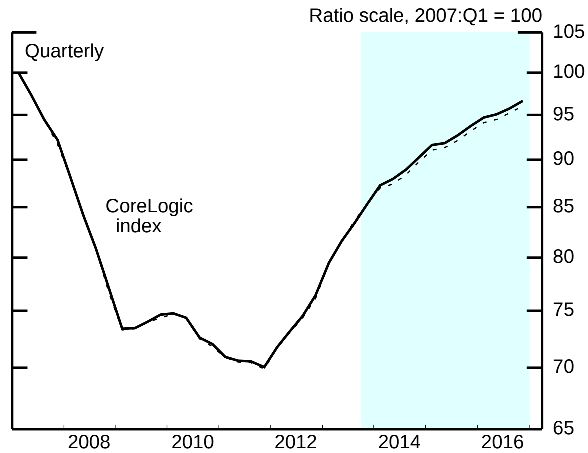
Long-Term Interest Rates



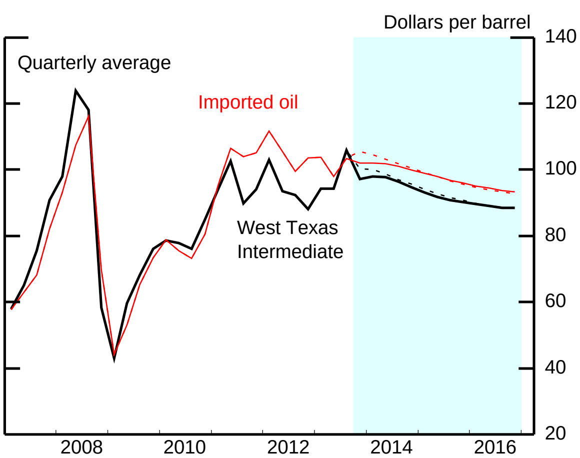
Equity Prices



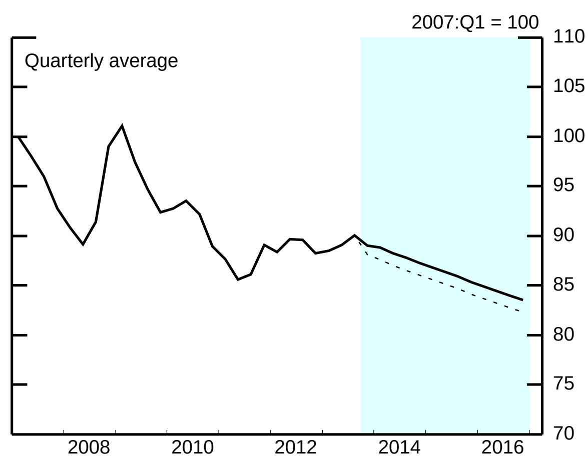
House Prices



Crude Oil Prices



Broad Real Dollar



With the unemployment rate projected to fall below the Committee's 6.5 percent threshold near the beginning of 2015, we continue to assume that the federal funds rate will lift off from its effective lower bound in the second quarter of 2015 and thereafter rise at a pace determined by the prescriptions of an inertial version of the Taylor (1999) policy rule. As in the October Tealbook, the federal funds rate reaches 2 percent at the end of 2016.

Other Interest Rates

The 10-year Treasury yield has risen about 30 basis points since the October Tealbook, a larger increase than we had projected. Over the medium term, our forecast still calls for Treasury yields to rise significantly, primarily reflecting the movement of the 10-year valuation window through the period of extremely low short-term interest rates as well as a gradual waning of the effects of the FOMC's LSAP program. Nonetheless, toward the end of the projection period, we have the 10-year Treasury yield somewhat lower in this Tealbook than in the previous one, reflecting the slight increase in the expected size of the LSAP program and a lower assumed medium-term level of the term premium.

Rates for conventional 30-year fixed-rate mortgages have increased roughly in line with the yields on comparable maturity Treasury securities over the intermeeting period, and yields on 10-year investment-grade corporate bonds have risen just a bit less. As a result, our forecasts for corporate bond yields and mortgage rates in the medium term have been revised essentially in line with the revision to Treasury yields.

Equity Prices and Home Prices

Equity prices have risen about 1½ percent since the October Tealbook, a bit more than we had anticipated. We have carried forward the higher level of 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 had anticipated to occur later in the projection, our forecast for stock prices is essentially unrevised by the end of 2016. We continue to expect equity prices to move up at an average annual rate of about 6½ percent over the next few years, a pace that we think will bring the equity risk premium down toward more typical levels by the end of the medium-term forecast.

House prices have moved up by a bit more since the October Tealbook than we had projected. However, the projected rate of house price appreciation over the forecast period is little changed relative to the October Tealbook projection, and we continue to anticipate that house prices will decelerate from the rapid pace of increase seen over the past year.

Fiscal Policy

We have adjusted our fiscal policy assumptions to incorporate the enactment of the recently announced budget deal in the Congress. We continue to anticipate that the federal debt limit will be lifted again in the coming months before significant financial market disruptions occur, and that the emergency unemployment compensation program will be allowed to expire at the end of this year.

Federal fiscal policy has exerted considerable restraint on the growth of aggregate demand in 2013 as a result of the sequestration, additional decreases in defense purchases associated with the drawdown of overseas military operations, the expiration of the payroll tax cut, and the implementation of other tax increases at the beginning of this year. Excluding multiplier effects, changes in fiscal policy at all levels of government are projected to reduce real GDP growth by 1 percentage point this year, ½ percentage point in 2014, ¼ percentage point in 2015, and to have little effect in 2016; in addition, we estimate that the recent budget deal will ease the fiscal restraint on real GDP growth in 2014 by 0.1 percentage point. As in the previous projection, the federal unified budget deficit is projected to narrow from 4 percent of GDP in fiscal year 2013 to 2¼ percent of GDP by fiscal 2016, reflecting both ongoing budget consolidation and further improvements in the economy that generate stronger gains in tax receipts.

Foreign Activity and the Dollar

We estimate that foreign real GDP will post a second consecutive quarter of 3 percent growth in the current quarter, up considerably from its sluggish first-half rate. Our estimates for both the third and fourth quarters are a little higher than in the October Tealbook, mainly reflecting slightly stronger growth in the emerging market economies. The Mexican economy rebounded somewhat more sharply than expected in the third quarter following a second-quarter contraction, and recent indicators of economic activity in China have been positive. The euro-area economy continued its slow exit from recession and financial stress. We continue to expect foreign economic growth to improve gradually over the forecast period, averaging 3¼ percent next year and then leveling off near 3½ percent through the end of 2016.

The broad nominal dollar index has increased about 1¼ percent since the previous Tealbook. The dollar strengthened against most other currencies as market participants assigned a higher probability to an earlier start to Federal Reserve tapering and increased their expectations for additional monetary accommodation in some foreign economies. Looking ahead, we project that the broad real dollar will depreciate at an annual rate of about 2¼ percent over the medium term, about the same pace that we had projected in the October Tealbook. Our forecast of dollar depreciation continues to be driven by our assumption that financial stress in the euro area will abate further over the forecast period, resulting in reduced safe-haven demands for the dollar; we also assume that the dollar will resume its trend depreciation against emerging market currencies.

Oil and Other Commodity Prices

The spot price of Brent crude oil is little changed since the time of the previous Tealbook, closing at $109 per barrel on December 10. Market analysts have become more pessimistic about the outlook for Libyan oil production—and apparently by enough to offset any optimism that might have been engendered by the temporary agreement to contain Iran's nuclear program in exchange for an easing of sanctions. The spot price of West Texas Intermediate is also little changed. As in the October Tealbook, we project the price of imported oil to remain at about $100 per barrel in 2014 and then to decline over the remainder of the forecast period, reaching $93 per barrel at the end of 2016.

Our broad index of nonfuel commodity prices is little changed relative to the October Tealbook, with the prices of many commodities exhibiting the lowest daily volatility in recent years. Over the forecast period, as in the previous Tealbook, we expect this index to increase only slightly, consistent with futures prices and our projected depreciation of the dollar.

RECENT DEVELOPMENTS AND THE NEAR-TERM OUTLOOK FOR REAL GDP

The information we have received since the October Tealbook has led us to increase our forecast for real GDP growth over the second half of this year by ½ percentage point to an average annual rate of 2½ percent, and we expect economic growth to rise to a 2¾ percent pace in the first quarter of next year. Consumer spending appears to be accelerating more in the fourth quarter than we had previously projected, and business fixed investment seems to be on a slightly stronger trajectory. Inventory investment and government purchases in the third quarter were also notably stronger than we had anticipated, but we expect the surprise from these categories to mostly unwind

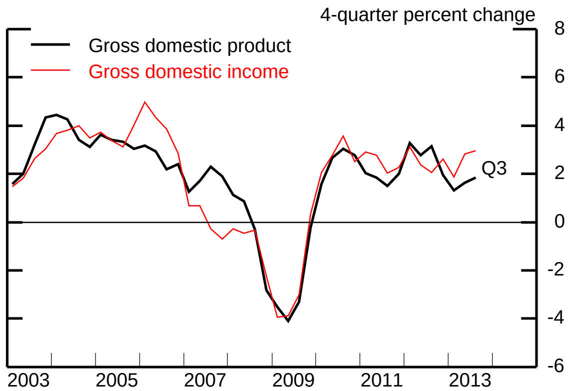
Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

Measure	2013:Q3 Previous Tealbook	2013:Q3 Current Tealbook	2013:Q4 Previous Tealbook	2013:Q4 Current Tealbook	2014:Q1 Previous Tealbook	2014:Q1 Current Tealbook
Real GDP	**2.2**	**3.5**	**2.1**	**1.7**	**3.2**	**2.8**
Private domestic final purchases	2.1	2.1	3.0	3.3	3.5	3.1
Personal consumption expenditures	1.5	1.4	2.6	3.2	2.9	2.8
Residential investment	7.8	13.0	11.0	-1.7	15.9	10.8
Nonres. private fixed investment	4.0	3.5	3.6	5.0	3.8	3.0
Government purchases	-1.7	.4	-4.2	-5.3	-.6	.9
Contributions to change in real GDP						
Inventory investment[1]	.8	1.5	.0	-.1	.3	-.3
Net exports[1]	.0	.1	.4	.1	.0	.3
Unemployment rate	**7.3**	**7.3**	**7.3**	**7.1**	**7.1**	**6.9**
PCE chain price index	**2.0**	**2.0**	**1.1**	**.7**	**1.5**	**1.5**
Ex. food and energy	1.5	1.5	1.4	1.1	1.6	1.4

1. Percentage points.

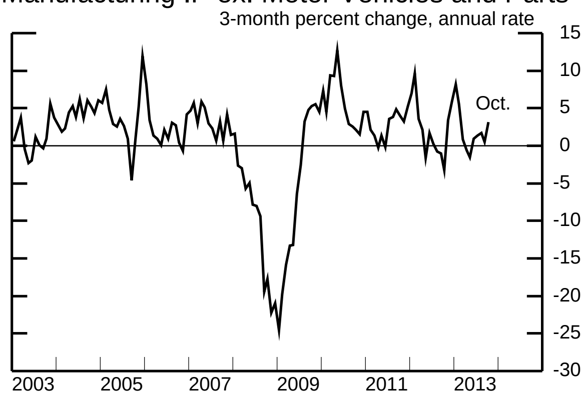
Recent Nonfinancial Developments (1)

Real GDP and GDI



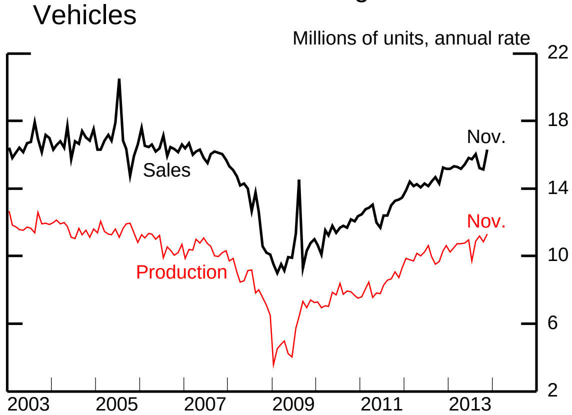
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Manufacturing IP ex. Motor Vehicles and Parts



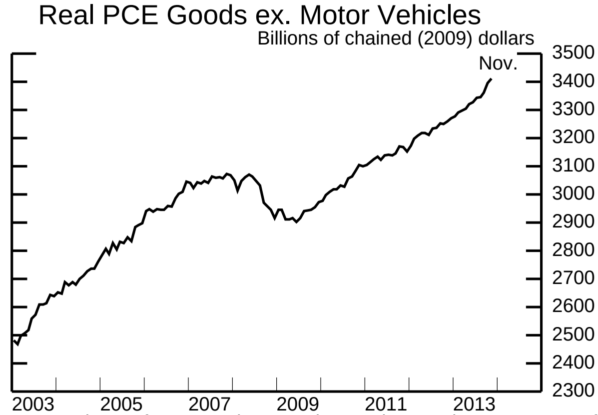
Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

Sales and Production of Light Motor Vehicles



Source: Ward's Communications.

Real PCE Goods ex. Motor Vehicles



Note: Figures for September, October, and November 2013 are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

over the near term. Moreover, the slowing in housing activity since midyear now appears to have been more pronounced than we previously expected, and we have marked down our near-term projection for the growth of residential investment.

Household Spending

We now estimate that real PCE will rise at an annual rate of 3¼ percent in the current quarter, up from a 1½ percent pace in the third quarter.[2] The October reading for PCE was solid, and light motor vehicle sales surged in November, consistent with a pickup in real PCE growth for the fourth quarter as a whole that is about ½ percentage point greater than in the October Tealbook. In addition, the level of private wages and salaries was revised up, and the preliminary December reading of the Michigan survey measure of consumer sentiment reversed the declines seen since the summer. In the first quarter of next year, we now project that real PCE will rise at an annual rate of 2¾ percent. As before, we attribute the near-term acceleration in consumer spending relative to that seen earlier this year to the effect of gains in household net wealth, the waning effects of the tax increases imposed at the beginning of the year, and further increases in personal income. The projected increase in spending next quarter would be larger if not for the currently scheduled termination of the emergency unemployment compensation program.

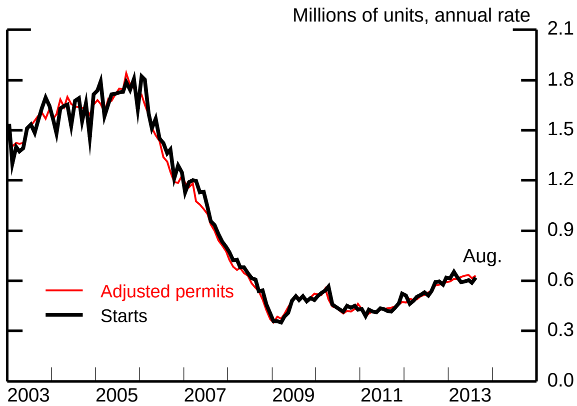
In the staff's view, the rise in mortgage rates since the spring has been restraining housing activity by more than we had anticipated. Existing home sales fell 5 percent in the three months ending in October, and the latest readings on pending home sales point to further weakness in these sales in the coming months. The level of single-family construction spending in October was below our expectation, and permits in September and October were also notably weaker than we had anticipated.[3] As a result, we now project the recovery in single-family construction to be somewhat slower than in the previous Tealbook. Meanwhile, construction in the multifamily sector still appears to have flattened out this year after rising quickly over the past couple of years. All told, the growth in real residential investment is expected to slow from an annual rate of about 13 percent in the first half of this year to just 5½ percent in the second half, 4 percentage points weaker than in the October Tealbook.

[2] This projection does not reflect information from the retail sales release published on December 12.

[3] A consequence of the government shutdown is that the Census Bureau will release their estimate of single-family housing starts for September, October, and November on December 18.

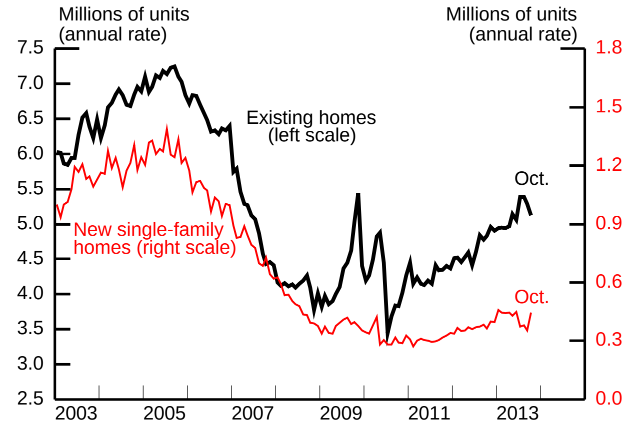
Recent Nonfinancial Developments (2)

Single-Family Housing Starts and Permits



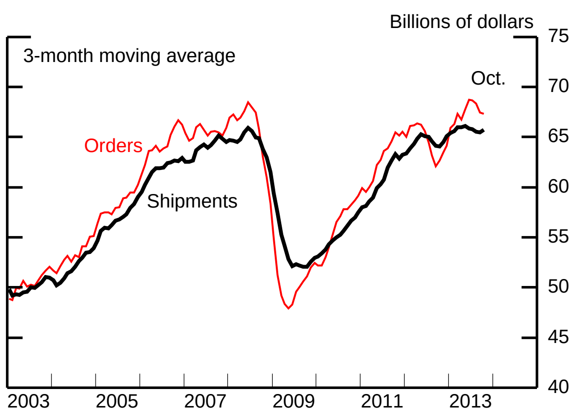
Note: Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.
Source: U.S. Census Bureau.

Home Sales



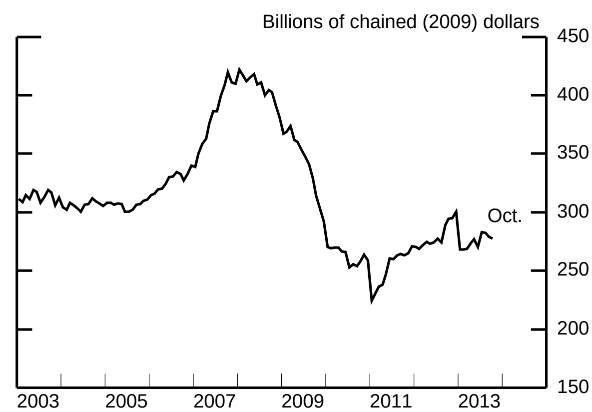
Source: For existing, National Association of Realtors; for new, U.S. Census Bureau.

Nondefense Capital Goods ex. Aircraft



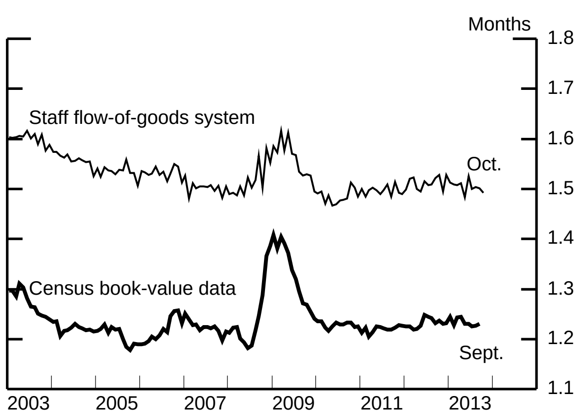
Source: U.S. Census Bureau.

Nonresidential Construction Put in Place



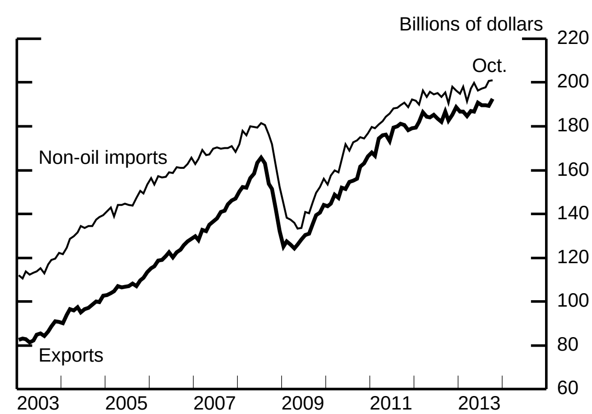
Note: Nominal CPIP deflated by BEA prices through 2013:Q2 and by staff's estimated deflator thereafter.
Source: U.S. Census Bureau.

Inventory Ratios ex. Motor Vehicles



Note: Flow-of-goods system inventories include manufacturing and mining industries except motor vehicles and parts and 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.

Business Investment

Real private investment in equipment and intangibles (E&I) is projected to increase at a moderate annual rate of 6¼ percent this quarter after rising at a tepid pace earlier in the year. Orders and shipments of nondefense capital goods in October point to some pickup in the pace of business equipment outlays this quarter, and survey measures of business conditions in November suggest solid spending increases in the coming months. The near-term trajectory for E&I growth is consistent with the modest pace of business output growth since the end of last year.

Averaging through some large quarterly swings, real nonresidential investment excluding drilling and mining has increased by just 2 percent over the four quarters ending in the third quarter of this year, as high vacancy rates and tight financing conditions for new construction continue to curb demand for new buildings. Both the incoming spending data and indicators like the architectural billings index point toward a continued sluggish pace of spending for new buildings in the current quarter and early next year. Meanwhile, increases in real investment in drilling and mining structures remain robust, supported by high oil prices and new drilling technologies.

Nonfarm inventory investment rose substantially in the third quarter, contributing 1½ percentage points to real GDP growth. This contribution was about ½ percentage point stronger than we had anticipated at the time of the October Tealbook. We assume that the pace of nonfarm inventory investment slows a bit in the current quarter and then flattens out; consequently, inventory investment is a small drag on real GDP growth, on balance, over the near term. Inventory-to-sales ratios from book-value data and the staff's flow-of-goods system, as well as gauges of inventory sentiment from regional and national manufacturing surveys, do not point to significant inventory imbalances in most industries.

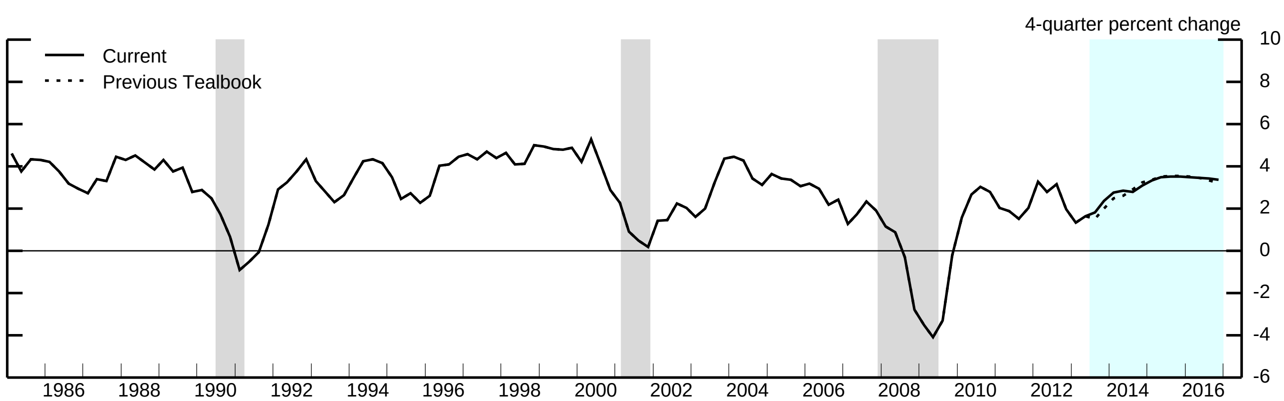
Government

Real federal purchases declined at an annual rate of 1½ percent in the third quarter, a smaller decrease than we had anticipated given the sequestration and the ongoing drawdown in overseas military spending. However, we anticipate that federal purchases will fall sharply in the current quarter, owing to the effects of the temporary government shutdown in October as well as the ongoing pressure on federal purchases from budget restraint. The reversal of the shutdown effects, along with less spending

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	**2.2**	**1.8**	**2.6**	**3.1**	**3.5**	**3.4**
Previous Tealbook	2.0	1.8	2.2	3.2	3.5	3.2
Final sales	1.5	1.1	1.9	3.3	3.7	3.5
Previous Tealbook	1.5	1.1	1.8	3.3	3.7	3.3
Personal consumption expenditures	2.2	2.0	2.3	3.3	3.9	3.2
Previous Tealbook	2.0	2.0	2.1	3.4	3.8	3.1
Residential investment	9.3	13.4	5.4	15.5	14.7	8.3
Previous Tealbook	11.4	13.4	9.4	17.5	14.1	5.8
Nonresidential structures	.1	-6.5	7.2	3.9	2.8	2.6
Previous Tealbook	-.1	-6.5	6.7	2.5	2.9	2.6
Equipment and intangibles	2.7	1.9	3.4	4.8	6.2	5.8
Previous Tealbook	2.4	1.9	3.0	5.6	6.1	5.5
Federal purchases	-6.3	-5.1	-7.6	-2.0	-3.7	.0
Previous Tealbook	-6.8	-5.1	-8.6	-4.3	-3.8	.0
State and local purchases	.3	-.4	1.1	.5	1.1	1.5
Previous Tealbook	.2	-.4	.9	.3	1.1	1.5
Exports	4.2	3.2	5.3	4.7	6.0	6.7
Previous Tealbook	3.7	3.2	4.2	5.1	6.5	6.9
Imports	3.7	3.7	3.7	3.5	5.2	4.9
Previous Tealbook	3.0	3.7	2.3	3.8	5.1	4.7
	Contributions to change in real GDP (percentage points)					
Inventory change	.7	.7	.7	-.2	-.2	-.1
Previous Tealbook	.5	.7	.4	.0	-.1	-.1
Net exports	.0	-.2	.1	.1	.0	.1
Previous Tealbook	.0	-.2	.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.

restraint because of the recent budget deal, are anticipated to lead to a small increase in real federal purchases in the first quarter of next year.

In the state and local government sector, the information we have received since the October Tealbook is consistent with modest increases in real purchases by these governments. State and local employment gains averaged 13,000 per month during the past five months, up from a pace of 2,000 per month over the first half of this year. In addition, real state and local construction spending rose robustly in the third quarter after declining in the first half of the year, and data for October suggest a further increase this quarter. Overall, real state and local purchases are projected to increase at an annual rate of about ½ percent in both the current quarter and the first quarter of next year.

Foreign Trade

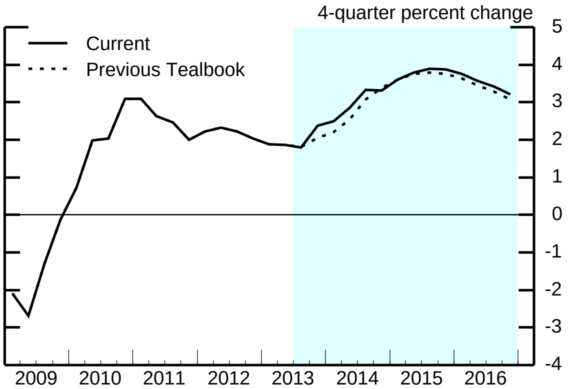
After increasing at an annual rate of 3¾ percent in the third quarter, real exports of goods and services are expected to rise 6¾ percent in the current quarter, supported in part by solid demand from the emerging market economies and consistent with the strength of the October trade data. We expect the surge in exports to be transitory and project that exports will step down to a 4¼ percent rate of increase during the first quarter, a pace more in line with the rate of foreign growth and recent movements in the dollar. The growth of real imports of goods and services is expected to step up to an annual rate of 4¾ percent in the fourth quarter of this year, supported by a temporary leveling off of real oil imports following earlier declines. We expect oil imports to resume their decline, and, partly as a consequence, we anticipate that real imports will increase at only a 2 percent pace in the first quarter of 2014. All told, the external sector is expected to add about ¼ percentage point to the rate of real GDP growth both in the current quarter and in the first quarter of next year; this projection is little changed, on average, from the previous Tealbook.

The Industrial Sector

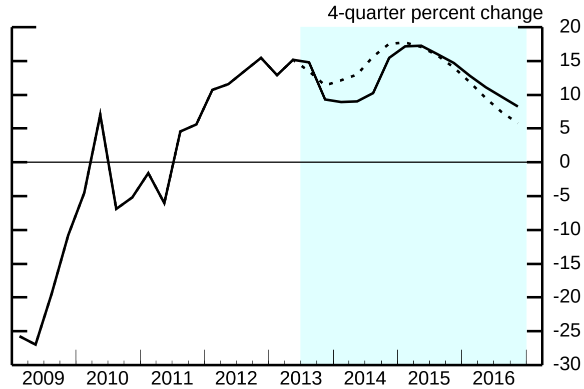
Manufacturing activity appears to have accelerated this quarter after increasing at an annual rate of just 1 percent in the third quarter. Factory output rose at a moderate pace in October, reflecting broad-based production gains across industries, and the available data for physical products and production worker hours point to a somewhat larger increase in November. Taking account of the new orders indexes from the latest manufacturing surveys and automakers' production schedules, we expect factory output growth to pick up to an annual rate of 4¾ percent this quarter, 1½ percentage points

Components of Final Demand

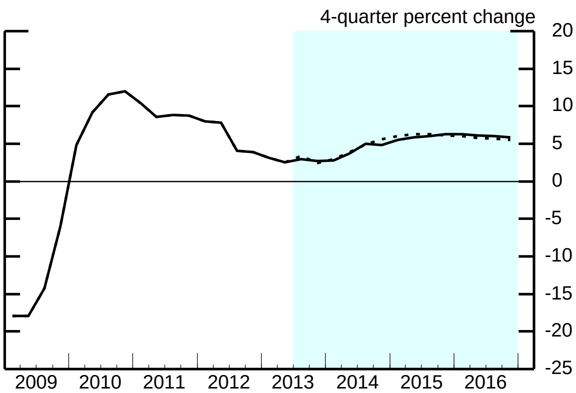
Personal Consumption Expenditures



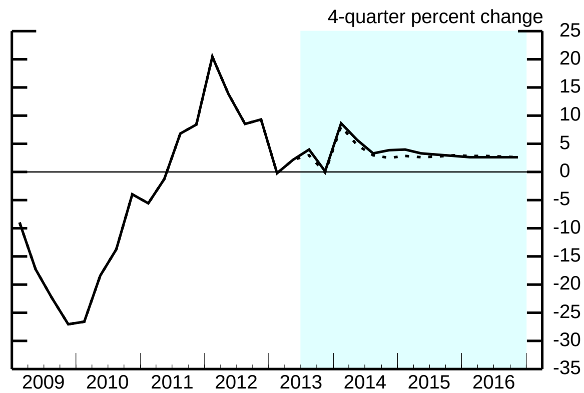
Residential Investment



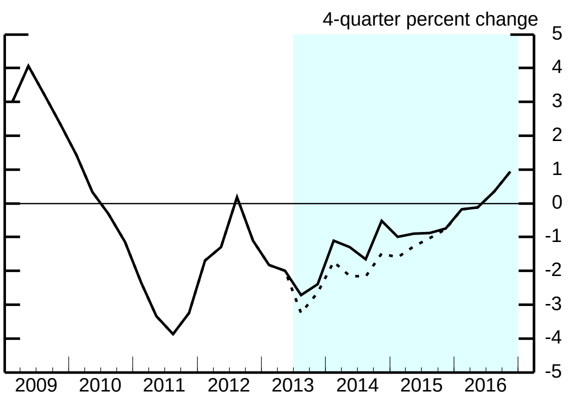
Equipment and Intangibles



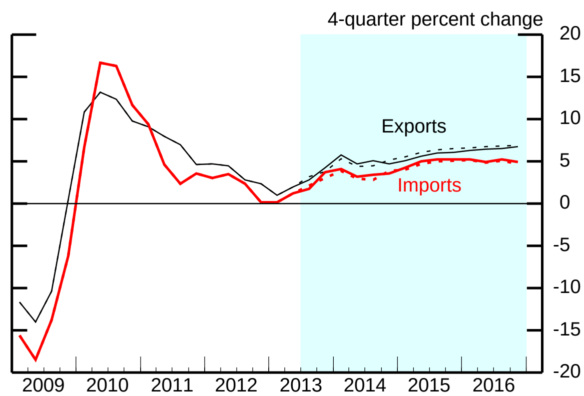
Nonresidential Structures



Government Consumption & Investment



Exports and Imports



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

above our forecast in the October Tealbook, and then to moderate somewhat in the first quarter of next year.

THE MEDIUM-TERM OUTLOOK FOR REAL GDP

Our forecast for real GDP growth over the medium term is slightly stronger than in the October Tealbook. The lower projected path for interest rates, the somewhat higher equity and house prices, and the easing of fiscal restraint because of the recent budget deal are expected to provide a bit more lift to real output growth than in the previous projection. This positive impetus is partly offset by the higher level of the exchange value of the dollar. All told, the level of real GDP ends the medium-term projection period a little higher than in the October Tealbook. We now forecast real GDP growth to step up from 2¼ percent this year to 3 percent in 2014 and 3½ percent in both 2015 and 2016.

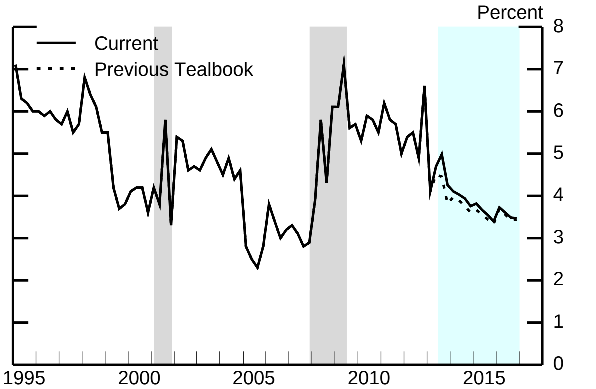
Our projection of faster real GDP growth during the next three years continues to reflect our expectation that a number of the forces that have been holding back the growth in economic activity in recent years will recede. In particular, we expect the restraint from changes in federal fiscal policy to wane over time. We also look for European financial and economic conditions to continue their slow improvement. In addition, we think that mortgage credit will gradually become more broadly available. Given the still highly accommodative stance of monetary policy, these developments are expected to foster a growing sense among households and firms that downside risks to the recovery have diminished, which should, in turn, reduce asset risk premiums and provide additional support to consumer spending, business investment, and hiring.

These dynamics are particularly evident in our forecast for consumer spending. Real PCE is projected to rise 2¼ percent this year and then accelerate to a 3½ percent pace, on average, over the medium term. This acceleration reflects the fading effects of this year's tax increases, gains in household wealth produced by rising house and equity prices, and improved consumer confidence. Our trajectory for consumer spending in the medium term is little changed, on net, from the October Tealbook.

Rising income and confidence also are expected to support higher household formation and thereby boost residential construction, although the effect on home building will likely be damped by rising mortgage rates. We expect the growth in residential investment to run at a rate of about 15 percent in 2014 and 2015 before

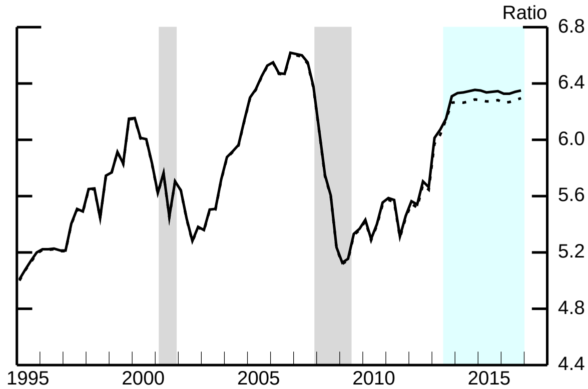
Aspects of the Medium-Term Projection

Personal Saving Rate



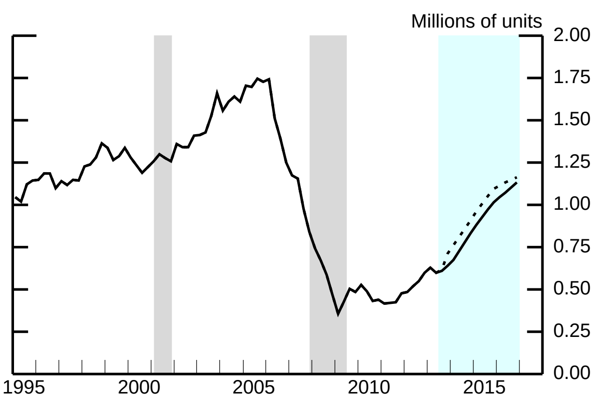
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



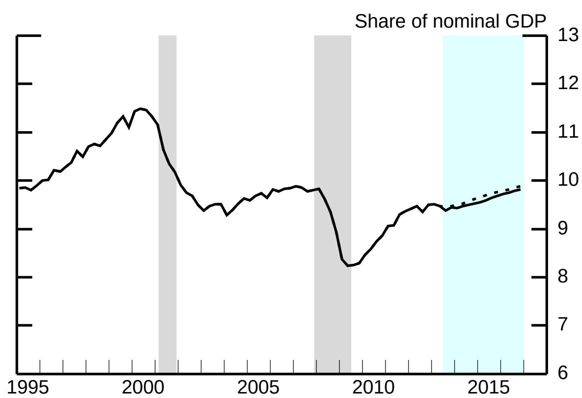
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, Financial Accounts of the United States; for income, U.S. Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



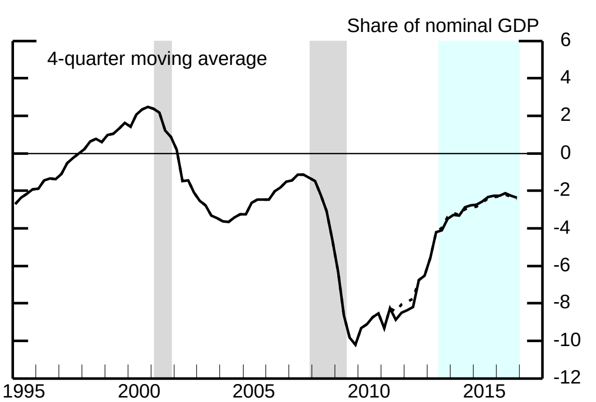
Source: U.S. Census Bureau.

Equipment and Intangibles Spending



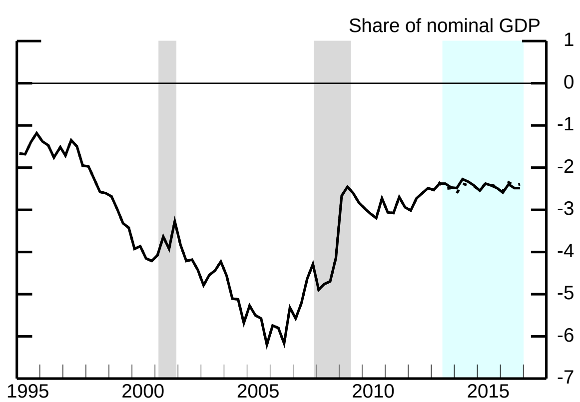
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.

slowing to about 8 percent in 2016. Our projection is slightly less robust than in the October Tealbook, as we have carried forward some of the recent softness in residential investment into next year. However, we have revised up growth in 2015 and 2016; as a result, the level of residential construction activity is still projected to reach its long-run average by the end of the medium term.

Real outlays for E&I are expected to rise 5½ percent per year, on average, over the next three years. Although faster than the 2¾ percent pace of growth expected this year, our medium-term projection for E&I growth is modest by historical standards and reflects our expectation that business output will increase at only a moderate pace over this period. Similarly, we continue to expect only subdued growth in outlays for nonresidential structures over the medium term.

The external sector is expected to be about neutral for GDP growth in 2014 and 2015 and then to provide a small boost in 2016; on average, these contributions are a bit smaller than in our previous projection, reflecting the higher path for the dollar. As foreign growth recovers and the dollar begins to depreciate, we expect real exports to grow 4¾ percent in 2014 and then to accelerate over the remainder of the forecast period, reaching a 6¾ percent pace in 2016. Real imports are expected to increase at an average pace of 4½ percent over the medium term, as the ongoing domestic recovery more than offsets the restraint from the projected depreciation in the real exchange value of the dollar.

The Outlook for the Labor Market and Inflation

Recent Developments and Near-Term Outlook for the Labor Market

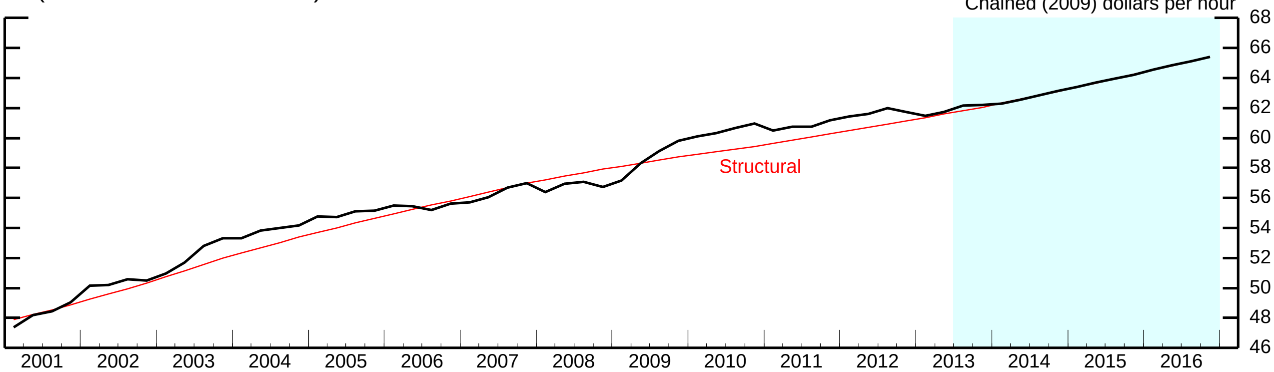
We received the labor market reports for both October and November since the October Tealbook, and these reports were, overall, somewhat stronger than we had been expecting. Total nonfarm payroll employment growth averaged 200,000 in October and November, about 50,000 more per month than we had anticipated in the past round. These readings, combined with the upward revisions to employment in August and September, leave the level of total payrolls in November about 175,000 higher than our projection in the previous Tealbook. In the household survey, the unemployment rate has decreased 0.2 percentage point since September to 7.0 percent in November, whereas we

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 NFB 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	.5	.6	.6	.6	.6	.5
Previous Tealbook	1.5	1.0	.6	.7	.7	.6	.6	.5
Labor force participation	.4	.0	-.3	-.4	-.6	-.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	-3.4	-2.5	-1.3	-.1
Previous Tealbook	-2.4	1.9	-3.6	-3.6	-3.6	-2.6	-1.3	-.3

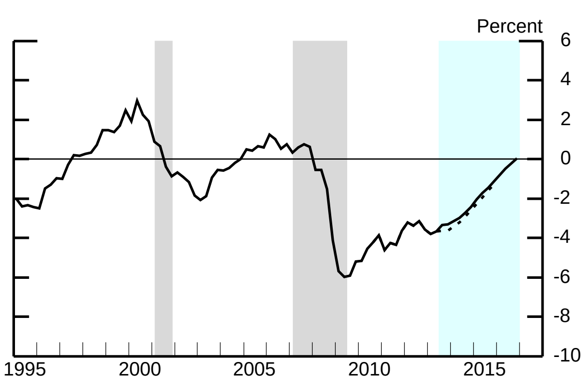
Note: For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.
1. Percentage points.
2. Because of substantial revisions from the Bureau of Economic Analysis to productive investment as part of the latest comprehensive 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)



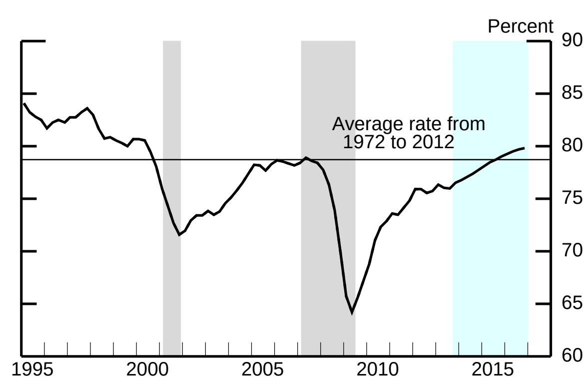
Source: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; staff assumptions.

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.

had projected it to stay at its September level.[4] The labor force participation rate also decreased 0.2 percentage point over the same period, reaching 63.0 percent, contrary to our projection of no change.

Forward-looking indicators of labor market activity have generally remained consistent with a gradual labor market recovery. The four-week moving average of initial claims for unemployment insurance has moved back down to its August level, and the staff's labor market conditions index, which summarizes the movements in 19 labor market indicators, edged up further in October and November. The hiring plans of small businesses have increased, on net, from a year ago, and job openings have continued to edge up over the past few months, although the hiring rate remains relatively flat.

All told, we now expect nonfarm payroll gains of about 185,000 in December and 195,000 per month in the first quarter of next year, about 35,000 more per month than in the October Tealbook. We have carried forward the lower level of the unemployment rate and now project it to hold steady at 7.0 percent in December and then gradually move down to 6.8 percent by March 2014—a path that is 0.2 percentage point lower than in our October forecast. Similarly, we have adjusted down the path of the labor force participation rate and now expect that it will remain at its current level of 63.0 percent through March.

Potential GDP and the Natural Rate of Unemployment

We have not revised our estimates of potential output or the natural rate of unemployment in this projection.[5] We continue to project that the natural rate of unemployment will edge down from 5½ percent in 2013 to 5¼ percent in 2015, and we estimate that potential output will rise by a bit more than 2 percent per year over the projection period, a slightly faster pace than seen in the past few years. This acceleration

[4] We do not believe that the quality of the October payroll survey was materially affected by the government shutdown. In contrast, the quality of the October household survey may have been impaired because of the longer-than-usual delay between the reference week and the data collection week. As such, we believe it is better to compare the November readings in the household survey with their September values.

[5] We have lowered our estimate of trend labor force participation in response to the downside surprises since the September Tealbook but left our estimate of potential GDP growth unrevised. In effect, we boosted our assumption for the difference between productivity in the total economy and productivity in the nonfarm business sector.

Domestic Econ Devel & Outlook

The Outlook for the Labor Market

Measure	2013	2013 H1	2013 H2	2014	2015	2016
Output per hour, nonfarm business[1]	.7	.0	1.5	1.5	1.8	1.9
Previous Tealbook	.8	.0	1.7	1.4	1.8	1.9
Nonfarm private employment[2]	190	201	179	210	245	220
Previous Tealbook	173	201	145	199	245	195
Labor force participation rate[3]	62.9	63.4	62.9	63.0	62.9	62.8
Previous Tealbook	63.2	63.4	63.2	63.2	63.1	63.0
Civilian unemployment rate[3]	7.1	7.5	7.1	6.5	5.9	5.3
Previous Tealbook	7.3	7.5	7.3	6.6	5.9	5.4

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	.9	.5	1.3	1.4	1.4	1.6
Previous Tealbook	1.0	.5	1.6	1.4	1.5	1.6
Food and beverages	.9	.9	.9	.7	1.3	1.4
Previous Tealbook	1.1	.9	1.2	.6	1.3	1.4
Energy	-2.5	-7.8	3.1	1.1	-.8	-.5
Previous Tealbook	-2.4	-7.8	3.2	-.7	-1.1	-.5
Excluding food and energy	1.1	1.0	1.3	1.4	1.6	1.7
Previous Tealbook	1.2	1.0	1.5	1.5	1.6	1.7
Prices of core goods imports[1]	-1.1	-1.0	-1.2	1.5	1.6	1.7
Previous Tealbook	-1.1	-1.0	-1.1	1.7	1.6	1.6

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

reflects a step-up in structural productivity as well as the projected decline in the natural rate of unemployment.

The Medium-Term Outlook for the Labor Market

Total payroll employment is projected to increase 200,000 per month in 2014 and then rise 240,000 per month, on average, in 2015 and 2016, a trajectory that is slightly stronger, on net, than in the October Tealbook. As in previous forecasts, the pace of job gains over the medium term is somewhat less rapid than what the acceleration in real GDP would normally imply, reflecting a projected pickup in labor productivity to a pace more in line with its structural growth rate.

As noted previously, the unemployment rate is 0.2 percentage point lower at the start of the forecast period as a result of the incoming data. From this lower starting point, the unemployment rate declines about ½ percentage point per year, thereby reaching 5¼ percent, the staff's estimate of the natural rate of unemployment, at the end of 2016. We continue to project that the unemployment rate will cross the 6.5 percent policy threshold around the start of 2015.

Over the four quarters of 2012, the unemployment rate declined 0.9 percentage point; during 2013, it is projected to decline 0.7 percentage point. During each of the next three years, the unemployment rate is projected to decline slightly less per year—0.6 percentage point in each year—despite the fact that real GDP growth is forecast to run at a faster average pace than in 2012 or 2013. This outlook stems from two considerations. First, we judge that the natural rate of unemployment was declining a little more quickly during 2012 and 2013 than it will from here forward; accordingly, the unemployment rate gap will be closing about as rapidly over the next three years as it has during the past two years. Second, we judge that between the end of 2011 and the end of this year, productivity was increasing at a below-trend pace; as a result, the gains in output that we observed could only be supported by relatively rapid increases in employment. In contrast, over the next three years, we expect productivity growth to proceed at its trend pace; therefore, a given increase in GDP will require a smaller gain in employment, all else being equal.

As shown in the "Labor Market Data and Projections" exhibit, the current projection for the unemployment rate in mid-2014 is about 1 percentage point lower than our projection in September 2012, when the Committee first tied its asset purchases to an

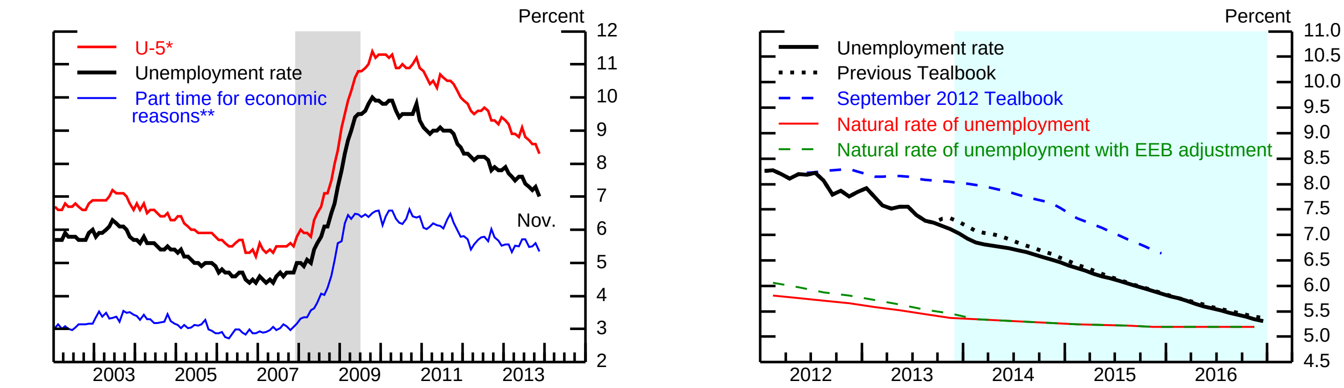
Labor Market Data and Projections

Indicator	Aug. 2012[1]	Projection for mid-2014[2] in the Tealbook dated:			
		Sept. 2012	Dec. 2012	Sept. 2013[3]	Dec. 2013[3]
Unemployment rate (percent)	8.1	7.8	7.6	6.8	6.7
Labor force participation rate (percent)	63.5	63.7	63.7	63.3	63.0
Monthly change in payroll employment (thousands, three-month averages)					
Total	94	212	197	197	203
Private	109	210	195	205	207
Level of total payroll employment (millions)	133.3	137.0	137.1	138.0	138.2
Total hours worked (percent change)[4]	1.0	2.3	2.0	2.5	2.0
Total hours worked (billions)[4]	184.6	190.3	190.8	193.0	193.3

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.

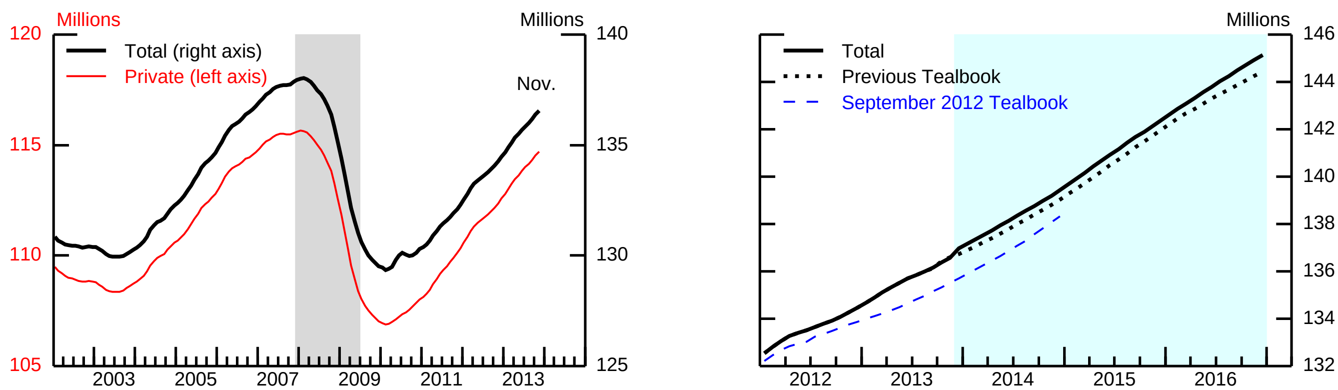
Labor Market Developments and Outlook

Measures of Labor Underutilization



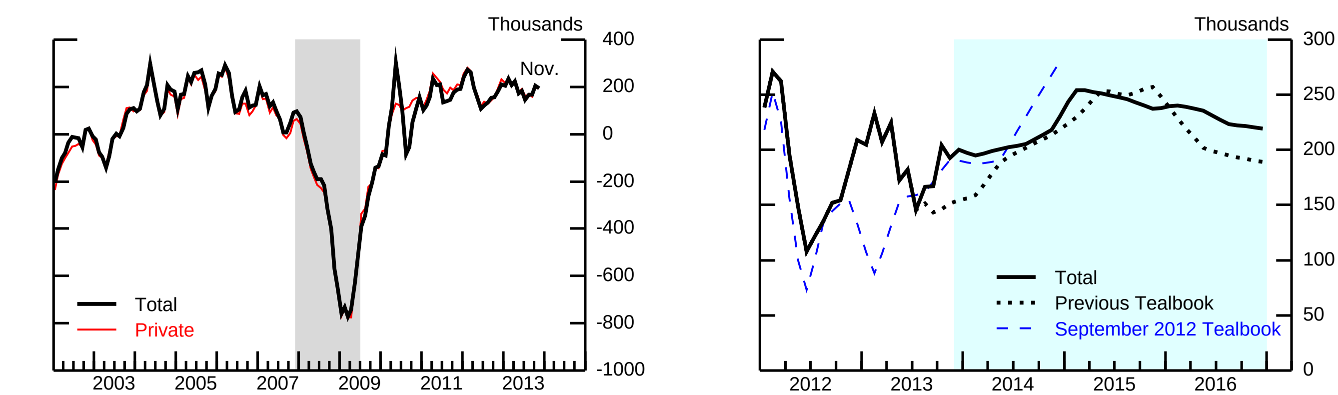
* U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force.
** Percent of Current Population Survey employment.
EEB Extended and emergency unemployment benefits.
Source: U.S. Department of Labor,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

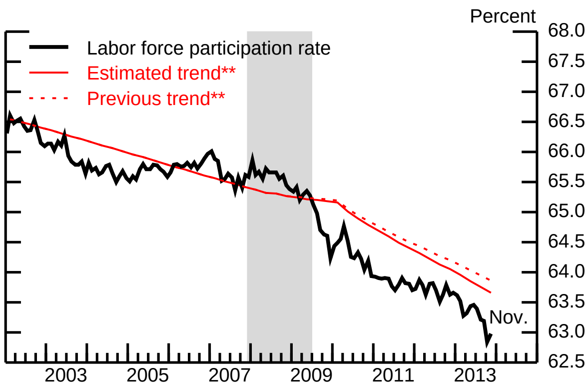


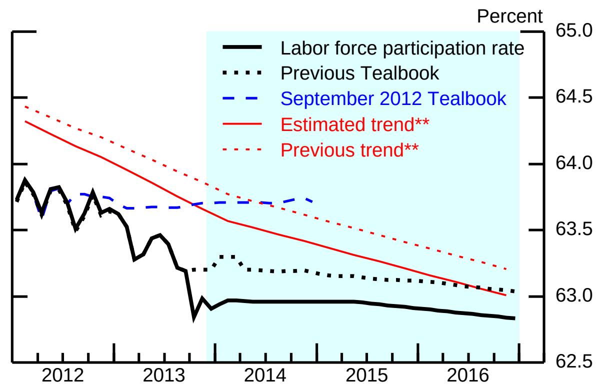
* 3-month moving averages in history; average monthly changes in each quarter during the forecast period.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

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

Labor Market Developments and Outlook (2)

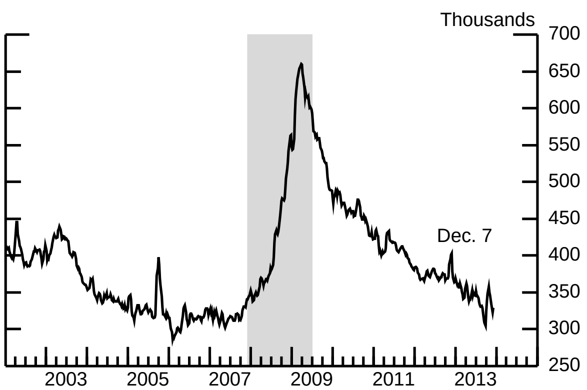
Labor Force Participation Rate*





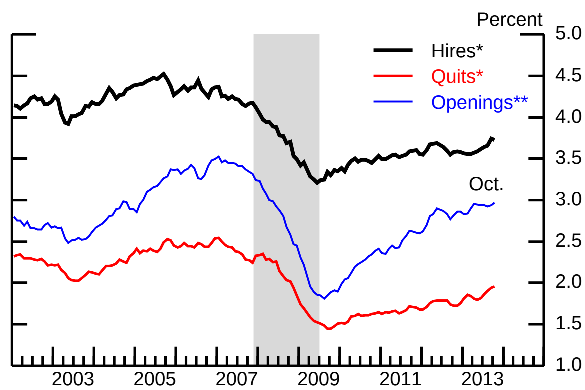
* Published data adjusted by staff to account for changes in population weights.
** Includes staff estimate of the effect of extended and emergency unemployment benefits.
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

Initial Unemployment Insurance Claims*



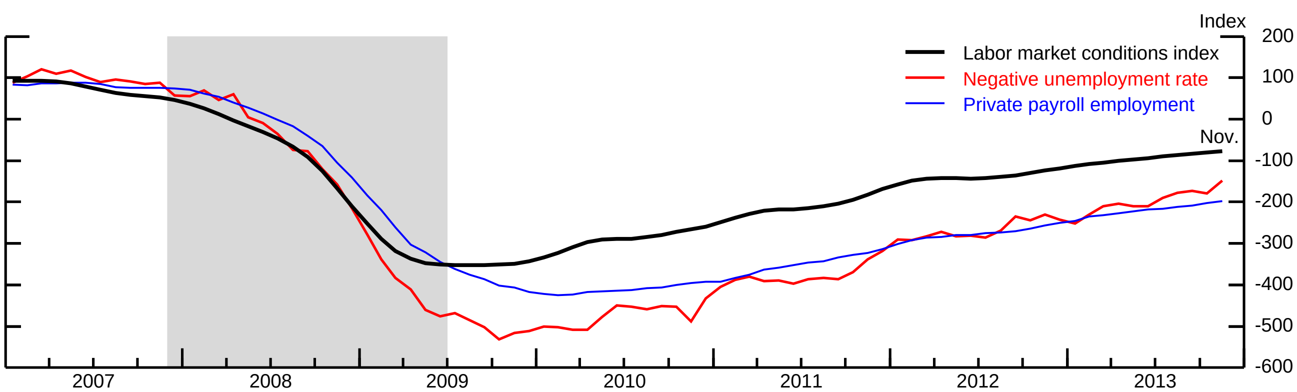
* 4-week moving average.
Source: U.S. Department of Labor, Employment and Training Administration.

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.

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

improvement in the outlook for labor market conditions. The monthly change in payrolls currently projected for mid-2014 is about the same as in the September 2012 forecast; however, the *level* of total payroll employment in mid-2014 in this projection is about 1¼ million (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.

Resource Utilization

The incoming data have led us to narrow our estimate of the unemployment rate gap by ¼ percentage point at the start of the projection period relative to our forecast in the October Tealbook, with the unemployment rate 1¾ percentage points above our estimate of the natural rate. The GDP gap is also a little narrower, with real GDP currently 3½ percent below potential. These gaps are projected to diminish gradually over the medium term; by the end of 2016, the unemployment gap is expected to close, and real GDP is projected to be nearly at its potential level. In the manufacturing sector, capacity utilization is currently almost 2½ percentage points below its long-run average but rises to its long-run average by mid-2015.[6]

The Outlook for Prices and Compensation

After rising at an annual rate of 2 percent in the third quarter, total PCE prices are estimated to increase at just a ¾ percent pace in the fourth quarter, as energy prices decline and other consumer prices decelerate. Core PCE inflation was 1½ percent in the third quarter but appears to be running at a rate of only about 1 percent in the fourth quarter. We project that early next year both total and core PCE inflation will be about 1½ percent.

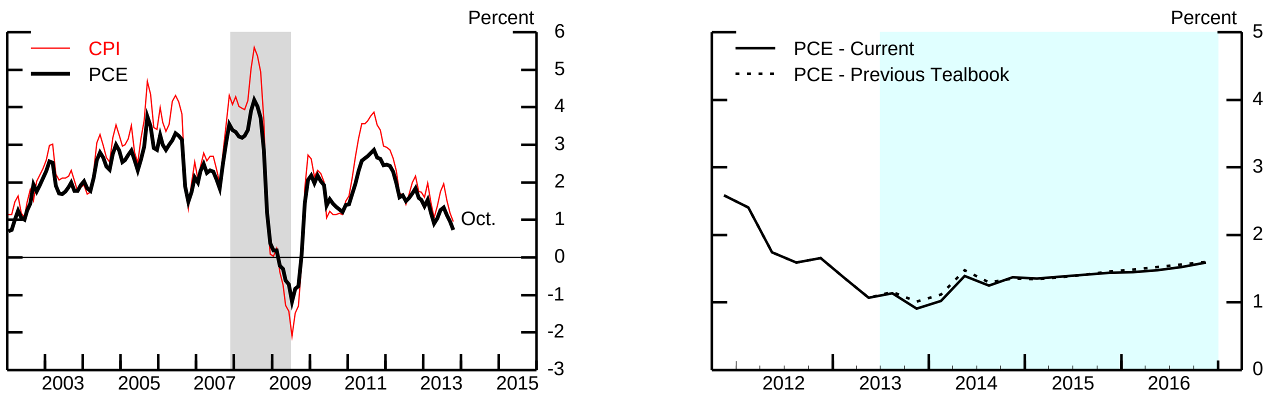
We have marked down our projection slightly for consumer energy price inflation in the fourth quarter because of recent movements in the prices of crude oil and refined products. Overall consumer energy prices are now projected to fall at an annual rate of 5 percent, although we expect this decline will be reversed early next year. Nevertheless,

[6] The degree of slack in the manufacturing sector appears to be smaller than that for the broader economy, in part because of unprecedented declines in production capacity from 2007 to 2010 that occurred as manufacturers shuttered plants that had been chronically underutilized. Note that we estimate capacity in the industrial sector based largely on survey data that seek to capture the highest level of output that plants can sustainably maintain given sufficient availability of variable inputs, such as labor and materials.

Inflation Developments and Outlook

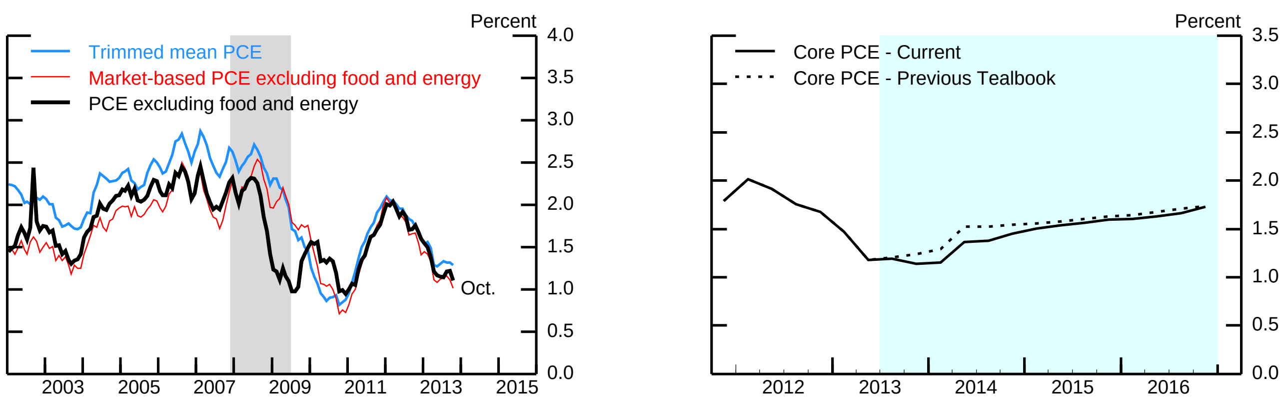
(Percent change from year-earlier period)

Headline Consumer Price Inflation



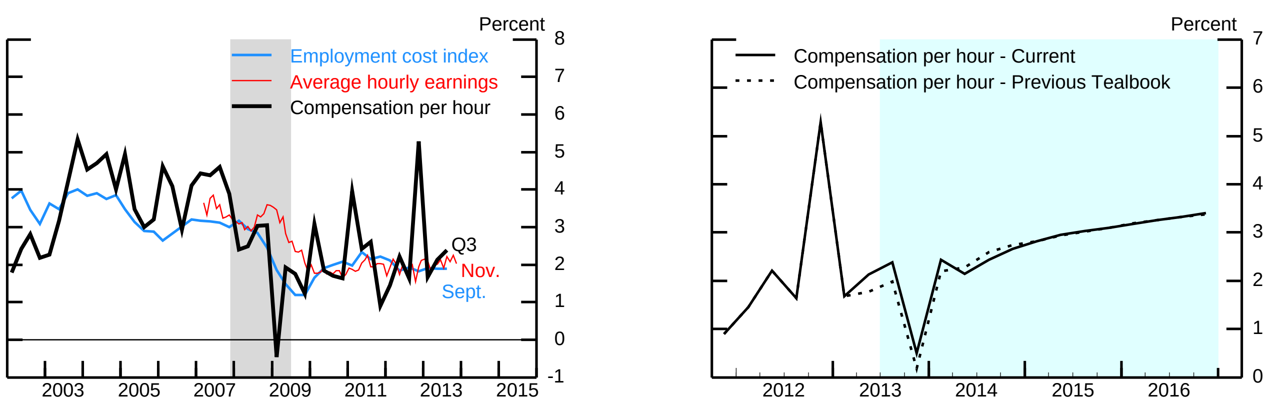
Source: For CPI, U.S. Department of Labor, Bureau of Labor Statistics; for PCE, U.S. Department of Commerce, Bureau of Economic Analysis.

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:Q3 is a staff estimate.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

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

given the downward tilt in our projected oil price path, we still forecast that PCE energy prices will decline modestly over the medium term.

Consumer food prices are projected to increase at an annual rate of ½ percent this quarter and ¾ percent in the first quarter of next year. The subdued pace of food price inflation reflects a bumper domestic crop, which has pushed down prices for food commodities and should continue to restrain food price increases next year. We expect PCE food inflation to remain at about ¾ percent in 2014 before rising steadily throughout the remainder of the medium term to a pace that is slightly below core inflation.

The data we have received on core PCE prices since the October Tealbook have been softer than we had anticipated, and our projection for core PCE inflation in the current quarter has been revised down about ¼ percentage point. Medical services prices account for part of the recent softness in the core PCE index, as the Center for Medicare and Medicaid Services reduced the rate of increase in Medicare reimbursements at the time of their typical October adjustment by more than we had expected.[7] We expect that reimbursement rates for Medicare and Medicaid will continue to be restrained by tight government budgets over the next couple of years, and, as a result, we have reduced our projection for PCE core services inflation a bit to better account for the slowdown in medical services inflation.

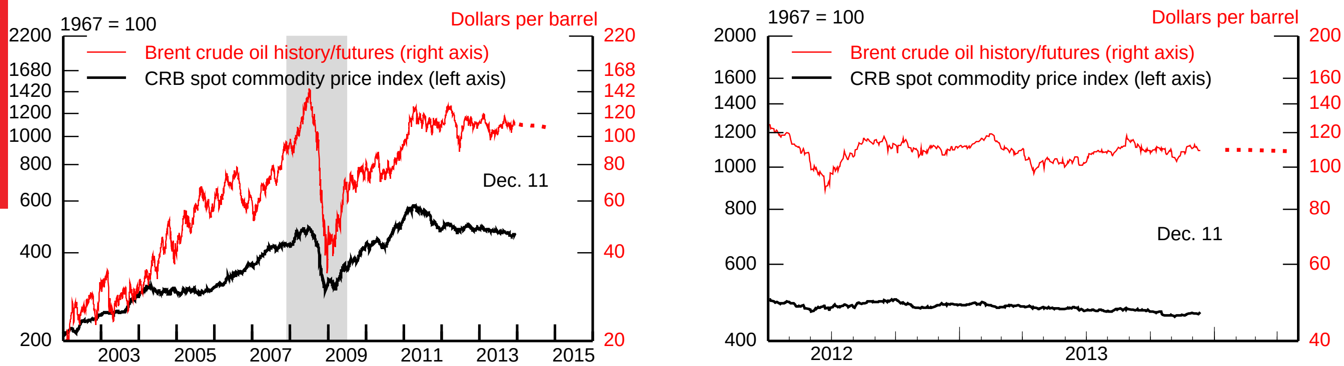
Part of the recent softness of core PCE inflation likely also reflects import prices. Prices of imported core goods declined at an average annual rate of nearly 3 percent in the second and third quarters but are expected to increase at about a 1 percent pace in both the current quarter and the first half of next year. Relative to the October Tealbook, the projection for the first half of 2014 was revised down by ½ percentage point in response to the higher dollar. For the remainder of the forecast period, core import price inflation is expected to run about 1½ percent per year—a pace that would have a roughly neutral effect on U.S. consumer price inflation—in line with the relatively flat projected trajectory for commodity prices and our assumed pace of dollar depreciation.

[7] In contrast, core CPI inflation has come in closer to our expectations and is little revised since the previous Tealbook. The CPI price index for medical services focuses on out-of-pocket expenses by households, while the PCE price index includes all medical services provided to households regardless of the payer. In particular, although the PCE price index includes prices for Medicare and Medicaid, these prices are not included in the CPI. The wider scope for medical services in the PCE index leads to a weight of about 20 percent in core PCE inflation, compared with a weight of only 7 percent in core CPI inflation.

Inflation Developments and Outlook (2)

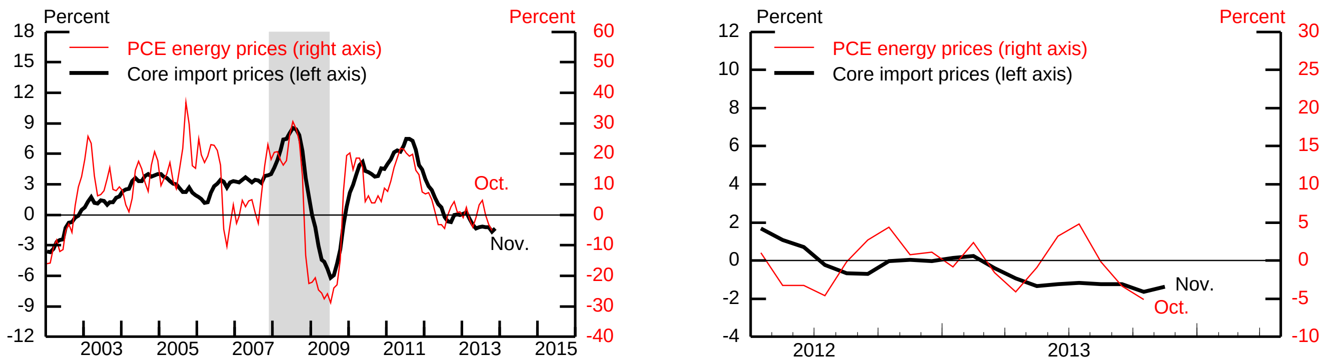
(Percent change from year-earlier period, except as noted)

Commodity and Oil Price Levels



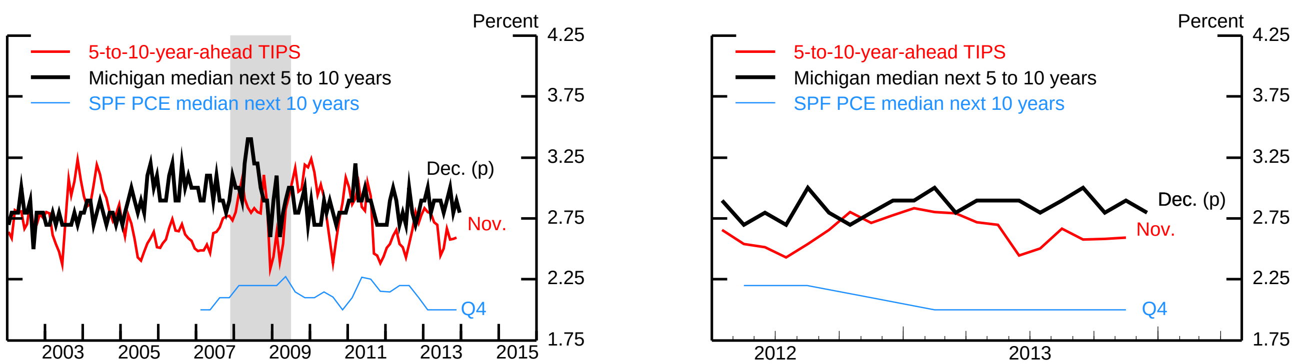
Note: Futures prices are the latest observations on monthly futures contracts.
Source: For oil prices, U.S. Department of Energy, Energy Information Agency; for commodity prices, Conference Research Board (CRB).

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.

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

Readings on longer-term inflation expectations have remained stable. The preliminary December reading on median 5-to-10-year-ahead inflation expectations from the Michigan survey stood at 2.8 percent, well within the relatively narrow range seen in recent years. Expectations for PCE price inflation over the next 10 years, as measured by the Survey of Professional Forecasters, were unchanged at 2 percent in the fourth quarter. Similarly, TIPS-based measures of longer-term inflation compensation are little changed, on balance, since the October Tealbook.

With stable long-run inflation expectations, a projected pickup in commodity and import prices next year, and gradually diminishing margins of slack, we expect core PCE inflation to increase from just over 1 percent in 2013 to 1¾ percent in 2016; this forecast is essentially the same as in the October Tealbook. Given the trajectory for energy prices, total PCE inflation is projected to be a bit below core inflation over the medium term. Thus, through 2016, the PCE inflation projection remains below the Committee's long-run objective of 2 percent.

The incoming data suggest that labor compensation has continued to rise modestly. We now estimate that compensation per hour in the nonfarm business sector will increase at a 2 percent annual rate in the current quarter—close to the average rate seen over the past two years. We expect the gradual tightening of the labor market over the medium term to push hourly compensation growth up to 3½ percent by 2016.

Also, see the box "Tealbook Forecast Errors over the Recovery So Far" for a discussion of the recent errors in the staff's forecasts for GDP, unemployment, and inflation.

THE LONG-TERM OUTLOOK

We have extended the staff's forecast beyond the medium term using the FRB/US model and our assumptions about long-run supply-side conditions, fiscal policy, and other factors. The contour of the long-term outlook depends on the following key assumptions:

- The federal funds rate continues to be set according to the prescriptions of an inertial version of the Taylor (1999) rule.
- The Federal Reserve's holdings of securities continue to put downward pressure on longer-term interest rates through 2017, albeit to a diminishing

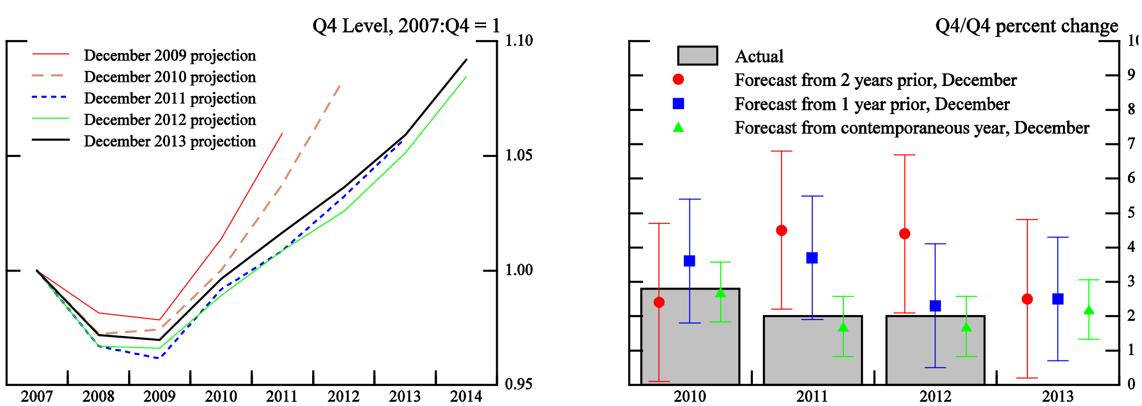
Tealbook Forecast Errors over the Recovery So Far

In 2009 and 2010, staff forecasts of real GDP growth were too optimistic, while our forecasts of the unemployment rate were relatively accurate. Starting in 2011, circumstances have reversed: Our forecasts of real GDP have thus far proven quite accurate, while we were not able to anticipate the extent of the decline in the unemployment rate that has taken place. Responding to this constellation of forecast errors, we have substantially downgraded our assessment of the supply side of the economy. Meanwhile, inflation in 2011 and 2012 came in well above the staff's expectations; in 2013, by contrast, we have been surprised by how low inflation has been. In this box we present and discuss these recent forecast errors.

Staff projections for the level of real GDP from the current and past four December Tealbooks are plotted in the left panel of figure 1. The solid red and dashed orange lines show the overly optimistic projections made by the staff in 2009 and 2010. In mid-2010 and mid-2011, the BEA released revised estimates of real GDP that painted a considerably darker picture of the severity of the recession and the immediate post-recession period, and the staff substantially marked down its GDP forecast in 2011. Since then, revisions to the projected level of real GDP have been relatively minor.

The right-hand panel presents the same information in growth-rate terms, and rather than focusing on the year in which the forecast was made, it focuses instead on the year in which the economic outcome took place. The gray bars in this panel show the currently published Q4/Q4 percent changes in real GDP in 2010, 2011, and 2012, while the red dots, blue squares, and green triangles over each bar show forecasts for growth that year from December Tealbooks two years prior, one year prior, and the contemporaneous year, respectively. The whisker bands around the dots, squares, and triangles demarcate approximate 70 percent confidence bands using staff forecast errors over the past

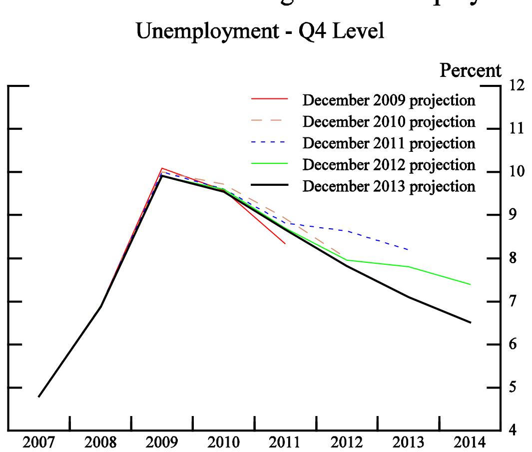
Figure 1: Real GDP Forecasts

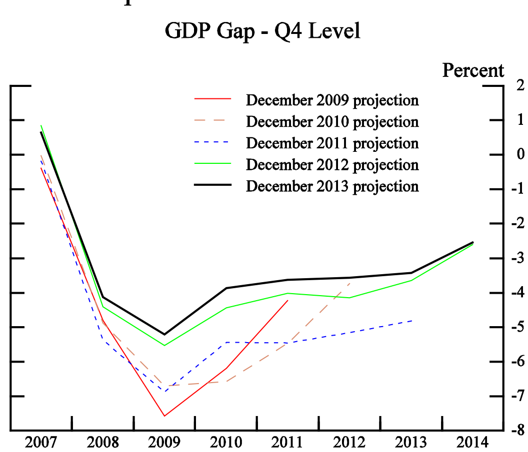


20 years.[1] Unusually large forecast errors are represented by cases where the top of a gray bar (the actual value) falls outside one of the whisker bands, as was true for the two-year-ahead projections for growth in 2011 and 2012, both too high by an unusually large 2½ percentage points (p.p.). Attempts to identify the cause of these forecast errors are fraught with uncertainty, but the current GDP data show that PCE is the category that contributed most to these two-year-ahead forecast misses (about 1 p.p. to the 2011 GDP growth miss and 1½ p.p. to the 2012 miss). Growth in real PCE may have been held down by a surge in energy prices in 2011, which acted like a tax on consumers, contributing to lower-than-expected real disposable personal income.[2]

The left panel of figure 2 shows the staff's forecasts of the unemployment rate from the current and past four December Tealbooks. The overly pessimistic projections in December 2011 and December 2012 are particularly striking; in each case, the unemployment rate was ¾ p.p. lower one year later than the staff had projected. These larger-than-expected declines in the unemployment rate in the face of only modest measured GDP growth led the staff to substantially mark down its estimates of potential GDP, leading to a sizable narrowing of the estimated GDP gap despite only minor revisions to real GDP since 2011 (see the right panel of figure 2). Even conditional on our revised potential output path, the unemployment rate has declined somewhat more than we would have expected based on GDP growth alone. In our current view, possible explanations for that development might include excessive, panicked firing in 2009 followed by subsequent normalization in the labor market; measurement error in GDP

Figure 2: Unemployment Rate and GDP Gap Forecasts





[1] These bands are plus or minus the root mean square error of the forecast for each horizon over the past 20 years, so an implicit assumption has been made here that forecast errors follow a normal distribution. Other procedures yield somewhat different error bands.

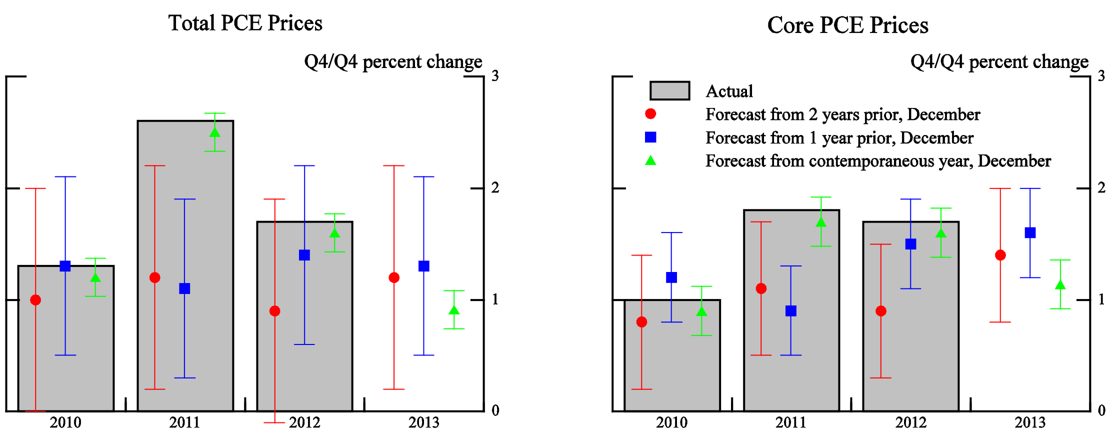
[2] Among other expenditures categories, government purchases contributed about 1 p.p. to the forecast miss for 2011, as defense spending and state and local purchases fell much more sharply than expected. The contribution to the GDP forecast error from overall fiscal policy was smaller than that from government purchases, as the federal government unexpectedly put in place a payroll tax cut in 2011 that we think boosted aggregate demand somewhat.

growth, with the official GDP estimates understating the true pace of growth; and greater-than-expected cyclical declines in labor force participation.[3]

Finally, figure 3 shows the staff's forecasts, with standard error bands, for total and core PCE price inflation over the recovery so far, along with bars for the latest realized values. In both 2011 and 2012, inflation came in higher than the staff had projected earlier; indeed, the one- and two-year-ahead forecast errors for both total and core PCE price inflation in 2011 were unusually large, as was the two-year-ahead core inflation forecast error for 2012. These forecast misses appear to be due to a mix of factors. First, higher-than-anticipated oil prices contributed to the errors in overall inflation. This oil-price surprise probably contributed to the errors in core inflation as well, as did larger-than-expected increases in other commodity and import prices. More broadly, there may have been less downward pressure from slack (as can be seen from the errors in our projections of resource utilization), less persistence in the inflation process, and greater anchoring of inflation expectations than we had earlier assumed.

However, for 2013, both inflation measures now appear likely to come in somewhat lower than we had earlier projected. The ½ p.p. downward revision over the past year to our estimate of core PCE inflation in 2013 likely stems from several factors, including a stronger exchange value of the dollar than we had projected and surprising weakness in both the PCE measure of medical prices and the nonmedical portion of the non-market-based prices.

Figure 3: Price Inflation Forecasts



[3] For further discussion, see Stephanie Aaronson, Bruce Fallick, Charles Fleischman, and Robert Tetlow (2013), "Assessing the Recent Decline in the Unemployment Rate and Its Implications for Monetary Policy," memorandum to the FOMC, Board of Governors of the Federal Reserve System, Division of Research and Statistics, June 7.

extent. The process of returning the SOMA portfolio to a normal size is expected to be completed by 2021.

- Risk premiums on corporate equities and bonds continue to decrease gradually, returning to normal levels by 2020, and financial institutions further ease their lending standards.

- The federal budget deficit (measured on a NIPA basis) is 3¾ percent of GDP in 2017 and widens thereafter, primarily reflecting fast-rising transfer payments for retirement and health-care programs. Federal debt stabilizes temporarily at 74 percent of GDP in 2017 but edges up later in the decade.

- The real foreign exchange value of the dollar stays constant from 2017 onward. The price of crude oil holds steady in real terms. Foreign real GDP rises at about a 3 percent annual rate in the period from 2017 to 2020.

- The natural rate of unemployment is 5¼ percent, and potential GDP rises around 2¼ percent per year from 2017 to 2020.

The economy is projected to enter 2017 with output at its potential level and unemployment at its natural rate, but with inflation below the long-run objective of the Committee. In the staff's long-term forecast, further improvements in household and business confidence and credit availability, in conjunction with diminishing uncertainty, enable real GDP to rise nearly 2¾ percent in 2017. As a result, real GDP moves slightly above potential and the unemployment rate declines a bit below the natural rate; these small gaps are eventually closed as monetary policy accommodation is progressively withdrawn. Long-run inflation expectations are assumed to remain well anchored, and, with slack in labor and product markets having been eliminated, consumer price inflation moves up to 2 percent by 2019. The nominal federal funds rate rises gradually from about 2 percent at the end of 2016 to 4 percent by 2020.[8]

[8] For further discussion, see Michiel de Pooter, Marcel Priebsch, and John Roberts (2013), "Quantifying the Headwinds," memorandum to the FOMC, Board of Governors of the Federal Reserve System, Divisions of International Finance, Monetary Affairs, and Research and Statistics, December 6.

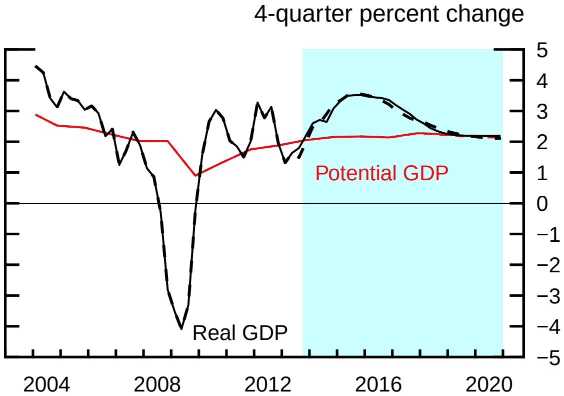
The Long-Term Outlook

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

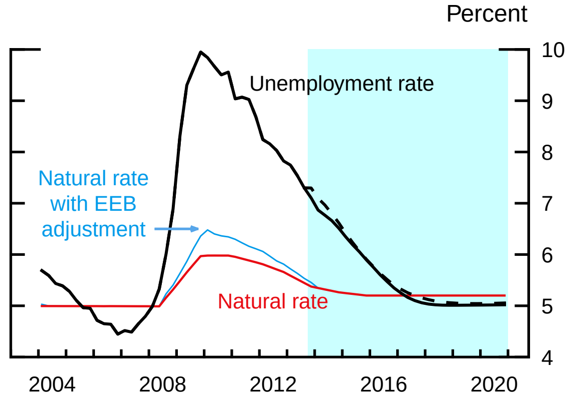
Measure	2013	2014	2015	2016	2017	2018	Longer run
Real GDP	2.2	3.1	3.5	3.4	2.7	2.3	2.3
Previous Tealbook	2.0	3.2	3.5	3.2	2.7	2.4	2.3
Civilian unemployment rate[1]	7.1	6.5	5.9	5.3	5.1	5.0	5.2
Previous Tealbook	7.3	6.6	5.9	5.4	5.2	5.1	5.2
PCE prices, total	.9	1.4	1.4	1.6	1.8	1.9	2.0
Previous Tealbook	1.0	1.4	1.5	1.6	1.8	1.9	2.0
Core PCE prices	1.1	1.4	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	.8	1.9	2.9	3.5	4.0
Previous Tealbook	.1	.1	.9	2.0	2.8	3.4	4.0
10-year Treasury yield[1]	2.8	3.3	3.8	4.2	4.6	4.8	4.8
Previous Tealbook	2.7	3.4	4.0	4.4	4.7	4.8	4.8

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

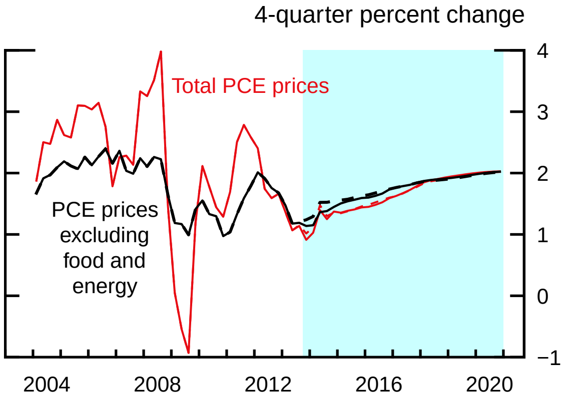
Real GDP



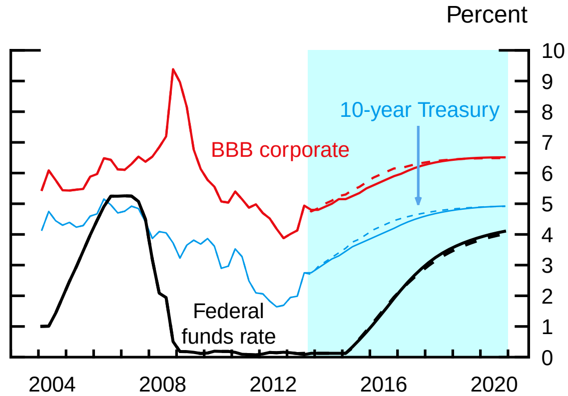
Unemployment Rate



PCE Prices



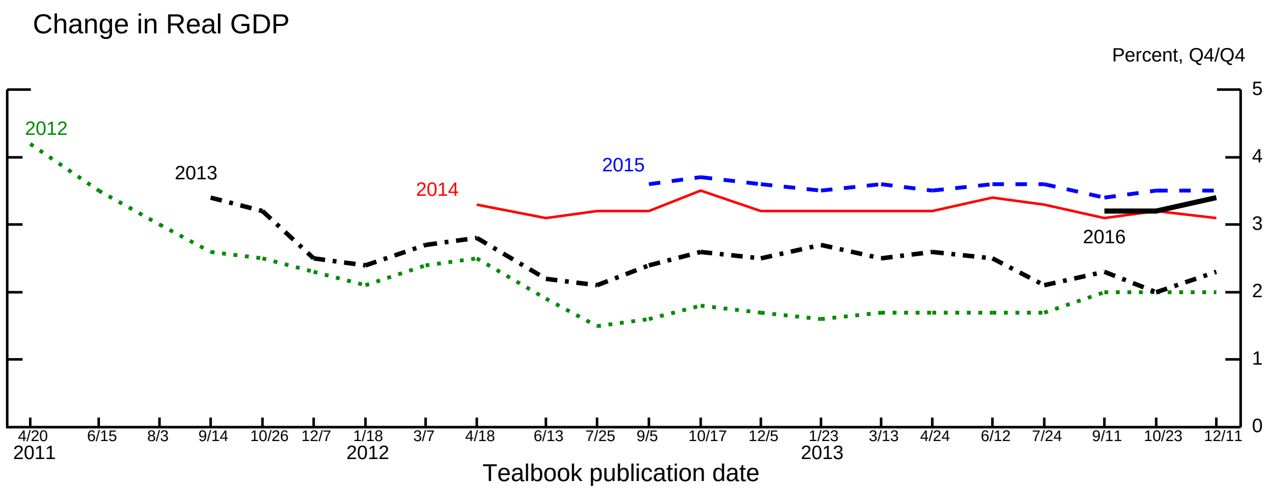
Interest Rates

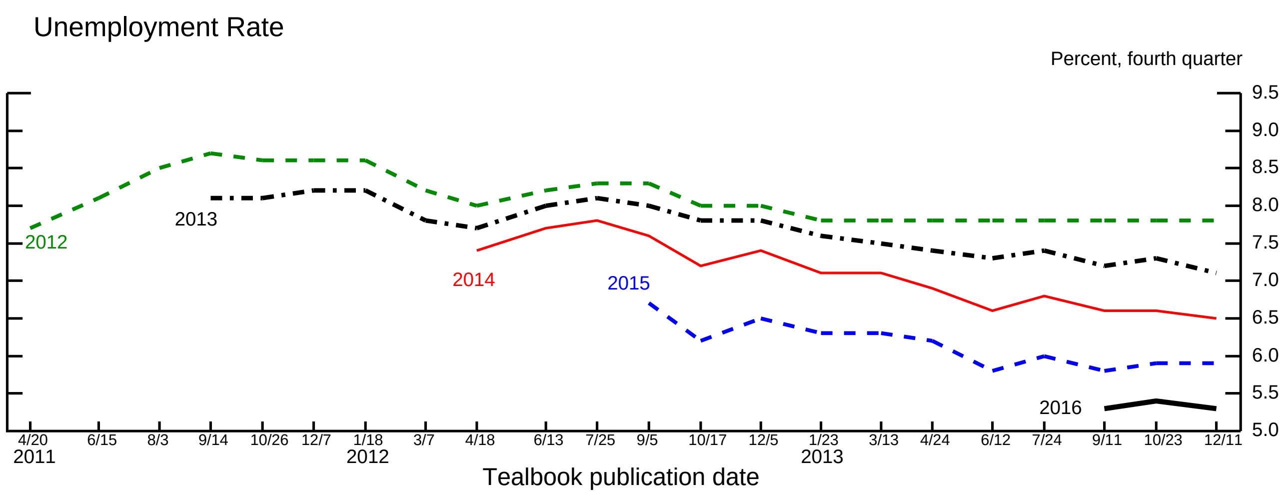


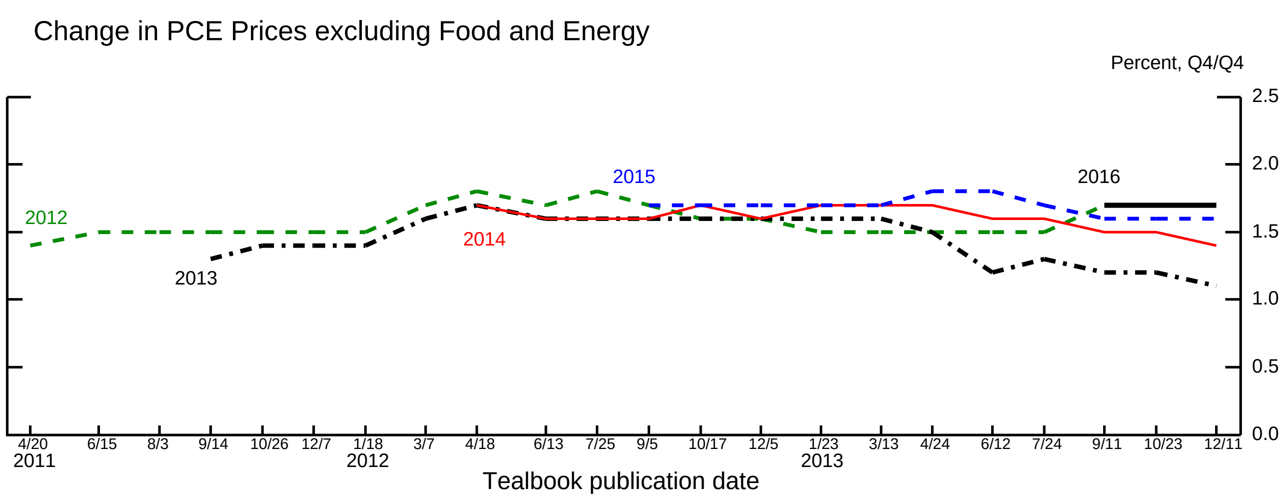
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

Domestic Econ Devel & Outlook

Evolution of the Staff Forecast







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International Economic Developments and Outlook

Foreign economic activity is pulling out of a protracted soft patch. Real GDP growth picked up to 3 percent in the third quarter after averaging only about 2 percent for more than a year, and recent indicators are pointing to another 3 percent expansion in the fourth quarter. Europe is emerging from its long recession, China's growth has recovered from a slowdown in the first half of the year, and the Mexican economy has rebounded from a second-quarter contraction. Foreign GDP growth is expected to average 3¼ percent next year and then level off near 3½ percent through 2016. This outlook is a little stronger in the current quarter than in the October Tealbook and not much changed thereafter.

With activity throughout the advanced and emerging market economies (EMEs) accelerating simultaneously, there is some chance that positive synergies could result in stronger global growth than we have projected in our baseline. At the same time, however, some of the downside risks we have previously identified have not gone away. Europe continues to face daunting economic and political challenges, which could result in a resurgence of financial turmoil and possibly a triple-dip recession. And financial stresses in some EMEs became a little more pronounced over the intermeeting period. Although not the most likely outcome, such stresses could snowball into a broader EME crisis, a scenario explored in the Risks and Uncertainty section.

Inflation in the advanced foreign economies (AFEs) is estimated to have fallen to just ½ percent in the current quarter, nearly 1 percentage point lower than we had predicted. Although recent softness in retail prices for energy and other commodities contributed to the decline, core inflation also decreased somewhat. With inflation below central bank targets and substantial resource slack remaining, we expect monetary policy in the AFEs to remain expansionary. Monetary policy moves have been more divergent across the EMEs. Although some central banks have recently cut policy rates to support growth, in some of the more vulnerable EMEs, including Brazil, India, and Indonesia, policy rates have been raised to contain inflationary pressures and curtail currency depreciation.

Int'l Econ Devel & Outlook

ADVANCED FOREIGN ECONOMIES

We expect real GDP growth in the AFEs to remain about 2 percent in the current quarter for the third consecutive quarter, as the euro area continues its slow exit from recession while the other economies expand at a more robust pace. Growth is expected to edge up to just 2¼ percent over the forecast period, with a significant further recovery in the euro area partly offset by a slowing of Japan's expansion from its rapid 2013 pace.

Outside of Japan, AFE inflation has declined significantly in recent months, raising concerns that disinflation could depress expectations and ultimately turn into outright deflation. Indeed, persistent weakness in core inflation, especially in Canada and the euro area, has led us to mark down our forecast for inflation a touch going forward. However, our sense is that the current low rates of inflation are consistent with resource slack and declines in retail energy prices. With output gaps projected to shrink over the forecast period, we expect AFE inflation to rise gradually, reaching 1¾ percent in 2016.

With inflation well below targets, we expect monetary policy in most economies to be a little more accommodative than previously assumed. Following a surprise policy rate cut to 0.25 percent in early November, we expect the European Central Bank (ECB) to refrain from tightening until early 2016, two quarters later than we had previously assumed. We also pushed back the Bank of Canada's (BOC) first policy rate hike by two quarters and built in an assumption that the Bank of Japan (BOJ) will increase the pace of its asset purchases starting in the second quarter of next year. We continue to expect the Bank of England (BOE) to hold rates steady until late 2015.

Euro Area

The euro-area economy emerged from recession in the second quarter with growth of 1.2 percent, boosted by some transitory factors, then slowed as expected to a meager ¼ percent in the third quarter. Export growth dropped following a surge in the second quarter, while final domestic demand again grew only modestly. Recent indicators suggest that growth will remain sluggish in the current quarter at an estimated rate of ¾ percent. In October, euro-area retail sales declined and industrial production fell in most euro-area countries. In addition, the composite PMI edged lower in both October and November. We expect a gradual improvement in the pace of expansion to 1¼ percent in 2014 and about 2 percent in 2015 and 2016 as financial conditions ease further, monetary policy remains accommodative, and the pace of fiscal consolidation diminishes.

Recent data suggest that euro-area headline inflation fell below an annual rate of 1 percent in the current quarter, mostly because of a decline in retail energy prices, and that core inflation moderated to roughly 1 percent. Inflation expectations also have edged down. In response, we lowered our forecast slightly, although we still expect inflation to increase to 1¼ percent in 2014 and to 1½ percent in 2015 and 2016 as the recovery gains traction. In addition to the surprise rate cut at its November meeting, the ECB subsequently signaled that it still has scope for further cuts in the policy rate, as well as for unconventional policy easing. However, our sense is that as long as growth and inflation do not dip below our current forecast, the ECB would find such options unpalatable. Accordingly, we have assumed that the policy interest rate will remain at 0.25 percent through 2015 and will increase to 0.75 percent over the course of 2016.

United Kingdom

Real GDP rose a robust 3.2 percent in the third quarter, continuing its recent strong performance. Growth was considerably faster than we had projected, driven by a pickup in domestic demand, while exports fell. Recent data, including strong PMI readings in all sectors and improving business confidence, led us to raise our estimate for the current quarter by ½ percentage point to 3 percent, and we also carried some of this strength forward. We now project growth to average 2¾ percent in 2014 and 2½ percent in 2015 and 2016.

We had expected inflation of 3 percent in the current quarter as increases in tuition fees continue to be phased in. However, October data indicated that the effect of this year's increase in tuition fees was considerably smaller than last year's, while transport costs fell. As a result, we cut our forecast of current-quarter inflation to 1½ percent. With sizable economic slack eroding only gradually, we expect inflation to remain moderate over the forecast period, averaging 2 percent. We thus continue to project that the BOE will not raise the Bank Rate until the fourth quarter of 2015 and will maintain the current size of its asset purchase program into 2016. The latest BOE forecast suggested that the unemployment rate would hit 7 percent—the BOE's threshold to consider raising rates—much earlier than it had indicated in August. This change brought the BOE's unemployment rate forecast closer to our own projection, and so we did not alter our assumptions for BOE policy. The BOE has continued to stress that crossing the threshold would not necessarily trigger a rate hike.

Japan

After surging 4 percent in the first half of this year on Abenomics-inspired increases in consumer confidence, fiscal stimulus, and declines in the yen, real GDP growth slowed to 1 percent in the third quarter as exports dipped and household spending moderated. However, real merchandise exports bounced back in October, and the composite PMI through November points to rapid expansion. Accordingly, we expect GDP growth to rebound to an average of 4 percent this quarter and next, supported by higher household spending ahead of a consumption tax hike scheduled for April. Growth should then fall back and average about 1 percent over the remainder of the forecast period, as the ending of previously enacted fiscal stimulus measures along with forthcoming consumption tax increases are only partly offset by some new business tax cuts and additional public spending. Nevertheless, with potential growth at only about ½ percent, the output gap shrinks over the forecast period.

In contrast to the other AFEs, core inflation picked up in Japan in October, prompting us to revise our forecast of fourth-quarter inflation up a bit to 1 percent. We expect inflation (excluding the direct impact of the tax hikes) to average ¾ percent in 2014, 1¼ percent in 2015, and 1¾ percent in 2016, still slightly below the BOJ's 2 percent target. With inflation rising only slowly toward that target, and in line with recent indications from policymakers, we now assume that the BOJ will step up the pace of its already substantial asset purchases beginning in the second quarter of 2014.

Canada

Real GDP growth in Canada rebounded to 2.7 percent in the third quarter from 1.6 percent in the second, when it had been restrained by temporary factors that included flooding in Alberta and Toronto. We expect GDP growth to step down to about 2¼ percent in the fourth quarter before rising to 2½ percent in 2014 and 2¾ percent in the following two years, supported by improvement in U.S. activity.

Headline inflation slowed sharply in October, largely as a result of a surprisingly steep drop in gasoline prices. With energy prices lower than previously expected, we marked down our current-quarter inflation forecast by 1½ percentage points to only ¼ percent. Core inflation also has been persistently low in recent months. Going forward, we expect inflation to edge up as economic activity firms, but to not reach the BOC's 2 percent target until 2016. This path is a little lower than in our previous forecast. Given our outlook for lower inflation along with still-high unemployment, we now project that the BOC will keep its main policy rate unchanged until the first quarter of 2015.

EMERGING MARKET ECONOMIES

Real GDP growth in the EMEs picked up to 4 percent in the third quarter from 3 percent in the second, reflecting a rebound of Mexican economic activity from its second-quarter contraction along with a pickup in China. Recent indicators suggest that EME growth will edge up to 4¼ percent in the current quarter. We expect the pace of expansion to pick up a little more to an average of 4½ percent over the remainder of the forecast period, about its trend rate, supported by firming activity in the advanced economies. This projection is a little stronger in the current quarter than in the previous forecast, reflecting stronger-than-expected data for both China and Mexico, and is little changed thereafter.

We estimate that aggregate EME inflation picked up to 3¾ percent in the current quarter, largely reflecting a rise in Mexican inflation, as food prices reversed their earlier declines. Afterward, inflation is expected to moderate to 3¼ percent. Over the intermeeting period, the central banks of Brazil, India, and Indonesia raised their policy rates further to contain inflation and support their currencies. In contrast, the central banks of Chile, Mexico, and Thailand eased monetary policy to support growth.

China

Recent indicators suggest that the economy continued to expand briskly in the current quarter, at a pace of about 8½ percent, up ½ percentage point from the October Tealbook. Although investment growth moderated in October and November, industrial production and retail sales growth remained robust, while exports strengthened. We continue to expect a gradual slowing of growth to 7½ percent by 2016, reflecting both a decline in trend growth as well as our belief that the authorities will be reining in credit expansion, particularly in the shadow banking sector. Credit growth slowed somewhat in October and November and interbank interest rates moved up, as the People's Bank of China appeared to shift toward a somewhat less accommodative monetary policy stance.

We estimate that consumer price inflation registered 3½ percent in the current quarter, up from earlier in the year, reflecting a temporary increase in food prices. Inflation is expected to fall back to about 3 percent next quarter and remain at this rate throughout the forecast period.

In mid-November, Chinese leaders agreed on an ambitious blueprint for reform aimed at increasing the role of markets in the economy. The plans are largely in line with our assumption of gradual liberalization of markets and further progress in moving away from heavy dependence on the external sector, and should help sustain growth and decrease the likelihood of a disruptive financial crisis. (See the box "China's Reform Agenda.")

Other Emerging Asia

Real GDP expanded at a 4 percent pace in the third quarter, a little higher than projected in the October Tealbook. However, performance varied across the region. Driven by stronger exports, growth was robust in India, Thailand, and Malaysia, but the pace of expansion was more muted in Taiwan, Hong Kong, and Indonesia. Recent indicators for activity in the current quarter, including PMIs, exports, and industrial production, suggest that growth is continuing to average about 4 percent. Growth would be higher if not for the effect of November's Typhoon Haiyan on Philippine GDP. We anticipate that the Philippine economy will make up its lost ground early next year, with growth getting a boost from reconstruction efforts. We also marked down fourth-quarter growth in Thailand somewhat in response to the recent political unrest. We expect real GDP growth in the region to remain at 4 percent through the first half of 2014 and to rise to 4½ percent thereafter.

We estimate that consumer price inflation was again close to 4 percent in the current quarter, up from the first half of the year, reflecting pass-through of earlier currency depreciations and, in some countries, higher food prices. These effects should dissipate next quarter, and we project that inflation will decline to 3½ percent over the next three years.

Latin America

Mexico's real GDP rebounded more strongly than we had expected from its second-quarter contraction, increasing at a 3½ percent rate in the third quarter. Sizable gains in exports and government expenditures contributed to this expansion. Growth is expected to remain at 3½ percent in the current quarter, marked up from the previous forecast in part because of upward revisions to U.S. manufacturing activity, and to stay at about that pace over the next three years.

Inflation in Mexico is estimated to have risen from 2 percent in the third quarter to 4 percent in the current quarter as earlier food price declines were reversed. Next quarter, tax increases are expected to push inflation up further to 4¾ percent. However, headline inflation should fall back to 3½ percent thereafter, within the central bank's target band of 2 to 4 percent.

After surging more than 7 percent in the second quarter, Brazilian real GDP contracted 2 percent in the third quarter, a weaker outcome than we had expected, with declines in both investment and exports. Recent data on exports, as well as the manufacturing PMI and confidence indicators, have been more positive, and we expect growth to pick up in the current quarter to 1¼ percent. But this expansion is still quite weak, as the economy is being held back by ongoing financial stresses and sluggish demand for commodities. As financial conditions slowly improve and global recovery continues, we should see some pickup in growth to 3 percent next year and 3½ percent in 2015 and 2016.

We estimate that Brazilian inflation rose to 5½ percent in the current quarter, reflecting the pass-through of *real* depreciation and a pickup in food price inflation in October. These pressures should abate next year, allowing inflation to moderate to 5¼ percent by the end of 2014. Citing concerns over inflationary pressures, Brazil's central bank has continued to tighten monetary policy, with November's 50 basis point increase in the main policy rate, to 10 percent, bringing the cumulative increase in the rate to 275 basis points since April.

China's Reform Agenda

On November 15, the Communist Party of China (CPC) unveiled an ambitious blueprint for economic reform, reflecting decisions made at the Third Plenum of the 18th CPC Central Committee. Third Plenums, which are held every five years, have historically been used to set out the new leadership's policy agenda and have occasionally—for example, in 1978 and 1993—heralded major market reforms. This year's document calls for sweeping reforms long thought necessary to enhance the role of markets in the economy, help address worrisome imbalances, and improve prospects for sustainable economic growth.[1]

The document gives emphasis to strengthening the foundations of the market-based economy, notably by according a "decisive" role to the market in allocating resources (an upgrade from the "basic" role in previous reform documents) and advocating a more limited role for government in the economy. The reforms highlighted include the following:

- ***Financial reforms*** to improve financial access and promote a more efficient use of capital, including gradually liberalizing interest rates, introducing deposit insurance, developing domestic capital markets, moving toward a market-based exchange rate regime, liberalizing the capital account, and opening up services sectors such as finance, health care, and education to foreign investment.
- ***Fiscal reforms*** to reduce local governments' reliance on transfers from higher levels of government and lessen incentives to raise revenue via land sales and opaque off-balance-sheet borrowing vehicles. The reforms would centralize some government spending responsibility (which currently resides mostly with local governments), provide local governments with more taxing authority, allow local governments to issue debt, and improve transparency in local government finances.
- ***Labor and land reforms*** to facilitate urbanization and address growing social inequities. Reforms in this area include easing restrictions on migration of rural residents to urban areas and reducing farmers' vulnerability to land expropriation by strengthening their property rights.
- ***Natural resource pricing reforms*** to encourage a more efficient use of water, oil, natural gas, and electricity and thus reduce the energy intensity of China's growth.
- ***Reforming state-owned enterprises (SOEs)*** to improve corporate governance practices, create state-owned asset management companies focused on maximizing returns, and allocate more SOE profits to social

[1] The formal title of the document is "The Decision on Major Issues Concerning Comprehensively Deepening Reforms." An abbreviated version of the document is available in English at www.china.org.cn/china/third_plenary_session/2013-11/16/content_30620736.htm.

spending. These reforms have generally been perceived to be among the least ambitious on the agenda; notably, the document fails to mention reducing barriers to entry in "strategic" and "pillar" industries, such as telecommunications, which are currently shielded from competition. That said, other reforms, such as moving toward market-based prices for natural resources and liberalizing interest rates, would likely force changes on SOEs indirectly.

- ***Other reforms*** include those for governance such as cracking down on corruption and waste and relaxing the one-child policy for families. Although this latter policy has received much attention, it is less consequential than it might appear, as it only applies to families in which one or both of the parents is a single child.

Most of these reform initiatives have been articulated before, and some (including several of the financial reforms) are already under way. But the comprehensive range and decidedly pro-market tone of the plenum's agenda has strengthened the perception that the current leadership both recognizes what reforms are needed and intends to implement them.

Timely and successful implementation of these reforms remains an open question, however, and will require strong coordinated action from the party leadership. Encouragingly, oversight of the implementation of the reform agenda will be chaired by President Xi Jinping himself, who appears to carry more weight in the party than some of his predecessors. His oversight may help counter resistance at various levels of government. Moreover, President Xi benefits from the support of other reform-minded officials, notably Premier Li Keqiang, who heads the State Council, the highest executive body. Reformers also head some of the most important government departments, including the People's Bank of China and the Ministry of Finance.

The timeline for reforms remains vague; the document states only that "decisive results are to be obtained in key areas in 2020." We continue to expect gradual and cautious implementation of the reform agenda, particularly in areas where vested interests are more formidable (for example, SOEs), where technical barriers are significant (for example, developing rural land markets), and where financial stability concerns come into play (for example, revamping local government finances).

Overall, the Third Plenum's reform agenda is a welcome development. Its implementation would both support continued rapid economic expansion in the coming years, albeit at a decelerating pace, and decrease the likelihood of a disruptive financial crisis. Since we had already factored in several of the reforms and still believe that it will take some time for them to bear fruit, the agenda has not led us to alter our forecast. The announced agenda does give us more confidence, though, that the authorities will indeed carry out these reforms over time and thus increases the conviction with which we hold our baseline outlook.

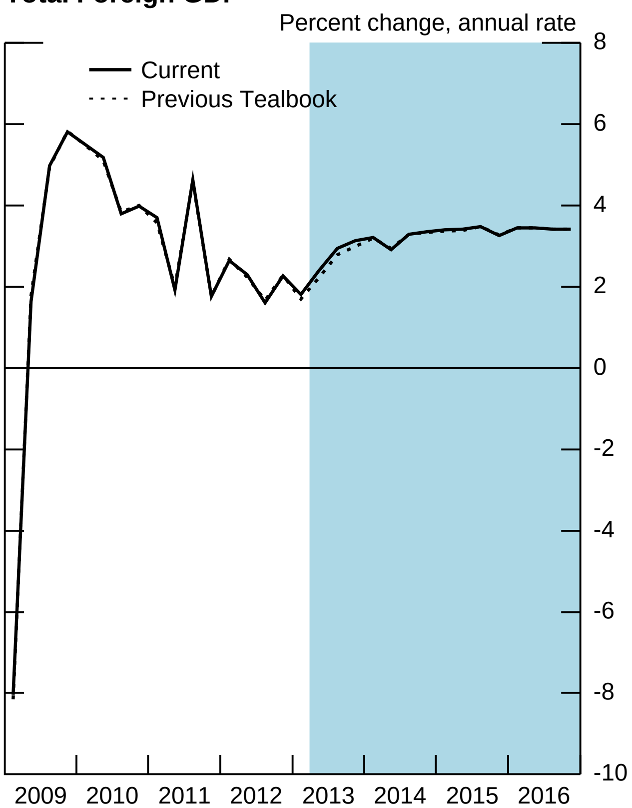
The Foreign GDP Outlook

Real GDP* Percent change, annual rate

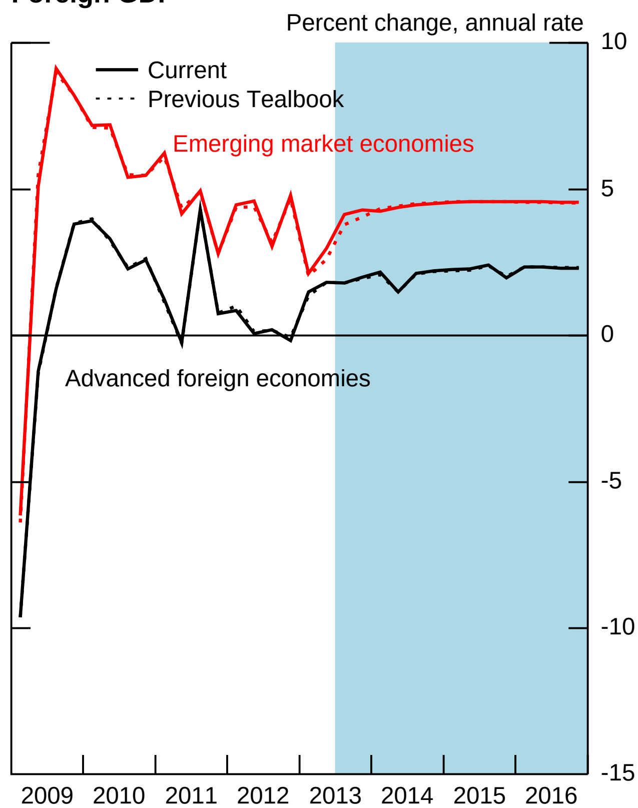
	2013			2014			2015	2016
	H1	Q3	Q4	Q1	Q2	H2		
1. Total Foreign	**2.1**	**3.0**	**3.1**	**3.2**	**2.9**	**3.3**	**3.4**	**3.4**
Previous Tealbook	*2.0*	*2.8*	*3.0*	*3.2*	*2.9*	*3.3*	*3.4*	*3.4*
2. Advanced Foreign Economies	**1.7**	**1.8**	**2.0**	**2.2**	**1.5**	**2.2**	**2.2**	**2.3**
Previous Tealbook	*1.6*	*1.8*	*1.9*	*2.1*	*1.5*	*2.1*	*2.2*	*2.3*
3. Canada	2.0	2.7	2.2	2.4	2.5	2.6	2.7	2.7
4. Euro Area	0.2	0.3	0.8	1.0	1.2	1.3	1.9	2.0
5. Japan	4.0	1.1	3.6	4.4	-3.5	2.1	1.0	1.3
6. United Kingdom	2.1	3.2	3.0	2.8	2.8	2.7	2.6	2.4
7. Emerging Market Economies	**2.6**	**4.1**	**4.3**	**4.3**	**4.4**	**4.5**	**4.6**	**4.6**
Previous Tealbook	*2.3*	*3.8*	*4.1*	*4.3*	*4.4*	*4.5*	*4.6*	*4.6*
8. China	7.0	9.4	8.5	8.0	7.8	7.7	7.6	7.5
9. Emerging Asia ex. China	2.9	4.1	4.1	3.9	4.1	4.3	4.6	4.6
10. Mexico	-0.7	3.4	3.5	3.4	3.6	3.6	3.6	3.5
11. Brazil	3.5	-1.9	1.3	2.6	3.0	3.2	3.4	3.4

* 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

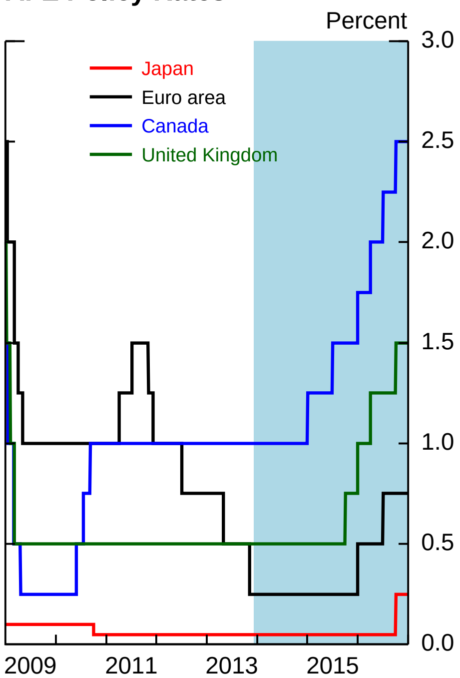
	2013			2014			2015	2016
	H1	Q3	Q4	Q1	Q2	H2		
1. Total Foreign	**2.1**	**2.8**	**2.3**	**2.5**	**3.0**	**2.4**	**2.6**	**2.6**
Previous Tealbook	*2.0*	*2.8*	*2.6*	*2.5*	*3.1*	*2.5*	*2.7*	*2.6*
2. Advanced Foreign Economies	**0.7**	**2.0**	**0.6**	**1.2**	**2.7**	**1.4**	**1.8**	**1.7**
Previous Tealbook	*0.7*	*2.1*	*1.4*	*1.3*	*2.8*	*1.5*	*1.8*	*1.8*
3. Canada	0.8	1.5	0.3	1.4	1.5	1.6	1.7	1.9
4. Euro Area	0.7	1.8	0.3	1.1	1.3	1.3	1.5	1.5
5. Japan	0.2	3.1	1.0	1.0	8.8	0.8	2.6	1.7
6. United Kingdom	1.9	3.0	1.6	1.7	1.7	2.0	1.9	1.8
7. Emerging Market Economies	**3.1**	**3.3**	**3.7**	**3.5**	**3.3**	**3.3**	**3.3**	**3.3**
Previous Tealbook	*3.1*	*3.3*	*3.5*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*
8. China	2.6	3.4	3.4	2.9	3.0	3.0	3.0	3.0
9. Emerging Asia ex. China	2.7	4.0	3.8	3.3	3.2	3.4	3.4	3.4
10. Mexico	4.2	2.0	3.9	4.7	3.7	3.4	3.4	3.4
11. Brazil	6.4	4.6	5.5	5.7	5.6	5.3	5.3	5.3

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

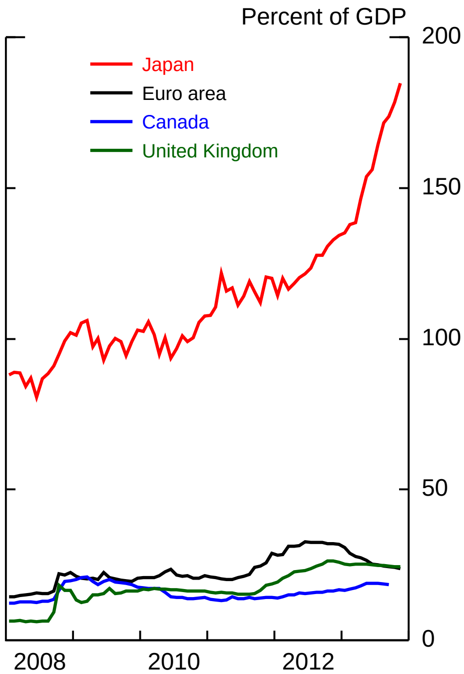
Int'l Econ Devel & Outlook

Foreign Monetary Policy

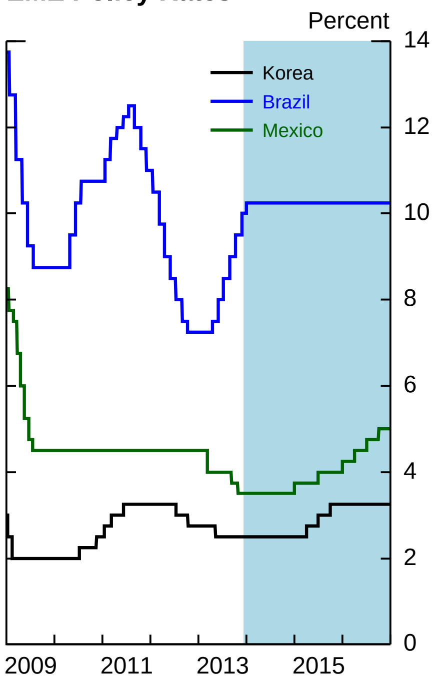
AFE Policy Rates



AFE Central Bank Balance Sheets

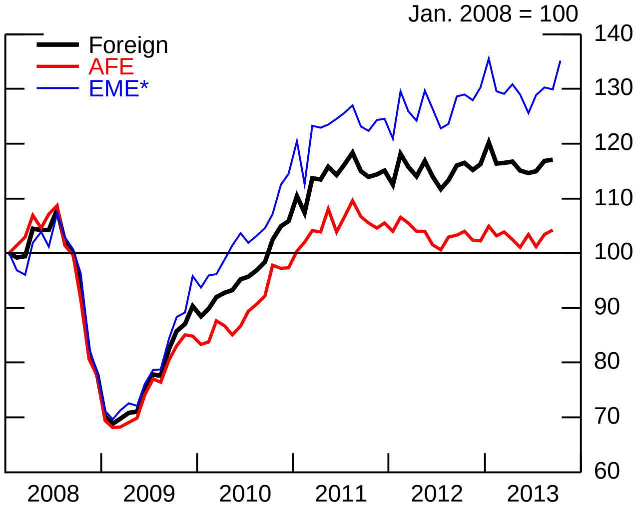


EME Policy Rates



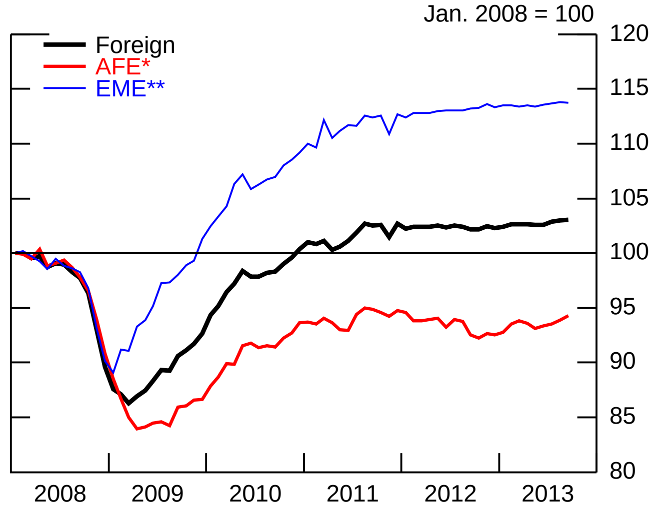
Recent Foreign Indicators

Nominal Exports



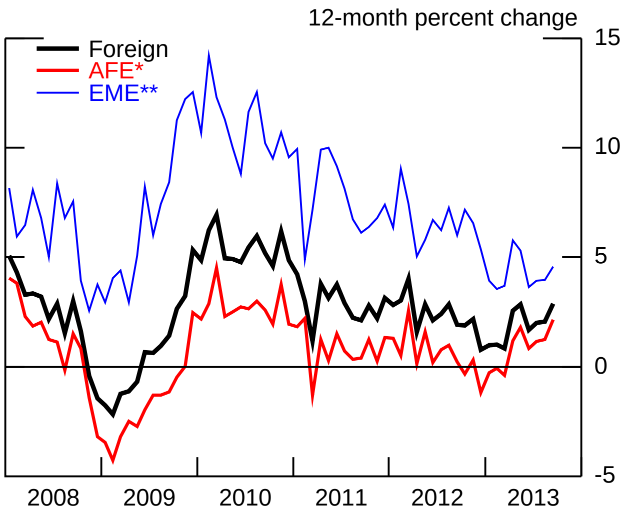
* Excludes Venezuela.

Industrial Production



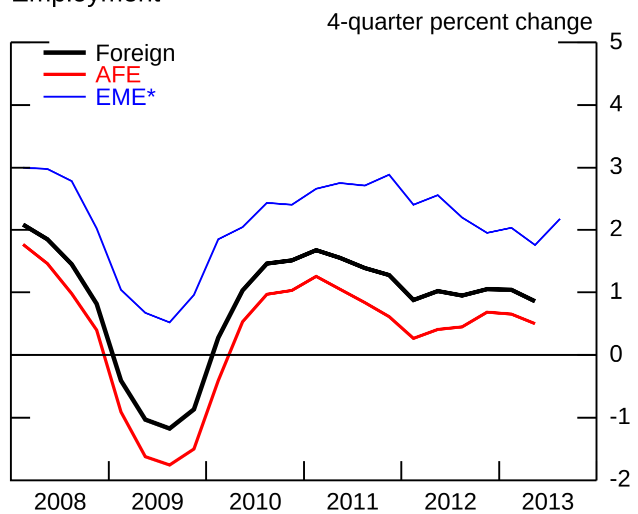
* Excludes Australia and Switzerland.
** Excludes Colombia, Hong Kong, the Philippines, and Venezuela.

Retail Sales



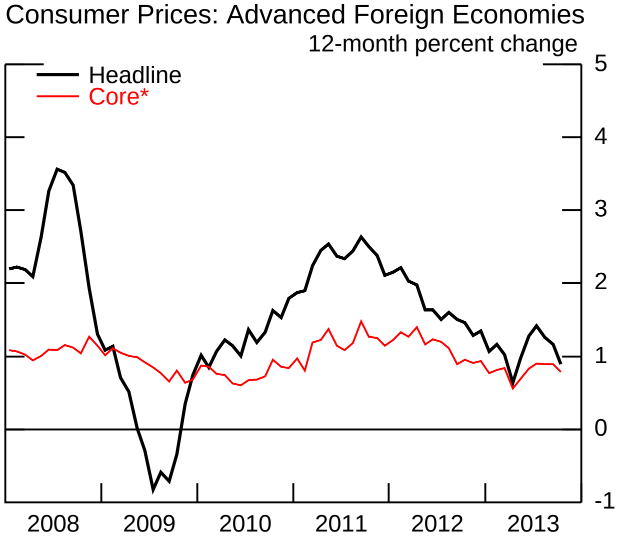
* Excludes Australia and Switzerland.
** Includes Brazil, China, Indonesia, Korea, Singapore, and Taiwan.

Employment



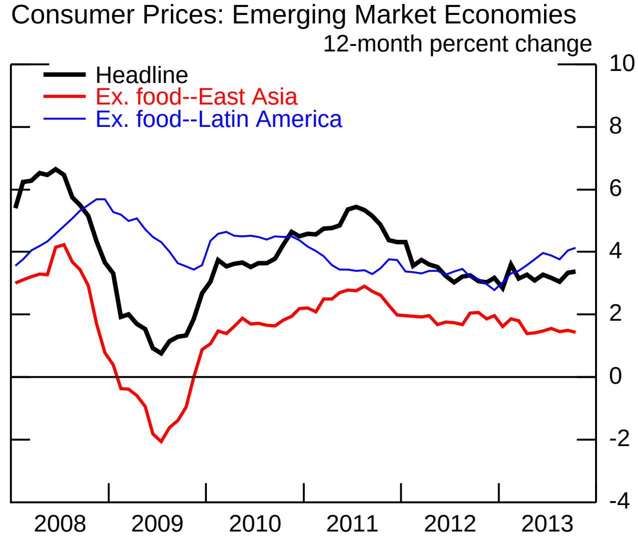
* Excludes Argentina and Mexico.

Consumer Prices: Advanced Foreign Economies



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

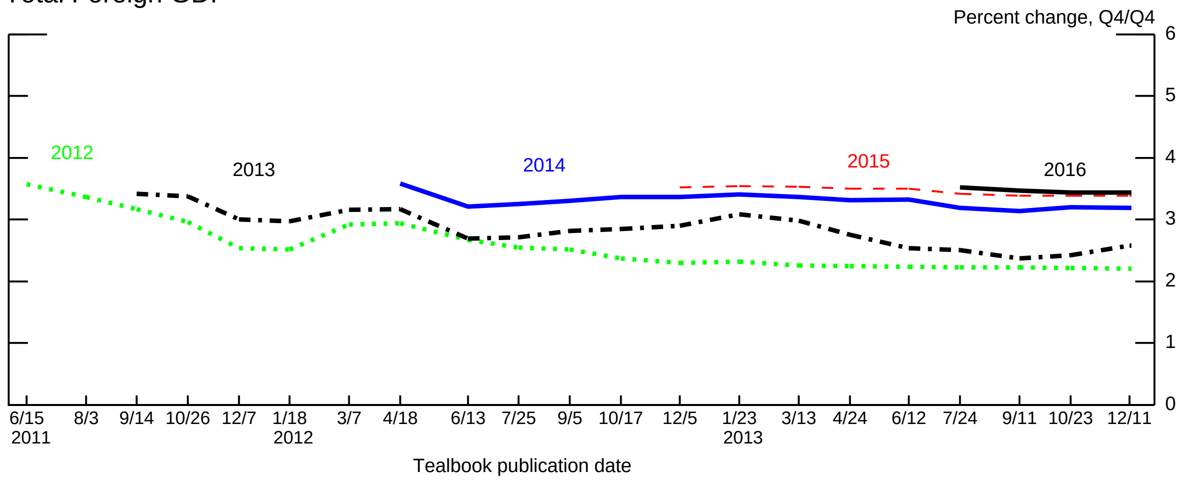
Consumer Prices: Emerging Market Economies



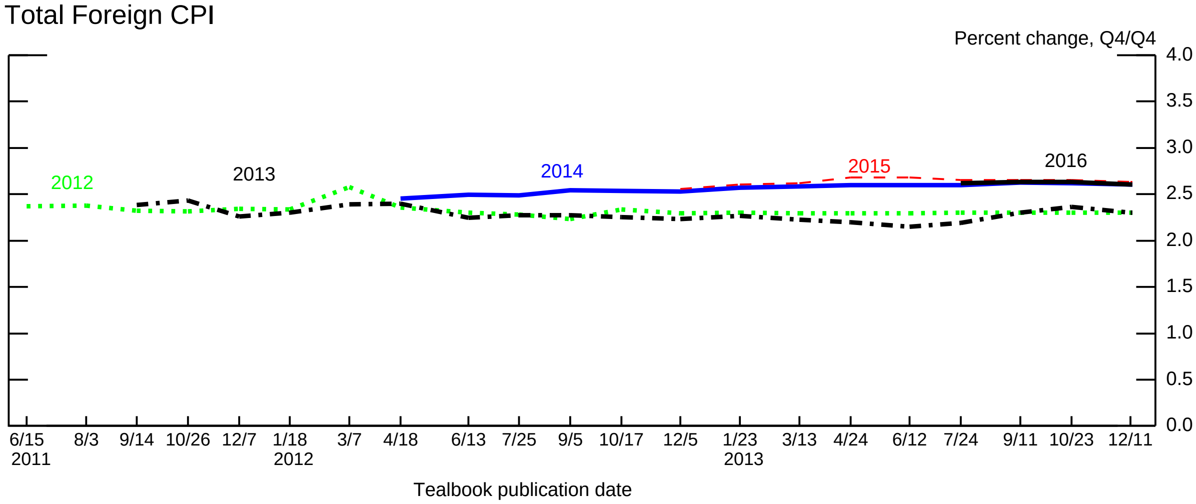
Source: Haver Analytics and CEIC.

Evolution of Staff's International Forecast

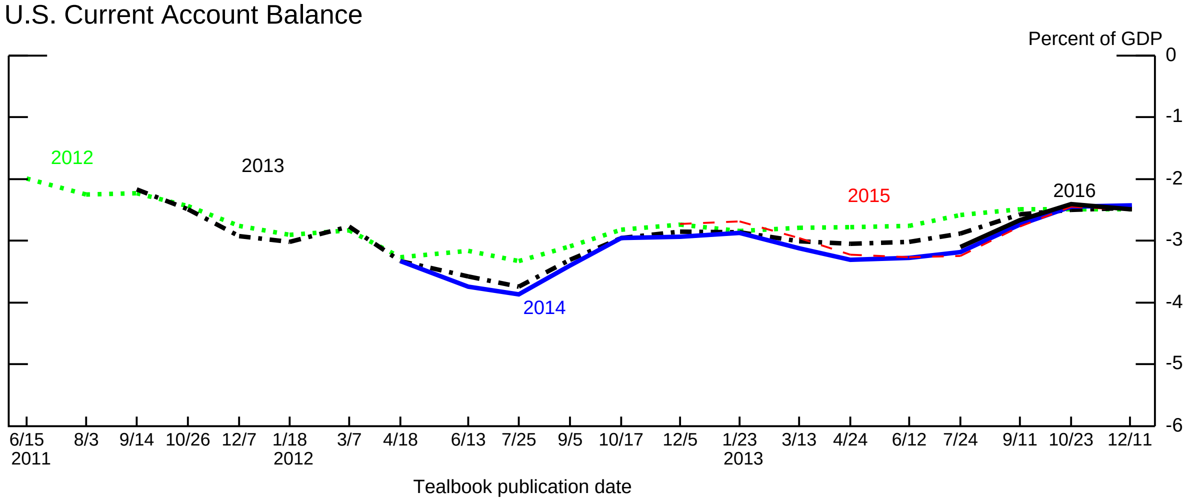
Total Foreign GDP



Total Foreign CPI



U.S. Current Account Balance



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Financial Developments

Financial market developments over the intermeeting period were driven largely by incoming data on employment and economic activity that exceeded investor expectations as well as by Federal Reserve communications. On balance, market participants moved closer their expected timing of the first reduction in the pace of asset purchases but continued to anticipate that the federal funds rate would remain low for a substantial time. The yield curve steepened over the period, equity prices moved up, and spreads on corporate bonds narrowed somewhat. The dollar appreciated against most other currencies.

- Responses to the December Survey of Primary Dealers indicate that the perceived probability of a reduction in the pace of purchases at the upcoming meeting has risen significantly since the October survey. However, the median anticipated date for the first reduction in asset purchases remains March 2014.

- The expected path of the federal funds rate priced into derivatives markets was little changed through the end of 2015, but it became somewhat steeper thereafter. The two-year Treasury yield was about unchanged, whereas the 10-year yield rose 30 basis points.

- Financial flows to nonfinancial businesses picked up again after a temporary dip associated with the fiscal standoff. In the household sector, auto loans continued to expand strongly, whereas credit card and mortgage lending remained restrained, reflecting in part tight lending conditions.

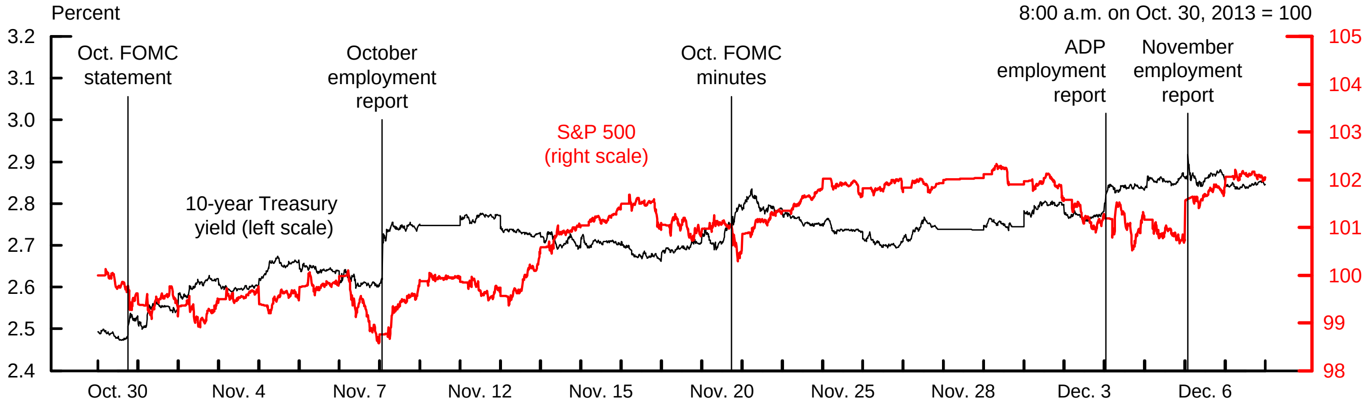
- Hints of a growing confidence in the economic outlook included a surge in initial public offerings, ongoing strong issuance of subprime auto ABS, and the first significant increase in bank holdings of construction and land development loans in five years.

Policy Expectations and Asset Prices

The better-than-expected economic data releases over the intermeeting period were seen as raising the odds that the FOMC might decide to reduce the pace of asset

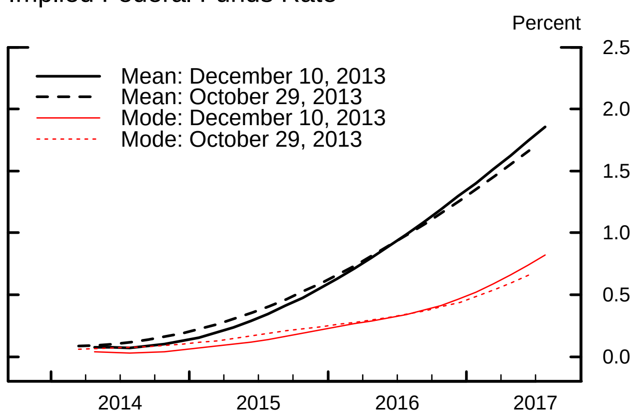
Policy Expectations and Asset Prices

S&P 500 Index and 10-year Treasury Yield



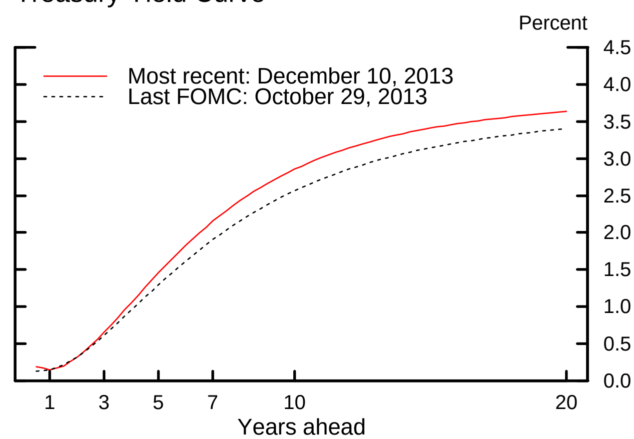
Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m.
Source: Bloomberg.

Implied Federal Funds Rate



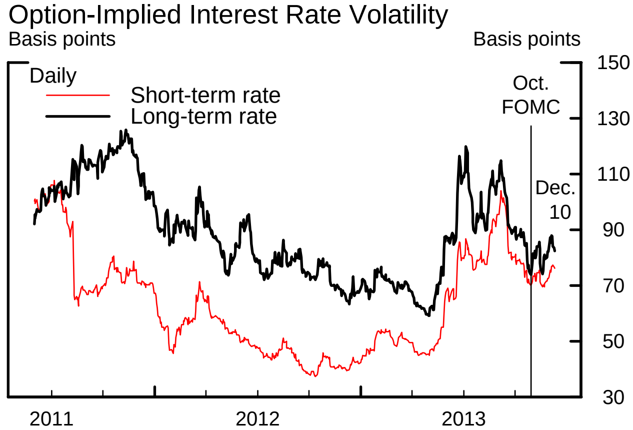
Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.
Source: Bloomberg; CME Group.

Treasury Yield Curve



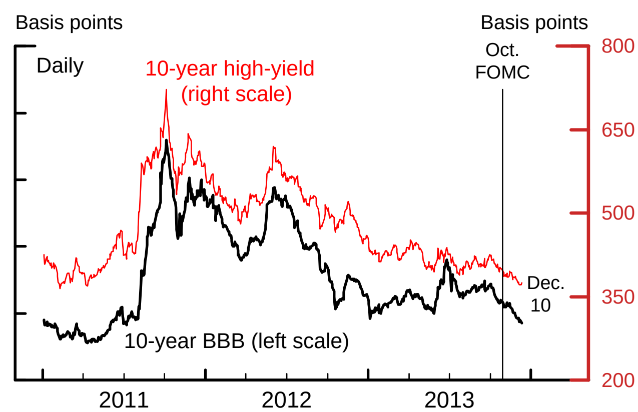
Note: Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.
Source: Federal Reserve Board.

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 implied volatility of the short-term rate is based on options on the 1-year swap rate that expire in 2 years.
Source: Staff calculations from Barclays data.

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.

Financial Developments

purchases at its December meeting, though analysts remained uncertain and divided in their views on this question. In addition, the October FOMC statement and minutes reportedly were viewed as indicating that the Committee's stance on asset purchases would be a touch less accommodative than previously expected.

The December Survey of Primary Dealers indicates that dealers now place probabilities of 25 percent and 18 percent on a reduction at the upcoming meeting in the pace of Treasury and MBS purchases, respectively. At the time of the October survey, the probabilities were around 10 percent. For the January and March meetings, respondents place probabilities of 27 percent and 30 percent, respectively, on a first reduction in the pace of either Treasury or MBS purchases; the reported probability for March is about 5 percentage points lower than at the time of the October survey. Nonetheless, by a relatively slim margin, the median anticipated date for the first reduction in asset purchases remains March 2014.

Market participants, however, did not appear to interpret these developments as suggesting an earlier liftoff of the federal funds rate. A variety of Federal Reserve communications—including other language in the October FOMC minutes, Vice Chair Yellen's confirmation testimony, and the Chairman's speech at the National Economists Club—were seen as strengthening the Committee's forward guidance for the federal funds rate. Two research papers by senior Federal Reserve staff members may have reinforced this development. Respondents to the primary dealer survey anticipate that the most likely timing of the first increase in the target rate has shifted to the fourth quarter of 2015, after generally remaining at the third quarter of 2015 since the August 2012 survey.[1]

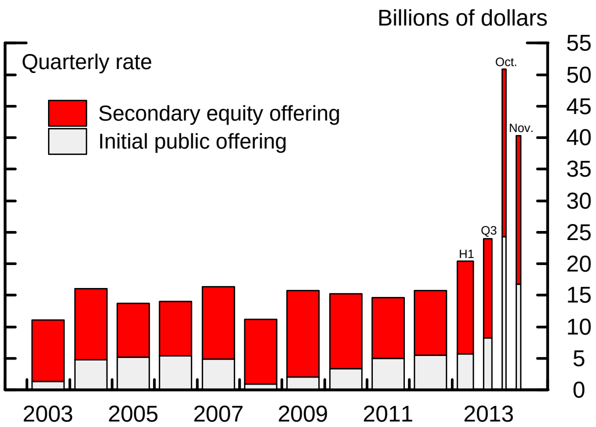
On net, the expected federal funds rate path through the end of 2015 based on a straight read of OIS quotes moved only slightly since the October meeting, and uncertainty about short-term rates two- to three-years ahead, proxied by swaption implied volatilities, inched up.[2] The expected federal funds rate path further out rose somewhat, and the Treasury yield curve steepened, with the 2-year Treasury yield about unchanged

[1] In the flash survey conducted after the June 2013 FOMC meeting, respondents anticipated that the most likely timing of the first increase in the target rate was the second quarter of 2015.

[2] The staff's term structure model that respects the zero-lower-bound constraint yields qualitatively similar behavior of the expected path of the short rate.

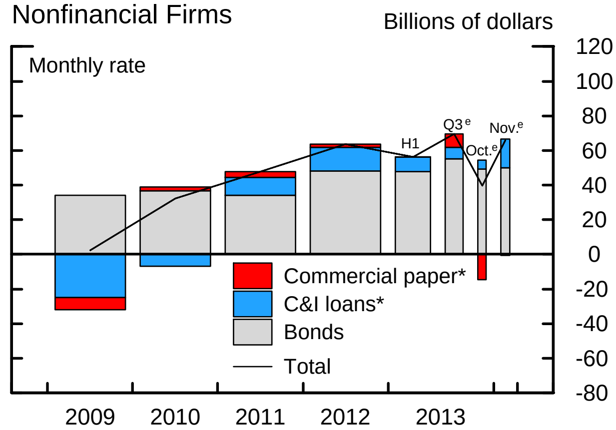
Business Finance

Gross Proceeds from Nonfinancial Equity Issuance



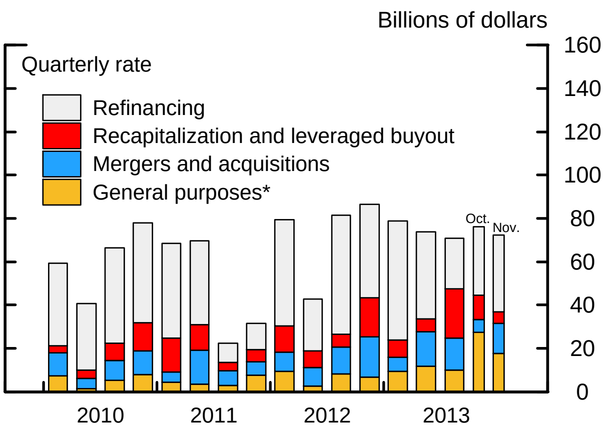
Source: Securities Data Company.

Selected Components of Net Debt Financing, Nonfinancial Firms



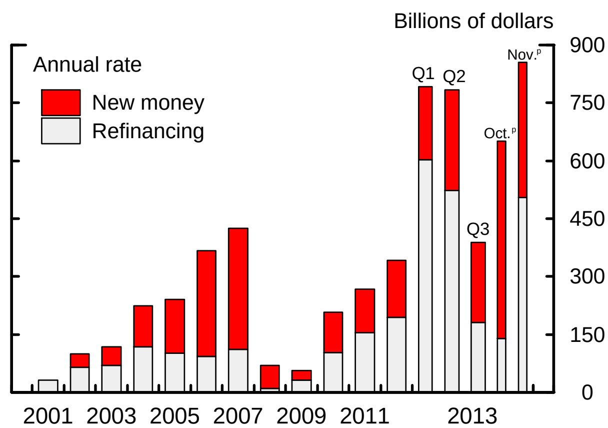
e Staff estimate of net corporate bond issuance.
* Period-end basis, seasonally adjusted.
Source: Depository Trust & Clearing Corporation; Thomson Reuters Financial; Federal Reserve Board.

Use of Proceeds for High-Yield Issues



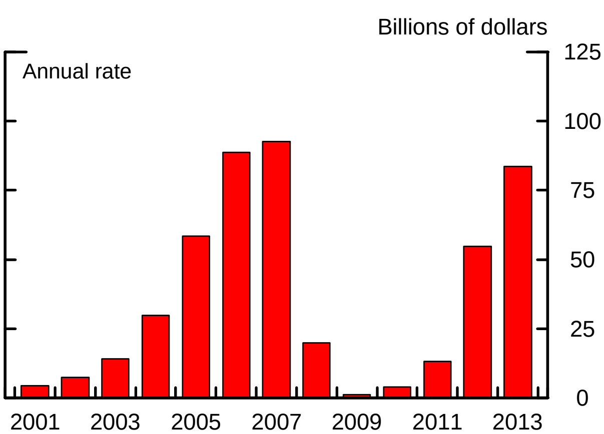
* "General purposes" includes capital expenditures and other purposes not included in the designated breakdown.
Source: Standard & Poor's; LCD Database.

Institutional Leveraged Loan Issuance



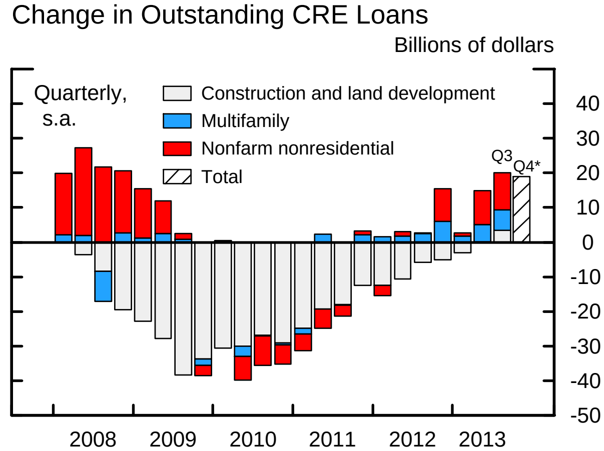
p Preliminary.
Source: Thomson Reuters LPC LoanConnector.

U.S. CLO Issuance



Note: For 2013, data for January to November are annualized. CLO is collateralized loan obligation.
Source: Thomson Reuters LPC LoanConnector.

Change in Outstanding CRE Loans



* For 2013:Q4, total change in outstanding CRE loans is based on quarter-to-date data from the Federal Reserve Board's Weekly Report of Selected Assets and Liabilities of Domestically Chartered Commercial Banks and U.S. Branches and Agencies of Foreign Banks.
Source: Federal Reserve Board.

Financial Developments

and 5- and 10-year yields higher by 16 and 30 basis points, respectively.[3] The staff term structure models suggest that more than half of the rise in the 10-year yield was due to an increase in term premiums, consistent with a shift in asset purchase expectations influencing the long end of the curve and a modest rise in interest rate uncertainty.

The TIPS-based measure of 5-year inflation compensation dipped 13 basis points, while the 5-year forward measure was unchanged. The 30-year current-coupon agency MBS yield increased a bit more than the 10-year Treasury yield.

Consistent with the generally better-than-expected news regarding economic activity, stock prices moved up 2 percent, on net, and some broad equity price indexes touched all-time highs during the period. As discussed in greater detail in the December QS assessment, aggregate ratios of broad equity price indexes to forward earnings measures are generally not far above their historical median values, while valuations in some segments of the stock market—including small firms in the high-tech sector—appear stretched. Both near- and far-term spreads of yields on corporate bonds to those on Treasury securities of comparable maturity narrowed somewhat over the intermeeting period.

BUSINESS FINANCE

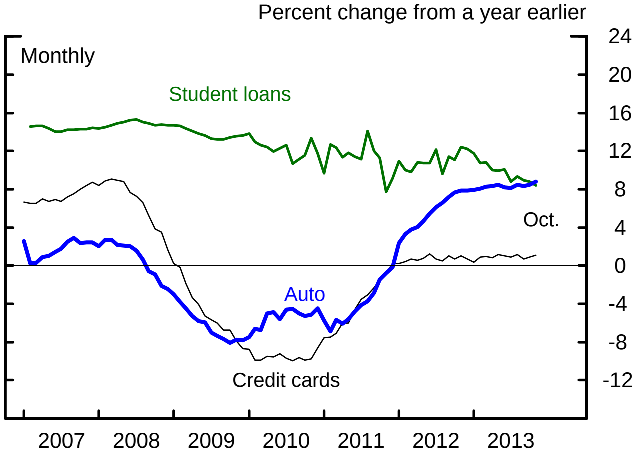
Business finance flows were robust over the intermeeting period, likely reflecting in part a growing comfort with the economic outlook as well as the resolution of the uncertainty surrounding the fiscal standoff. Total funds raised through seasoned and initial public offerings by the nonfinancial corporate sector in October and November reached levels not seen in a decade. Gross bond issuance by nonfinancial corporations picked up again after a dip related to the fiscal standoff, and a larger amount of speculative-grade issuance was earmarked for investment spending, leveraged buyouts (LBOs), and mergers and acquisitions (M&As). Similarly, institutional issuance of leveraged loans rose in October, boosted by a number of M&A and LBO transactions, and remained solid in November. CLO issuance was also robust.

Financing conditions in commercial real estate (CRE) markets were also consistent with increased investor confidence. Year-to-date CMBS issuance is 80 percent

[3] The effective federal funds rate averaged 8 basis points over the intermeeting period, with the intraday standard deviation averaging about 5 basis points.

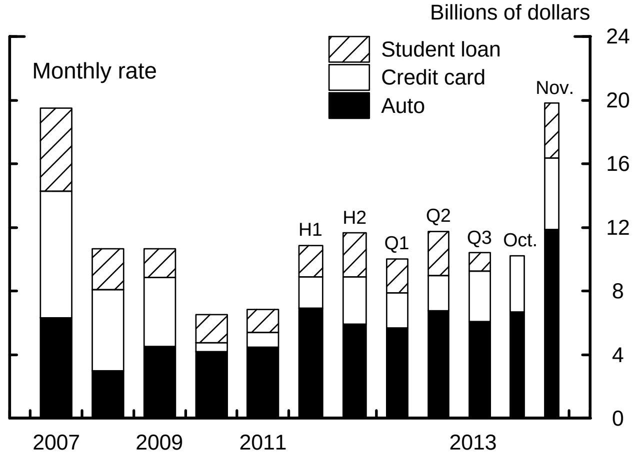
Household Finance

Consumer Credit



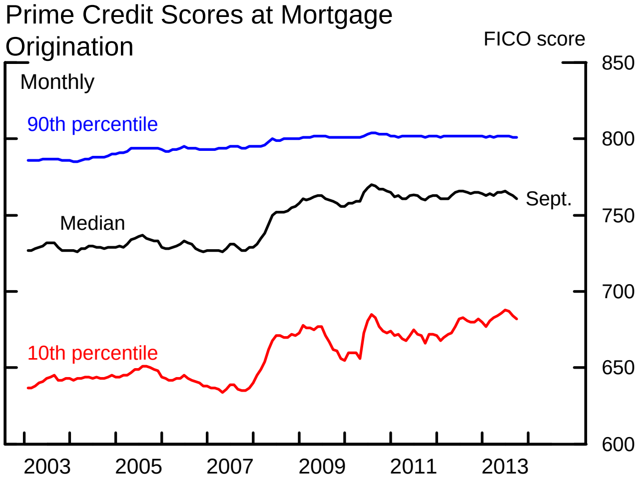
Note: The data are not seasonally adjusted.
Source: Federal Reserve Board.

Gross Consumer ABS Issuance



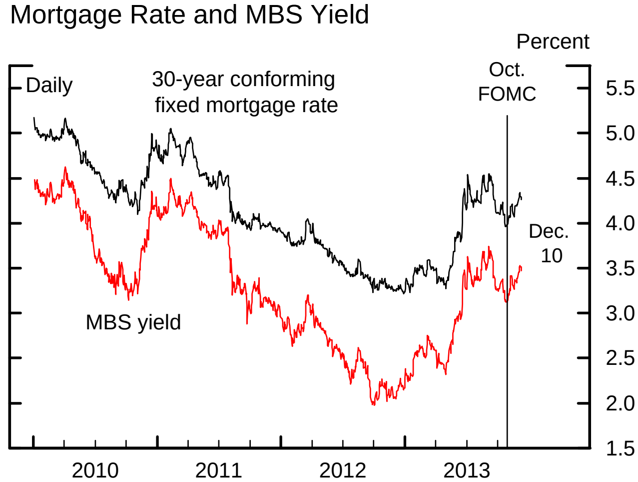
Source: Inside MBS & ABS; Merrill Lynch; Federal Reserve Board.

Prime Credit Scores at Mortgage Origination



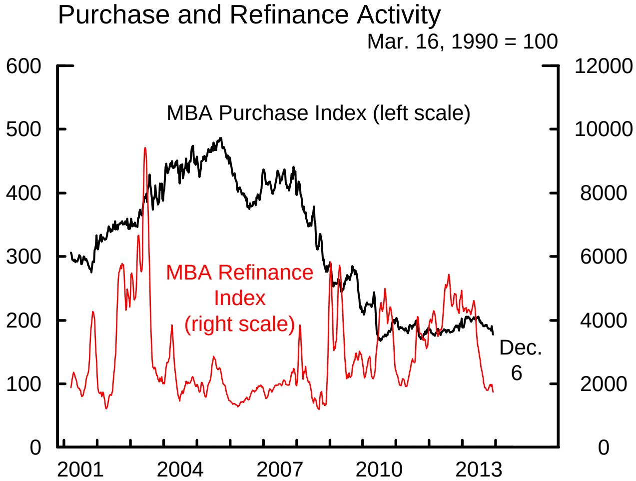
Note: Concerns 30-year fixed-rate mortgages originated in month shown.
Source: LPS Applied Analytics.

Mortgage Rate and MBS Yield



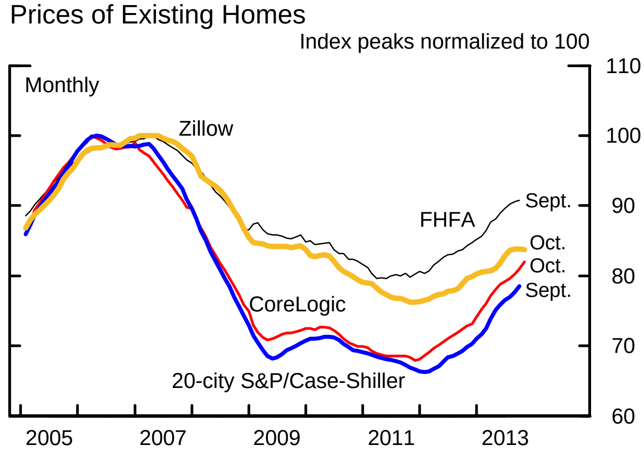
Note: The MBS yield is the Fannie Mae 30-year current-coupon rate.
Source: For MBS yield, Barclays; for mortgage rate, Loansifter.

Purchase and Refinance Activity



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

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.

Financial Developments

higher than the equivalent measure for 2012, although issuance remains well below the levels seen before the financial crisis. Responses to the December 2013 Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS) suggest that demand for funding for CMBS has picked up since September. CRE loans on banks' books expanded in October and November at an increasing pace, and third-quarter Call Report data indicate that construction and land development loans, generally the riskiest types of CRE loans, registered their first significant increase in five years.

HOUSEHOLD FINANCE

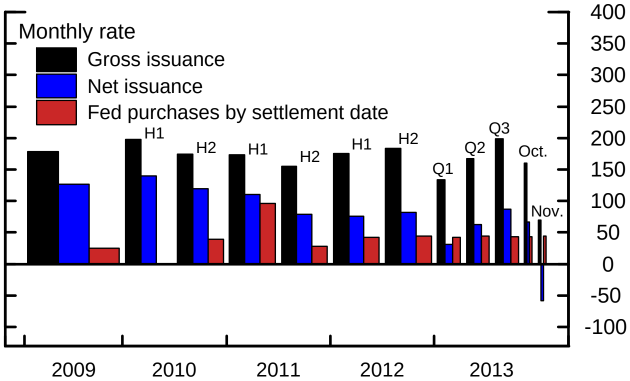
Auto loans continued to expand in October, and bank credit data suggest that this trend was sustained in November. Data from credit bureau records indicate that these loans are broadly available, including to consumers with subprime credit histories. Auto ABS issuance accelerated in November, and, within the category, issuance of paper backed by subprime auto loans stayed strong. As discussed in the QS assessment, although underwriting standards applied to loans included in recent subprime auto ABS deals appear to have slipped a touch, overall credit enhancement appears adequate. In contrast to conditions in the auto loan market, credit card balances, measured on a year-over-year basis, continued to move sideways, and ABS issuance in the sector has stayed flat.

In the mortgage finance market, market sources reported that several large lenders eased their mortgage underwriting standards slightly, but aggregate data through September suggest that lenders continue to be reluctant to extend credit to borrowers with less-than-pristine credit scores. Mortgage rates increased about 30 basis points over the intermeeting period and are about 100 basis points above their early-May lows. On balance, refinance applications hovered roughly 65 percent below their early-May level, while purchase applications have declined only 13 percent. Banks' holdings of closed-end residential real estate loans in November ran off for the fifth consecutive month, as mortgage originations, which were held down by the sharp drop in refinancing, were outpaced by sales to the government-sponsored enterprises of loans held on balance sheet, reflecting the usual lag between loan originations and sales. House prices as measured by the CoreLogic index rose significantly in October, but other indicators suggest that the pace of house price gains continues to decelerate relative to its pace at the beginning of the year.

Treasury and Agency Finance and Short-Term Funding Markets

Nominal Treasury Issuance and Fed Purchases

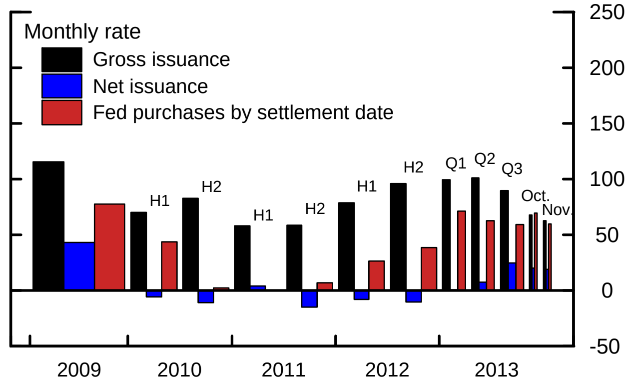
Billions of dollars



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

Agency MBS Issuance and Fed Purchases

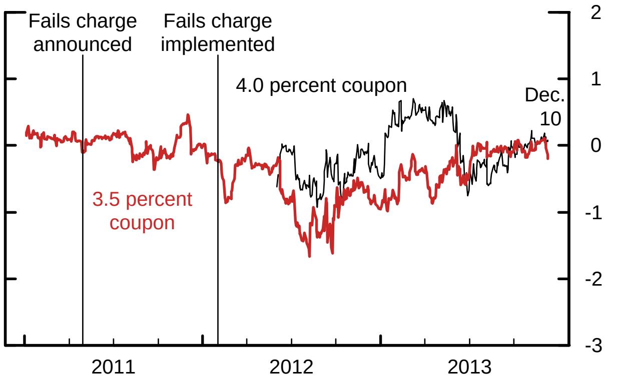
Billions of dollars



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

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

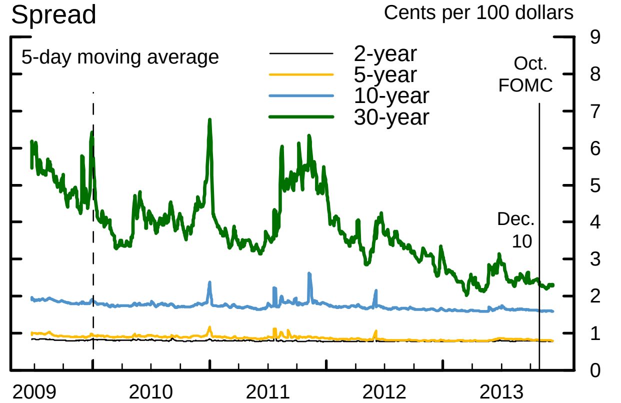
Percent



Source: J.P. Morgan.

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

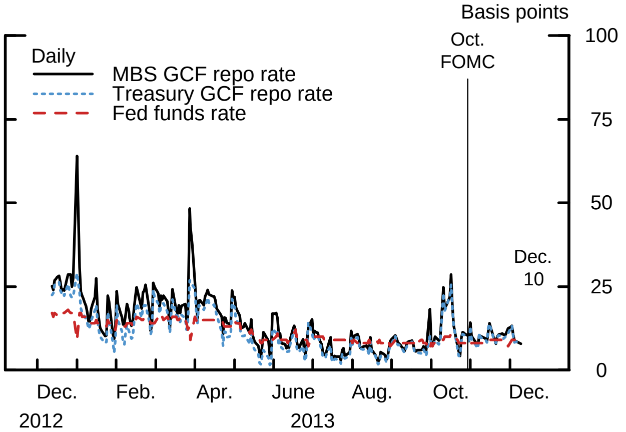
Cents per 100 dollars



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.

Overnight Funding Rate

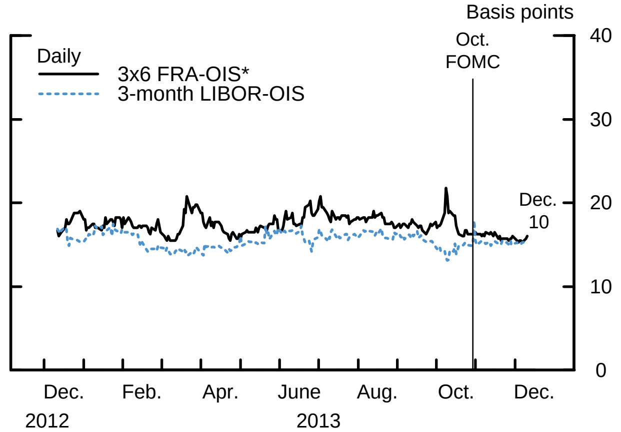
Basis points



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

Funding Spreads

Basis points



* Spread is calculated from a LIBOR forward rate agreement (FRA) 3 to 6 months in the future and the forward overnight index swap (OIS) rate for the same period.
Source: Bloomberg.

TREASURY AND AGENCY FINANCE AND SHORT-TERM FUNDING MARKETS

Liquidity conditions in the Treasury market remained close to long-term average levels. Agency MBS market liquidity continued to show some further signs of improvement from the challenged levels seen this summer, with some measures returning to near their average levels for most of the current MBS purchase program. Dollar-roll-implied financing rates for main production coupon agency MBS securities stayed near their recent high levels, reflecting limited settlement pressures.[4] Since the October FOMC meeting, the Treasury Department has auctioned $225 billion of nominal coupon securities and $13 billion of TIPS.[5]

Conditions in short-term dollar funding markets have been generally stable since the October FOMC meeting. The Open Market Desk continued to conduct daily, overnight, fixed-rate, capped-allotment reverse repurchase operations as part of an operational readiness exercise and gradually raised the offered rate to 5 basis points, the maximum rate authorized by the FOMC.[6]

Responses to the December SCOOS generally showed little change in dealer-intermediated financing since September. Credit terms applicable to most classes of counterparties were little changed. One-third of respondents reported a decline in the use of financial leverage by trading real estate investment trusts, whereas the use of leverage by other classes of counterparties was unchanged. Despite reports of an uptick in the financing of longer-duration assets since September, the current use of repo and other similar financing for longer-duration assets was roughly in line with or somewhat below the levels seen early in 2013.

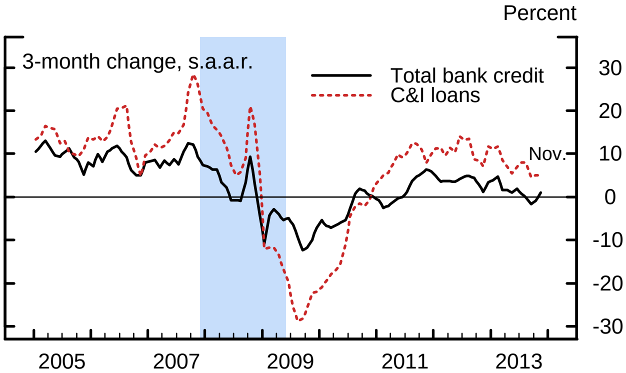
[4] Over the intermeeting period, the Desk purchased $68 billion of Treasury securities under the flow-based Treasury purchase program and $78 billion of agency MBS under the flow-based MBS program and the reinvestment program. In addition, the Federal Reserve began an exercise consisting of a series of small-value purchase and sale operations of agency MBS via FedTrade. Although only purchases have been tested to date, sales will be conducted as well; gross operations through January will not exceed $500 million.

[5] The Treasury will conduct its initial auction of floating-rate notes in late January 2014, which represents the first introduction of a new type of Treasury security in 17 years. The floating-rate notes will have a maturity of two years and will pay a variable interest rate composed of an index rate equal to the high rate of the most recently issued 13-week Treasury bill and a spread that is determined at auction.

[6] In addition, over the intermeeting period, the Federal Reserve conducted a 28-day, fixed-rate, full-allotment term deposit operation at an interest rate of 26 basis points. The operation, as part of ongoing operational readiness exercises, resulted in an award of $13½ billion in term deposits, marking the largest such operation to date.

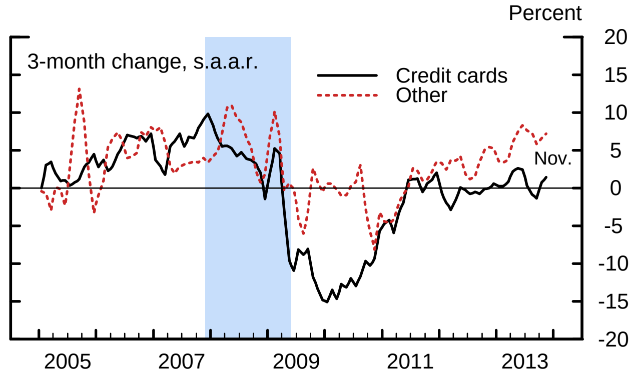
Banking Developments and Money

Change in Bank Credit



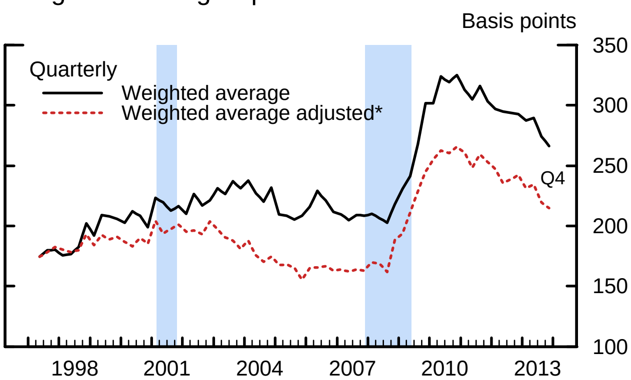
Note: The data have been adjusted to remove the estimated effects of certain changes to accounting standards and nonbank structure activity of $5 billion or more. C&I is commercial and industrial.
Source: Federal Reserve Board.

Change in Consumer Loans



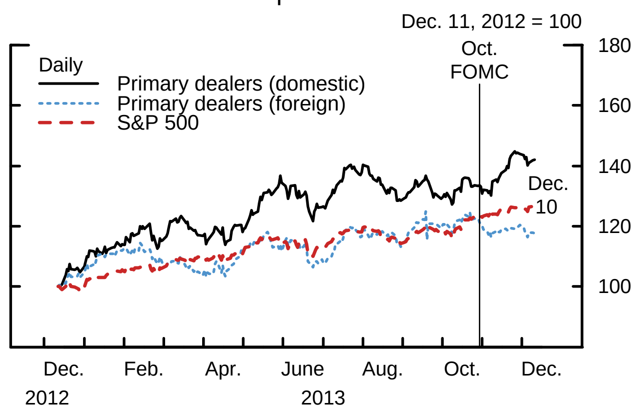
Note: The data have been adjusted to remove the estimated effects of certain changes to accounting standards and nonbank structure activity of $5 billion or more.
Source: Federal Reserve Board.

Weighted-Average Spread on C&I Loans



Note: The observation for Q4 is as of November 8, 2013. C&I loans of amounts less than $25 million. Spreads are computed over market interest rates on instruments with maturities comparable to each loan's repricing interval.
*Adjusted for changes in nonprice loan characteristics.
Source: Survey of Terms of Business Lending.

Bank Stock Market Capitalization



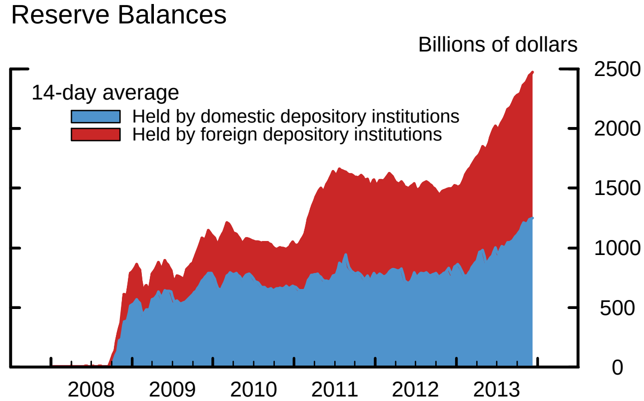
Note: Average stock market capitalization for 5 domestic primary dealers and for 11 foreign primary dealers.
Source: Compustat; Yahoo! Finance.

Growth of M2 and Its Components

Percent, s.a.a.r.	M2	Liquid deposits	Small time deposits	Retail MMFs	Curr.
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	6.8	-19.2	10.0	7.7
Oct.	14.8	18.6	-14.3	3.9	6.6

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

Reserve Balances



Note: Domestic depository institutions (DIs) consist of commercial banks, savings and loan associations, savings banks or mutual savings banks, and credit unions. Foreign DIs consist of U.S. branches and agencies of foreign banks and Edge Act and agreement corporations.
Source: Federal Reserve Board.

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

BANKING DEVELOPMENTS AND MONEY

Bank credit rose slightly in October and November, as the growth in C&I, CRE, and consumer loans was partially offset by declines in holdings of residential mortgages on banks' balance sheets. According to the November Survey of Terms of Business Lending, interest rates and loan rate spreads on newly originated C&I loans declined over the past three months, likely in part because of the ongoing elevated competition for such loans. Stock prices for large and regional domestic banking firms outperformed the broad equity market over the intermeeting period, rising about 4½ percent amid better-than-expected economic data and the settlement of mortgage-related litigation by some large banking organizations. CDS spreads for the largest bank holding companies declined relative to a broad index of liquid CDS referencing investment-grade firms.

After a brisk advance in October, M2 growth contracted in November as market conditions normalized following the fiscal standoff and investors reallocated out of cash positions. Notably, institutional money fund investors and money funds themselves appeared to reallocate out of bank deposits following the fiscal deal, reversing the increases seen during the debt ceiling impasse. The monetary base continued to expand rapidly in November, primarily reflecting the increase in reserve balances resulting from the Federal Reserve's asset purchases.

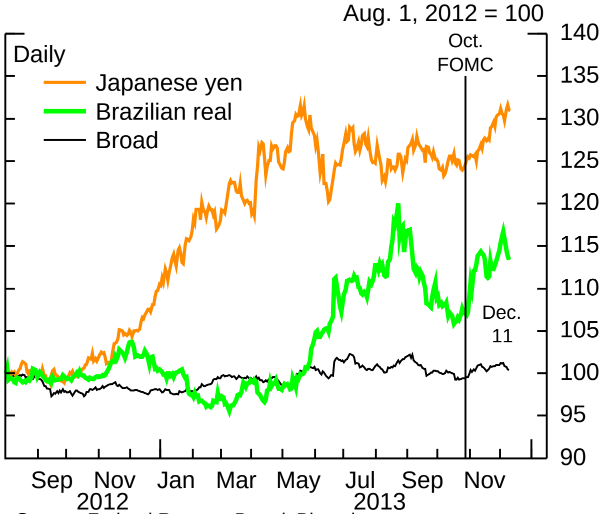
FOREIGN DEVELOPMENTS

The dollar appreciated against most currencies in the wake of the October FOMC meeting and after the October jobs report, in line with expectations for a more imminent slowing in the pace of asset purchases. Over the period as a whole, the broad dollar index increased nearly 1 percent. Against other major currencies, the dollar rose the most—appreciating 4¾ percent—against the Japanese yen, reflecting in part comments by Finance Minister Aso that raised the possibility of currency-market intervention and comments by Governor Kuroda that indicated that the Bank of Japan will continue easing and may expand monetary stimulus.

Asset prices in some of the vulnerable emerging market economies remained especially sensitive to information regarding the timing of a potential reduction in the pace of Federal Reserve asset purchases. The dollar appreciated 6¼ percent against the Brazilian real and 7½ percent against the Indonesian rupiah. Bond yields in these economies rose sharply, with long-term Brazilian local currency yields increasing

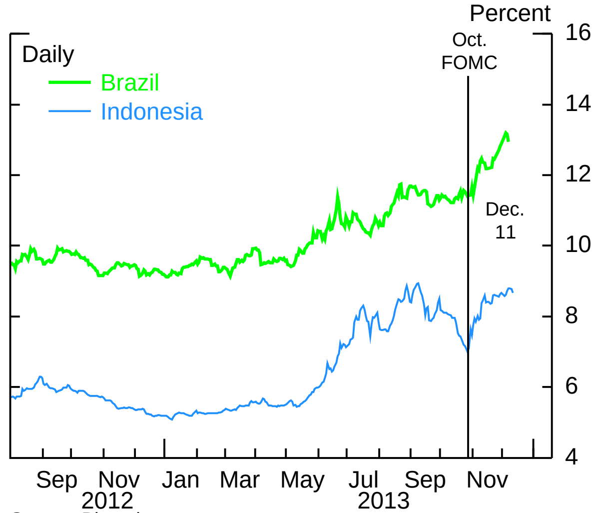
Foreign Developments

Dollar Exchange Rate Indexes



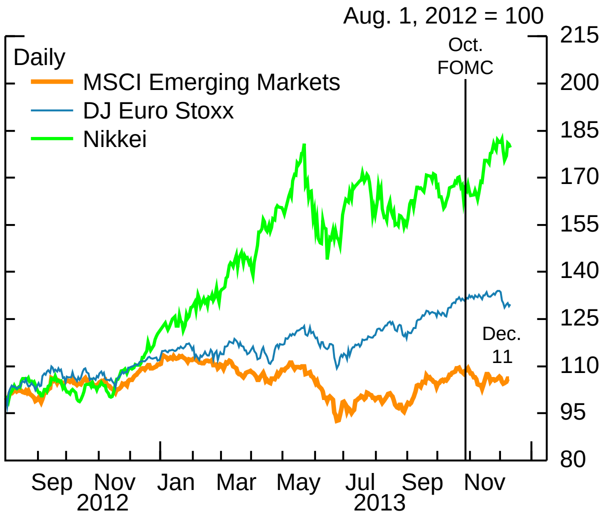
Source: Federal Reserve Board; Bloomberg.

EME 10-Year Nominal Benchmark Yields



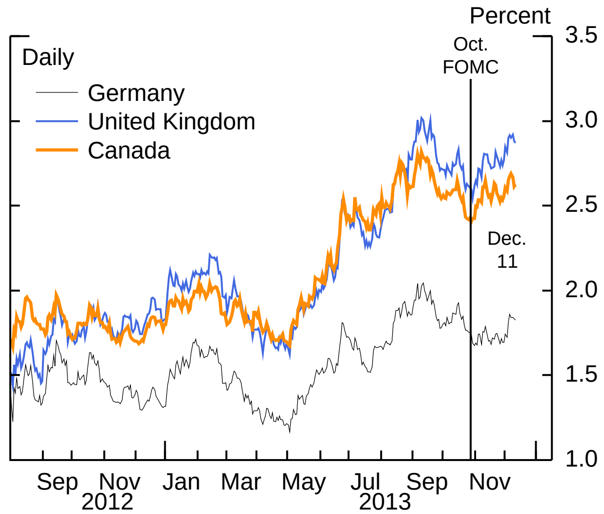
Source: Bloomberg.

Stock Price Indexes



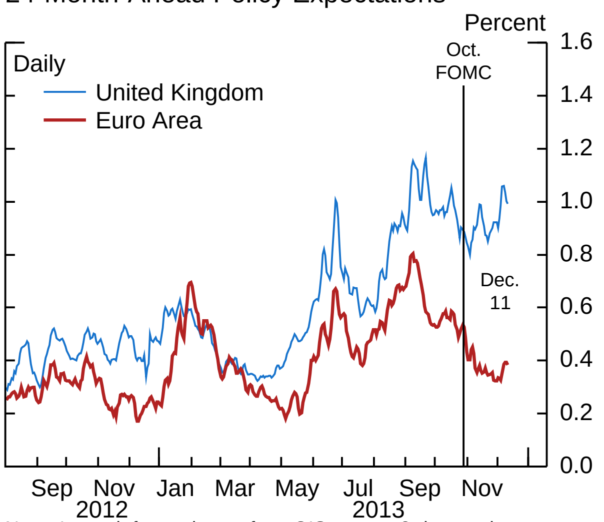
Source: Bloomberg.

AFE 10-Year Nominal Benchmark Yields



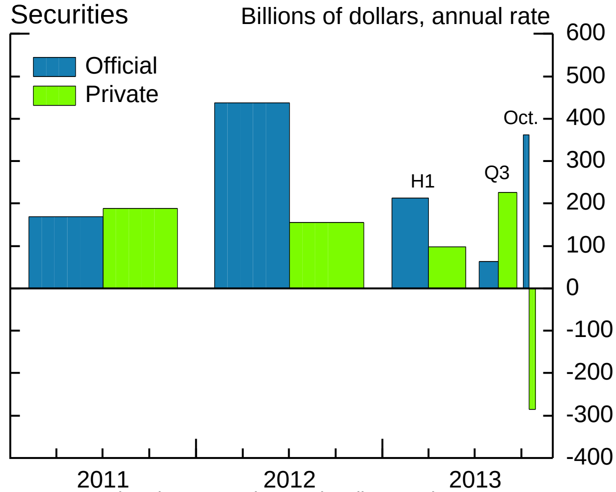
Source: Bloomberg.

24-Month-Ahead Policy Expectations



Note: 1-month forward rates from OIS quotes, 3-day moving average.
Source: Bloomberg.

Foreign Net Purchases of U.S. Treasury Securities



Note: October data are embargoed until December 16, 2013.
Source: TIC data adjusted for staff estimates.

Financial Developments

150 basis points. In addition, most emerging market equity indexes fell, on net, over the period, even though they reacted favorably to the outcome of China's Third Plenum (see the IEDO box "China's Reform Agenda").

Prompted by lower-than-expected inflation in the euro area, which fell in October to its lowest level in four years, the European Central Bank (ECB) surprised markets by cutting its main refinancing rate 25 basis points to ¼ percent, sooner than had been expected. Since the meeting, several ECB policymakers have noted possibilities for further easing in the euro area, including cutting the main refinancing rate further, lowering the rate paid at the ECB's deposit facility into negative territory, and conducting a new longer-term refinancing operation. These factors likely restrained the increase over the period in German long-term sovereign yields, which rose only 8 basis points, compared with increases of nearly 30 basis points in comparable U.K. and U.S. yields.

Major headline equity prices in the euro area and the United Kingdom fell 1¾ percent and 3½ percent, on net, respectively. In contrast, Japan's Nikkei index rose 9 percent amid the weakening of the yen and large foreign purchases of Japanese equities.

Foreign private investors, on net, sold a sizable amount of Treasury bills in October, perhaps reflecting concerns over the fiscal standoff. However, demand for Treasury securities by foreign official investors remained strong, especially for longer-term bonds and notes. More recent data on custody holdings at the FRBNY suggest that foreign official investors continued to purchase Treasury securities at a brisk pace in November.

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Risks and Uncertainty

ASSESSMENT OF RISKS

We continue to view the uncertainty around our projections for real GDP growth and the unemployment rate as roughly in line with the average of the past 20 years (the benchmark used by the FOMC), a period that includes considerable volatility.[1] We see a number of risks attending our forecast for economic activity, including those posed by the possibility that the extent of supply-side damage to the economy since the recession has been greater than we have assumed, that the tightening in mortgage rates since last spring will continue to exert greater restraint on the recovery in the housing sector than we have projected, and that economic and financial stresses in emerging market economies (EMEs) or the euro area will intensify. In addition, we see neither monetary policy nor fiscal policy as being well positioned to help the economy weather any future adverse shocks. Given these considerations, we continue to believe that the risks to our forecast for real GDP growth are skewed to the downside. However, we view the risks around our projection for the unemployment rate as roughly balanced, with the risk of a higher unemployment rate from adverse demand-side developments roughly countered by the possibility that the unemployment rate continues to surprise us to the downside as it has in recent years.

Our view of the risks to the economic outlook has been informed by the staff's recently completed quantitative surveillance (QS) assessment, which concluded that the vulnerability of the financial system to adverse shocks has remained at moderate levels overall, with mixed and largely offsetting changes over the fall. The moderate level of vulnerability reflects the relatively strong capital profiles of large domestic banking firms, the low levels and moderate growth of aggregate credit in the nonfinancial sectors, and some progress in ongoing efforts to reduce reliance on fragile short-term wholesale

[1] The benchmark estimates of uncertainty about real activity have increased sharply over the past several years. In particular, as the fixed 20-year window used to assess the size of typical forecast errors has moved forward to include the experience of the past five years, the estimated standard errors for out-year projections of the unemployment rate and real GDP growth increased between 2008 and 2011, almost doubling for unemployment and increasing by about 50 percent for GDP growth, and have remained at these higher levels with the current 20-year sample. As a result, the benchmark estimates of uncertainty about economic activity are no longer dominated by the experience of the Great Moderation period. In contrast, benchmark estimates of uncertainty about inflation are essentially unchanged relative to earlier sample periods.

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	2.6	3.1	3.5	3.4	2.5
Hysteresis	2.6	3.0	2.9	2.7	2.3
Weak housing market	2.6	2.6	3.0	3.4	2.7
Corporate credit boom and bust	4.2	5.1	2.3	-1.1	2.1
Faster recovery	3.3	4.1	3.8	3.3	2.3
Low inflation	2.5	3.1	3.4	3.3	2.5
EME financial crisis	2.6	1.9	3.4	3.9	2.8
Lower oil prices	2.6	3.3	3.9	3.7	2.5
Unemployment rate[1]					
Extended Tealbook baseline	7.1	6.5	5.9	5.3	5.0
Hysteresis	7.1	6.2	5.6	5.3	5.3
Weak housing market	7.1	6.7	6.4	5.9	5.3
Corporate credit boom and bust	7.0	5.4	4.8	6.5	6.9
Faster recovery	7.0	6.0	5.1	4.6	4.7
Low inflation	7.1	6.5	6.0	5.4	5.1
EME financial crisis	7.1	6.9	6.5	5.8	5.2
Lower oil prices	7.1	6.5	5.7	5.0	4.7
Total PCE prices					
Extended Tealbook baseline	1.3	1.4	1.4	1.6	1.9
Hysteresis	1.3	1.5	1.5	1.7	2.0
Weak housing market	1.3	1.4	1.4	1.5	1.8
Corporate credit boom and bust	1.3	1.4	1.4	1.6	1.9
Faster recovery	1.3	1.4	1.4	1.7	2.0
Low inflation	1.2	.6	.3	.2	.4
EME financial crisis	1.2	-.1	1.2	1.9	2.2
Lower oil prices	1.2	.4	1.3	1.6	1.8
Core PCE prices					
Extended Tealbook baseline	1.3	1.4	1.6	1.7	1.9
Hysteresis	1.3	1.5	1.7	1.8	2.0
Weak housing market	1.3	1.4	1.6	1.6	1.8
Corporate credit boom and bust	1.3	1.4	1.6	1.8	1.9
Faster recovery	1.3	1.4	1.6	1.8	2.0
Low inflation	1.2	.6	.5	.3	.4
EME financial crisis	1.3	.9	1.3	1.7	2.1
Lower oil prices	1.3	1.2	1.4	1.6	1.9
Federal funds rate[1]					
Extended Tealbook baseline	.1	.1	.8	1.9	3.5
Hysteresis	.1	.6	2.0	3.0	3.7
Weak housing market	.1	.1	.4	1.4	2.8
Corporate credit boom and bust	.1	1.1	2.4	1.9	1.2
Faster recovery	.1	.6	1.9	3.2	4.4
Low inflation	.1	.1	.3	.8	1.6
EME financial crisis	.1	.1	.1	1.2	3.3
Lower oil prices	.1	.1	.7	1.9	3.7

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

Risks & Uncertainty

funding across the financial sector. In addition, valuations in most asset markets are broadly in line with historical norms, and an increase in term premiums in the past few months has pushed yields on Treasury and investment-grade corporate securities closer to average levels. The QS assessment reiterated the importance of certain structural vulnerabilities in the financial system, including the complexity and interconnectedness of large financial institutions, and noted potential concerns related to a growing appetite for higher-yielding assets and associated pressures on underwriting standards, but it suggested that current vulnerabilities are not unusually pronounced.

With regard to inflation, we see significant uncertainty around our projection but do not view the current level of uncertainty as unusually high. Longer-run inflation expectations appear to have remained stable in recent years despite fluctuations in the prices of crude oil, other commodities, and imports more generally, as well as persistently wide margins of slack in labor and product markets. Furthermore, we still view the risks to our inflation forecast as broadly balanced. On the downside, there is the possibility that the soft readings on inflation seen this year could prove more persistent than we expect, especially if low levels of resource utilization or subdued increases in unit labor costs persist longer or have larger effects than we currently project. On the upside, an increase in inflation expectations, potentially related to concerns about the size of the Federal Reserve's balance sheet and the ability to execute a timely exit from the current stance of policy, could cause inflation to rise, as could a stronger-than-expected recovery or a larger amount of damage to the supply side of the economy than is assumed in the baseline.

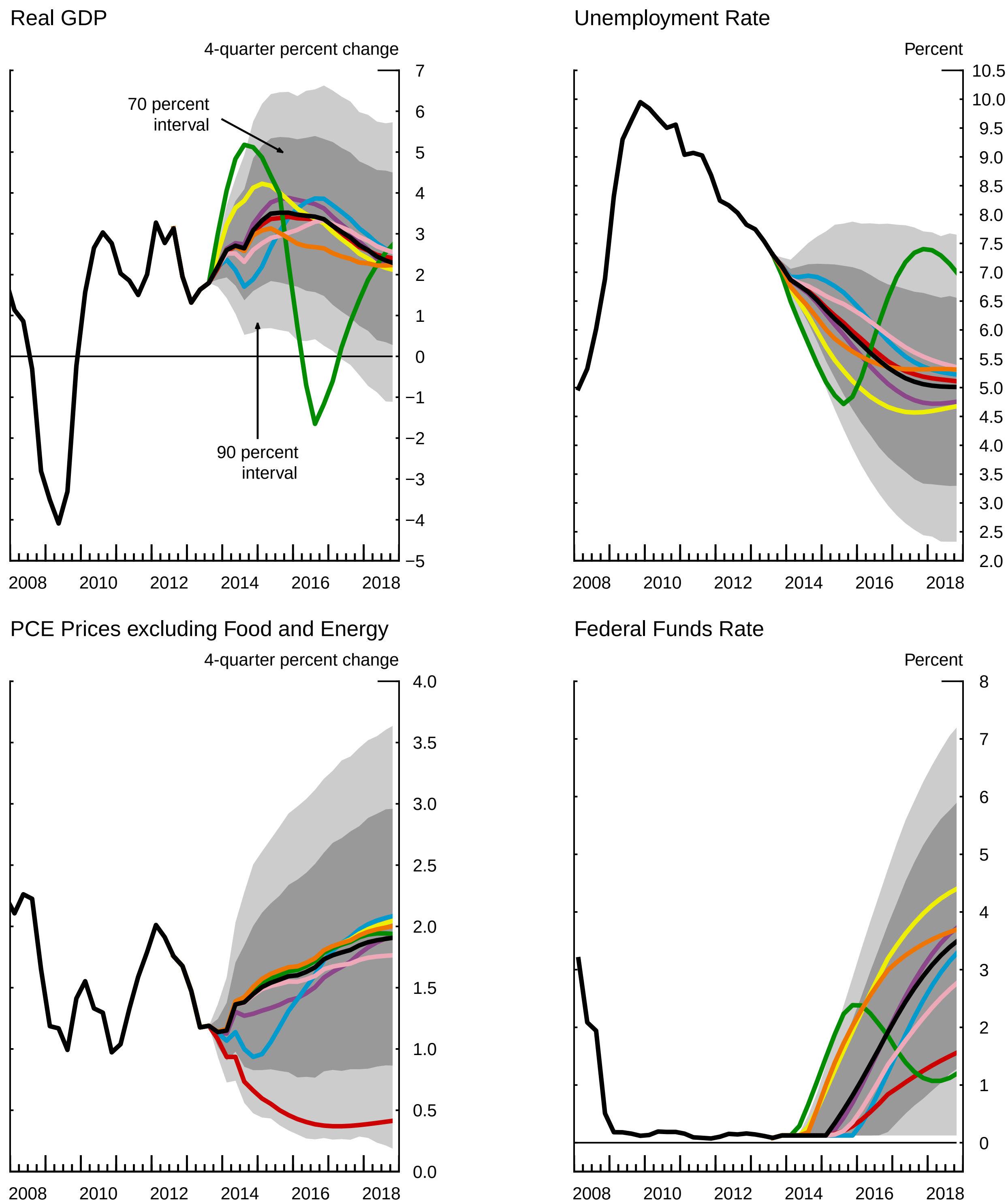
Alternative Scenarios

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 in our baseline assessment, we have underestimated the extent of labor market damage caused by the recession and its aftermath. In the second scenario, restrained demand slows residential investment and causes house prices to decelerate more than in the baseline. In the third, a stronger recovery is accompanied by an unsustainable buildup in financial risk-taking and leverage in corporate finance that ultimately leads to another recession. The fourth 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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- Hysteresis
- Weak housing market
- Corporate credit boom and bust
- Faster recovery
- Low inflation
- EME financial crisis
- Lower oil prices



GDP will rise more strongly in the next couple of years than is projected in the baseline. In the fifth scenario, the softness in consumer price inflation seen this year proves to be more persistent than anticipated. The final two scenarios explore risks to the U.S. economy from foreign economic developments—in the sixth scenario, financial stresses experienced by EMEs escalate into a full-blown crisis, and in the seventh, easing of geopolitical tensions leads to a gradual, but sizable, decline of oil prices.

We generate the first five 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.[2] In all cases, we assume that the size and composition of the SOMA portfolio follow their baseline paths.

Hysteresis

The prolonged period of slack demand in recent years appears to have had some persistent adverse effects on the productive capacity of the economy. The staff's baseline analysis incorporates the negative effects of the weak economy on physical capital accumulation, a modest rise in the natural unemployment rate, and some steepening of the downtrend in labor force participation. That said, the baseline forecast assumes that labor markets are in the process of healing. In this scenario, the damage to potential labor supply is more extensive, reflecting a deeper manifestation of hysteresis than we have assumed in the baseline.[3] As a result, the natural rate of unemployment is ¾ percentage point above the baseline and the trend labor force participation rate falls 1½ percentage points below the baseline by 2013, leaving the current output gap 2½ percentage points narrower. Potential labor input is eroded in future years because of hysteresis, but with the labor market improving, the effects going forward are smaller than in the past, although potential output is still 1½ percentage points below the baseline by the end of 2018. In this scenario, the annual rate of real GDP growth is about ½ percentage point less than in the baseline, on average, through 2016, and it returns to its baseline pace by

[2] 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.

[3] We modeled the alternative by augmenting the usual specifications in FRB/US for the natural unemployment rate and for trend labor force participation with hysteresis-generating components that become active when labor market slack is elevated.

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	2.2	3.1	3.5	3.4	2.7	2.3
Confidence interval						
Tealbook forecast errors	1.7–2.7	1.3–4.8	1.5–5.5	. . .	. . .	. . .
FRB/US stochastic simulations	1.9–2.5	1.6–4.8	1.8–5.4	1.5–5.3	.7–4.8	.3–4.5
Civilian unemployment rate						
(percent, Q4)						
Projection	7.1	6.5	5.9	5.3	5.1	5.0
Confidence interval						
Tealbook forecast errors	7.0–7.2	5.8–7.2	4.9–6.9	. . .	. . .	. . .
FRB/US stochastic simulations	7.0–7.2	5.8–7.1	4.6–7.1	3.8–6.8	3.3–6.6	3.3–6.5
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	.9	1.4	1.4	1.6	1.8	1.9
Confidence interval						
Tealbook forecast errors	.7–1.1	.1–2.6	.2–2.7	. . .	. . .	. . .
FRB/US stochastic simulations	.7–1.1	.5–2.2	.4–2.5	.5–2.7	.6–2.9	.7–3.2
PCE prices excluding food and energy						
(percent change, Q4 to Q4)						
Projection	1.1	1.4	1.6	1.7	1.8	1.9
Confidence interval						
Tealbook forecast errors	.9–1.4	.8–2.1	.8–2.4	. . .	. . .	. . .
FRB/US stochastic simulations	1.0–1.2	.8–2.0	.8–2.3	.8–2.6	.8–2.8	.9–3.0
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.8	1.9	2.9	3.5
Confidence interval						
FRB/US stochastic simulations	.1–.1	.1–.6	.1–2.1	.2–3.8	.8–5.2	1.3–5.9

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.

2018. Resource slack decreases more rapidly in coming years, and the unemployment rate therefore initially falls faster than in the baseline. Eventually, however, the higher natural rate manifests itself, and unemployment is higher by 2017. Even with a narrower margin of resource slack, inflation is only slightly higher than in the baseline because the model's Phillips curve is very flat. The federal funds rate begins to rise from its effective lower bound in the fourth quarter of 2014.

Weak Housing Market

The most recent indicators of housing demand and residential investment have been weaker than we expected, plausibly reflecting a greater restraint from the increase in mortgage rates this year. This scenario considers the possibility that this restraint is greater and persists longer than we have allowed for in the baseline. In particular, residential construction is assumed here to edge up only slightly over the next two years. These weaker demand conditions cause house price gains to average 2 percent per year less than in the baseline. These developments shave about 1 percent off the level of real GDP by the end of 2015, and the unemployment rate remains above 6½ percent until the second half of 2015. The weaker pace of economic growth and lower inflation relative to the baseline cause the first increase in the federal funds rate to be delayed until the fourth quarter of 2015.

Corporate Credit Boom and Bust

As noted in the recent QS Assessment of Financial Stability, the provision of financing to speculative-grade corporate borrowers through high-yield bonds and syndicated leveraged loans has remained robust this year, raising the possibility of large future losses for investors. This scenario initially features a more aggressive easing in lending standards, greater use of leverage, a larger reduction in risk spreads, and rapid increases in equity prices. In response, business capital investment and consumer outlays for durables and housing move strongly above the baseline, and the unemployment rate drops below 5 percent in 2015. However, the financial froth proves unsustainable, and about two years from now the leverage cycle reverses abruptly, leading to a sharp curtailment of credit. The resulting plunge in business and household spending is severe enough to cause the economy to fall into recession, with the unemployment rate reaching almost 7½ percent by late 2017. Monetary policy responds to the credit boom by beginning to tighten in mid-2014 but reverses course once the credit disruption begins. Although the inertial nature of the assumed policy rule prevents a rapid decline in the federal funds rate, the policy easing is sufficient to enable an economic recovery to take hold. Inflation is little changed over the simulation horizon.

Faster Recovery

As currently measured, real GDP has risen only modestly over the past few years, but the unemployment rate has declined substantially. In the staff baseline projection, we have interpreted the weaker readings on GDP growth as resulting from factors that continue to restrain aggregate demand. An alternative possibility is that the recent gains in real GDP have been understating the true strength of the economy, and other indicators—such as GDI and labor market conditions—have been accurate in signaling a more rapid economic recovery. In this scenario, the improvements in household wealth and the labor market over the past year lead to a stronger pickup in spending than in the baseline projection. Additionally, the equity premium is assumed to decline faster than in the baseline. Real GDP rises at an average annual rate of about 4 percent in 2014 and 2015; the unemployment rate falls below 6½ percent by mid-2014 and reaches its natural rate of 5¼ percent by the end of 2015. With resource slack decreasing more rapidly, wages and unit labor costs accelerate gradually relative to the baseline; however, with long-term inflation expectations assumed to remain well anchored, consumer price inflation rises to only 2 percent by 2018. The federal funds rate lifts off from its effective lower bound by the third quarter of 2014, three quarters earlier than in the baseline.

Low Inflation

In the baseline projection, the downside surprise on core inflation this year is assumed to be largely transitory, and over the next few years inflation gradually moves up toward 2 percent as the recovery continues. This view is based on the staff's assumption of firmly anchored longer-run inflation expectations, a view shared by most New Keynesian Phillips curves. In this scenario, we examine the possibility that inflation is currently behaving according to an accelerationist Phillips curve, which in current circumstances generates declining longer-run inflation expectations, thereby leading to a mutually reinforcing downward dynamic. As a result, inflation falls below 1 percent next year and edges close to zero thereafter. While the unemployment rate falls below its 6½ percent threshold in the first quarter of 2015, the very low inflation that prevails in this scenario causes the policy rule to prescribe the first increase in the federal funds rate only in the fourth quarter of 2015. By then, the unemployment rate is 6 percent.

Financial Crisis in the Emerging Market Economies

We expect financial market stresses in the EMEs to remain generally manageable. However, with investors focused 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 that engulfs many EMEs. 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 roughly 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. These factors lead real GDP in the EMEs to decline 4½ percent relative to the baseline by early 2015.[4]

The financial stress in the EMEs is assumed to have some financial spillovers to the rest of the world. In 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 less than 2 percent in 2014, and the unemployment rate hovers around 7 percent through most of 2014 before beginning to decline gradually. 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 until early 2016.

Lower Oil Prices

In our baseline forecast, global oil prices decline gradually over the next few years. However, it is possible that various geopolitical tensions that have restrained global oil supply, including the Iranian export embargo and civil unrest in Libya, will diminish considerably more than is assumed, particularly if the recent agreement with Iran over its nuclear program presages a quicker return by that country to full production. In this scenario, we assume that oil prices fall $25 per barrel below the baseline by the end of 2014.[5] The decline in oil prices boosts U.S. domestic demand by raising real

[4] In the QS background report on EME vulnerabilities, the staff considered a variant of this scenario in which the EME financial crisis was even deeper and more broadly based. That alternative scenario assumed more-adverse financial spillover effects to the United States and the AFEs and, hence, implied larger declines in U.S. and AFE GDP than the scenario examined here.

[5] Financial markets appear to assign a fairly low weight to the possibility that oil prices will fall by more than envisioned in this scenario. In particular, staff analysis using options on oil futures suggests a

household income and increasing the return on investment.[6] U.S. real GDP rises at an annual rate of about 3½ percent, on average, in 2014 and 2015—¼ percentage point above the baseline—and the unemployment rate is 5¾ percent at the end of 2015, about ¼ percentage point lower than in the baseline. Reflecting the decline in energy costs, total PCE inflation drops to ½ percent in 2014, one percentage point below the baseline. However, because longer-run inflation expectations remain well anchored, core inflation runs only about ¼ percentage point below the baseline over the next couple of years. Given the largely offsetting implications for monetary policy of lower core inflation and stronger real activity, the federal funds rate lifts off from its effective lower bound at about the same time as in the baseline but rises a bit faster thereafter.

roughly 10 percent chance that crude oil prices will fall by $25 per barrel or more below the December 2014 futures price.

[6] That said, the effect is smaller than it would have been in years past when the United States was more reliant on imported oil.

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

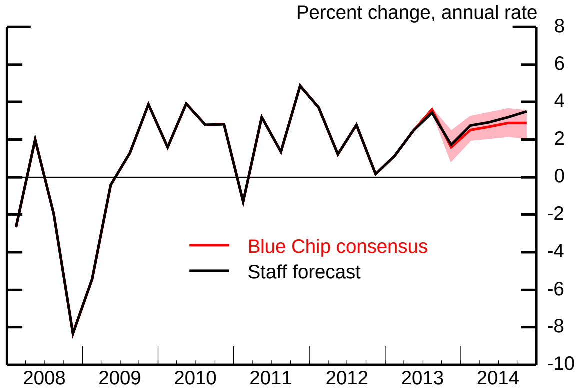
Measure and projection	2013 Previous Tealbook	2013 Current Tealbook	2014 Previous Tealbook	2014 Current Tealbook	2015 Previous Tealbook	2015 Current Tealbook
Real GDP						
Staff	2.0	2.2	3.2	3.1	3.5	3.5
FRB/US	1.5	2.2	2.2	2.1	2.6	2.6
EDO	2.1	2.2	3.1	3.0	3.0	2.9
Blue Chip	2.0	2.2	2.8	2.8	...	...
Unemployment rate[1]						
Staff	7.3	7.1	6.6	6.5	5.9	5.9
FRB/US	7.4	7.1	7.4	7.0	7.1	6.6
EDO	7.4	7.1	7.2	7.1	7.0	6.9
Blue Chip	7.3	7.2	6.8	6.7	...	...
Total PCE prices						
Staff	1.0	.9	1.4	1.4	1.5	1.4
FRB/US	.9	.9	.9	1.0	1.0	1.0
EDO	1.1	.9	1.3	1.3	1.5	1.5
Blue Chip[2]	1.4	1.3	2.0	2.0	...	...
Core PCE prices						
Staff	1.2	1.1	1.5	1.4	1.6	1.6
FRB/US	1.2	1.1	1.1	1.1	1.1	1.1
EDO	1.2	1.1	1.3	1.3	1.5	1.5
Blue Chip	...	...	...	...	...	...
Federal funds rate[1]						
Staff	.1	.1	.1	.1	.9	.8
FRB/US	.1	.1	.1	.1	.1	.1
EDO	.4	.1	1.4	1.2	2.1	2.0
Blue Chip[3]	.1	.1	.2	.2	...	...

Note: Blue Chip forecast completed on December 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

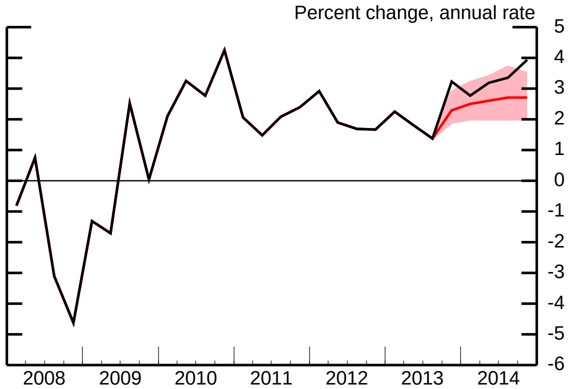
Tealbook Forecast Compared with Blue Chip
(Blue Chip survey released December 10, 2013)

Real GDP

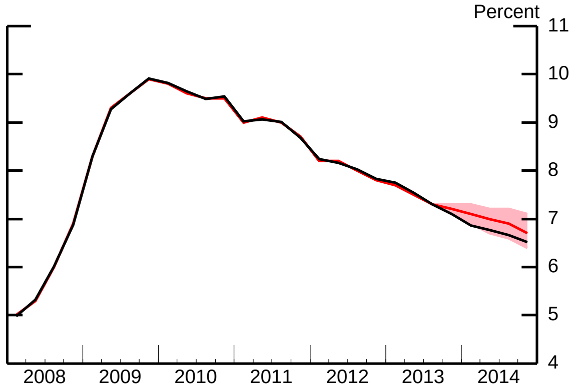


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

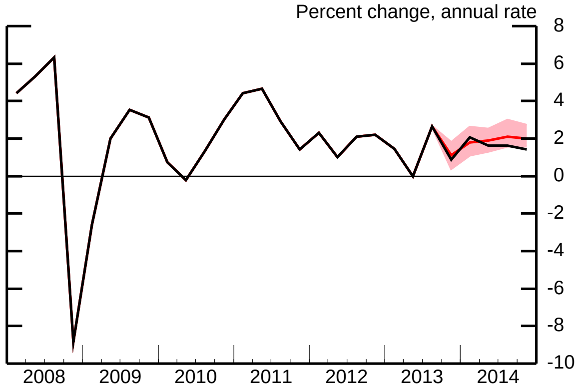
Real PCE



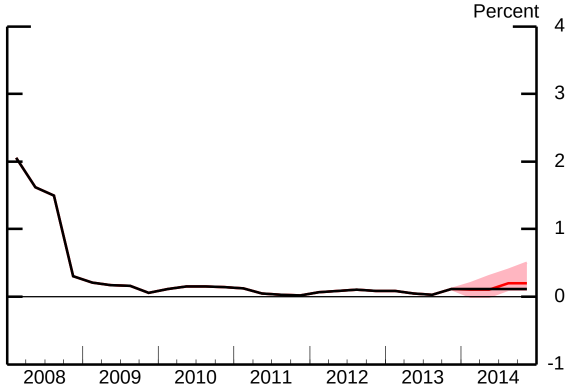
Unemployment Rate



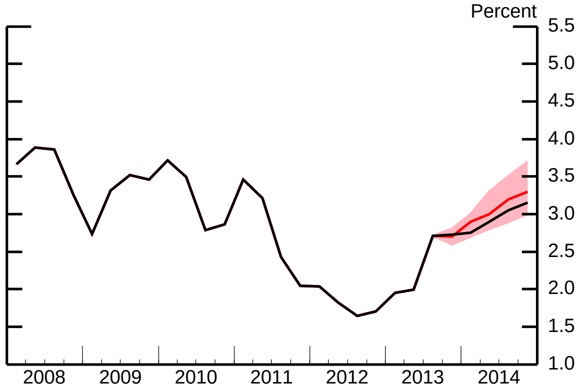
Consumer Price Index



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:Q4)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
Greater than 3 percent				
Current Tealbook	.03	.02	.09	.02
Previous Tealbook	.03	.01	.06	.05
Less than 1 percent				
Current Tealbook	.31	.47	.35	.27
Previous Tealbook	.34	.53	.36	.20

Probability of Unemployment Events
(4 quarters ahead—2014:Q4)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
Increase by 1 percentage point				
Current Tealbook	.01	.04	.23	.01
Previous Tealbook	.01	.08	.19	.02
Decrease by 1 percentage point				
Current Tealbook	.27	.08	.14	.18
Previous Tealbook	.21	.03	.21	.19

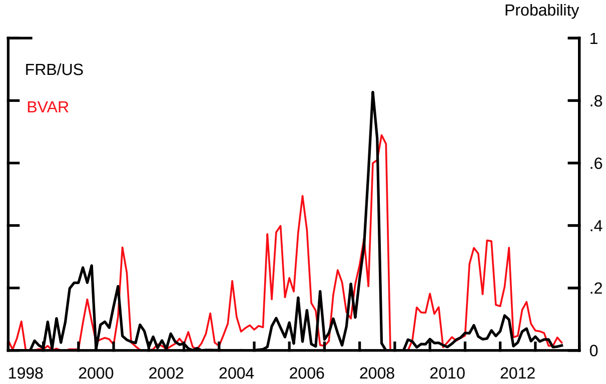
Probability of Near-Term Recession

Probability that real GDP declines in each of 2014:Q1 and 2014:Q2	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.02	.05	.05	.04	.04
Previous Tealbook	.02	.05	.05	.06	.09

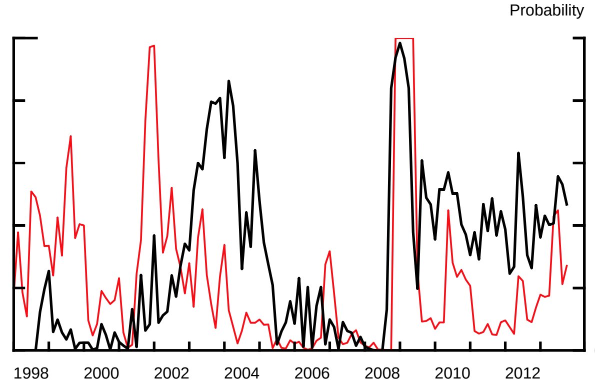
Note: "Staff" represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. Data for the current quarter are taken from the staff estimate for the second Tealbook 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)

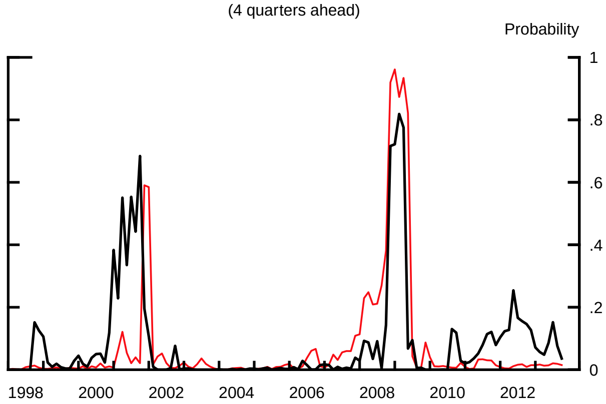
Probability that Total PCE Inflation Is above 3 Percent
(4 quarters ahead)



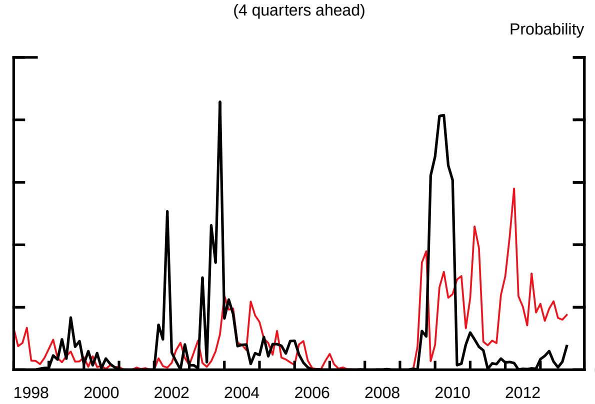
Probability that Total PCE Inflation Is below 1 Percent
(4 quarters ahead)



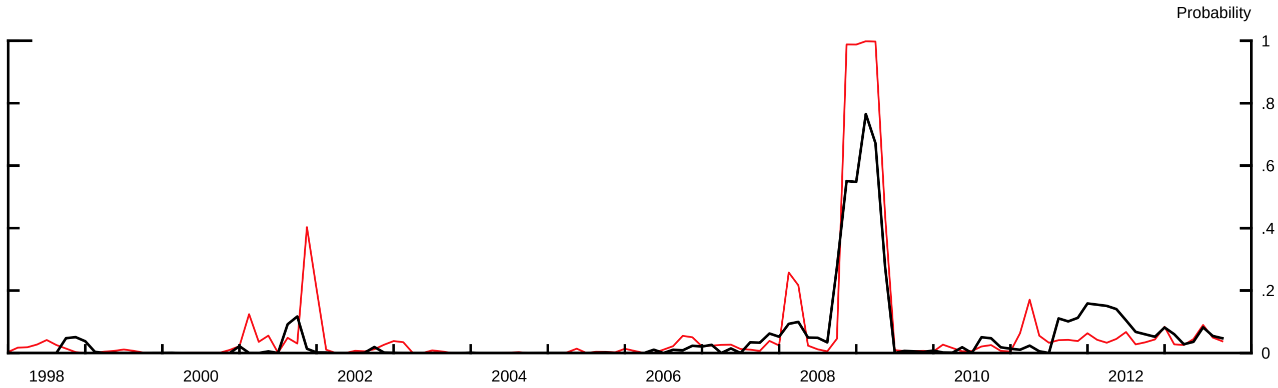
Probability that the Unemployment Rate Increases 1 ppt
(4 quarters ahead)



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, Credit and Banking* , vol. 39 (October), pp. 1533−61.

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

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate[1]	
	10/23/13	12/11/13	10/23/13	12/11/13	10/23/13	12/11/13	10/23/13	12/11/13	10/23/13	12/11/13
Quarterly										
2013:Q1	2.8	2.8	1.1	1.1	1.1	1.1	1.4	1.4	7.7	7.7
Q2	3.1	3.1	2.5	2.5	-.1	-.1	.6	.6	7.5	7.5
Q3	4.2	5.5	2.2	3.5	2.0	2.0	1.5	1.5	7.3	7.3
Q4	3.3	2.8	2.1	1.7	1.1	.7	1.4	1.1	7.3	7.1
2014:Q1	4.4	4.2	3.2	2.8	1.5	1.5	1.6	1.4	7.1	6.9
Q2	4.5	4.4	3.0	2.9	1.3	1.3	1.6	1.5	7.0	6.8
Q3	4.9	4.7	3.4	3.2	1.3	1.4	1.5	1.5	6.8	6.7
Q4	5.0	4.9	3.5	3.5	1.3	1.2	1.5	1.4	6.6	6.5
2015:Q1	5.4	5.5	3.6	3.7	1.4	1.5	1.6	1.6	6.4	6.3
Q2	5.2	5.3	3.6	3.6	1.4	1.5	1.6	1.6	6.2	6.2
Q3	5.3	5.0	3.6	3.3	1.5	1.5	1.6	1.6	6.1	6.1
Q4	5.1	5.1	3.4	3.5	1.5	1.3	1.6	1.5	5.9	5.9
Two-quarter[2]										
2013:Q2	3.0	3.0	1.8	1.8	.5	.5	1.0	1.0	-.3	-.3
Q4	3.8	4.1	2.2	2.6	1.6	1.3	1.5	1.3	-.2	-.4
2014:Q2	4.4	4.3	3.1	2.8	1.4	1.4	1.6	1.5	-.3	-.3
Q4	4.9	4.8	3.4	3.3	1.3	1.3	1.5	1.4	-.4	-.3
2015:Q2	5.3	5.4	3.6	3.6	1.4	1.5	1.6	1.6	-.4	-.3
Q4	5.2	5.0	3.5	3.4	1.5	1.4	1.6	1.6	-.3	-.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	3.4	3.5	2.0	2.2	1.0	.9	1.2	1.1	-.5	-.7
2014:Q4	4.7	4.6	3.2	3.1	1.4	1.4	1.5	1.4	-.7	-.6
2015:Q4	5.2	5.2	3.5	3.5	1.5	1.4	1.6	1.6	-.7	-.6
2016:Q4	5.0	5.1	3.2	3.4	1.6	1.6	1.7	1.7	-.5	-.6
Annual										
2012	4.6	4.6	2.8	2.8	1.8	1.8	1.8	1.8	8.1	8.1
2013	3.1	3.2	1.6	1.7	1.1	1.1	1.3	1.2	7.5	7.4
2014	4.2	4.2	2.8	2.8	1.3	1.3	1.5	1.3	6.9	6.7
2015	5.1	5.1	3.5	3.5	1.4	1.4	1.6	1.6	6.2	6.1
2016	5.1	5.2	3.4	3.4	1.5	1.5	1.7	1.7	5.6	5.5

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

Greensheets

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

Item	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	3.5	1.7	2.8	2.9	3.2	3.5	3.7	3.6	3.3	3.5	2.2	3.1	3.5	3.4
Previous Tealbook	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
Final sales	2.1	1.9	1.9	3.0	3.1	3.4	3.7	3.8	3.7	3.7	3.7	1.5	3.3	3.7	3.5
Previous Tealbook	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
Priv. dom. final purch.	2.6	2.1	3.3	3.1	3.9	4.2	4.7	4.7	4.7	4.5	4.5	2.4	4.0	4.6	3.7
Previous Tealbook	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
Personal cons. expend.	1.8	1.4	3.2	2.8	3.2	3.4	3.9	3.9	4.0	3.8	3.9	2.2	3.3	3.9	3.2
Previous Tealbook	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
Durables	6.2	7.7	7.8	8.3	8.9	9.0	9.8	9.2	9.1	8.8	8.8	6.9	9.0	9.0	6.4
Nondurables	1.6	2.4	4.7	1.6	2.5	2.6	3.1	3.1	3.2	3.0	3.1	2.9	2.4	3.1	2.6
Services	1.2	.0	2.0	2.3	2.5	2.7	3.3	3.3	3.4	3.2	3.3	1.2	2.7	3.3	2.8
Residential investment	14.2	13.0	-1.7	10.8	14.8	18.2	18.4	17.4	15.1	13.4	12.9	9.3	15.5	14.7	8.3
Previous Tealbook	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
Nonres. priv. fixed invest.	4.7	3.5	5.0	3.0	5.2	5.0	5.1	5.3	5.5	5.5	5.5	2.1	4.6	5.4	5.1
Previous Tealbook	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
Equipment & intangibles	1.3	.7	6.3	3.0	5.1	5.5	5.6	5.9	6.3	6.3	6.4	2.7	4.8	6.2	5.8
Previous Tealbook	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
Nonres. structures	17.6	13.8	1.0	3.0	5.4	3.6	3.6	3.3	2.8	2.6	2.6	.1	3.9	2.8	2.6
Previous Tealbook	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
Net exports[2]	-424	-423	-417	-408	-407	-404	-408	-408	-414	-410	-412	-422	-407	-411	-401
Previous Tealbook[2]	-424	-425	-410	-410	-408	-402	-399	-395	-397	-392	-389	-420	-405	-394	-372
Exports	8.0	3.7	6.8	4.3	3.9	5.0	5.5	5.8	6.1	6.3	6.0	4.2	4.7	6.0	6.7
Imports	6.9	2.7	4.7	2.0	3.2	3.7	5.3	4.8	6.1	4.7	5.4	3.7	3.5	5.2	4.9
Gov't. cons. & invest.	-.4	.4	-5.3	.9	-1.2	-1.0	-.8	-1.0	-.8	-1.0	-.2	-2.4	-.5	-.7	.9
Previous Tealbook	-.4	-1.7	-4.2	-.6	-2.1	-1.8	-1.5	-1.0	-.8	-.8	-.4	-2.6	-1.5	-.8	.9
Federal	-1.6	-1.4	-13.4	1.6	-3.6	-3.3	-2.8	-4.1	-3.9	-4.4	-2.5	-6.3	-2.0	-3.7	.0
Defense	-.6	-.4	-14.3	-2.2	-5.3	-5.2	-2.9	-4.8	-4.2	-4.8	-2.4	-6.8	-3.9	-4.1	-.1
Nondefense	-3.1	-3.1	-11.9	8.0	-.9	-.3	-2.5	-3.1	-3.3	-3.7	-2.6	-5.5	1.0	-3.2	.1
State & local	.4	1.7	.5	.5	.4	.4	.5	1.0	1.1	1.1	1.1	.3	.5	1.1	1.5
Change in priv. inventories[2]	57	107	102	96	92	85	78	83	81	65	57	77	88	72	50
Previous Tealbook[2]	57	82	81	94	93	87	78	77	74	68	63	65	88	70	59
Nonfarm[2]	33	85	79	79	78	73	65	81	79	63	54	55	74	69	48
Farm[2]	19	22	23	17	14	13	13	2	2	2	2	20	14	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	2.2	3.1	3.5	3.4
Previous Tealbook	1.9	-2.8	-.2	2.8	2.0	2.0	2.0	3.2	3.5	3.2
Final sales	2.0	-2.2	-.4	2.0	1.8	2.5	1.5	3.3	3.7	3.5
Previous Tealbook	2.0	-2.2	-.4	2.0	1.8	2.5	1.5	3.3	3.7	3.3
Priv. dom. final purch.	.8	-4.1	-2.3	3.5	3.0	2.9	2.4	4.0	4.6	3.7
Previous Tealbook	.8	-4.1	-2.3	3.5	3.0	2.9	2.3	4.2	4.5	3.5
Personal cons. expend.	1.5	-2.0	-.1	3.1	2.0	2.0	2.2	3.3	3.9	3.2
Previous Tealbook	1.5	-2.0	-.1	3.1	2.0	2.0	2.0	3.4	3.8	3.1
Durables	4.1	-12.9	2.5	9.3	5.7	7.8	6.9	9.0	9.0	6.4
Nondurables	.1	-2.7	.2	3.3	.7	1.6	2.9	2.4	3.1	2.6
Services	1.5	.2	-.6	2.1	1.9	1.3	1.2	2.7	3.3	2.8
Residential investment	-21.3	-24.3	-10.8	-5.2	5.6	15.5	9.3	15.5	14.7	8.3
Previous Tealbook	-21.3	-24.3	-10.8	-5.2	5.6	15.5	11.4	17.5	14.1	5.8
Nonres. priv. fixed invest.	7.1	-8.9	-12.2	8.1	8.6	5.0	2.1	4.6	5.4	5.1
Previous Tealbook	7.1	-8.9	-12.2	8.1	8.6	5.0	1.8	4.9	5.4	4.9
Equipment & intangibles	3.9	-11.8	-6.0	12.0	8.7	3.9	2.7	4.8	6.2	5.8
Previous Tealbook	3.9	-11.8	-6.0	12.0	8.7	3.9	2.4	5.6	6.1	5.5
Nonres. structures	17.1	-1.2	-27.1	-4.0	8.3	9.3	.1	3.9	2.8	2.6
Previous Tealbook	17.1	-1.2	-27.1	-4.0	8.3	9.3	-.1	2.5	2.9	2.6
Net exports[1]	-704	-547	-392	-463	-446	-431	-422	-407	-411	-401
Previous Tealbook[1]	-704	-547	-392	-463	-446	-431	-420	-405	-394	-372
Exports	9.8	-2.9	.4	9.8	4.6	2.4	4.2	4.7	6.0	6.7
Imports	.7	-5.9	-6.2	11.7	3.5	.1	3.7	3.5	5.2	4.9
Gov't. cons. & invest.	1.8	3.3	2.3	-1.1	-3.3	-1.1	-2.4	-.5	-.7	.9
Previous Tealbook	1.8	3.3	2.3	-1.1	-3.3	-1.1	-2.6	-1.5	-.8	.9
Federal	2.7	8.4	3.9	3.2	-3.9	-2.3	-6.3	-2.0	-3.7	.0
Defense	2.5	9.4	3.6	2.0	-4.2	-5.0	-6.8	-3.9	-4.1	-.1
Nondefense	2.9	6.5	4.6	5.5	-3.3	2.6	-5.5	1.0	-3.2	.1
State & local	1.2	.2	1.3	-4.0	-2.8	-.3	.3	.5	1.1	1.5
Change in priv. inventories[1]	36	-34	-148	58	34	58	77	88	72	50
Previous Tealbook[1]	36	-34	-148	58	34	58	65	88	70	59
Nonfarm[1]	37	-35	-146	66	40	69	55	74	69	48
Farm[1]	-1	1	-2	-7	-4	-7	20	14	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	3.5	1.7	2.8	2.9	3.2	3.5	3.7	3.6	3.3	3.5	2.2	3.1	3.5	3.4
Previous Tealbook	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
Final sales	2.1	1.9	1.9	3.0	3.1	3.4	3.7	3.7	3.6	3.7	3.7	1.5	3.3	3.7	3.5
Previous Tealbook	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
Priv. dom. final purch.	2.2	1.8	2.7	2.6	3.3	3.5	3.9	3.9	3.9	3.8	3.8	2.0	3.3	3.9	3.2
Previous Tealbook	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
Personal cons. expend.	1.2	1.0	2.2	1.9	2.2	2.3	2.7	2.7	2.7	2.6	2.6	1.5	2.3	2.7	2.2
Previous Tealbook	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
Durables	.5	.6	.6	.6	.7	.7	.7	.7	.7	.7	.7	.5	.7	.7	.5
Nondurables	.3	.4	.7	.3	.4	.4	.5	.5	.5	.5	.5	.4	.4	.5	.4
Services	.5	.0	.9	1.0	1.1	1.2	1.5	1.5	1.5	1.5	1.5	.5	1.2	1.5	1.3
Residential investment	.4	.4	-.1	.3	.5	.6	.6	.6	.5	.5	.5	.3	.5	.5	.3
Previous Tealbook	.4	.2	.3	.5	.6	.6	.6	.6	.5	.5	.4	.3	.6	.5	.2
Nonres. priv. fixed invest.	.6	.4	.6	.4	.6	.6	.6	.6	.7	.7	.7	.3	.6	.7	.6
Previous Tealbook	.6	.5	.4	.5	.6	.7	.7	.6	.7	.7	.7	.2	.6	.7	.6
Equipment & intangibles	.1	.1	.6	.3	.5	.5	.5	.6	.6	.6	.6	.3	.5	.6	.6
Previous Tealbook	.1	.2	.3	.4	.5	.6	.6	.6	.6	.6	.6	.2	.5	.6	.5
Nonres. structures	.4	.4	.0	.1	.2	.1	.1	.1	.1	.1	.1	.0	.1	.1	.1
Previous Tealbook	.4	.3	.1	.0	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.1
Net exports	-.1	.1	.1	.3	.0	.1	-.1	.0	-.2	.1	-.1	.0	.1	.0	.1
Previous Tealbook	-.1	.0	.4	.0	.1	.1	.1	.1	-.1	.1	.1	.0	.1	.0	.2
Exports	1.0	.5	.9	.6	.5	.7	.7	.8	.8	.9	.8	.6	.6	.8	.9
Imports	-1.1	-.4	-.8	-.3	-.5	-.6	-.9	-.8	-1.0	-.8	-.9	-.6	-.6	-.9	-.8
Gov't. cons. & invest.	-.1	.1	-1.0	.2	-.2	-.2	-.1	-.2	-.1	-.2	.0	-.5	-.1	-.1	.2
Previous Tealbook	-.1	-.3	-.8	-.1	-.4	-.3	-.3	-.2	-.1	-.1	-.1	-.5	-.3	-.1	.2
Federal	-.1	-.1	-1.0	.1	-.3	-.2	-.2	-.3	-.3	-.3	-.2	-.5	-.1	-.3	.0
Defense	.0	.0	-.7	-.1	-.2	-.2	-.1	-.2	-.2	-.2	-.1	-.3	-.2	-.2	.0
Nondefense	-.1	-.1	-.4	.2	.0	.0	-.1	-.1	-.1	-.1	-.1	-.2	.0	-.1	.0
State & local	.1	.2	.1	.1	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.2
Change in priv. inventories	.4	1.5	-.1	-.3	-.2	-.2	-.2	.0	-.1	-.4	-.2	.7	-.2	-.2	-.1
Previous Tealbook	.4	.8	.0	.3	-.1	-.2	-.3	-.2	-.1	-.2	-.1	.5	.0	-.1	-.1
Nonfarm	.3	1.4	-.2	.0	.0	-.1	-.2	.4	-.1	-.4	-.2	.4	-.1	-.1	-.1
Farm	.1	.1	.0	-.3	-.1	.0	.0	-.4	.0	.0	.0	.3	-.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	1.1	1.4	1.5	1.5	1.4	1.8	1.6	1.6	1.5	1.3	1.4	1.6	1.7
Previous Tealbook	.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
PCE chain-wt. price index	-.1	2.0	.7	1.5	1.3	1.4	1.2	1.5	1.5	1.5	1.3	.9	1.4	1.4	1.6
Previous Tealbook	-.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
Energy	-11.9	11.7	-4.8	4.9	.1	.1	-.4	-.5	-.9	-.9	-.8	-2.5	1.1	-.8	-.5
Previous Tealbook	-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
Food	.5	1.2	.5	.7	.6	.7	.7	1.0	1.3	1.3	1.4	.9	.7	1.3	1.4
Previous Tealbook	.5	1.5	.9	.6	.6	.7	.7	1.0	1.3	1.3	1.4	1.1	.6	1.3	1.4
Ex. food & energy	.6	1.5	1.1	1.4	1.5	1.5	1.4	1.6	1.6	1.6	1.5	1.1	1.4	1.6	1.7
Previous Tealbook	.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
Ex. food & energy, market based	.5	1.4	.7	1.4	1.5	1.5	1.3	1.6	1.6	1.6	1.4	1.1	1.4	1.6	1.7
Previous Tealbook	.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
CPI	.0	2.6	.9	2.0	1.6	1.6	1.4	1.6	1.6	1.6	1.6	1.2	1.7	1.6	1.7
Previous Tealbook	.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
Ex. food & energy	1.4	1.8	1.6	1.9	1.9	1.9	1.7	1.9	1.9	1.9	1.8	1.7	1.8	1.9	1.9
Previous Tealbook	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
ECI, hourly compensation[2]	2.4	1.7	2.1	2.2	2.4	2.5	2.5	2.6	2.7	2.8	2.8	2.0	2.4	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	2.7	.2	.8	1.7	1.9	1.8	1.9	1.7	1.6	1.9	.7	1.5	1.8	1.9
Previous Tealbook	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
Compensation per hour	3.8	1.6	2.0	2.3	2.6	2.8	2.9	3.0	3.1	3.1	3.2	.5	2.7	3.1	3.4
Previous Tealbook	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
Unit labor costs	1.9	-1.0	1.8	1.6	.9	.9	1.1	1.1	1.4	1.5	1.3	-.2	1.1	1.3	1.5
Previous Tealbook	.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
Core goods imports chain-wt. price index[3]	-2.4	-3.2	.8	1.1	1.4	1.8	1.5	1.6	1.6	1.6	1.6	-1.1	1.5	1.6	1.7
Previous Tealbook[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

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	1.3	1.4	1.6	1.7
PCE chain-wt. price index	3.3	1.5	1.2	1.3	2.6	1.7	.9	1.4	1.4	1.6
Previous Tealbook	3.3	1.5	1.2	1.3	2.6	1.7	1.0	1.4	1.5	1.6
Energy	19.1	-8.2	2.3	6.4	11.7	2.1	-2.5	1.1	-.8	-.5
Previous Tealbook	19.1	-8.2	2.3	6.4	11.7	2.1	-2.4	-.7	-1.1	-.5
Food	4.9	6.9	-1.8	1.3	5.1	1.2	.9	.7	1.3	1.4
Previous Tealbook	4.9	6.9	-1.8	1.3	5.1	1.2	1.1	.6	1.3	1.4
Ex. food & energy	2.2	1.6	1.4	1.0	1.8	1.7	1.1	1.4	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	1.1	1.4	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	1.2	1.7	1.6	1.7
Previous Tealbook	4.0	1.6	1.5	1.2	3.3	1.9	1.3	1.5	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	2.0	2.4	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	2.4	-.4	5.5	1.9	.4	.9	.7	1.5	1.8	1.9
Previous Tealbook	2.3	-.2	5.4	1.9	.4	.9	.8	1.4	1.8	1.9
Compensation per hour	3.9	3.0	1.2	1.6	.9	5.3	.5	2.7	3.1	3.4
Previous Tealbook	3.9	3.0	1.2	1.6	.9	5.3	.2	2.7	3.1	3.4
Unit labor costs	1.5	3.5	-4.0	-.3	.5	4.4	-.2	1.1	1.3	1.5
Previous Tealbook	1.6	3.2	-4.0	-.3	.5	4.4	-.7	1.3	1.3	1.5
Core goods imports chain-wt. price index[2]	3.0	3.9	-1.9	2.3	4.2	.1	-1.1	1.5	1.6	1.7
Previous Tealbook[2]	3.0	3.9	-1.9	2.3	4.2	.1	-1.1	1.7	1.6	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	.5	.6	.6	.6	.6	.6	.7	.8	.7	.7	2.3	2.4	2.9	2.8
Unemployment rate[3]	7.5	7.3	7.1	6.9	6.8	6.7	6.5	6.3	6.2	6.1	5.9	7.1	6.5	5.9	5.3
Previous Tealbook[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
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	-3.3	-3.4	-3.3	-3.1	-2.9	-2.5	-2.2	-1.8	-1.6	-1.3	-3.4	-2.5	-1.3	-.1
Previous Tealbook[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
Industrial production[5]	1.1	2.3	5.7	4.7	4.1	3.1	3.7	4.2	3.9	2.7	3.6	3.3	3.9	3.6	3.1
Previous Tealbook[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
Manufacturing industr. prod.[5]	.1	1.0	4.8	3.3	3.6	3.6	4.1	4.2	4.3	3.7	3.9	2.7	3.6	4.0	3.5
Previous Tealbook[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
Capacity utilization rate - mfg.[3]	76.1	76.0	76.5	76.8	77.1	77.4	77.7	78.1	78.5	78.7	79.0	76.5	77.7	79.0	79.8
Previous Tealbook[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
Housing starts[6]	.9	.9	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.5	.9	1.2	1.4	1.6
Light motor vehicle sales[6]	15.5	15.7	15.7	15.8	15.8	15.9	16.0	16.1	16.2	16.4	16.5	15.5	15.9	16.3	16.6
Income and saving															
Nominal GDP[5]	3.1	5.5	2.8	4.2	4.4	4.7	4.9	5.5	5.3	5.0	5.1	3.5	4.6	5.2	5.1
Real disposable pers. income[5]	4.1	2.9	.9	2.2	2.8	3.0	3.2	4.1	3.3	3.3	3.3	-.1	2.8	3.5	3.3
Previous Tealbook[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
Personal saving rate[3]	4.7	5.0	4.4	4.3	4.2	4.1	3.9	4.0	3.8	3.7	3.6	4.4	3.9	3.6	3.6
Previous Tealbook[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
Corporate profits[7]	13.9	7.1	6.3	9.1	3.7	6.3	7.2	6.6	7.0	5.6	6.0	5.3	6.5	6.3	7.2
Profit share of GNP[3]	12.3	12.4	12.5	12.7	12.6	12.7	12.8	12.8	12.9	12.9	12.9	12.5	12.8	12.9	13.2
Net federal saving[8]	-653	-854	-776	-704	-692	-691	-684	-695	-676	-667	-655	-784	-693	-673	-712
Net state & local saving[8]	-198	-232	-233	-226	-208	-202	-190	-185	-165	-161	-152	-223	-207	-166	-136
Gross national saving rate[3]	17.7	17.8	18.1	18.1	18.3	18.4	18.4	18.4	18.6	18.6	18.7	18.1	18.4	18.7	19.1
Net national saving rate[3]	2.5	3.1	3.4	3.4	3.6	3.7	3.8	3.8	4.1	4.1	4.3	3.4	3.8	4.3	4.8

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	2.3	2.4	2.9	2.8
Unemployment rate[2]	4.8	6.9	9.9	9.5	8.7	7.8	7.1	6.5	5.9	5.3
Previous Tealbook[2]	4.8	6.9	9.9	9.5	8.7	7.8	7.3	6.6	5.9	5.4
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	-3.4	-2.5	-1.3	-.1
Previous Tealbook[3]	.6	-4.1	-5.2	-3.9	-3.6	-3.6	-3.6	-2.6	-1.3	-.3
Industrial production[4]	2.7	-8.9	-5.5	6.2	3.3	2.8	3.3	3.9	3.6	3.1
Previous Tealbook[4]	2.7	-8.9	-5.5	6.2	3.3	2.8	2.9	4.2	3.7	2.8
Manufacturing industr. prod.[4]	2.9	-11.6	-6.1	6.4	3.3	2.8	2.7	3.6	4.0	3.5
Previous Tealbook[4]	2.9	-11.6	-6.1	6.4	3.3	2.8	2.4	4.1	4.2	3.2
Capacity utilization rate - mfg.[2]	78.4	69.9	67.2	72.9	74.8	75.7	76.5	77.7	79.0	79.8
Previous Tealbook[2]	78.4	69.9	67.2	72.9	74.8	75.7	76.3	78.0	79.6	80.2
Housing starts[5]	1.4	.9	.6	.6	.6	.8	.9	1.2	1.4	1.6
Light motor vehicle sales[5]	16.1	13.1	10.4	11.5	12.7	14.4	15.5	15.9	16.3	16.6
Income and saving										
Nominal GDP[4]	4.4	-1.0	.1	4.6	3.9	3.8	3.5	4.6	5.2	5.1
Real disposable pers. income[4]	1.2	1.1	-.6	2.5	1.4	3.6	-.1	2.8	3.5	3.3
Previous Tealbook[4]	1.2	1.1	-.6	2.5	1.4	3.6	-.9	3.2	3.5	3.2
Personal saving rate[2]	2.9	6.1	5.7	5.5	5.0	6.6	4.4	3.9	3.6	3.6
Previous Tealbook[2]	2.9	6.1	5.7	5.5	5.0	6.6	3.8	3.6	3.3	3.4
Corporate profits[6]	-9.0	-30.8	54.5	17.0	8.4	2.7	5.3	6.5	6.3	7.2
Profit share of GNP[2]	9.9	6.9	10.7	11.9	12.4	12.3	12.5	12.8	12.9	13.2
Net federal saving[7]	-267	-635	-1,250	-1,330	-1,248	-1,110	-784	-693	-673	-712
Net state & local saving[7]	-73	-165	-272	-237	-213	-253	-223	-207	-166	-136
Gross national saving rate[2]	16.3	15.0	14.7	15.2	15.8	16.9	18.1	18.4	18.7	19.1
Net national saving rate[2]	1.0	-1.6	-1.6	-.4	.5	1.7	3.4	3.8	4.3	4.8

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[a]	2014	2015	2016	Q1[a]	Q2[a]	Q3[a]	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2,774	3,055	3,275	3,479	581	891	687	672	641	969	772	746	672	1,023	834	785
Outlays[1]	3,454	3,554	3,698	3,913	888	800	857	872	915	894	873	933	943	926	896	964
Surplus/deficit[1]	-680	-500	-424	-434	-307	91	-170	-201	-274	75	-100	-187	-271	97	-62	-179
Previous Tealbook	*-660*	*-512*	*-436*	*-446*	*-307*	*91*	*-151*	*-202*	*-278*	*69*	*-101*	*-196*	*-272*	*94*	*-63*	*-187*
On-budget	-720	-539	-453	-449	-303	36	-143	-225	-261	19	-72	-213	-255	45	-31	-200
Off-budget	39	39	30	15	-4	55	-28	24	-13	56	-28	26	-16	52	-32	21
Means of financing:																
Borrowing	702	632	544	554	336	-17	69	364	-12	230	49	217	301	-67	92	209
Cash decrease	-3	18	0	0	14	-56	46	-51	95	-107	82	0	0	0	0	0
Other[2]	-19	-151	-120	-120	-43	-18	55	-112	190	-198	-30	-30	-30	-30	-30	-30
Cash operating balance, end of period	88	70	70	70	79	135	88	140	45	152	70	70	70	70	70	70
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2,937	3,154	3,360	3,548	2,900	3,167	2,971	3,029	3,161	3,194	3,232	3,276	3,341	3,388	3,434	3,479
Expenditures	3,797	3,870	4,040	4,247	3,753	3,820	3,825	3,806	3,865	3,887	3,923	3,960	4,036	4,064	4,102	4,134
Consumption expenditures	981	952	940	939	982	976	973	957	954	950	947	943	945	939	933	930
Defense	620	598	589	587	620	616	615	603	601	597	592	591	592	589	585	584
Nondefense	361	354	351	352	363	360	358	354	353	353	354	352	353	351	348	346
Other spending	2,815	2,918	3,100	3,308	2,771	2,844	2,853	2,849	2,911	2,937	2,976	3,017	3,091	3,125	3,169	3,204
Current account surplus	-860	-716	-680	-699	-853	-653	-854	-776	-704	-692	-691	-684	-695	-676	-667	-655
Gross investment	277	262	252	245	273	277	278	266	264	261	258	256	253	250	248	246
Gross saving less gross investment[3]	-871	-707	-656	-663	-860	-663	-865	-774	-697	-682	-676	-667	-672	-650	-637	-622
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-668.5	-510.3	-517.2	-607.5	-648.8	-453.1	-662.6	-571.9	-491.4	-486.9	-490.9	-498.6	-520.7	-521.0	-528.5	-535.4
Change in HEB, percent of potential GDP	-2.0	-1.0	-.1	.4	-1.6	-1.2	1.2	-.5	-.5	.0	.0	.0	.1	.0	.0	.0
Fiscal impetus (FI), percent of GDP	-1.3	-.5	-.4	.0	-2.0	-.7	-.7	-1.6	-.4	-.7	-.5	-.3	-.7	-.4	-.3	-.2
Previous Tealbook	*-1.3*	*-.6*	*-.4*	*-.1*	*-2.0*	*-.7*	*-1.1*	*-1.4*	*-.7*	*-.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	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
Real GDP[1]												
Total foreign	1.8	2.4	3.0	3.1	3.2	2.9	3.3	3.3	3.4	3.4	3.5	3.3
Previous Tealbook	*1.7*	*2.2*	*2.8*	*3.0*	*3.2*	*2.9*	*3.3*	*3.3*	*3.4*	*3.4*	*3.5*	*3.3*
Advanced foreign economies	1.5	1.8	1.8	2.0	2.2	1.5	2.1	2.2	2.3	2.3	2.4	2.0
Canada	2.3	1.6	2.7	2.2	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.6
Japan	4.5	3.6	1.1	3.6	4.4	-3.5	2.0	2.1	1.8	1.4	2.6	-1.8
United Kingdom	1.5	2.7	3.2	3.0	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.5
Euro area	-.8	1.2	.3	.8	1.0	1.2	1.3	1.4	1.7	1.9	1.9	2.0
Germany	.0	2.9	1.3	1.7	1.8	1.9	2.0	2.1	2.4	2.5	2.5	2.5
Emerging market economies	2.1	3.0	4.1	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.6
Asia	3.4	5.2	5.9	5.6	5.3	5.4	5.5	5.5	5.6	5.7	5.6	5.6
Korea	3.4	4.5	4.3	4.0	3.7	3.8	4.0	4.2	4.3	4.5	4.6	4.6
China	6.5	7.5	9.4	8.5	8.0	7.8	7.8	7.7	7.7	7.7	7.6	7.6
Latin America	.8	.7	2.4	3.0	3.2	3.4	3.5	3.5	3.5	3.5	3.5	3.5
Mexico	.8	-2.2	3.4	3.5	3.4	3.6	3.6	3.7	3.6	3.6	3.6	3.6
Brazil	.0	7.2	-1.9	1.3	2.6	3.0	3.2	3.2	3.4	3.4	3.4	3.4
Consumer prices[2]												
Total foreign	2.2	1.9	2.8	2.3	2.5	3.0	2.4	2.5	2.5	2.5	2.6	3.0
Previous Tealbook	*2.2*	*1.9*	*2.8*	*2.6*	*2.5*	*3.1*	*2.5*	*2.5*	*2.5*	*2.5*	*2.6*	*3.0*
Advanced foreign economies	.9	.5	2.0	.6	1.2	2.7	1.3	1.4	1.4	1.5	1.6	2.6
Canada	1.6	.0	1.5	.3	1.4	1.5	1.6	1.7	1.7	1.7	1.8	1.8
Japan	-.4	.8	3.1	1.0	1.0	8.8	.8	.9	1.1	1.2	1.3	6.8
United Kingdom	2.3	1.6	3.0	1.6	1.7	1.7	1.7	2.3	1.7	1.7	1.8	2.3
Euro area	.7	.7	1.8	.3	1.1	1.3	1.3	1.3	1.4	1.4	1.5	1.5
Germany	1.4	.7	2.6	.9	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7
Emerging market economies	3.3	3.0	3.3	3.7	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Asia	3.3	2.0	3.6	3.5	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2
Korea	.6	.3	1.4	1.4	2.4	2.4	3.0	3.1	3.2	3.2	3.2	3.1
China	3.2	2.1	3.4	3.4	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Latin America	3.5	5.4	2.6	4.2	4.8	3.9	3.7	3.7	3.7	3.7	3.7	3.7
Mexico	3.2	5.3	2.0	3.9	4.7	3.7	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 (Projected)	2014 (Projected)	2015 (Projected)	2016 (Projected)
Real GDP[1]									
Total foreign	-.7	.9	4.6	3.0	2.2	2.6	3.2	3.4	3.4
Previous Tealbook	*-.7*	*.9*	*4.6*	*3.0*	*2.2*	*2.4*	*3.2*	*3.4*	
Advanced foreign economies	-1.5	-1.5	3.0	1.5	.2	1.8	2.0	2.2	2.3
Canada	.1	-1.4	3.6	2.4	1.0	2.2	2.5	2.7	2.7
Japan	-4.8	-.6	3.5	.2	-.3	3.2	1.2	1.0	1.3
United Kingdom	-4.3	-2.5	1.8	1.1	-.2	2.6	2.8	2.6	2.4
Euro area	-2.1	-2.3	2.3	.7	-1.0	.4	1.2	1.9	2.0
Germany	-1.8	-2.2	4.2	2.2	.3	1.5	1.9	2.5	2.5
Emerging market economies	.3	3.9	6.3	4.5	4.2	3.4	4.4	4.6	4.6
Asia	.8	8.0	7.8	4.9	5.3	5.0	5.4	5.6	5.6
Korea	-3.2	6.3	5.0	3.4	1.4	4.1	3.9	4.5	4.5
China	7.6	11.3	9.7	8.7	7.8	7.9	7.8	7.6	7.5
Latin America	-.4	-.1	4.7	4.0	3.2	1.7	3.4	3.5	3.5
Mexico	-1.3	-1.2	4.4	4.1	3.2	1.4	3.6	3.6	3.5
Brazil	.9	5.3	5.3	1.4	1.9	1.6	3.0	3.4	3.4
Consumer prices[2]									
Total foreign	3.3	1.2	3.2	3.4	2.3	2.3	2.6	2.6	2.6
Previous Tealbook	*3.3*	*1.2*	*3.2*	*3.4*	*2.3*	*2.4*	*2.6*	*2.7*	
Advanced foreign economies	2.0	.2	1.7	2.2	1.3	1.0	1.6	1.8	1.7
Canada	1.8	.8	2.2	2.7	.9	.9	1.5	1.7	1.9
Japan	1.1	-2.0	-.2	-.3	-.2	1.1	2.8	2.6	1.7
United Kingdom	3.9	2.2	3.4	4.6	2.6	2.1	1.8	1.9	1.8
Euro area	2.3	.4	2.0	2.9	2.3	.9	1.2	1.5	1.5
Germany	1.7	.3	1.6	2.6	2.0	1.4	1.6	1.7	1.8
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	3.1	3.1	3.2	3.2
Korea	4.5	2.4	3.2	3.9	1.7	.9	2.7	3.2	3.2
China	2.5	.6	4.7	4.6	2.1	3.0	3.0	3.0	3.0
Latin America	6.6	3.9	4.4	4.0	4.3	3.9	4.0	3.7	3.7
Mexico	6.2	4.0	4.3	3.5	4.1	3.6	3.8	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 Q1	2013 Q2	2013 Q3	2013 Q4	Projected 2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
	Billions of dollars, s.a.a.r.											
U.S. current account balance	**-419.6**	**-396.9**	**-403.7**	**-420.6**	**-427.6**	**-394.9**	**-411.9**	**-431.7**	**-460.1**	**-436.3**	**-449.2**	**-466.9**
Previous Tealbook	*-419.6*	*-395.6*	*-421.0*	*-423.9*	*-447.6*	*-413.2*	*-426.9*	*-435.3*	*-459.7*	*-432.5*	*-446.6*	*-458.7*
Current account as percent of GDP	-2.5	-2.4	-2.4	-2.5	-2.5	-2.3	-2.3	-2.4	-2.6	-2.4	-2.4	-2.5
Previous Tealbook	*-2.5*	*-2.4*	*-2.5*	*-2.5*	*-2.6*	*-2.4*	*-2.4*	*-2.4*	*-2.6*	*-2.4*	*-2.4*	*-2.5*
Net goods & services	-490.5	-472.5	-482.9	-490.6	-475.1	-453.3	-460.0	-475.3	-478.9	-463.6	-466.8	-480.4
Investment income, net	211.6	221.1	221.8	208.9	203.2	197.1	190.3	182.5	174.4	166.0	159.9	152.3
Direct, net	276.6	279.9	291.2	293.9	292.2	293.0	293.4	294.5	296.5	299.5	305.6	311.1
Portfolio, net	-65.0	-58.9	-69.5	-85.0	-88.9	-95.9	-103.1	-112.0	-122.0	-133.5	-145.7	-158.8
Other income and transfers, net	-140.6	-145.5	-142.5	-138.8	-155.6	-138.6	-142.2	-138.8	-155.6	-138.6	-142.2	-138.8

Annual Data

	2008	2009	2010	2011	2012	Projected 2013	2014	2015	2016
	Billions of dollars								
U.S. current account balance	**-681.3**	**-381.6**	**-449.5**	**-457.7**	**-440.4**	**-410.2**	**-416.5**	**-453.1**	**-481.9**
Previous Tealbook	*-681.3*	*-381.6*	*-449.5*	*-457.7*	*-440.4*	*-415.0*	*-430.8*	*-449.4*	
Current account as percent of GDP	-4.6	-2.6	-3.0	-2.9	-2.7	-2.4	-2.4	-2.5	-2.5
Previous Tealbook	*-4.6*	*-2.6*	*-3.0*	*-2.9*	*-2.7*	*-2.5*	*-2.5*	*-2.4*	
Net goods & services	-702.3	-383.7	-499.4	-556.8	-534.7	-484.1	-465.9	-472.5	-464.4
Investment income, net	157.8	132.3	185.7	240.7	232.3	215.8	193.3	163.2	126.4
Direct, net	284.3	257.7	288.0	310.6	293.5	285.4	293.3	303.2	321.3
Portfolio, net	-126.4	-125.4	-102.3	-69.8	-61.2	-69.6	-100.0	-140.0	-194.9
Other income and transfers, net	-136.9	-130.2	-135.8	-141.6	-138.0	-141.9	-143.8	-143.8	-143.8

Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
BEA	Bureau of Economic Analysis, Department of Commerce
BOC	Bank of Canada
BOE	Bank of England
BOJ	Bank of Japan
CDS	credit default swaps
C&I	commercial and industrial
CLO	collateralized loan obligation
CMBS	commercial mortgage-backed securities
CPI	consumer price index
CRE	commercial real estate
Desk	Open Market Desk
ECB	European Central Bank
E&I	equipment and intangibles
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDI	gross domestic income
GDP	gross domestic product
LBO	leveraged buyout
LSAP	large-scale asset purchase
M&A	mergers and acquisitions
MBS	mortgage-backed securities
NIPA	national income and product accounts
OIS	overnight index swap
PCE	personal consumption expenditures
PMI	purchasing managers index

QS	quantitative surveillance
repo	repurchase agreement
RMBS	residential mortgage-backed securities
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SOMA	System Open Market Account
TIPS	Treasury inflation-protected securities