Prefatory Note

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

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

Class II FOMC – Restricted (FR)

Report to the FOMC on Economic Conditions and Monetary Policy

Book A

Economic and Financial Conditions: Current Situation and Outlook

October 17, 2012

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

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Domestic Economic Developments and Outlook

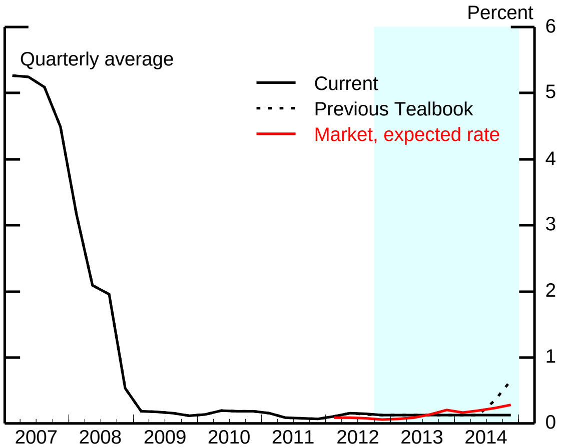
The information we have received since the September Tealbook has mostly surprised us to the upside. Consumer spending appears to be on a faster trajectory entering the fourth quarter, reflecting the surprising strength last month in retail sales and motor vehicle purchases as well as noteworthy improvements in consumer sentiment. In addition, single-family housing starts and permits both jumped in September. And in the labor market, the unemployment rate is reported to have declined a cumulative ½ percentage point from July to September. In contrast, some of the recent news from the business sector has been worrisome. Orders of capital goods remained well below shipments in August, factory output and business sentiment have remained soft, and the latest indicators of nonresidential construction suggest some greater-than-expected pullback in this sector as well. All told, our forecast for the increase in real GDP over the second half of this year has been revised up to an annual rate of 2 percent from 1½ percent in the September Tealbook. And, even after discounting some of the decline in the unemployment rate, we have lowered our current-quarter unemployment projection by ¼ percentage point to 8 percent.

We have also taken on board the monetary policy actions announced by the Committee at the conclusion of its September meeting. Accordingly, we now assume that Federal Reserve purchases of longer-term securities will continue until the middle of 2013, and that liftoff of the federal funds rate from its effective lower bound will not occur until the middle of 2015. These new policy assumptions contribute to an improved outlook for economic activity in the medium term through the usual transmission channels: a lower exchange value of the dollar, higher stock prices, and lower interest rates.

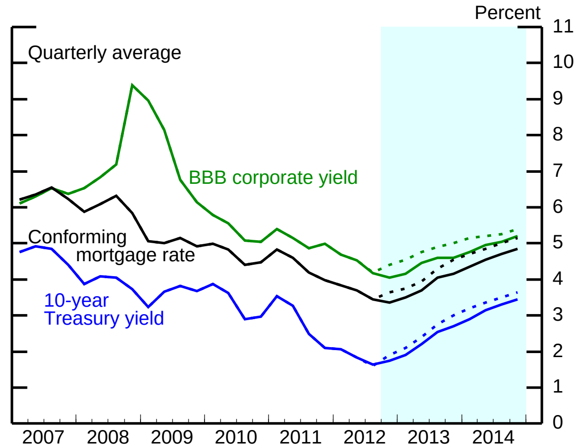
In particular, the rise in real GDP is projected to step up next year, as improvements in the situation in Europe, domestic financial conditions, consumer and business confidence, and farm production more than offset the anticipated drag from fiscal policy. After next year, with the fiscal restraint expected to lessen and the factors supporting the recovery still in place, real GDP is expected to increase more rapidly. We now project that real GDP will increase 2½ percent next year and 3½ percent in 2014; these figures are about ¼ percentage point above our projection in the September Tealbook. We expect the unemployment rate to decline from 8 percent in the current

Key Background Factors underlying the Baseline Staff Projection

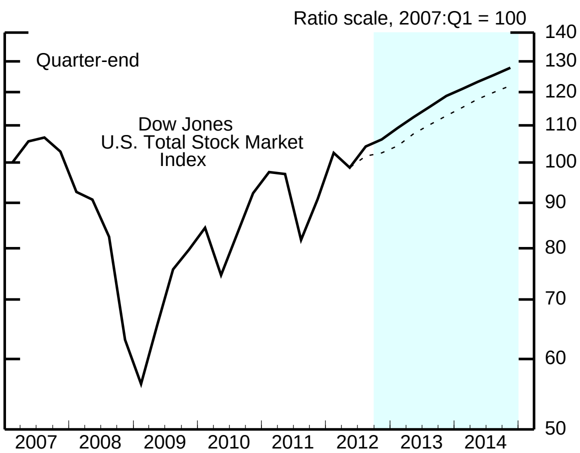
Federal Funds Rate



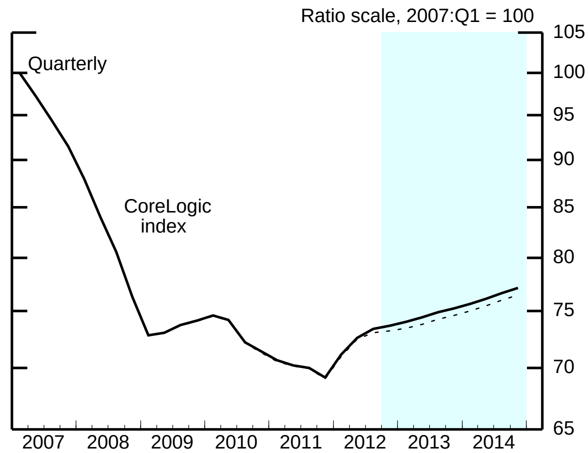
Long-Term Interest Rates



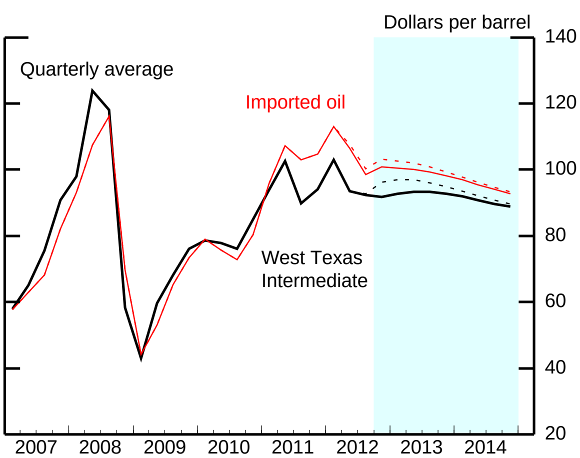
Equity Prices



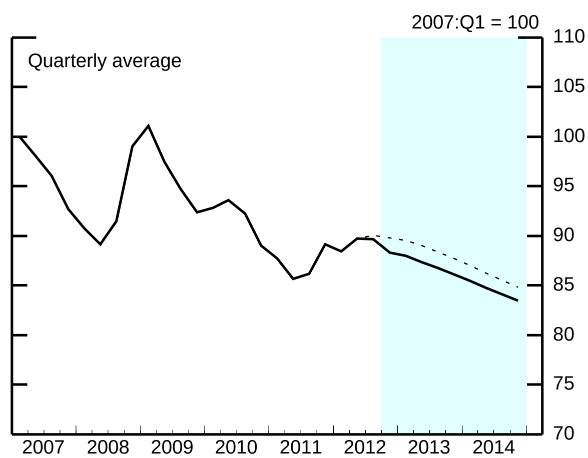
House Prices



Crude Oil Prices



Broad Real Dollar



quarter to 7¼ percent by the end of 2014, nearly ½ percentage point below our projection in the September Tealbook. We project that the pace of economic activity will pick up further in 2015, with real GDP rising 3¾ percent and the unemployment rate ending the year at 6¼ percent.

The incoming data on core consumer price inflation have been close to our previous projection. With long-term inflation expectations well anchored, significant margins of slack in labor and product markets persisting for some time, and relatively small movements in commodity prices and import prices, we continue to project core PCE inflation to be subdued through 2015. All told, core inflation is expected to be 1.6 percent next year and 1.7 percent in 2014 and 2015. Total PCE inflation runs slightly below core in the medium term, as retail energy prices edge down from their current levels in response to anticipated declines in crude oil prices.

KEY BACKGROUND FACTORS

Monetary Policy

We conditioned the October Tealbook projection on monetary policy assumptions that are intended to be consistent with the September FOMC statement; as a result, we implemented important revisions to our assumptions for both the Federal Reserve's balance sheet and the path of the federal funds rate. With respect to the balance sheet, we assume that the Federal Reserve will continue the maturity extension program (MEP) and continue to purchase $40 billion per month of agency MBS until the end of this year. We assume that the Federal Reserve will then purchase about $85 billion per month of longer-term securities until the middle of 2013, at which point we assume that the outlook for the labor market over the subsequent year will have improved by enough for the Committee to stop adding to the SOMA portfolio. Results from the primary dealer survey suggest that market participants currently expect a larger expansion of the balance sheet than we have assumed.

With respect to the federal funds rate, this round we adjusted the estimated outcome-based rule that we use to govern the path of the policy rate in order to bring it into line with the forward guidance in the September FOMC statement.[1] The adjusted

[1] The federal funds rate follows the estimated outcome-based rule described in the appendix on policy rules in Book B, with an intercept adjustment that reflects monetary policy as announced at the conclusion of the September FOMC meeting. The adjustment is calibrated to delay the first increase in the federal funds rate until the third quarter of 2015 under the economic outlook in the September Tealbook

outcome-based rule implies that liftoff of the target federal funds rate from its effective lower bound will occur in the third quarter of 2015, four quarters later than we assumed in the September Tealbook. Of course, different policy rules yield different paths for the federal funds rate. For example, an unadjusted outcome-based rule would place liftoff in the fourth quarter of 2013, and, as discussed in Book B, the Taylor (1999) rule calls for liftoff in the third quarter of 2014. However, the rule that targets the level of nominal GDP projects liftoff in the fourth quarter of 2014, while the standard optimal-control exercise indicates that increases in the federal funds rate would not begin until the fourth quarter of 2015. In contrast, the Taylor (1993) rule and the first-difference rule call for firming to begin much earlier than in the baseline projection or under optimal control. Indeed, the Taylor (1993) rule calls for an immediate and substantial increase in the federal funds rate.

The September Tealbook was *not* conditioned on the additional policy easing announced in the FOMC statement. However, at the time of the September Tealbook, market participants appeared to have priced in considerable odds of a significant policy move, so our previous projection had built in noticeable "disappointment effects" in asset prices. In this projection, we have implicitly removed these effects in light of the FOMC's statement. As a result, the projected path for interest rates is lower than it would have been in the absence of Committee action, the exchange value of the dollar is weaker, and the projected path for U.S. equity prices is higher.

Other Interest Rates

The 10-year Treasury yield has increased about 15 basis points since the September Tealbook and was little changed, on net, following the September FOMC statement. (See the box "Market Reaction to the September 2012 FOMC Communications" in the Financial Developments section.) We now project that the yield on 10-year Treasury bonds will rise 1¾ percentage points to 3½ percent in the fourth quarter of 2014. This projected increase primarily reflects the movement of the 10-year valuation window through the period of extremely low short-term interest rates and a gradual waning of the effects of unconventional monetary policy. In addition, we assume that downward pressure on Treasury rates will lessen next year as concerns abate about both the crisis in Europe and the fiscal situation at home.

that has been modified to incorporate the policy changes announced at the conclusion of the September FOMC meeting. Beginning in the third quarter of 2015, this intercept adjustment is reduced and is zero beginning in the fourth quarter of 2017.

Yields on investment-grade corporate bonds have fallen 25 basis points since the September Tealbook despite the increase in yields on comparable-maturity Treasury bonds, leaving their implied risk spread about 40 basis points narrower. We expect this spread to hold fairly steady through the first half of next year and then to decrease about ½ percentage point by the end of 2014. Conventional 30-year mortgage rates have moved down since early September to about 3¼ percent, a shade below the historical lows reached over the summer. We project that spreads of primary mortgage rates over MBS yields will narrow in coming quarters. Nonetheless, with benchmark yields anticipated to normalize gradually over the next two years, we expect mortgage rates to rise to about 4¾ percent by the end of 2014.

Equity Prices and Home Prices

A broad index of U.S. stock prices has increased about 3 percent, on net, since the September Tealbook, with much of that increase occurring shortly after the release of the September FOMC statement. We assume that equity prices will rise at an average rate of 10 percent per year in 2013 and 2014, in part reflecting an easing of concerns next year about the European crisis and the U.S. fiscal situation.

Recent readings on home prices from CoreLogic were a little stronger than we had expected, leading us to mark up the projected path for house prices a touch. However, we continue to project that home prices will be restrained by a rise in the supply of distressed properties for sale as some of the largest mortgage servicers step up the pace of foreclosure proceedings upon implementing the terms of their settlement with the State Attorneys General. In total, house prices are expected to increase about 6½ percent this year but only 2¼ percent, on average, in 2013 and 2014.

Fiscal Policy

Our fiscal policy assumptions are unchanged in this forecast and continue to imply that federal fiscal policy will exert a substantial drag on economic growth in the medium term, especially next year.[2] The baseline projection envisions that the process

[2] In particular, we still assume that the temporary payroll tax cut and the emergency unemployment compensation program will expire at the beginning of next year, as scheduled under current law. We also continue to assume that federal discretionary spending will be restrained by the caps in the Budget Control Act and by reductions in defense spending as overseas military operations are scaled back. We also continue to assume that the additional cuts scheduled to take effect in January 2013 under the act's automatic sequestration provisions will be replaced by more-gradual budget measures that achieve the same amount of cumulative deficit reduction through fiscal year 2021. We have also maintained our assumption

for reaching agreement on the extraordinary range of fiscal issues up for discussion in the next several months will probably involve a number of short-term extensions at the end of this year and in early 2013. This legislative wrangling is assumed to weigh on household and business confidence, particularly in early 2013. Reflecting both the assumed tightening of fiscal policy and an anticipated acceleration in tax revenues as the economic recovery strengthens, the federal budget deficit is projected to narrow from $1.1 trillion (7 percent of GDP) in fiscal year 2012 to about $600 billion (3½ percent of GDP) in fiscal 2014. We continue to expect that fiscal policy at all levels of government will directly restrain the rate of real GDP growth (excluding multiplier effects) by ⅓ percentage point this year, 1 percentage point in 2013, and ½ percentage point in 2014.

Foreign Activity and the Dollar

Foreign real GDP is expected to increase at a subdued and downward-revised 2 percent rate over the second half of this year, restrained by the contraction in the euro area and a slowing in other advanced foreign economies and in emerging market economies. The recent commitments by European officials to support sovereign debt and move toward banking union have helped ease financial stresses. However, conditions are assumed to deteriorate again until the authorities are compelled by circumstances to follow through on their promises; only by next year do we expect financial conditions to improve sufficiently to support a return to positive economic growth. The resulting pickup in the euro-area economy, in turn, will have positive spillovers to the rest of the world. Along with the effects of faster U.S. growth, Europe's recovery should help push total foreign economic growth up to 2¾ percent in 2013 and about 3½ percent in 2014. This outlook is little changed from the September Tealbook.

Since the time of the September Tealbook, the nominal exchange value of the dollar has depreciated about 2 percent in response to both easing financial stresses in Europe and the September FOMC announcement. However, we project the dollar will appreciate modestly through the end of this year as financial conditions in Europe deteriorate somewhat. Thereafter, the dollar is expected to depreciate in real terms at about a 3 percent annual rate through the end of the forecast period—close to the pace we had previously projected—reflecting the gradual abatement of safe-haven pressure on the dollar and the trend decline of the dollar against emerging market currencies.

that most federal tax provisions set to expire at the end of this year under current law, notably the 2001–03 tax cuts, will not, in fact, be allowed to expire but instead will eventually be extended.

Oil and Other Commodity Prices

Oil prices are little changed in this projection. The spot price of Brent crude oil closed at about $115 per barrel on October 16, unchanged from the September Tealbook. Prices had moved higher following the September FOMC announcement, but subsequently fell back some as Saudi Arabia repeatedly stated that it would work to moderate crude prices. The price of West Texas Intermediate (WTI) also increased after the FOMC announcement, but it has fallen $4 per barrel from its level at the time of the September Tealbook amid accumulating inventories, closing on October 16 at $92 per barrel. All told, our forecast for the price of imported oil has been revised down since the September Tealbook by about $1 per barrel over the forecast period. In particular, the price of imported oil is projected to remain at about $100 per barrel for much of 2013 and then slowly decline over the reminder of the forecast period, reaching $92 per barrel at the end of 2014.

A broad index of nonfuel commodity prices is about unchanged since the September Tealbook, as slightly higher prices of many industrial metals have been offset by declining agricultural prices. Metals prices rose in the week leading up to the FOMC meeting and immediately thereafter, but they have subsequently retraced much of these gains. Although agricultural prices remain elevated, soybean and corn prices have fallen since the September Tealbook, as the drought-stricken U.S. harvest has progressed a bit better than had been expected. (For further details, see the box "The Effects of the 2012 Drought.")

Recent Developments and the Near-Term Outlook

We project that real GDP will increase at a 2 percent pace in the second half of this year, ½ percentage point faster than anticipated in the September Tealbook. Labor market conditions seem a little better than we thought at the time of the September Tealbook, and consumer spending and residential construction look to be on higher trajectories. In our thinking, these factors outweigh indicators of business investment and manufacturing production that have come in below our expectations. We anticipate that the drought will subtract about ¼ percentage point from growth in the second half of this year, with that effect unwinding early next year.[3]

[3] In contrast to our assumption in the September Tealbook, the BEA now estimates that the drought affected farm production beginning in the second quarter by enough to reduce GDP growth that

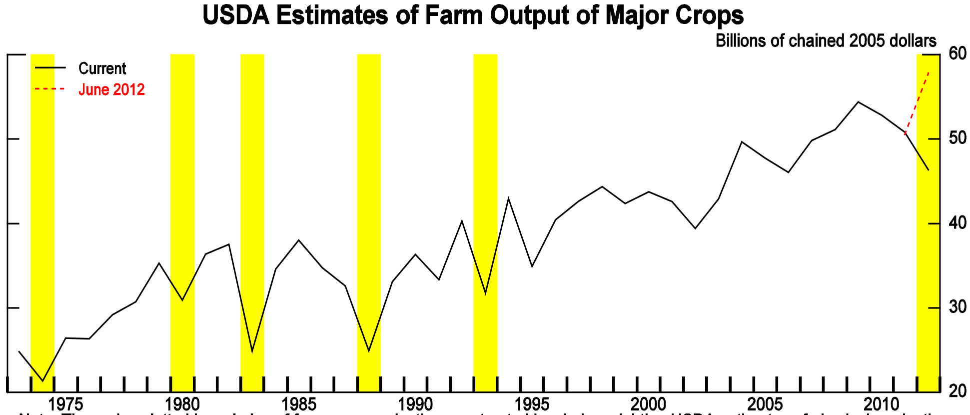
The Effects of the 2012 Drought

This summer, for the first time in almost 20 years, drought struck a wide swath of the nation, including regions of the Midwest where the bulk of the nation's corn and soybean crops are grown. Earlier in the year, farmers had boosted plantings in response to tight inventories and favorable prices, and market participants had expected a sizable increase in crop production for the year (the red dotted line in the figure below). The drought dashed these expectations and, as shown by the black line, the U.S. Department of Agriculture's latest projection is roughly consistent with a 20 percent reduction in farm output in 2012 relative to the pre-drought forecast. This loss of production, which occurred when inventories of corn and soybeans were already extremely tight, caused a steep rise in an index of crop prices—roughly 25 percent from June to mid-October (the lower-left figure on the next page). As devastating as it has been for a segment of the population, the drought is expected to have only transitory effects on overall real GDP and consumer price inflation and no discernable effect on the unemployment rate.

Within the farm sector, the drought's effects have been dramatic but uneven. Obviously, farmers directly affected by the drought have suffered setbacks only partly offset by insurance indemnities or government disaster assistance. In contrast, the smaller group of farmers who have experienced little or no loss in their production are benefiting enormously from the steep rise in crop prices, ending up better off than if the drought had not occurred. On net, the drought may actually raise overall farm proprietors' income slightly.

We estimate that the transitory reduction in farm output caused by the drought will reduce real GDP in 2012 by about $15 billion.[1] The annual nature of the crop production

USDA Estimates of Farm Output of Major Crops

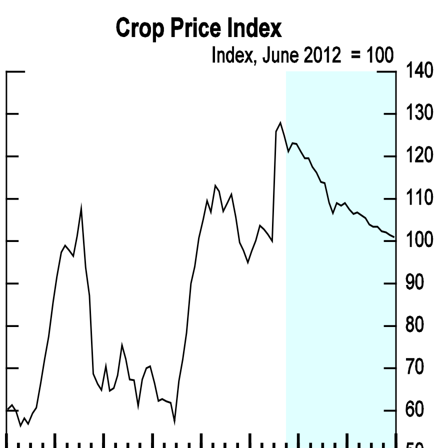


Note: The series plotted is an index of farm crop production constructed by chain-weighting USDA estimates of physical production of corn, soybeans, and wheat with corresponding spot prices. Sales of these three crops account for roughly two-thirds of total annual crop sales. The areas shaded yellow denote years in which losses from drought were substantial.
Source: USDA data chain-aggregated by FRB staff.

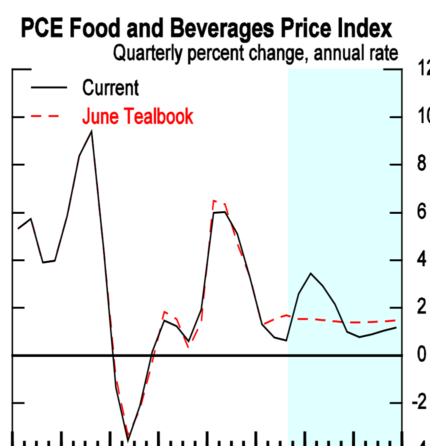
[1] In terms of the expenditure components of GDP, most of the reduction in farm output will likely be reflected in a drawdown in farm inventories. Of course, the price increases caused by drought also may reduce purchases of crops for export, consumption, or intermediate use, but the transmission of the shock through these channels is much harder to discern and less certain.

process and the difficulties of allocating production across quarters presents a measurement challenge for the Bureau of Economic Analysis. Our best guess is that the adverse effect of the drought on GDP will be registered mainly in the second half of this year, trimming the change in real GDP over that period by roughly ¼ percentage point at an annual rate.[2] We expect that this shock will be reversed early next year, as crop production is assumed to rebound to normal.

The drought-related spike in crop prices has more than reversed the price declines since late 2011 that reflected the market's anticipation of a rebound in production following that year's disappointing harvest.[3] Looking forward, futures prices tilt down sharply, suggesting that market participants anticipate that crop prices will retrace almost all of this season's run-up by the end of next year. The projected transitory nature of the surge in farm commodity prices, together with the relatively slow pass-through of grain costs into retail food prices, damp the projected swing in consumer food prices in the Tealbook forecast. In addition, we expect that adjustments by livestock producers, who reportedly have been selling off breeding stock in response to poor pasture conditions and high grain costs, will hold down meat prices in the near term, providing some offset to the effects of higher grain prices—although eventually the reduction in livestock herds will boost meat prices as well. On balance, our models suggest that the drought-related surge in farm prices will begin to show through to PCE food prices shortly (the black line in the lower-right figure), boosting PCE food inflation to about 2½ percent in the fourth quarter and a little more than 3 percent over the first half of 2013. These increases will add roughly ¼ percentage point to overall PCE inflation over that interval. Afterward, food price inflation is projected to slow, falling back to near our June, pre-drought projection (the red dashed line) by the end of 2013.



Note: Staff aggregate of spot prices for corn, wheat, and soybeans, projected using futures prices. Seasonally adjusted by FRB staff.
Source: Commodity Research Bureau.



Note: PCE food and beverages refers to off-premises consumption.
Source: U.S. Department of Commerce, Bureau of Economic Analysis, and staff forecasts.

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[2] The Bureau of Economic Analysis also put a little of the drought effect into the second quarter.

[3] The surge in crop prices this year, which primarily reflects the shortfall in domestic supply, is considerably smaller than the increases in crop prices in either 2007 to 2008 or 2010 to 2011, periods when the upward pressure on crop prices came in large part from burgeoning world demand.

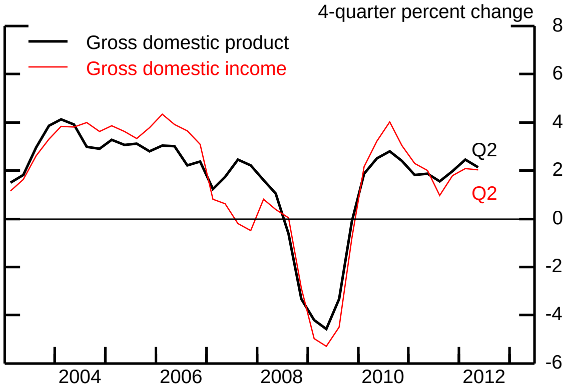
Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

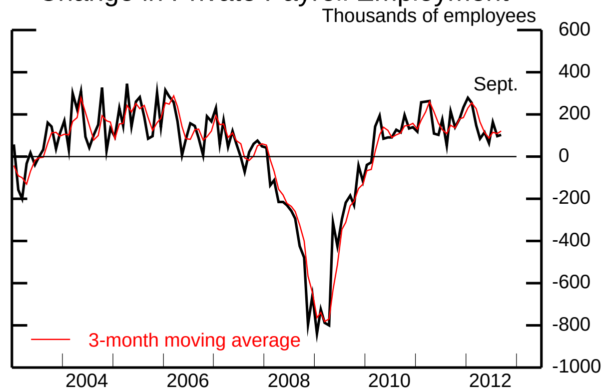
Measure	2012:Q3 Previous Tealbook	2012:Q3 Current Tealbook	2012:Q4 Previous Tealbook	2012:Q4 Current Tealbook	2013:Q1 Previous Tealbook	2013:Q1 Current Tealbook
Real GDP	**1.3**	**2.0**	**1.7**	**2.0**	**2.0**	**1.8**
Private domestic final purchases	2.1	2.1	2.2	3.1	1.3	1.4
Personal consumption expenditures	2.3	2.3	2.2	3.1	1.1	1.1
Residential investment	9.7	14.3	5.5	13.9	10.5	13.4
Business fixed investment	-1.0	-2.5	1.5	.8	.6	1.0
Government purchases	-1.7	.6	-1.1	-1.6	-1.5	-1.5
Contributions to change in real GDP						
Inventory investment[1]	-.1	.1	.2	.0	1.2	.8
Net exports[1]	.0	.0	-.2	-.2	.0	.1
Unemployment Rate[2]	**8.3**	**8.1**	**8.3**	**8.0**	**8.2**	**8.0**
PCE Chain Price Index	**1.9**	**1.7**	**1.7**	**2.1**	**1.2**	**.9**
Ex. food and energy	1.3	1.2	1.5	1.4	1.6	1.6

1. Percentage points.
2. Percent.

Recent Nonfinancial Developments (1)



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



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

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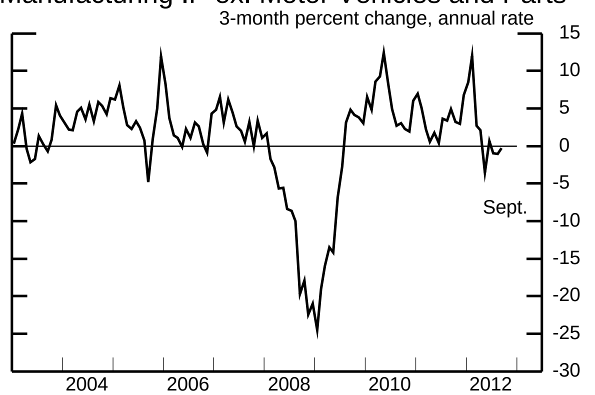

Source: Federal Reserve Board, G.17 Statistical Release, "Industrial Production and Capacity Utilization."

The Labor Market

The monthly readings for payroll employment and the unemployment rate—which are taken from two different surveys—often send different signals, and the most recent releases underscore this point.[4] Weighing the declines in the unemployment rate indicated in the household survey against the modest gains in nonfarm payrolls, we now think that the labor market has been improving a little more in recent months than we thought at the time of the September Tealbook.

After changing little, on net, since the beginning of the year, the unemployment rate is reported to have fallen from 8.3 percent in July to 7.8 percent in September, about ½ percentage point below the level we projected in the September Tealbook. While we have taken some signal from this decline, in our view the sharp drop in the published unemployment rate likely overstates the true improvement in labor market conditions. In particular, the decline in the unemployment rate seems considerably larger than would be consistent with the modest growth in real GDP we have seen thus far this year, and it has been accompanied by only middling growth of payroll employment. In addition, other indicators of labor market conditions, including surveys of hiring plans and new unemployment insurance claims, are not decidedly improved.[5] Accordingly, we have discounted some of the drop in the unemployment rate and now expect it to move back up to average 8 percent in the current quarter, 0.3 percentage point below our projection in the September Tealbook, and just a shade below its third-quarter average.

We continue to project that private nonfarm payrolls will increase at an underlying rate of about 130,000 per month from October to December, a pace consistent with the flat trajectory for the unemployment rate and with real GDP expanding roughly in line with its potential. We continue to think that distorted seasonal-adjustment factors will boost the published payroll employment gains about 20,000 per month and thus leave them at about 150,000 per month, unchanged from the previous Tealbook.

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quarter by ¼ percentage point. As a result, our estimate of the effect of the drought on GDP growth in the second half of this year is slightly smaller than before.

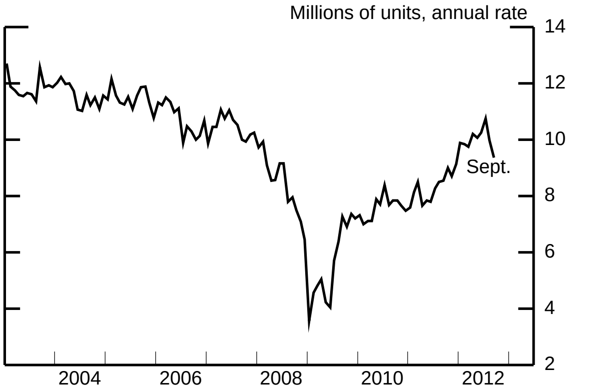
[4] We received the August labor market report after the publication of the September Tealbook but before the September FOMC meeting, so the discussion in the text takes on board the previous two releases.

[5] We are discounting the signal from the steep decline in claims for the week ended October 6 because it likely reflected a quirk in the way California reported their weekly numbers to the Department of Labor.

Domestic Econ Devel & Outlook

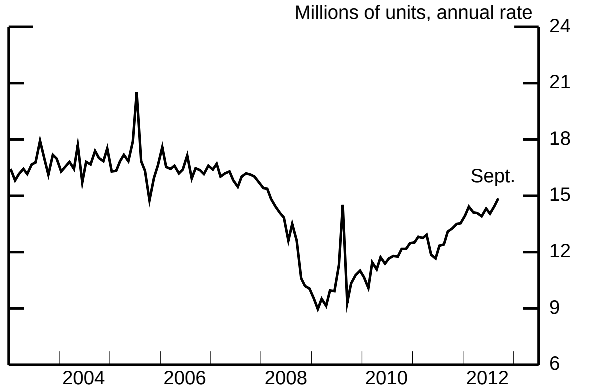
Recent Nonfinancial Developments (2)

Production of Light Motor Vehicles



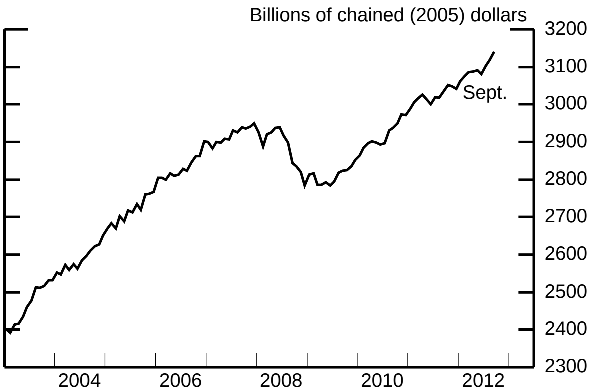
Source: Ward's Auto Infobank.

Sales of Light Motor Vehicles



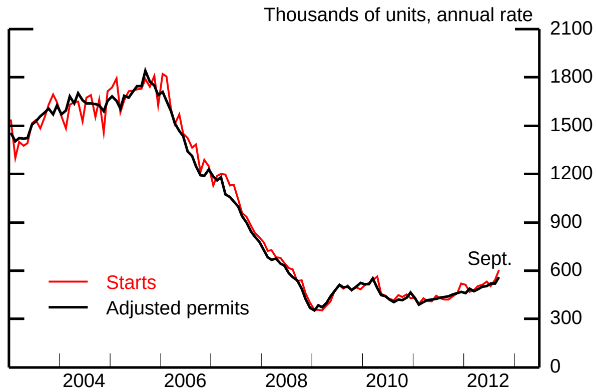
Source: Ward's Auto Infobank.

Real PCE Goods ex. Motor Vehicles



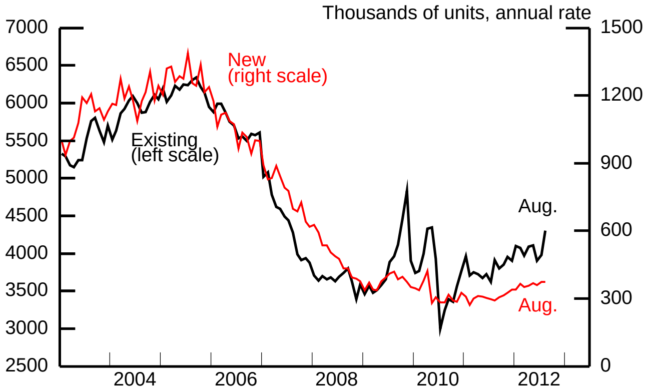
Note: Figures for July, August, and September 2012 are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



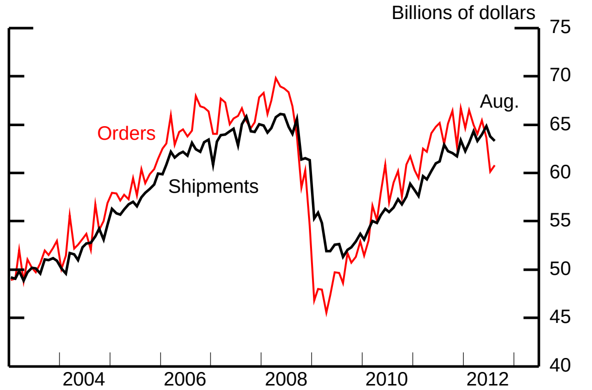
Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.
Source: U.S. Census Bureau.

Single-Family 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.

The Industrial Sector

Manufacturing output was weaker, on net, in August and September than we projected in the September Tealbook. After posting only a sluggish gain in the second quarter, factory output in the third quarter as a whole declined at an annual rate of 1 percent—substantially below our previous forecast of a 2 percent increase—as output in most major industry groups moved down.

While the new orders diffusion indexes from the national ISM survey and the regional manufacturing surveys improved, on net, since the September Tealbook, they still point to only modest gains in manufacturing output in the next few months. Moreover, motor vehicle production schedules suggest a pace of light vehicle assemblies in the fourth quarter that is about ¼ million units below the September Tealbook forecast. All told, manufacturing output is projected to rise at an annual rate of just 1½ percent in the fourth quarter, 1¼ percentage points less than in the September projection.

Household Spending

The latest indicators of consumer spending look decidedly better than we anticipated in the previous Tealbook. The portion of retail sales relevant for estimating PCE jumped in September after having been little changed in August, and purchases of motor vehicles increased almost ½ million units, rather than remaining flat as we had been expecting. Moreover, consumer sentiment brightened substantially in September and early October. On balance, our projection for spending in the second half has been revised up to 2¾ percent from 2¼ percent in the September Tealbook.

Incoming data suggest a somewhat faster housing recovery than we had previously assumed. Single-family housing starts and permits jumped in September after having been on a gradual uptrend through August. In addition, sales of new and existing homes have picked up over the past year, while the homeowner vacancy rate has declined and house prices have risen. We project the pace of single-family starts to increase in the near term, from an average annual rate of about 520,000 units in the second quarter to 580,000 units in the fourth quarter, about 30,000 higher than our projection in the September Tealbook.

Some of the factors restraining home purchases have fueled demand for rental units, leading to falling vacancy rates in the multifamily sector and rising rents.

Multifamily starts and permits rose smartly in September, and we expect them to continue to move up, as the supportive fundamentals persist.

Business Investment

We now estimate that real business spending on equipment and software (E&S) edged down in the third quarter, compared with the small increase we had projected in the previous Tealbook. Moreover, we expect spending in this category to remain weak in the fourth quarter, as concerns about the European situation, the U.S. fiscal situation, and the sluggish pace of the domestic recovery more generally leave businesses reluctant to invest. Indeed, new orders for nondefense capital goods outside of transportation have fallen sharply over the past several months and currently stand well below the level of shipments. In addition, indexes from various surveys of business conditions have been at low levels for several months, and surveys of capital spending plans have continued to be downbeat. Thus, we expect E&S spending to increase at an annual rate of just 2 percent in the fourth quarter, unchanged from our September Tealbook projection.

Incoming data suggest that investment in nonresidential structures (excluding drilling and mining) will decline by somewhat more in the second half of this year than we had previously projected. Nominal construction spending in August was 3 percent below the second-quarter average, and high vacancy rates and low commercial real estate prices should continue to weigh on investment going forward. Although there are hints of easing in financing conditions for existing commercial real estate, financing conditions for new construction remain difficult. Meanwhile, outlays for drilling and mining structures are anticipated to stay near their current levels in the near term.

Inventory stocks appear to be fairly well aligned with sales in most sectors, although likely not quite as lean as they were earlier in the year. Estimates from the staff's flow-of-goods system and reports on dealer inventories of motor vehicles do not point to significant inventory imbalances. However, the Census Bureau's book-value data suggest that the inventory-to-sales ratio for the overall business sector has moved up, on net, in recent months, while the ISM diffusion index on customer inventories suggests less comfort with inventories than was the case earlier in the year. Given the monthly inventory data, which currently extend through August, we expect that stockbuilding in the nonfarm business sector has contributed about ½ percentage point to GDP growth in the third quarter and will be a neutral factor in the current quarter.

Government

The contraction in the state and local sector appears to be ending, and fiscal conditions of these governments have started to improve. After dropping at an annual rate of 1½ percent in the first half of the year, real state and local purchases are projected to be little changed in the second half, reflecting a smaller decline in real public construction expenditures and what now appears to be a modest increase in employment.

We now project that real federal purchases ticked up in the third quarter, reflecting stronger-than-expected defense spending. However, we took little signal from these data for current-quarter spending. On net, real purchases are expected to fall at an annual rate of about 1½ percent in the second half of the year, a smaller decline than in the previous Tealbook. In total, federal, state, and local purchases are now expected to subtract only 0.1 percentage point from the annual rate of real GDP growth in the second half of this year, a slightly smaller drag than in the September Tealbook.

Foreign Trade

After rising at an annual rate of 5¼ percent in the second quarter of this year, real exports of goods and services are estimated to have declined 1¼ percent in the third quarter. Unexpectedly weak export data in July and August led us to lower our third-quarter estimate by 4½ percentage points relative to the September Tealbook. In the fourth quarter, exports are expected to increase 3½ percent, a pace more in line with projected foreign growth and the recent path of the dollar. Imports in July and August were also weaker than expected, and we now estimate that real imports of goods and services fell 1¼ percent in the third quarter, compared with our expectations of a 2¾ percent increase in the September Tealbook. As with exports, we expect imports to recover in the fourth quarter and increase at a 4 percent pace, supported in part by a rebound in oil imports. All told, net exports are estimated to have been about neutral for GDP growth in the third quarter and then make a small negative contribution in the fourth quarter; this contour is a bit more positive than in the previous Tealbook, owing to the lower path for the dollar.

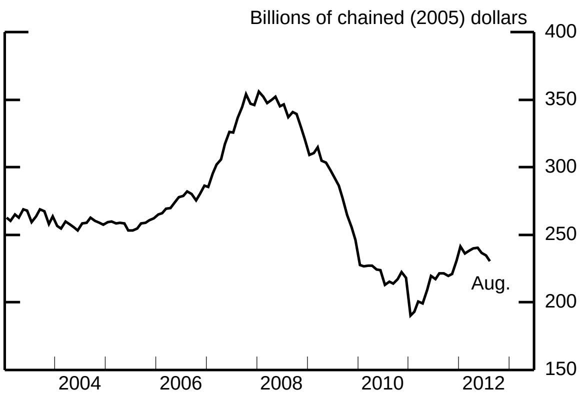
Prices and Wages

Total PCE price inflation is expected to run at an annual rate of just under 2 percent in the second half of the year, little changed from the September Tealbook. In the energy sector, an increase in crude oil prices over the summer, as well as a run-up in retail gasoline margins—reflecting refinery outages and tight inventories—led to a

Domestic Econ Devel & Outlook

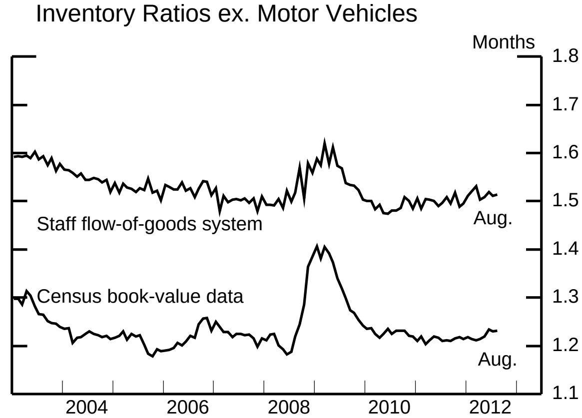
Recent Nonfinancial Developments (3)

Nonresidential Construction Put in Place



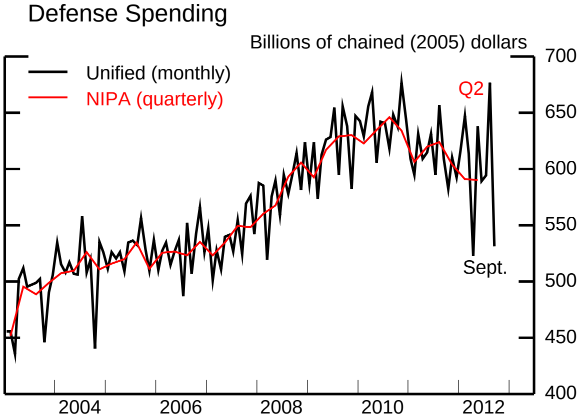
Note: Nominal CPIP deflated by BEA prices through 2012:Q2 and by staff's estimated deflator thereafter.
Source: U.S. Census Bureau.

Inventory Ratios ex. Motor Vehicles



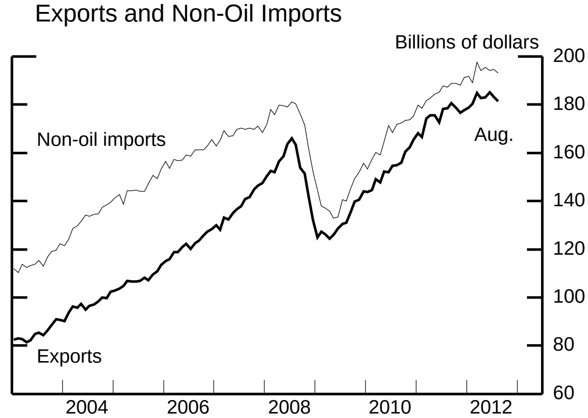
Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.
Source: U.S. Census Bureau; staff calculation.

Defense Spending



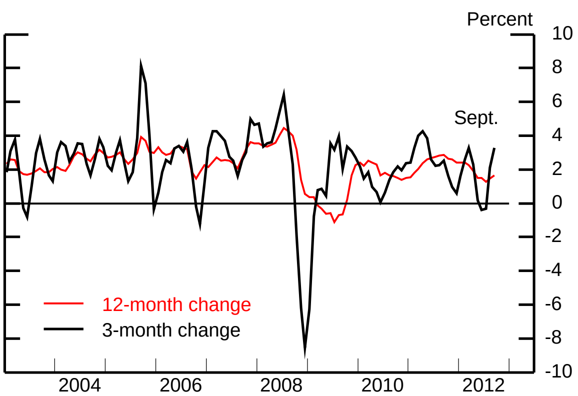
Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.
Source: *Monthly Treasury Statement*; U.S. Dept. of Commerce, Bureau of Economic Analysis.

Exports and Non-Oil Imports



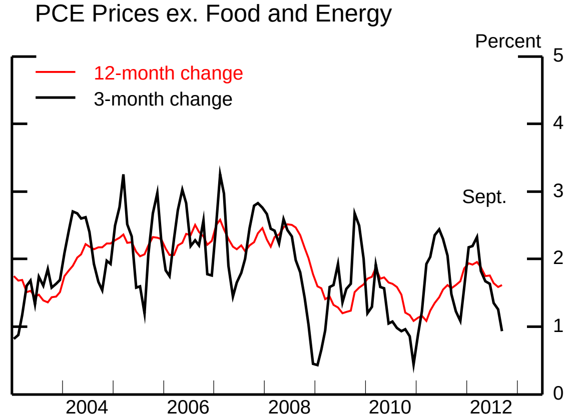
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Total PCE Prices



Note: 3-month changes are at an annual rate. July, August, and September 2012 are staff estimates.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



Note: 3-month changes are at an annual rate. July, August, and September 2012 are staff estimates.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

sharp increase in gasoline prices in August and September. With refinery operations returning to normal, we expect markups and thus retail prices to decline over coming months. Spot and futures prices for natural gas have risen sharply in recent weeks, and, in response, we have revised up our forecast for these prices over the coming winter heating season. On balance, PCE energy prices are projected to increase at an annual rate of 11½ percent in the fourth quarter after rising 10½ percent in the third; our projection for the fourth quarter is 9 percentage points higher than in the September Tealbook.

Lower-than-expected consumer food prices in August and September led us to revise down our third-quarter estimate for PCE food price inflation to an annual rate of just over ½ percent. We project that PCE food price inflation will pick up in the fourth quarter—to an annual rate of 2½ percent—as the sharp rise in farm commodity prices begins to show through into retail food prices. Given the relatively small weight (7½ percent currently) of food prices in overall inflation, the effect on total consumer price inflation is fairly minor.

Incoming data on core consumer price inflation have been close to our expectations. After having registered 1¾ percent in the second quarter, core PCE price inflation appears to have stepped down to a 1¼ percent pace in the third quarter, consistent with recent declines in core imports and a slowdown in some volatile services categories that had shown large increases earlier in the year. We anticipate that the step down will prove transitory and, as a result, expect core PCE inflation to edge up to 1½ percent in the fourth quarter.

On net, the increases in average hourly earnings in August and September were a little slower than we had expected in the previous Tealbook. For the third quarter, average hourly earnings rose at an annual rate of 1½ percent, about ½ percentage point less than in the September Tealbook, and we expect them to pick up to a 2¼ percent pace in the current quarter. We continue to expect that hourly compensation in the nonfarm business sector and the employment cost index for private industry workers will both increase at an annual rate of about 2¼ percent in the second half of this year after rising around 2 percent over the previous four quarters.

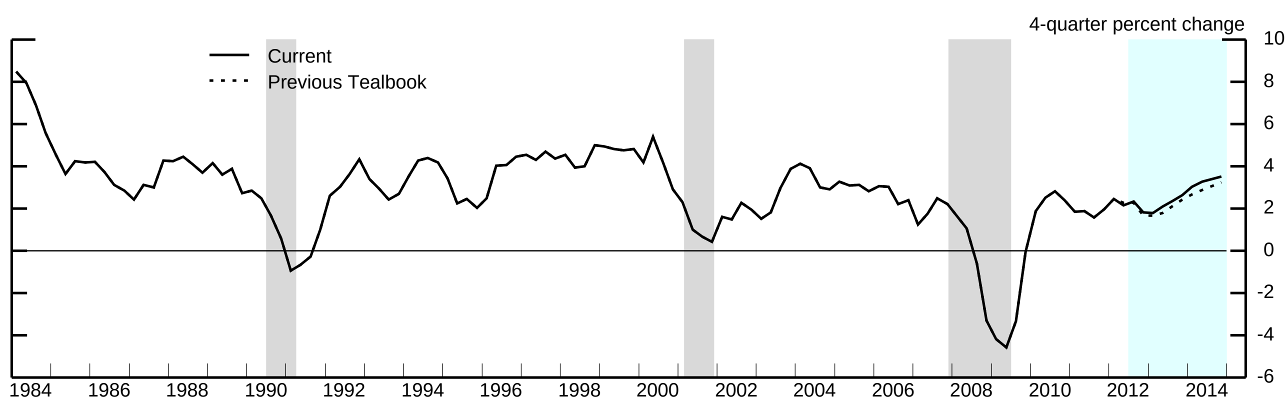
THE MEDIUM-TERM OUTLOOK

The more accommodative monetary policy assumptions underlying this projection support a somewhat stronger forecast for real GDP growth over the medium term through

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

Measure	2011	2012 H1	2012 H2	2013	2014
Real GDP	**2.0**	**1.6**	**2.0**	**2.6**	**3.5**
Previous Tealbook	2.0	1.8	1.5	2.4	3.2
Final sales	1.7	2.1	2.0	2.5	3.5
Previous Tealbook	1.7	2.1	1.4	2.1	3.1
Personal consumption expenditures	1.9	2.0	2.7	2.8	3.7
Previous Tealbook	1.9	2.1	2.3	2.4	3.4
Residential investment	3.9	14.3	14.1	14.8	13.2
Previous Tealbook	3.9	14.3	7.6	11.9	12.4
Nonresidential structures	6.9	6.6	-4.2	2.7	2.3
Previous Tealbook	6.9	6.5	-2.3	2.2	2.2
Equipment and software	11.4	5.1	.5	4.2	7.5
Previous Tealbook	11.4	4.8	1.3	5.1	7.2
Federal purchases	-4.2	-2.3	-1.4	-4.2	-4.2
Previous Tealbook	-4.2	-2.2	-2.8	-4.2	-4.3
State and local purchases	-2.7	-1.6	.0	.3	.9
Previous Tealbook	-2.7	-1.6	-.5	.3	.9
Exports	4.3	4.8	1.1	5.1	6.2
Previous Tealbook	4.3	5.2	3.3	4.5	5.7
Imports	3.5	2.9	1.4	3.9	5.0
Previous Tealbook	3.5	3.0	3.3	4.2	4.8
	Contributions to change in real GDP (percentage points)				
Inventory change	.3	-.4	.1	.2	.0
Previous Tealbook	.3	-.3	.0	.3	.1
Net exports	.0	.1	-.1	.0	.0
Previous Tealbook	.0	.2	-.1	-.1	.0

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.

the three main transmission channels for monetary policy: The lower exchange value of the dollar will lead to some greater support to U.S. activity from foreign trade, higher equity prices will provide additional impetus to consumer spending by way of a conventional wealth effect, and the lower long-term interest rates will boost housing market activity and consumer purchases of durable goods. Thus, we now expect that real GDP will increase 2½ percent in 2013 and 3½ percent in 2014; both figures are about ¼ percentage point faster than we projected in the September Tealbook. In 2015, we project GDP growth to pick up a little further to 3¾ percent.

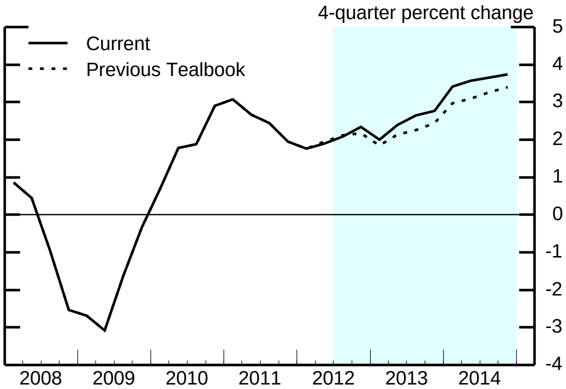
As described earlier, we now expect the unemployment rate to be 8 percent in the current quarter. With real GDP anticipated to increase just a little faster than its potential next year, we expect the unemployment rate to edge down to 7¾ percent at year-end. With GDP finally outpacing potential output by a more substantial margin in 2014 and 2015, the unemployment rate drops more quickly, falling to 6¼ percent by the end of 2015.

Although somewhat stronger, the broad contour of our medium-term projection is similar to that in the September Tealbook. Nearly ½ percentage point of the pickup in real GDP growth from this year to next reflects the anticipated rebound in farm production. More broadly, however, further improvements in financial conditions, an eventual easing of the financial crisis in Europe, and rising household and business confidence should contribute to an acceleration in real GDP over the next few years. Still, a number of other headwinds are expected to continue to restrain the pace of economic activity over the projection period, including tight credit for some households and businesses, the ongoing drag from the widespread losses in home equity, an overhang of vacant homes that continues to hold back residential construction, foreign demand that remains subdued, and continuing fiscal restraint.

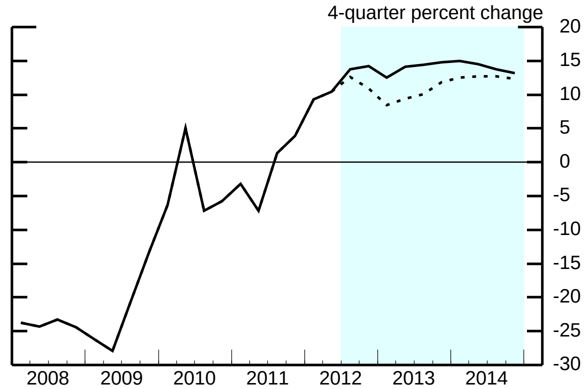
The largest portion of the fiscal drag that we expect next year shows through in the form of restraint on the growth of the after-tax incomes of households and hence their spending. The main elements of this restraint are the assumed expiration at the end of this year of both the temporary payroll tax cut and the EUC program as well as an increase in taxes that is assumed to be put in place instead of the sequester. By contrast, rising household wealth, increasing consumer confidence, and a modestly improving labor market should provide support for consumer spending. In total, real PCE is expected to expand 2¾ percent in 2013, about ¼ percentage point faster than we

Components of Final Demand

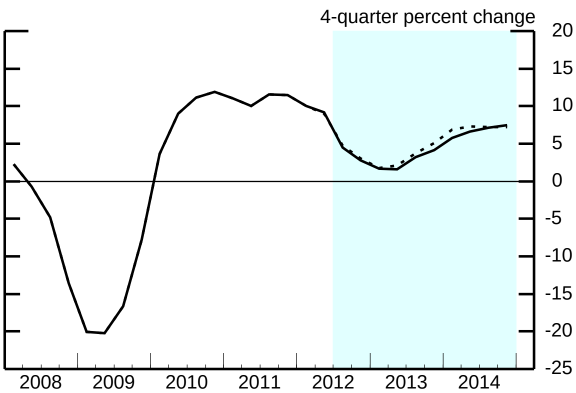
Personal Consumption Expenditures



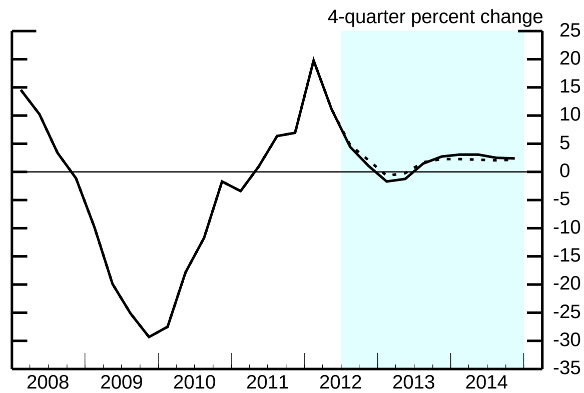
Residential Investment



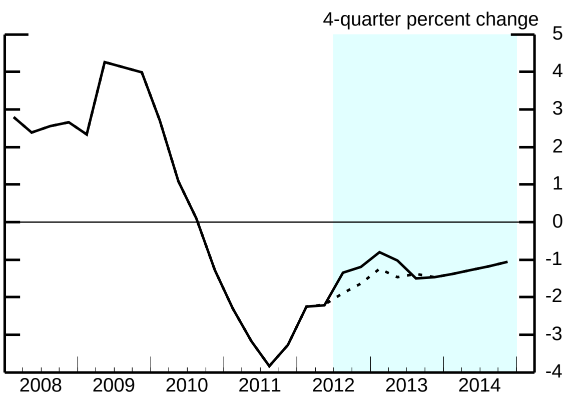
Equipment and Software



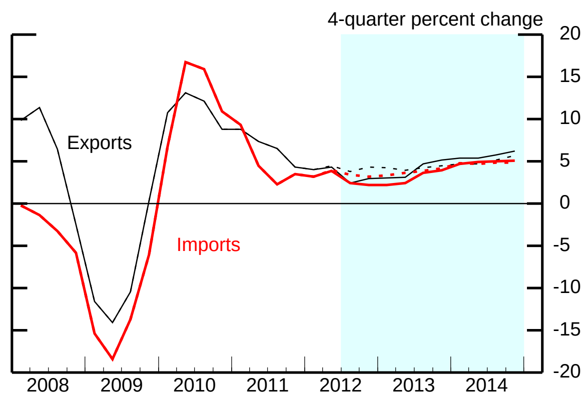
Nonresidential Structures



Government Consumption & Investment



Exports and Imports



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

projected in September. In 2014 consumer spending is expected to rise 3¾ percent, as the drag from fiscal policy wanes and as employment prospects, income growth, and household net worth continue to improve.

Because of the lower path for the exchange value of the dollar in this projection, net foreign trade now has a roughly neutral effect on GDP growth in the medium term rather than imposing a small drag as in the September Tealbook. In particular, with foreign economic growth anticipated to improve and with the dollar expected to depreciate over the medium term, real exports are projected to increase 5 percent in 2013 and 6¼ percent in 2014. Meanwhile, real imports are expected to grow at an average annual pace of 4½ percent over the medium term, supported by a pickup in the speed of the recovery in the United States that more than offsets the drag stemming from a depreciating dollar.

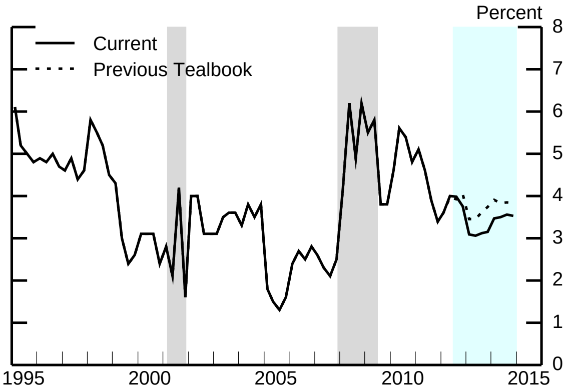
Businesses apparently see little reason to expand capacity significantly at present. And, despite the fact that many large firms have ample cash on hand and ready access to capital markets, we expect the business sector as a whole to remain cautious until the recovery is clearly on a stronger footing. Thus, we project that E&S will remain quite weak in the first half of next year and then accelerate more markedly, as economic conditions improve and uncertainty abates. All told, real E&S spending is projected to rise 4¼ percent in 2013 and 7½ percent in 2014.

Lackluster final demand and uncertainty about the outlook is likely also holding back business investment in nonresidential structures other than drilling and mining. In addition, we anticipate that persistently high vacancy rates and continued tight conditions for construction and development loans will continue to restrain investment in structures over the medium term. As a result, we expect real nonresidential construction spending to be flat next year and to rise moderately in 2014. In contrast, we expect investment in drilling and mining to increase in 2013, supported by rising prices for natural gas. In 2014, with natural gas prices flat and oil prices edging down, we expect investment to flatten out as well.

We continue to anticipate only a modest recovery in residential construction despite the encouraging signs in recent data and the lower mortgage rates in this projection. Historically low mortgage rates would normally be expected to bolster home purchases and lead to a significant increase in new construction over the medium term. However, the ongoing difficulties faced by many households in accessing mortgage

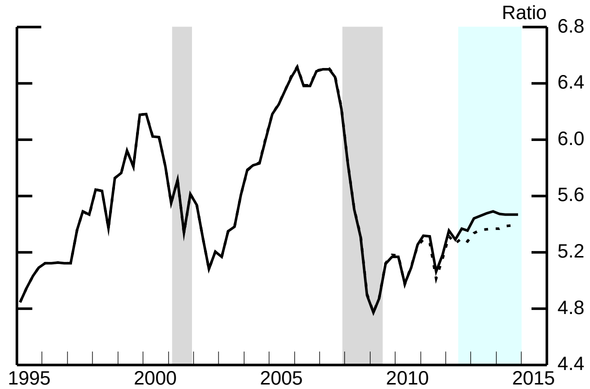
Aspects of the Medium-Term Projection

Personal Saving Rate



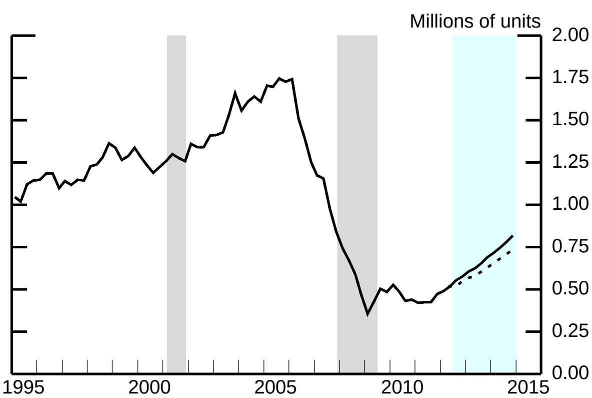
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



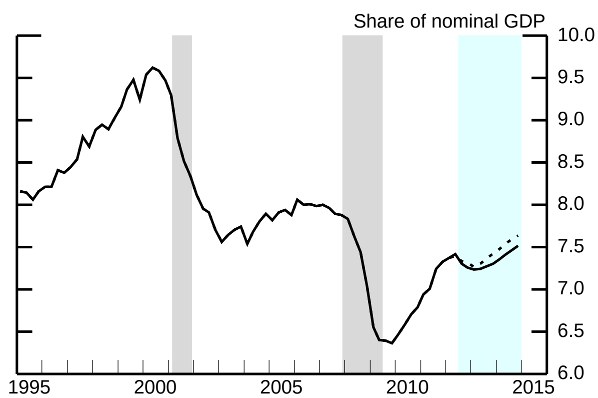
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



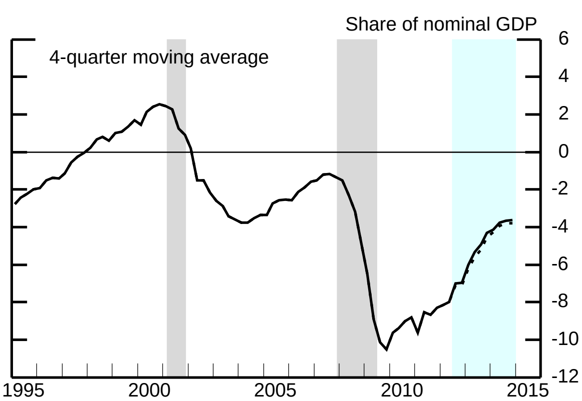
Source: U.S. Census Bureau.

Equipment and Software Spending



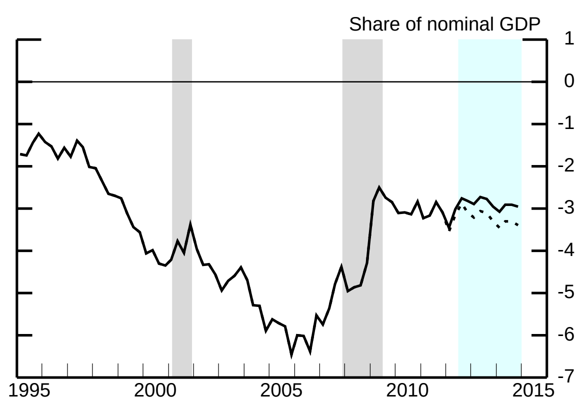
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Federal Surplus/Deficit



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.

credit, coupled with lingering uncertainty about employment and income prospects, are likely to materially restrain the pace of recovery in this sector. Moreover, the flow of homes from foreclosure into the resale market is expected to remain substantial, limiting the impetus for new construction even as overall housing demand strengthens. Thus, while we have upgraded our forecast for new home construction since the September Tealbook, the pace that we now project for single-family housing starts in the fourth quarter of 2014—an annual rate of 820,000 units—is still well below its long-run trend.

AGGREGATE SUPPLY, THE LABOR MARKET, AND INFLATION

Potential GDP and the Natural Rate of Unemployment

We reduced our estimates of the levels of potential output and structural productivity at the end of 2011 nearly ½ percent in this projection. In part, the motivation for this revision derives from the BLS's preliminary estimate that it will revise up the March 2012 level of private nonfarm payroll employment by 450,000. We estimate that this benchmark revision will reduce the level of labor productivity early this year by nearly ½ percent and, by itself, would have moved actual productivity back in line with our estimate of its trend level. However, in our view, firms—which remain uncertain about the outlook—are continuing to restrain employment, which suggests that productivity is still *above* its trend level. In other words, we view the downward revision to actual productivity as consistent with a lower level of structural productivity than we had previously assumed. In addition, this revision brought our estimate of the output gap into alignment with the unemployment rate gap in the first half of this year.

We project that potential output will increase 1¾ percent this year and 2 percent in both 2013 and 2014, the same as in the previous Tealbook. We also continue to assume that the natural rate of unemployment will remain at 6 percent through 2014.[6]

Productivity and the Labor Market

We estimate that the level of labor productivity was about ½ percent above its (downwardly revised) structural trend in the second quarter, consistent with our view that apprehension about the outlook is causing firms to be reluctant to add to their work

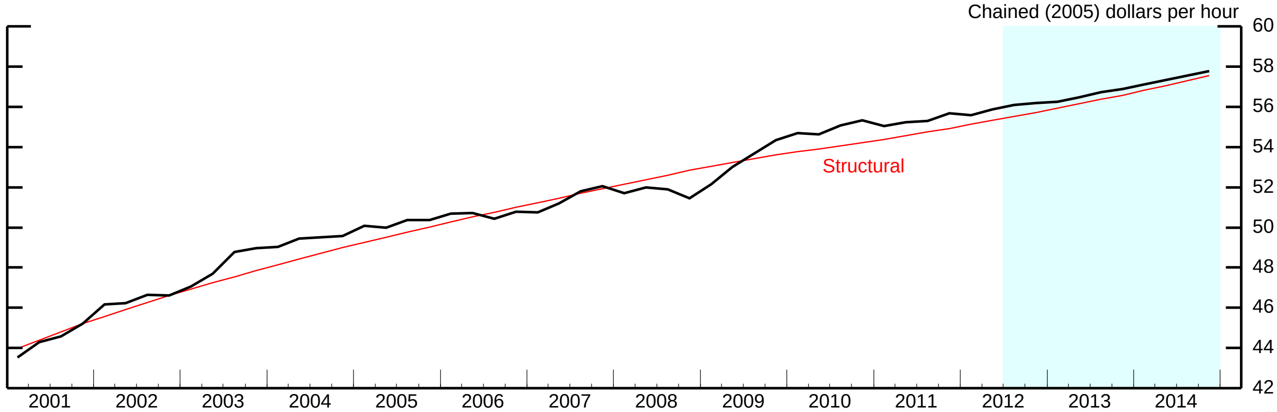
[6] We estimate that the boost to the "effective" natural rate of unemployment from the emergency and extended unemployment insurance programs has diminished and is worth less than ¼ percentage point at present. This effect is expected to dissipate completely next year as these programs are fully wound down.

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

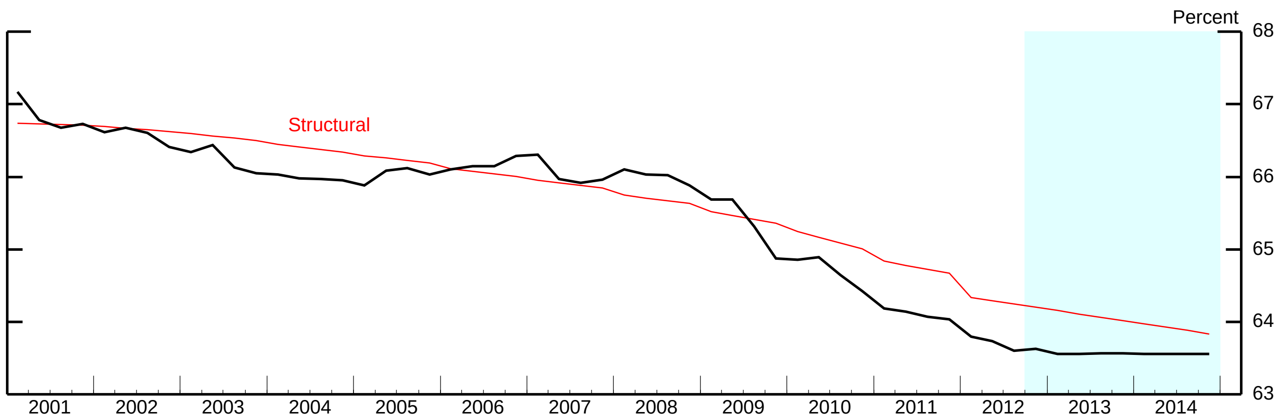
Measure	1974-1995	1996-2000	2001-2010	2011	2012	2013	2014
Potential real GDP	3.0	3.4	2.2	1.5	1.8	2.0	2.1
Previous Tealbook	3.0	3.4	2.2	1.7	1.8	2.0	2.1
Selected contributions[1]							
Structural labor productivity	1.4	2.6	2.1	1.3	1.4	1.6	1.7
Previous Tealbook	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Capital deepening	.7	1.5	.7	.4	.5	.6	.6
Previous Tealbook	.7	1.5	.7	.4	.5	.6	.7
Multifactor productivity	.5	.8	1.2	.8	.9	.9	1.0
Previous Tealbook	.5	.8	1.2	.9	.8	.9	.9
Structural hours	1.5	1.0	.6	.5	.6	.6	.6
Previous Tealbook	1.5	1.0	.6	.5	.6	.6	.6
Labor force participation	.4	.0	-.3	-.4	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.3	-.3	-.3

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

Structural and Actual Labor Productivity
(Nonfarm business sector)



Structural and Actual Labor Force Participation Rate



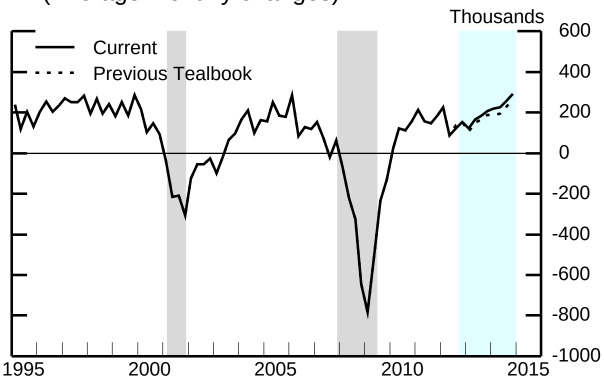
Source: U.S. Department of Labor, Bureau of Labor Statistics; Bureau of Economic Analysis; and staff assumptions.

The Outlook for the Labor Market and Resource Utilization
(Percent change from final quarter of preceding period)

Measure	2011	2012 H1	2012 H2	2013	2014
Output per hour, nonfarm business	.6	.7	1.1	1.3	1.6
Previous Tealbook	.6	.8	.9	1.3	1.6
Nonfarm private employment[1]	175	157	137	170	249
Previous Tealbook	175	159	145	153	218
Labor force participation rate[2]	64.0	63.7	63.6	63.6	63.6
Previous Tealbook	64.0	63.7	63.7	63.7	63.7
Civilian unemployment rate[2]	8.7	8.2	8.0	7.8	7.2
Previous Tealbook	8.7	8.2	8.3	8.0	7.6
Memo:					
GDP gap[3]	-4.0	-4.1	-4.0	-3.4	-2.0
Previous Tealbook	-4.4	-4.4	-4.6	-4.1	-3.1

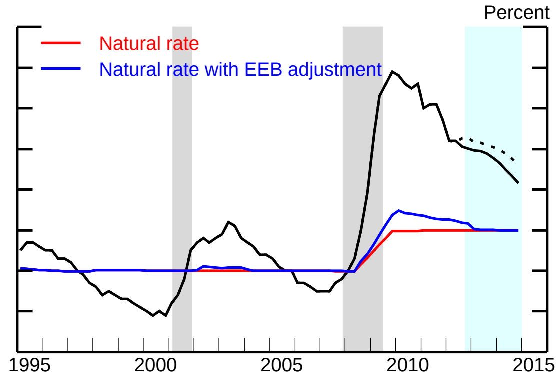
1. Thousands, average monthly changes.
2. Percent, average for the final quarter in the period.
3. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential.
Source: U.S. Department of Labor, BLS; staff assumptions.

Nonfarm Private Employment
(Average monthly changes)



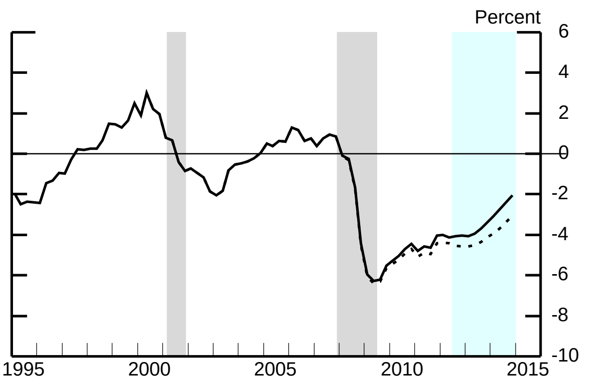
Source: U.S. Dept. of Labor, BLS.

Unemployment Rate



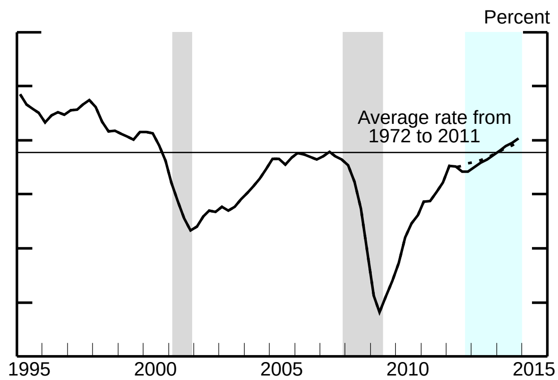
Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the natural rate of unemployment.
Source: U.S. Dept. of Labor, BLS; staff assumptions.

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."

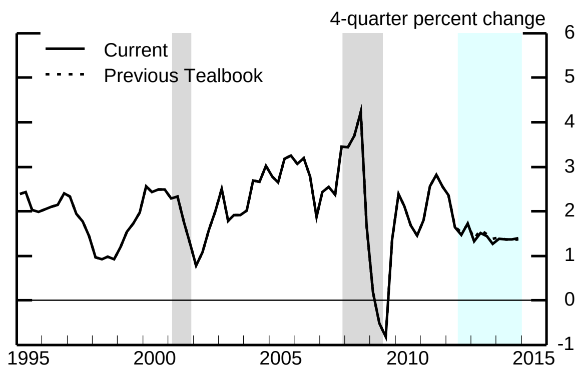
Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

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

Measure	2011	2012 H1	2012 H2	2013	2014
PCE chain-weighted price index	2.5	1.6	1.9	1.3	1.4
Previous Tealbook	2.5	1.6	1.8	1.4	1.4
Food and beverages	5.1	1.0	1.6	2.4	1.0
Previous Tealbook	5.1	1.0	2.4	2.6	.9
Energy	11.9	-3.3	11.0	-4.7	-2.3
Previous Tealbook	11.9	-3.3	6.3	-3.4	-2.2
Excluding food and energy	1.7	2.0	1.3	1.6	1.7
Previous Tealbook	1.7	2.0	1.4	1.6	1.6
Prices of core goods imports[1]	4.3	.5	-.9	1.4	1.5
Previous Tealbook	4.3	.5	-1.1	1.1	1.4

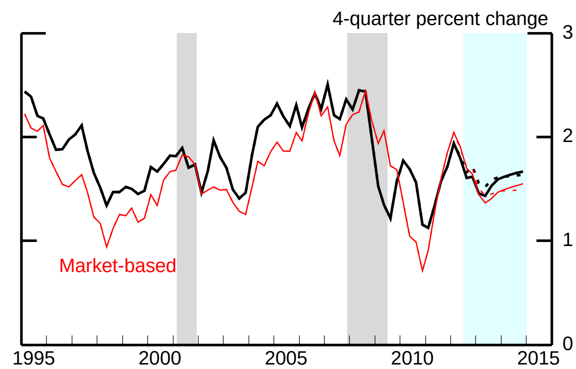
1. Core goods imports exclude computers, semiconductors, oil, and natural gas.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE Prices



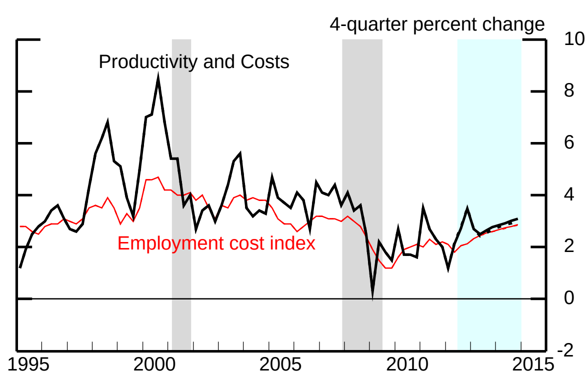
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



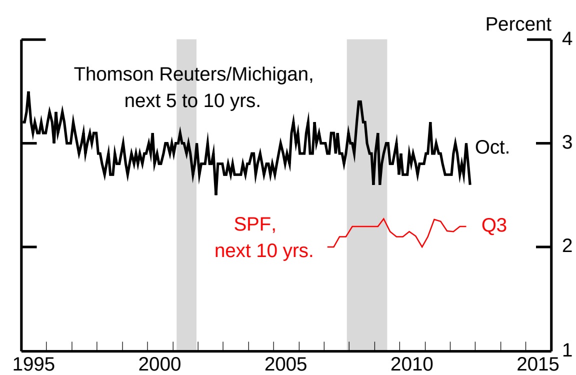
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Compensation per Hour



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

Long-Term Inflation Expectations



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

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

forces, just as seems to be the case with their physical capital. However, we see this effect dissipating over time, boosting the demand for labor.

The projected path for payroll employment reflects both this productivity dynamic and the anticipated acceleration in real GDP. In 2013, increases in private payroll employment are expected to average about 170,000 per month before picking up in 2014 to an average monthly gain of 250,000; these figures are about 20,000 and 30,000 per month larger, respectively, than in the September Tealbook. The employment gains we project for 2013 are still fairly modest, consistent with only a small decline in the unemployment rate next year. In 2014, the faster pace of hiring brings down the unemployment rate more quickly to 7¼ percent at the end of that year.

Resource Utilization

Starting from its current level of about 4 percent, the gap between actual and potential GDP is projected to narrow only slowly to 2 percent by the end of 2014. Similarly, labor market slack is expected to persist throughout the medium-term forecast, with the unemployment rate at the end of 2014 still 1¼ percentage points above our estimate of the natural rate.

There appears to be less slack in the manufacturing sector currently than in the broader economy, largely as a result of the steep drop in capacity from 2007 to 2010.[7] Capacity utilization in the manufacturing sector stood at 77.1 percent in the third quarter, only about 1¾ percentage points below its long-run average rate. Consequently, with the amount of slack in the manufacturing sector and in the broader economy projected to narrow at roughly comparable rates over the rest of the forecast period, the factory operating rate reaches its long-run average in early 2014 despite the still-sizable GDP gap.

Prices and Compensation

Beyond the near term, overall inflation is expected to remain low and steady, reflecting stable long-run inflation expectations, the relatively small movements projected for commodity prices and import prices, and persistent slack in resource utilization.

[7] Unlike the staff's measure of potential GDP, which directly incorporates trends in labor input, our concept of capacity for the industrial sector focuses on the capability of plants to produce with the equipment that is in place and ready to operate; it does not take account of the potential workforce, either inside the industrial sector or outside it.

Recent indicators of inflation expectations have been mixed. Expectations for PCE price inflation over the next 10 years, as measured by the Survey of Professional Forecasters, were unchanged at 2.2 percent in the third quarter, whereas 10-year CPI inflation expectations edged down to 2.4 percent. In the preliminary Michigan survey results for October, the median 5-to-10-year inflation expectation decreased to 2.6 percent from 2.8 percent in September. Meanwhile, the TIPS-based measure of inflation compensation 5 years ahead—which may reflect changes in risk aversion or desire for liquidity as well as changes in inflation expectations—has increased since the time of the last Tealbook.

Another important factor contributing to the low trajectory for inflation in this projection is import prices. Prices of imported core goods are expected to decrease at a 1 percent annual rate in the second half of this year, about unchanged from our projection in the September Tealbook, reflecting the lagged effects of previous declines in commodity prices. With the dollar expected to depreciate over the medium term, we project that core import price inflation will turn positive and run at an annual pace of 1½ percent, about unchanged from the previous Tealbook.

These factors and the still-considerable degree of slack in labor and product markets expected for next year lead us to project core inflation of 1.6 percent in 2013, unchanged from September. But, with the somewhat larger decline in unemployment now anticipated in 2014, we project that core inflation will increase to 1.7 percent in that year, 0.1percentage point above our projection in the September Tealbook. Meanwhile, total PCE inflation is projected to run a little below core inflation over the medium term, as the anticipated declines in crude oil prices put downward pressure on retail energy prices. In 2015, headline and core inflation are expected to continue at about the same pace as in 2014.

In our projection, persistent labor market slack, stable inflation expectations, and low rates of price inflation restrain the rise in hourly compensation. Both the nonfarm hourly compensation measure and the employment cost index are projected to rise about 2¾ percent in 2013 and 3 percent in 2014.

THE LONG-TERM OUTLOOK

We have extended the staff's forecast through 2020 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:

- Monetary policy seeks to stabilize PCE inflation at 2 percent over the longer term, consistent with the Committee's strategy statement after the January 2012 meeting. The federal funds rate is set according to the estimated outcome-based rule, adjusted to be consistent with the Committee's September 2012 policy guidance.[8]

- The Federal Reserve's holdings of securities continue to put downward pressure on longer-term interest rates from 2015 through 2017. However, as the time of the normalization of the portfolio draws nearer, this downward pressure diminishes, which contributes to the rise in the 10-year Treasury yield. By 2018, the process of portfolio normalization should have been essentially completed.

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

- The federal budget deficit (measured on a NIPA basis) narrows a little further to an average of about 3 percent of GDP in 2015 and 2016 but widens thereafter, reflecting fast-rising transfer payments for retirement and health-care programs. Federal debt stabilizes temporarily at around 75 percent of GDP in the middle of the decade but then rises to 78 percent of GDP by the end of the decade.

- The real foreign exchange value of the dollar depreciates 3 percent in 2015 and 2 percent per year in 2016 and 2017; the pace of depreciation tapers off thereafter. The price of crude oil declines in 2015 and 2016 and then holds steady in real terms. Foreign real GDP growth is 3½ percent in 2015 and then decreases gradually to a 3 percent annual rate late in the decade.

[8] The adjustments made to the estimated outcome-based rule in light of the Committee's forward guidance are discussed in more detail in the Key Background Factors part of this section.

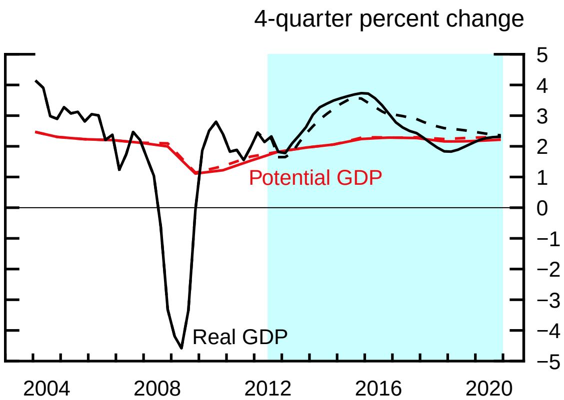
The Long-Term Outlook

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

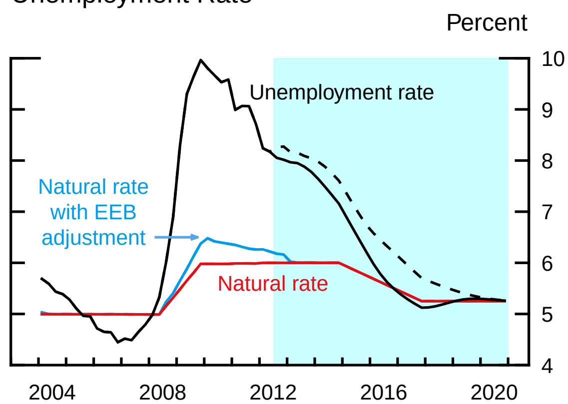
Measure	2012	2013	2014	2015	2016	2017
Real GDP	1.8	2.6	3.5	3.7	3.1	2.4
Previous Tealbook	1.6	2.4	3.2	3.6	3.0	2.9
Civilian unemployment rate[1]	8.0	7.8	7.2	6.2	5.5	5.1
Previous Tealbook	8.3	8.0	7.6	6.7	6.2	5.7
PCE prices, total	1.7	1.3	1.4	1.5	1.8	2.0
Previous Tealbook	1.7	1.4	1.4	1.5	1.8	1.9
Core PCE prices	1.6	1.6	1.7	1.7	1.9	2.0
Previous Tealbook	1.7	1.6	1.6	1.7	1.8	1.9
Federal funds rate[1]	.1	.1	.1	.7	2.6	3.9
Previous Tealbook	.1	.1	.6	2.1	2.9	3.5
10-year Treasury yield[1]	1.8	2.7	3.5	4.1	4.4	4.6
Previous Tealbook	1.9	3.0	3.7	4.2	4.3	4.4

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

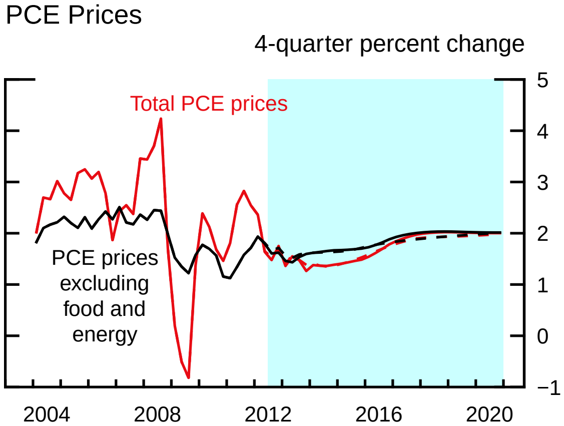
Real GDP



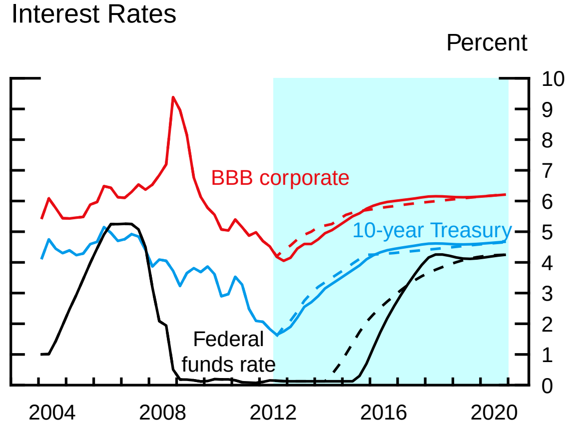
Unemployment Rate



PCE Prices



Interest Rates



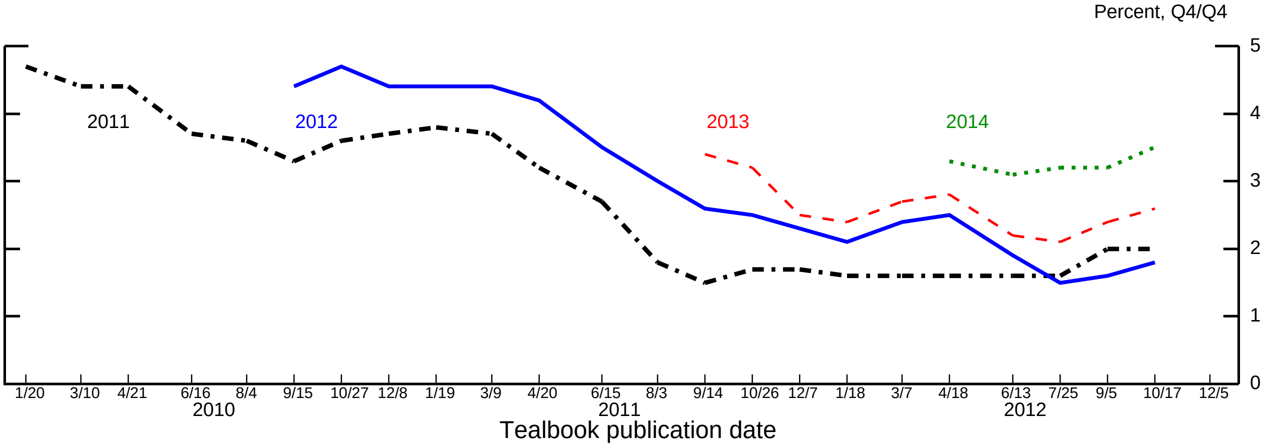
Note: In each panel, shading represents the projection period, and dashed lines are the previous Tealbook.

- The natural rate of unemployment declines from 6 percent in the fourth quarter of 2014 to 5¼ percent at the end of 2017 as conditions in the labor market continue to improve, and it remains at that level in the longer run. Potential GDP increases at an average annual rate of about 2¼ percent.

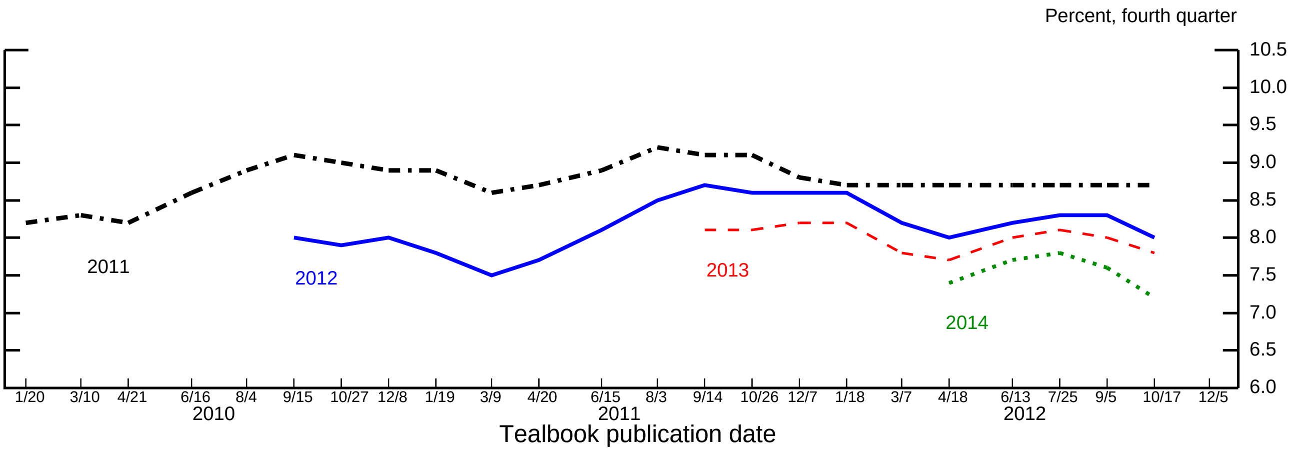
The economy is projected to enter 2015 with output still below its potential level, unemployment above its assumed natural rate, and inflation below the long-run objective of the Committee. In the staff's long-term forecast, further improvements in household and business confidence, diminishing uncertainty, and supportive financial conditions enable real GDP to rise at an average annual rate of 3½ percent in 2015 and 2016. With real GDP expanding at a pace faster than the growth rate of potential output, labor market conditions improve further, and the unemployment rate ends 2017 at 5.1 percent—slightly below its long-run natural rate of 5¼ percent and about ½ percentage point lower than in the September Tealbook. With long-run inflation expectations assumed to remain well anchored and the margin of slack in labor and product markets diminishing, consumer price inflation edges up to 2 percent in 2017. Later in the decade, real GDP growth moderates to a rate close to potential, the unemployment rate flattens out at its long-run natural rate, inflation holds steady at close to 2 percent, and the nominal federal funds rate stabilizes at around 4¼ percent.

Evolution of the Staff Forecast

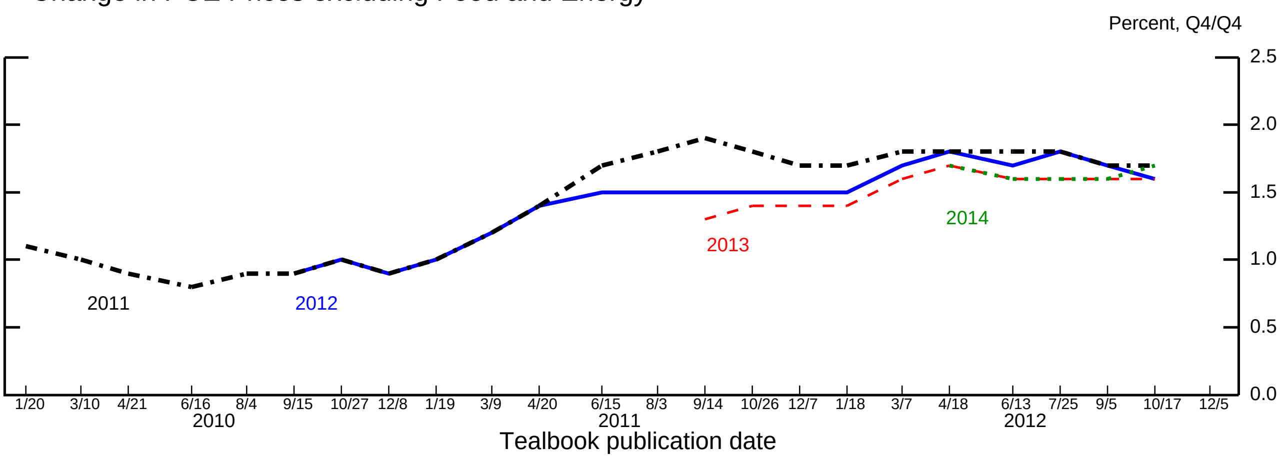
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



International Economic Developments and Outlook

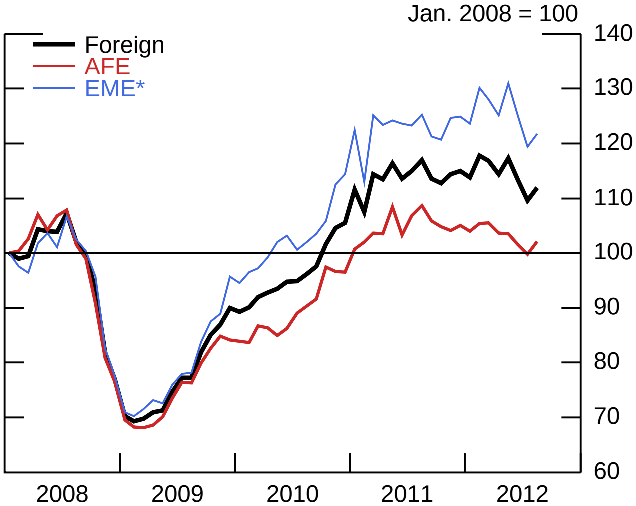
The global economy continues to struggle to gain traction, restrained by the fiscal and financial crisis in Europe, lackluster expansion in the United States, and the resulting adverse spillovers to the rest of the world. Real GDP in the foreign economies is expected to expand at a sluggish pace of 2 percent in the current quarter, similar to the estimated pace of the two previous quarters and down from early this year. The recent weakness has been most pronounced in the advanced foreign economies (AFEs), but reduced exports also have sapped the momentum of the emerging market economies (EMEs). Growth in the second half of the year is expected to be a little lower than in the September Tealbook, as the recent softness in EME exports and some other indicators have led us to revise our expectation that EME growth would firm over that period.

Not all of the recent news has been downbeat, however. Data on euro-area production and consumption have shown some improvement, suggesting a slightly shallower recession than we had anticipated. In addition, since the September Tealbook, financial stresses have eased further in response to positive policy developments in the euro area. These actions include the announcement by the European Central Bank (ECB) of the details of its Outright Monetary Transactions (OMT) program to buy sovereign bonds and the European Commission's release of initial blueprints for a single European bank supervisor. The likelihood of worst-case outcomes for the euro area appears to have diminished in response to these actions, and we assume financial stresses will be somewhat less pronounced throughout the forecast period as a result. Nevertheless, we still anticipate that euro-area financial conditions will deteriorate somewhat over the next couple of months as Spain deliberates over whether to request official support, doubts remain about the efficacy of the OMT program, and progress toward banking union runs into snags. This intensification of financial stresses should force European leaders to follow through on their earlier policy commitments, leading to a sustained, albeit slow and halting, improvement in financial conditions, which should allow the euro area to move out of recession by the middle of next year.

Recovery in Europe and more-solid growth in the United States should support an acceleration of activity throughout the global economy. We thus expect foreign economic growth to pick up to about 2¾ percent in 2013 and nearly 3½ percent in 2014, little changed from the September Tealbook. Nevertheless, substantial risks remain for

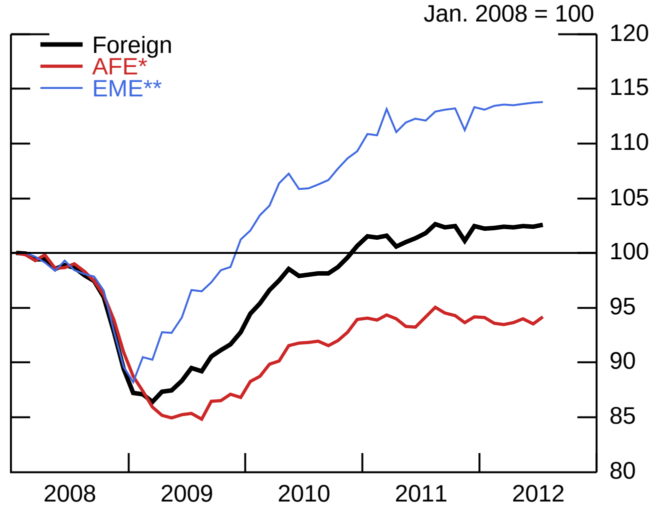
Recent Foreign Indicators

Nominal Exports



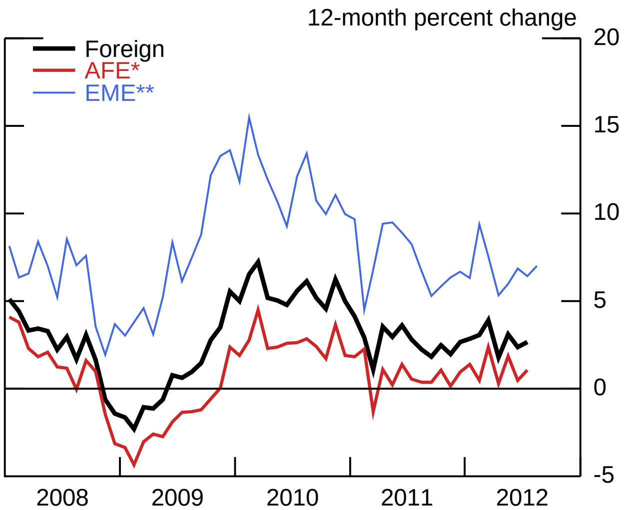
* Excludes Venezuela.

Industrial Production



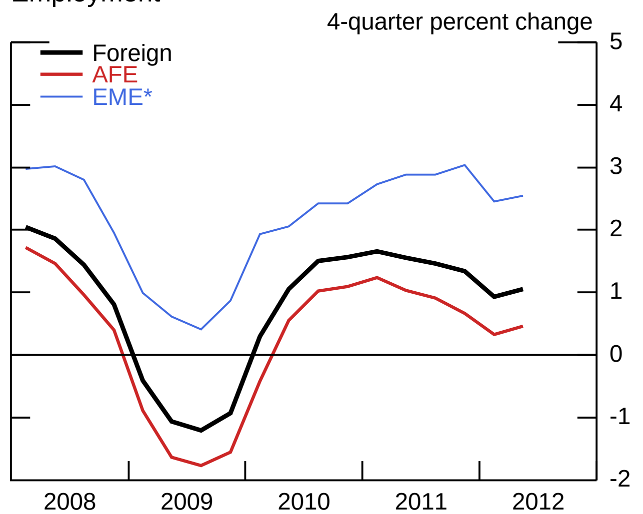
* Excludes Australia and Switzerland.
** Excludes Colombia, Hong Kong, Philippines, and Venezuela.

Retail Sales



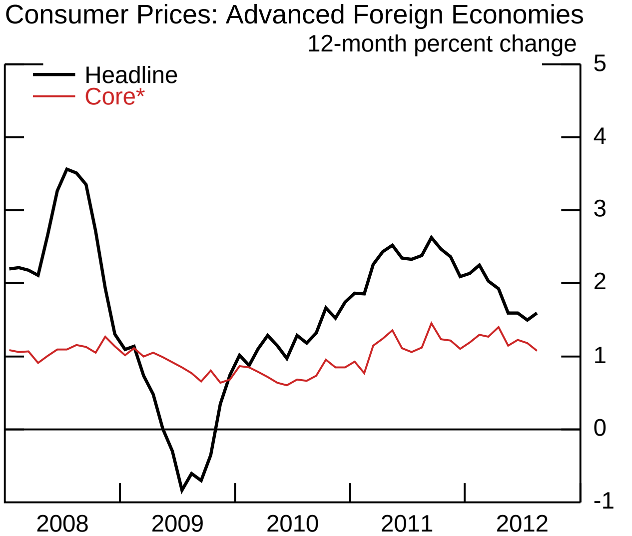
* Excludes Australia and Switzerland.
** Includes Brazil, China, Indonesia, Korea, Singapore, and Taiwan.

Employment

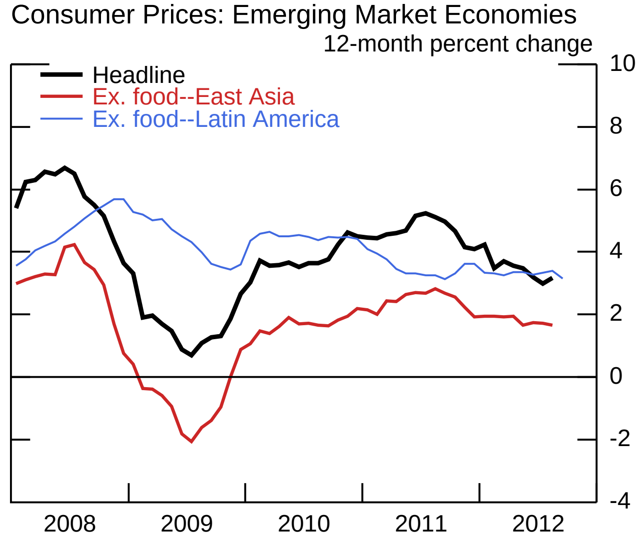


* Excludes Argentina and Mexico.

Consumer Prices: Advanced Foreign Economies



Consumer Prices: Emerging Market Economies



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

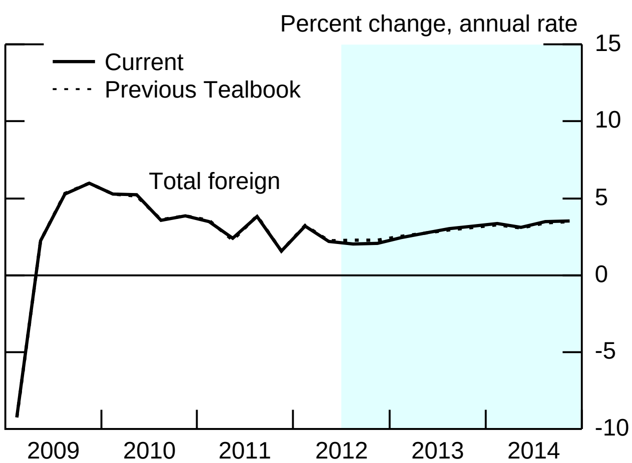
The Foreign Outlook

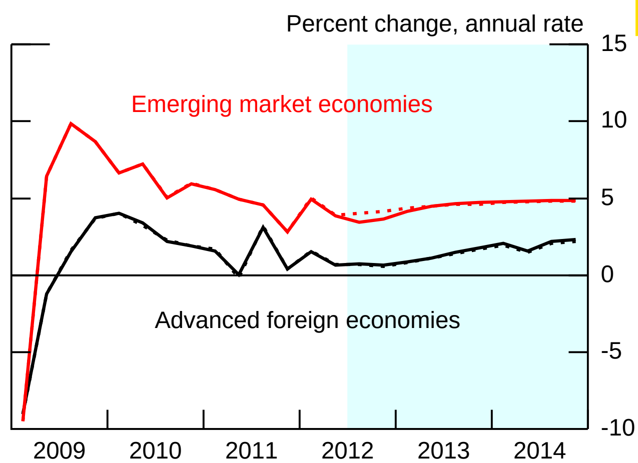
(Percent change, annual rate)

		2012				2013			
	2011	Q1	Q2	Q3	Q4	Q1	Q2	H2	2014
Real GDP									
Total foreign	2.8	3.2	2.2	2.0	2.1	2.4	2.7	3.1	3.4
Previous Tealbook	2.8	3.2	2.3	2.3	2.3	2.5	2.7	3.0	3.3
Advanced foreign economies	1.3	1.5	.6	.7	.6	.9	1.1	1.6	2.0
Previous Tealbook	1.3	1.6	.7	.7	.6	.8	1.1	1.5	1.9
Emerging market economies	4.5	5.0	3.9	3.4	3.6	4.1	4.5	4.7	4.8
Previous Tealbook	4.5	5.0	3.9	4.0	4.1	4.4	4.5	4.6	4.8
Consumer Prices									
Total foreign	3.4	2.6	1.9	2.2	2.7	2.3	2.2	2.2	2.5
Previous Tealbook	3.4	2.6	1.9	1.8	2.6	2.3	2.3	2.2	2.5
Advanced foreign economies	2.2	2.1	.6	.7	1.8	1.3	1.2	1.2	1.7
Previous Tealbook	2.2	2.2	.6	.7	1.9	1.4	1.3	1.2	1.7
Emerging market economies	4.3	2.9	3.0	3.3	3.3	3.1	3.1	3.1	3.2
Previous Tealbook	4.3	2.9	3.0	2.7	3.2	3.1	3.1	3.0	3.2

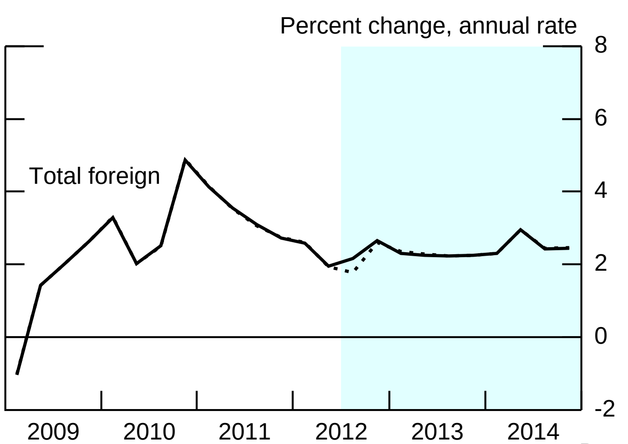
Note: Annualized percent change from final quarter of preceding period to final quarter of period indicated.

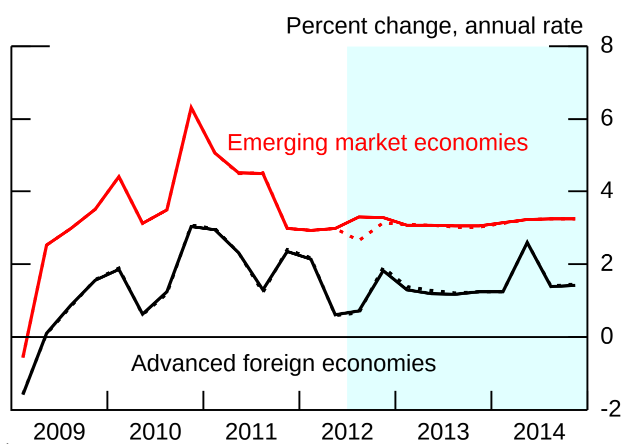
Real GDP





Consumer Prices





both the euro area and other parts of the world. In the Risks and Uncertainty section we explore two adverse scenarios: The first is an intensification of the European crisis with severe spillovers to the rest of the world, and the second is a hard landing in China that has significant effects on its major Asian trading partners.

Foreign inflation is estimated to have edged up to about 2¼ percent in the third quarter, nearly ½ percentage point higher than in our previous forecast, largely reflecting continued food price pressures in the EMEs. Inflation in the EMEs rose to 3¼ percent in the third quarter from 3 percent in the second, while inflation in the AFEs remained subdued at ¾ percent. We expect foreign inflation to pick up to 2¾ percent in the current quarter as earlier increases in energy prices pass through to inflation in the AFEs, but to drop back next year as energy and other commodity prices ease.

With inflation contained, monetary policy is generally expected to remain accommodative in the AFEs, with the ECB lowering rates one more time and the Bank of England (BOE) and the Bank of Japan (BOJ) further expanding their asset purchase programs. Monetary authorities in several Asian EMEs, including China, India, and South Korea, also are expected to ease monetary policy further in response to slowing growth. However, the central bank of Brazil's most recent rate cut is expected to be the last in this cycle.

Advanced Foreign Economies

We estimate that real GDP in the AFEs continued to expand at a feeble ¾ percent pace in the third quarter. This estimate is unchanged from the September Tealbook, as recent activity data have been a bit stronger than expected for the euro area but have surprised on the downside for Japan. We expect AFE growth to remain at about the same pace in the current quarter, with further contraction in the euro area and lackluster growth in most other advanced economies. Thereafter, we project AFE growth to recover only gradually, averaging 1¼ percent next year and 2 percent in 2014. This forecast is slightly higher than in the September Tealbook in response to the improved U.S. outlook and the recent diminution in financial stresses in Europe, much of which occurred between the time the September Tealbook forecast closed and the September FOMC meeting.

AFE inflation remained subdued at an estimated annual rate of ¾ percent in the third quarter, as earlier declines in oil prices passed through to the retail level. We expect inflation to step up to 1¾ percent in the current quarter in response to the uptick in oil prices over the summer as well as a hike in tuition fees in the United Kingdom. Thereafter, we continue to project that AFE inflation will average about 1½ percent, held down by sizable resource slack.

Euro Area

Recent indicators of euro-area economic activity have been mixed. The composite PMI and economic sentiment fell further during the third quarter, and the unemployment rate remained at a series high of 11.4 percent in August. However, retail sales and industrial production through August were higher than their second-quarter averages. Taken together, these data suggest that euro-area GDP contracted at a ¾ percent rate in the third quarter, similar to the previous quarter's decline. We expect GDP to contract a further 1 percent in the current quarter, reflecting continued weakness in domestic demand. Both the third- and fourth-quarter declines are now expected to be a little less severe than previously projected.

Since the September Tealbook, European policymakers have made further progress toward providing a credible financial backstop for Italy and Spain, including the inauguration of the European Stability Mechanism and the announcement of more details for the OMT program, the ECB's new bond-buying framework. (See the box "Recent Policy Developments in the Euro Area.") However, uncertainty remains over how forcefully the ECB will use OMTs. Furthermore, Spain and Italy remain reluctant to request official assistance for fear that they will be required to implement additional reforms and submit to intrusive monitoring.

Given these concerns, we expect financial conditions to get moderately worse over the next couple of months before getting better next year after Spain requests assistance, opening the door to OMT purchases of Spanish sovereign debt that ease concerns about Spain and, more generally, about the effectiveness of the financial backstop. We also expect European officials to approve another disbursement of EU–IMF financing for Greece that mitigates the near-term risks of it exiting the euro area. Nevertheless, full resolution of the crisis will likely be protracted, and we continue to expect a very slow recovery. Real GDP is projected to increase just ¼ percent in 2013 and about 1¼ percent in 2014, a bit more than in the previous forecast.

Euro-area headline inflation edged up to 2¼ percent in the third quarter, reflecting higher retail energy prices and a hike in the Spanish value-added tax. Inflation should

Recent Policy Developments in the Euro Area

Financial stresses in Europe eased sharply further in early September (see figures on the next page), as euro-area leaders expanded backstops for vulnerable economies and made progress on financial integration. Subsequently, the improvement in market conditions stalled as the Spanish government failed to request financial support, progress in the establishment of banking union ran into snags, and the deepening euro-area recession elevated political and social tensions in the periphery.

The main positive development in the euro area was the release of details on September 6—a day after the close of the September Tealbook—of the European Central Bank's (ECB's) new sovereign bond market intervention framework, the Outright Monetary Transactions (OMT) program. In this framework, the ECB may purchase a government's bonds in secondary markets once the government obtains a program of assistance from European support facilities and adheres to the program's policy commitments.[1] The ECB announced that its OMT purchases would be conducted with greater transparency and possibly in greater amounts than its previous program for bond market intervention, the Securities Markets Programme. Moreover, the ECB indicated that it would not seek preferential treatment relative to other creditors, should the bonds acquired under OMTs be restructured, which may encourage private creditors to continue participating in the market once OMTs begin.

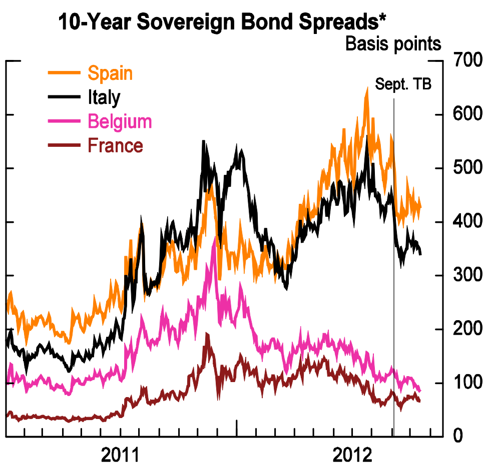
Over the intermeeting period, euro-area authorities also made incremental progress on earlier policy commitments. The European Commission (EC) released a proposal for establishing a single bank supervisory mechanism, the first step in its vision for banking union. In addition, on September 12, a ruling by the German Constitutional Court allowed Germany to ratify the European Stability Mechanism (ESM) treaty, which brought the euro area's permanent backstop facility into force.

However, since mid-September, financial conditions have improved little, on balance, amid doubts about European authorities' determination to follow through on their commitments. Importantly, even as the economic conditions worsen, Spain has delayed requesting the official aid necessary for the ECB to begin OMTs. Spain's reluctance appears to reflect, in part, concerns about the severity of policy conditionality associated with official support, uncertainty over the magnitude of ECB intervention using OMTs, and mixed signals from other European authorities (especially Germany) on their desire to see Spain apply for a program. Despite the introduction of the Spanish government's 2013 budget, with austerity measures worth almost €40 billion and a raft of structural reform plans, the IMF lowered its outlook for Spain and joined a growing consensus that the government will miss its fiscal targets for 2012 and 2013. Reflecting similar concerns, Standard & Poor's downgraded Spain's sovereign rating by two notches to just above junk status.

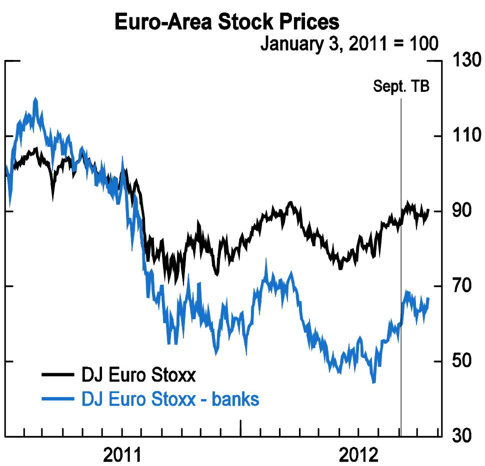
[1] The ECB will only purchase bonds with residual maturity of one to three years. The ECB also indicated that countries already on an EU–IMF program will be eligible only once they regain "full access" to sovereign debt markets, but it is unclear what would constitute full access.

Another factor likely weighing on markets of late has been the slowing of progress toward banking union for the region. The EC's proposal for a single bank supervisory mechanism has been met by disagreement over the division of powers between the ECB, the European Banking Authority, and the national authorities, as well as over which banks would fall under ECB supervision. As was agreed by euro-area leaders in June, without a single supervisory mechanism, the ESM will not be able to recapitalize banks directly. Such direct recapitalization would reduce the fiscal burden on governments of vulnerable euro-area countries with extensive banking-sector problems. European leaders also disagreed over the scope of any potential ESM direct recapitalization of banks, even if the single supervisory mechanism is established. The Dutch, Finnish, and German finance ministers jointly stated that national authorities should remain responsible for "legacy assets" from previous bank interventions—such as the Irish government's bank support in 2010 or forthcoming injections into troubled Spanish banks.

Finally, public discontent with austerity measures has elevated political and social tensions against a backdrop of deepening recession across the periphery. In Spain, rising unemployment has helped fuel public demonstrations against fiscal austerity and increased tensions between the central and regional governments, notably that of Catalonia, Spain's largest regional economy. The new Greek government, elected in June, experienced its first general strike as the unemployment rate rose above 25 percent and as negotiations over the next aid disbursement bogged down amid demands from Greece's official creditors for yet more budget cuts. Even in Portugal, where the EU–IMF program is generally on track, widespread public protests against austerity measures pressured the government into changing the composition of its fiscal plans, replacing some tax hikes with spending cuts.



* Relative to Germany.
Source: Bloomberg.



Source: Bloomberg.

ease to about 1½ percent by early 2013 and stay near that rate through the remainder of the forecast period, as these factors dissipate and the output gap widens.

The ECB left its benchmark policy rate unchanged at 0.75 percent during the intermeeting period. As before, we expect the ECB to lower this rate to 0.5 percent in the next few months and to continue providing significant liquidity support to banks.

United Kingdom

U.K. GDP growth rates were affected by the loss of a working day in June to mark the Queen's Diamond Jubilee, which contributed to a contraction of 1.5 percent in the second quarter and an estimated increase of 2½ percent in the third quarter. Recent indicators suggest that the underlying pace of economic activity has remained subdued, reflecting fiscal austerity and the effects of the euro-area crisis. The third-quarter composite PMI was consistent with stagnation, while confidence indicators stood at low levels. We thus expect only a small gain in real GDP in the current quarter. The gradual resolution of the euro-area crisis and supportive monetary conditions should lift GDP growth to 1¾ percent in 2013 and 2¼ percent in 2014. This outlook is little changed from the September Tealbook.

We expect a hike in tuition fees and higher gasoline prices to boost U.K. inflation to 3¾ percent at an annual rate in the current quarter. Ample spare capacity and the downward slope in projected oil prices should help inflation settle around 1¾ percent thereafter. With inflation likely to undershoot the 2 percent target and a substantial negative output gap, we continue to expect the BOE to expand its quantitative easing program £50 billion to £425 billion (28 percent of GDP) this fall and to maintain the Bank Rate at its current level of 0.5 percent beyond 2014.

Japan

Japanese economic indicators suggest that GDP contracted at about a 1 percent rate in the third quarter, more than the ½ percent decline we had expected. In addition, second-quarter growth was revised down to 0.7 percent from an initial estimate of 1.4 percent. The recent weakness partly reflects softer external demand along with the unwinding of fiscal stimulus measures. Both exports and industrial production fell in July and August, and the September manufacturing PMI was consistent with a further decline in production. However, we expect a small gain in GDP in the current quarter, as private consumption has held up, partly supported by improvements in the labor market.

Boosted by the global recovery, GDP growth should pick up to 1¼ percent in 2013 before falling back to ¾ percent in 2014 in response to a planned consumption tax hike.

We estimate that consumer prices fell at an annual rate of 2 percent in the third quarter, the fastest pace of deflation in nearly two years, largely owing to a drop in food prices. Core prices, by contrast, were nearly flat. As food prices bottom out, we project that inflation will move back up to near zero through the end of 2013 before spiking to 1¾ percent in 2014 on the consumption tax hike. Amid persistent deflation and weakening growth prospects, the BOJ expanded its asset purchase program by ¥10 trillion in early October. We continue to expect a further expansion of the program.

Canada

Recent data are broadly in line with our September Tealbook forecast of an expansion of the Canadian economy at a pace slightly under 2 percent in the second half of 2012. Monthly GDP rose 0.2 percent in July, and the manufacturing PMI remained in expansionary territory through September. Moreover, the economy added a relatively strong 52,000 jobs in September, although the unemployment rate inched up to 7.4 percent because of a substantial increase in labor force participation. As global economic conditions improve, we expect Canadian GDP growth to pick up to 2½ percent by the end of 2013 and to average 2¾ percent in 2014. This projection is a touch stronger than in the September Tealbook, reflecting better U.S. growth prospects.

We estimate that Canadian consumer prices were about flat for a second consecutive quarter in the third quarter in large part due to declines in retail energy prices. With retail energy prices expected to bottom out, we expect inflation to pick up but to remain below 2 percent for most of the forecast period. With inflation contained, we anticipate, as in the previous Tealbook, that the Bank of Canada will keep its target for the overnight rate at 1 percent until mid-2014.

Emerging Market Economies

We now estimate that growth in the EMEs slowed to just under 3½ percent in the third quarter, ½ percentage point below our September Tealbook estimate. The downward revision reflects surprisingly weak exports from emerging Asia, as well as a larger-than-expected decline in U.S. manufacturing production in August, which tempered our estimate of Mexican activity. Brazil is an exception, with third-quarter indicators coming in somewhat stronger than anticipated.

We also reduced our projection for EME growth in the current quarter ½ percentage point to about 3½ percent, reflecting the weakness in external demand as well as a more subdued projection for U.S. manufacturing. We continue to expect real GDP growth to pick up to about 4½ percent in 2013 and to nearly 5 percent in 2014, little changed from the previous Tealbook. This outlook is supported by the gradual recovery in Europe and by an acceleration of activity in the United States.

Inflation, at an annual rate of about 3¼ percent in the third quarter, has been running at a higher-than-expected rate in most EMEs, as food price pressures have remained more elevated than we had anticipated. We expect EME inflation to remain near that rate through the end of the year before easing a little to about 3 percent for much of the forecast period. With growth concerns still prominent, the central banks of Korea, Thailand, and Brazil lowered their policy rates, and we expect further monetary easing in some of the EMEs, notably China, India, and Korea.

China

Chinese data received since the September Tealbook have been somewhat weaker than we had anticipated, largely due to lower external demand. Retail sales and investment growth held up through August, but exports fell in the third quarter. In addition, although the PMI edged higher in September, it stayed under 50 after dipping below that benchmark in August. Consequently, we now estimate that Chinese real GDP expanded at an annual rate of only 7 percent in the third quarter, down almost ½ percentage point from the September projection and about the same as its average pace over the first half of the year. The recent data also suggest somewhat less momentum in the economy, prompting us to mark down growth over the next few quarters as well. We now call for GDP growth to gradually pick up to 8 percent by the fourth quarter of next year and then stay around that pace for the remainder of the forecast, supported by monetary and fiscal policy stimulus and a gradual improvement in global demand. Overcapacity in some sectors, including the property market, and the potential for stresses in the banking sector continue to pose downside risks to our forecast. (For more details, see the "Hard Landing in China" alternative scenario in the Risks and Uncertainty section and the box "Prospects for China's Economy.")

Chinese consumer price inflation was 1¾ percent at an annual rate in the third quarter, ½ percentage point higher than in the previous Tealbook. Headline inflation is expected to pick up to 2½ percent in the current quarter, as food prices appear to have stabilized after falling earlier in the year, and to increase to 3 percent by 2014, as economic activity accelerates and wage growth remains strong. As current inflation rates are within the Chinese authorities' comfort zone, and they remain concerned about near-term economic growth, additional monetary and fiscal stimulus is expected.

Other Emerging Asia

Recent indicators for the rest of emerging Asia also have been softer than expected. Weakness in exports, especially to Europe and the United States, has been particularly pronounced, with third-quarter exports generally below their second-quarter levels. PMIs have also fallen below the 50 benchmark in most countries in the region, and the advance GDP release for Singapore indicated that economic activity contracted in the third quarter. We now estimate that growth in the region dipped to 2¾ percent in the third quarter, and we expect it to remain around this rate in the fourth quarter, compared with 3½ percent in both quarters in the previous projection. However, with the global recovery gaining momentum over the next two years, we project that real GDP growth will pick up to 4 percent next year and to 4¾ percent in 2014.

We estimate that inflation bottomed out at an annual rate of 2¾ percent in the third quarter, slightly higher than we had projected at the time of the September Tealbook. Recent higher-than-expected readings on inflation, especially for food, also have led us to mark up our projection for inflation in the current quarter to nearly 4 percent. However, we continue to expect inflation to step back down to just over 3 percent for the remainder of the forecast period as the food-price cycle plays out.

Latin America

In Mexico, recent indicators point to more subdued activity in the third quarter than we had estimated in the September Tealbook, largely reflecting the recent weakness in U.S. manufacturing. Exports, which have been sluggish since the first quarter, have shown little sign of revival, industrial production has declined, and the PMI has deteriorated slightly. Domestic demand indicators have been more mixed. In response to this information, we revised down our estimate of third-quarter growth to 2½ percent, about ¾ percentage point below our September forecast. Projections for U.S. manufacturing in the current quarter were revised down as well, and we reduced our

Prospects for China's Economy

Chinese GDP growth has slowed significantly from the pace observed during the recovery from the global financial crisis (see the solid black line in the lower-left figure on the next page). We have had a more subdued forecast for Chinese activity than other forecasters (including Consensus Economics and the IMF) for some time, and, in light of the weakness of the most recent indicators, we lowered our outlook further for the October Tealbook. We now project Chinese growth at only 7 percent in the second half of this year and rising slowly to just over 8 percent by 2014. Below we discuss the factors driving our forecast and our assessment of the risk of a more severe slowdown.

Our near-term forecast is importantly influenced by the incoming data on industrial production, retail sales, and imports. A simple regression model based on these data tracks output growth reasonably well (the dashed line in the lower-left figure on the next page). It puts growth in the third quarter at 7½ percent, somewhat above our Tealbook estimate of 7 percent. Some observers, pointing to a sharp drop in the growth of electricity production, have asserted that actual output may have slowed more than indicated by the official GDP data. However, this assertion is contradicted by the fact that the official data continue to be well-predicted by our indicator-based model. Moreover, electricity production contracted more severely than output growth during the global financial crisis, and this pattern may be repeating itself, as manufacturing for export, which is relatively electricity-intensive, has slowed more than other sectors. Finally, the latest data point to a pick up in electricity production.

Further out, we expect Chinese growth to edge back up as the factors that had been depressing growth become more supportive. First, starting in 2010, concerns about overheating led the government to lower ceilings on loan-to-value ratios, clamp down on bank lending, and aggressively tighten monetary policy—it raised banks' required reserve ratios a cumulative 6 percentage points and benchmark lending rates 1¼ percentage points. These policies succeeded in reducing credit growth and cooling the housing market. However, late last year Chinese authorities began to loosen monetary policy, and last month authorities announced approvals for a large number of new infrastructure projects. Credit growth has picked up, and we expect further stimulus over the coming quarters.

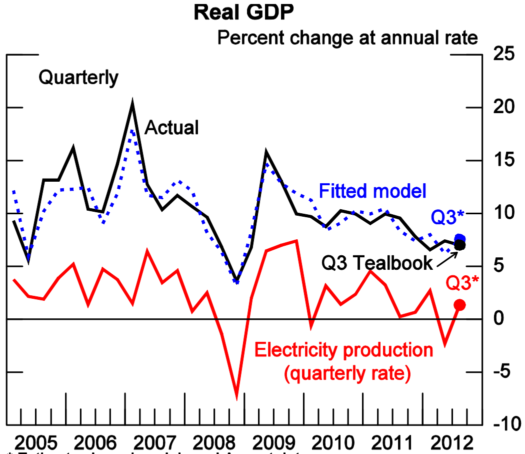
The drag from the external sector, another key factor that has hampered Chinese growth, is also expected to lessen going forward. As a result of the recession in Europe and the anemic performance of the U.S. economy, Chinese exports have continued to weaken over the past year, which has led business-investment spending to decelerate as well (the lower-right figure on the next page). With growth in both the United States and Europe expected to pick up next year, external demand for Chinese output should improve.

In putting together our outlook for China's economy, we continued to consider seriously a few important vulnerabilities. Chief among them is the overcapacity that has emerged in certain sectors. For example, steel production quadrupled over the past decade as China became the world's largest exporter, but the sector is now running at only about 80 percent of capacity, as both domestic and foreign demand have slackened. Arguably, the property market poses even greater risks. Vacant floor space is at an all-time high, there have been anecdotal reports of "ghost cities" (uninhabited new housing developments), and both sales and prices have declined from previous peaks. Finally, either an extended slump in the manufacturing sector or a collapse of the housing market could pose risks to the banking sector, which is burdened by the aftermath of the 2008–09 lending boom. Loans for infrastructure projects are reportedly being rolled over so as not to be declared in default, and the advent of wealth-management products—designed to circumvent the maximum interest rate allowed on deposits—is reportedly leading to riskier investments by banks and weakening the deposit base.

These vulnerabilities all pose the risk of a hard landing for the Chinese economy, and that risk would be demonstrably greater in the event that another adverse shock hit the global economy. However, assuming no such shock occurs, our judgment is that economic growth slowly edging up is still the most likely scenario. First, there are indications that property market conditions have improved, including an uptick in prices, real estate investment, and sales. Second, and more important, over the longer term, Chinese cities are projected to absorb an estimated 20 million people a year from the countryside—keeping up with this urbanization will require the equivalent of constructing more than two cities the size of New York annually. Not only should these needs place a floor under the property market, but they also imply continued strong growth in demand for steel and other manufactures. Third, a property bust, even if it occurred, would likely not trigger a financial crisis: loan-to-value ratios are typically low, commercial banks appear healthy (based on the official statistics, at least), and the government has $3.3 trillion in reserves to support its banks. Finally, in the event of a hard landing, the government also has substantial scope to loosen monetary and fiscal policy. Reserve requirements and interest rates remain well above earlier lows, restrictions on property lending could be loosened, and the consolidated government budget deficit was a mere 1 percent of GDP in 2011.

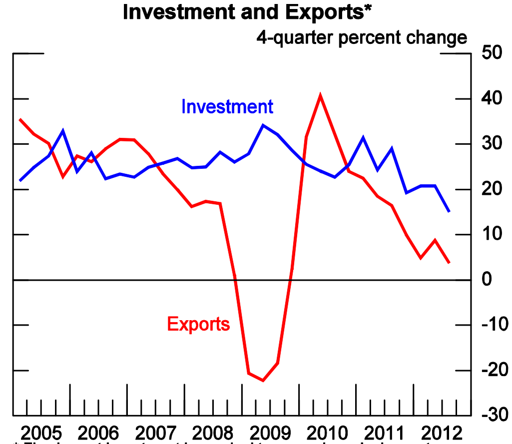
All that said, we do not expect a return of Chinese growth to the double-digit rates of previous years. As a result of declines in labor force growth, reduced investment as the economy rebalances toward consumption, and the slowing typically experienced as economies approach the technological frontier, we estimate that potential growth should edge down from 10 percent before the global financial crisis to less than 7 percent by 2020.

Real GDP



* Estimates based on July and August data.
Source: CEIC and staff estimates.

Investment and Exports*



* Fixed-asset investment in nominal terms and nominal exports deflated by the U.S. price index for imports from China.
Source: CEIC, U.S. Bureau of Labor Statistics, and staff estimates.

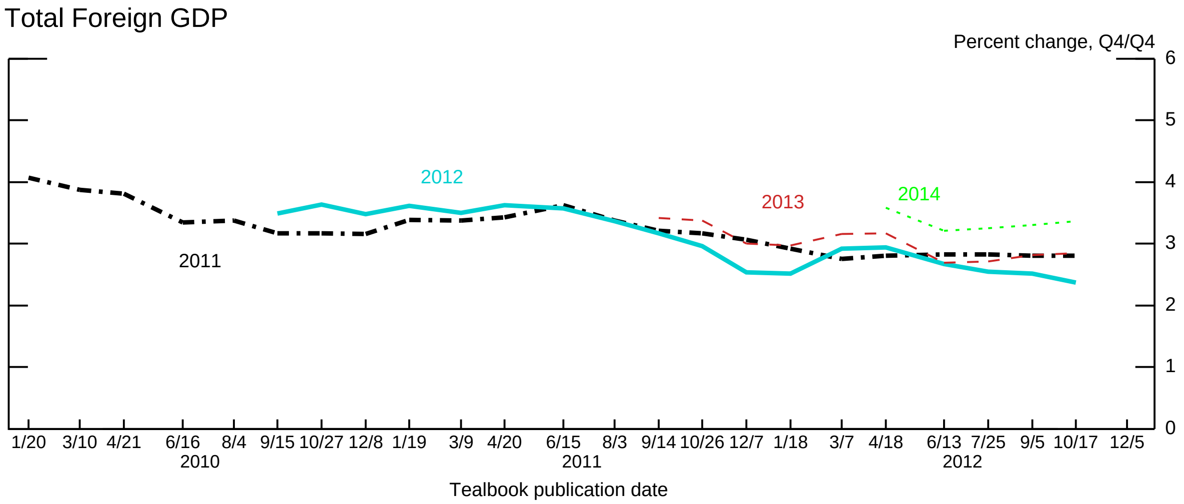
Int'l Econ Devel & Outlook

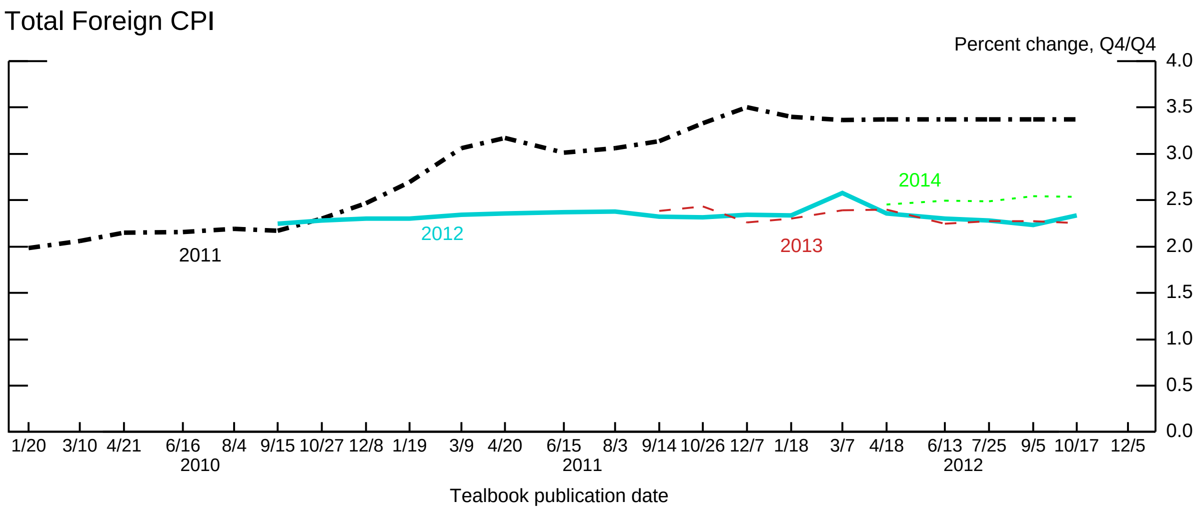
projection for Mexican growth to about 3 percent in response. We expect real GDP growth to average 3¾ percent over the remainder of the forecast period, in line with the projected path of U.S. manufacturing output.

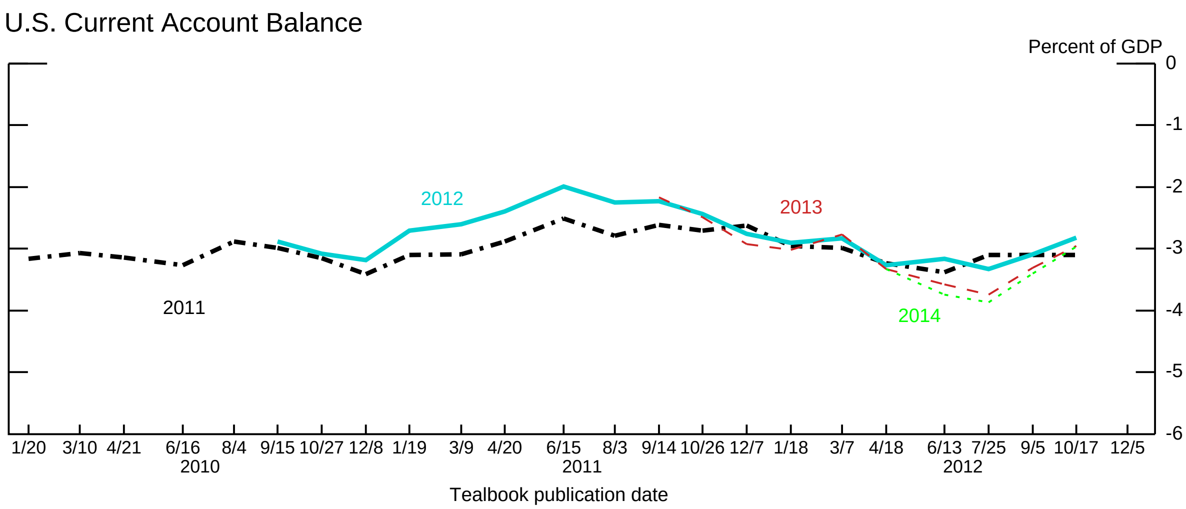
In contrast with other regions, recent data for Brazil and Colombia have been a bit stronger than we had expected, leading us to revise up our estimate for third-quarter growth in South America to 3 percent. In Brazil, favorable readings for the PMI and manufacturing production, along with strong retail sales growth, point to a somewhat more robust recovery of economic activity after several quarters of lackluster growth. We now expect that Brazilian growth will be 3¼ percent in the fourth quarter, about ¼ percentage point higher than our September Tealbook projection. With the economy showing slightly more momentum, we marked up Brazilian growth in 2013 a touch as well. We expect growth to rise gradually throughout the forecast, reaching 4 percent by 2014.

In Mexico, inflation surged to an annual rate of 6½ percent in the third quarter, about 1¼ percentage points above our September Tealbook forecast. While we were expecting the drought in North America and an outbreak of avian flu to push food prices up, the overall effect was larger than we had anticipated. However, we expect food price pressures to subside by the end of the year, bringing inflation down to about 3¼ percent over the remainder of the forecast. Inflation in Brazil also rose sharply, to 7¼ percent in the third quarter, but is expected to drop back and average about 5½ percent over the remainder of the forecast period.

Evolution of Staff's International Forecast







Int'l Econ Devel & Outlook

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Financial Developments

Overall financial conditions became slightly more supportive of economic growth over the intermeeting period. The improvement largely reflected the effects of FOMC communications on the day of the September meeting, which market participants interpreted as indicating that policy would be more accommodative than previously anticipated. Consistent with that reading, market participants now place smaller odds on the first increase in the federal funds rate occuring before 2015, and surveys show that the expected size of the System Open Market Account (SOMA) at the end of 2013 has grown significantly. In addition, incoming data were moderately stronger, on balance, than market participants had expected, reinforcing the somewhat-more-optimistic sentiment in financial markets. On net over the intermeeting period, yields on mortgage-backed securities (MBS) dropped substantially, with some of the decrease passing through to primary mortgage rates. In addition, yields on intermediate- and longer-term Treasury securities were little changed, while yields on corporate bonds fell. Broad equity indexes were up a little on net. Inflation compensation ended the period modestly higher, and the dollar depreciated some.

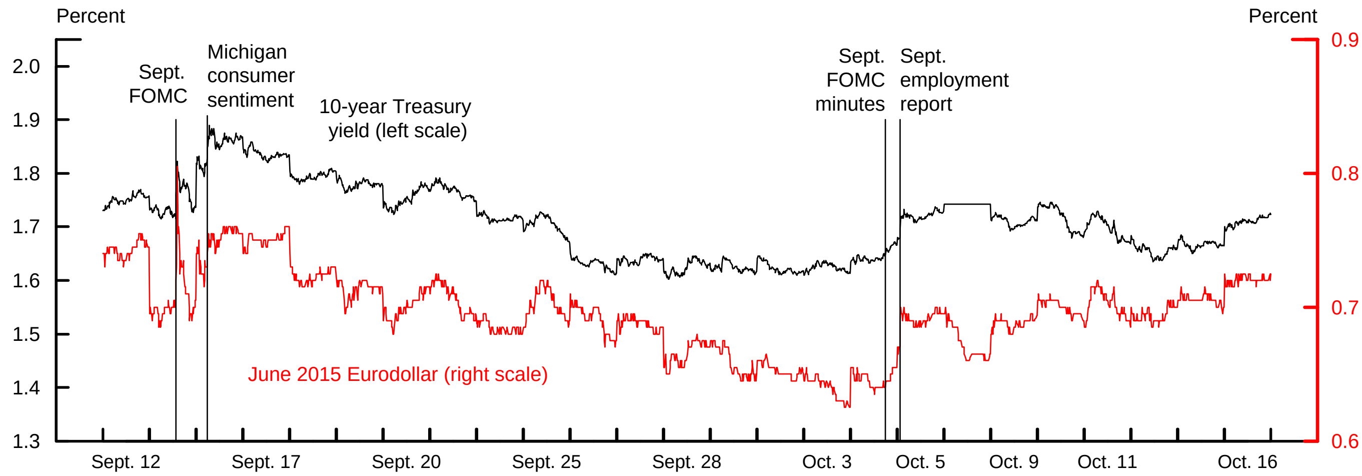
Recent trends in household and business debt in the United States generally continued over the intermeeting period, with some indicators suggesting a modest acceleration in the overall demand for credit. Residential mortgage refinancing activity has picked up further in recent weeks, but it remains below the level that would normally be expected given current mortgage rates. Consumer credit continued to expand, with solid growth in student and auto loans. Corporate bond issuance was robust over the intermeeting period, but net issuance of commercial paper (CP) slowed. Total loans held by commercial banks rose modestly in the third quarter, consistent with the October Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), in which domestic banks continued to report having eased their lending standards and experienced increased demand across most loan categories on net (see appendix). M2 grew at a relatively strong pace in September, led by gains in liquid deposits.

Policy Expectations and Treasury Yields

Despite some intitial volatility, the financial market reaction to the September FOMC statement was broadly consistent with an increase in monetary policy

Policy Expectations and Treasury Yields

Selected Interest Rates

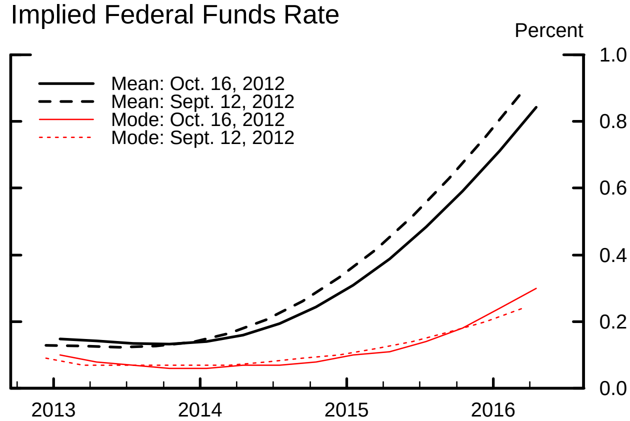


Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.
Source: Bloomberg.

Inflation Compensation

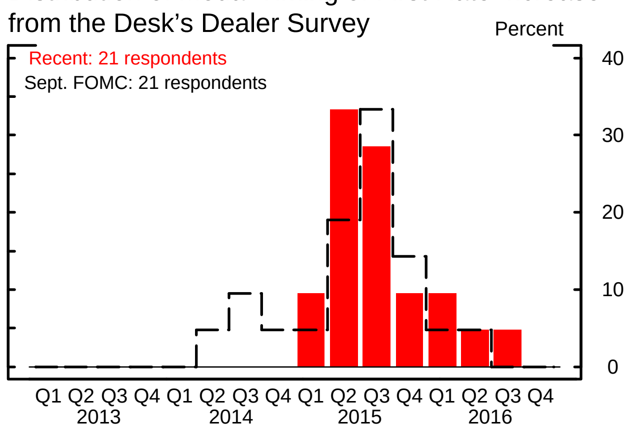
Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.
*Adjusted for the indexation-lag (carry) effect.
Source: Barclays PLC and staff estimates.

Implied Federal Funds Rate



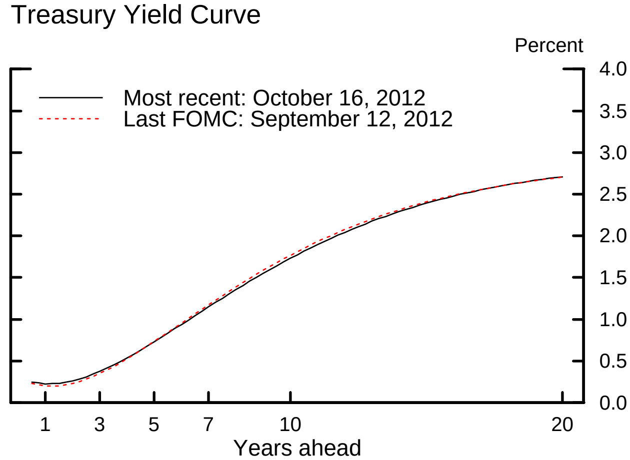
Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.
Source: Bloomberg and CME Group.

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



Source: Desk's dealer survey from October 15, 2012.

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.

Financial Developments

accommodation. (See the box "Market Reaction to the September 2012 FOMC Communications.") Nominal Treasury yields had moderate fluctuations, rising in the wake of the meeting but ending the intermeeting period about unchanged, on net, even as the tone of economic data releases improved in recent weeks. The September FOMC minutes were largely in line with expectations, and their release elicited little market reaction.

Real yields on Treasury inflation-protected securities (TIPS) decreased somewhat, leaving inflation compensation over the next five years and five years ahead up about 10 basis points over the intermeeting period. Anecdotal reports suggested that investors' perceptions of a more accommodative stance of monetary policy and slightly better-than-anticipated economic data releases contributed to the uptick. However, swaps- and caps-based measures of inflation compensation registered smaller increases over the period, and survey measures of inflation expectations were flat or down a little, suggesting that inflation expectations remain well anchored.

On net over the intermeeting period, the expected path of the federal funds rate derived from OIS rates shifted down beyond mid-2014 and now moves above the current target range in the fourth quarter of 2014, about one quarter later than before the September FOMC meeting. The modal policy path—the most likely values for future federal funds rates based on caps-implied risk-neutral distributions—remains within the current target range through the first quarter of 2016, about the same as before the previous meeting.[1] Market-based measures of policy uncertainty over the next few years declined over the period, likely in part because of the enhanced forward guidance in the FOMC statement.

Results from the Open Market Desk's latest survey of primary dealers showed a rightward shift in expectations for the timing of the first increase in the federal funds rate target, as none of the dealers expect an increase prior to the first quarter of 2015, compared with about one-fifth in the previous survey. Dealers still view the third quarter of 2015 as the most likely time of the first increase in the target rate. They indicate that by that time, the unemployment rate is expected to be 6.8 percent and the inflation rate 2.0 percent, but with a skew toward somewhat higher levels of inflation at the time of the

[1] The effective federal funds rate averaged 15 basis points over the intermeeting period, with the intraday standard deviation averaging about 4 basis points.

Market Reaction to the September 2012 FOMC Communications

Investors saw the September 2012 FOMC decision as providing more accommodation than they had expected, and financial conditions eased as a result. In particular, as shown in the table on the next page, between 12:15 p.m. and 4:00 p.m. on the day of the FOMC statement's release, yields on agency mortgage-backed securities (MBS) declined up to 50 basis points, the S&P 500 index increased 1.6 percent, and the broad nominal index of the dollar fell ½ percent. TIPS yields declined up to 10 basis points; yields on nominal Treasury securities were about unchanged, on net, implying an increase in inflation compensation.[1] These changes occurred despite the fact that market participants had placed high odds on the FOMC taking some action at the meeting.

Market commentary following the meeting and the Chairman's press briefing highlighted both the announcement of additional open-ended purchases of agency MBS and the language in the statement indicating that asset purchases will continue until the outlook for the labor market substantially improves. According to special Open Market Desk surveys of primary dealers conducted before and after the meeting, the median expectation of the most likely levels of Treasury and agency MBS holdings at the end of 2013 increased about $100 billion and $275 billion, respectively.[2] These revisions to expectations brought the median expected increase in total SOMA holdings through 2013 to $925 billion.[3]

Market participants had largely priced in the extension of the forward guidance to mid-2015. However, postmeeting commentary suggested that some market participants viewed the sentence stating that the Committee expects "a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens" as a signal of more accommodative policy than they had expected. Overall, the expected path of the target federal funds rate was little changed on the day, although the reaction of interest rate options (not shown) suggested a modest reduction in uncertainty about the target rate two or more years ahead.

The initial increase in inflation compensation, which was largest at shorter maturities, was reportedly driven in part by an interpretation of the FOMC statement as placing relatively greater emphasis on the employment side of the dual mandate and indicating a greater willingness to temporarily tolerate above-target inflation than had previously been perceived. A portion of the increase may have also reflected improvements in the economic

[1] Immediately following the statement's release, Treasury yields rose sharply, reportedly primarily because of disappointment that incremental purchases of Treasury securities were not announced. These moves retraced over the day, as investors apparently reassessed the likelihood of additional Treasury purchases after year-end.

[2] The first special survey was conducted on September 7, after the weaker-than-expected nonfarm payrolls report; the second special survey was conducted the week after the FOMC meeting. The post-payrolls survey asked only about expected holdings at the end of 2012 and 2013. However, the postmeeting survey showed that median expected holdings peak in 2013, so expectations at that horizon likely provide a reasonable indication of the changes in expected purchase amounts.

[3] Results from the Desk's latest survey, conducted the week of October 15, show that median expected purchases through 2013 have since increased about $100 billion.

outlook and risk sentiment resulting from the policy action, and an associated reversal of flight-to-quality flows into nominal Treasury securities. Measures of inflation compensation increased further the day after the meeting (not shown), as market participants continued to assess the FOMC communications, but these increases largely retraced over the subsequent week.[4]

As reflected in the second column of the table, the changes in yields and prices around the statement's release were largely sustained over the following week, even as market participants continued to consider the implications of the Committee's statement. MBS yields fell further, corporate bond spreads narrowed, forward inflation compensation increased a bit, and crude oil prices dropped sharply.[5] Primary mortgage rates (not shown) declined several basis points the week following the meeting and have continued to move lower since, consistent with a gradual adjustment to changes in MBS yields.

Yield and Price Changes around the September 2012 FOMC

	One-day	One-week
5-year nominal	0	4
10-year nominal	2	5
5-year TIPS	-10	-4
10-year TIPS	-5	-5
5-year inflation compensation	10	8
5-year, 5-year forward inflation compensation	4	13
1-year OIS 3-years forward	-3	-1
3.5 percent coupon MBS yield+	-50	-68
3.5 percent coupon MBS OAS+	-30	-43
BBB nonfinancial corporate bond spread#	0	-11
HY nonfinancial corporate bond spread#	-1	-10
S&P500 (percent)	1.6	1.6
Broad nominal dollar index (percent)	-0.5	-0.5
Front-month crude oil (percent)	0.9	-5.4

Note: One-day changes are from 12:15 p.m. to 4:00 p.m. on September 13. One-week changes are from 12:15 p.m. on September 13 to 4:00 p.m. on September 20. Changes are in basis points. Nominal Treasury and TIPS yields are for on-the-run securities.

+ Fannie Mae 30-year; option-adjusted spread (OAS) to Treasury securities. Changes are from end-of-day September 12 to end-of-day September 13.

Derived from smoothed yield curves using Merrill Lynch bond data; spread to the 10- year Treasury yield. Changes are from end-of-day September 12 to end-of-day September 13.

Source: For 3.5 percent coupon MBS yield and OAS, Barclays; for BBB and HY nonfinancial corporate bond spreads, Merrill Lynch; for all others, Bloomberg.

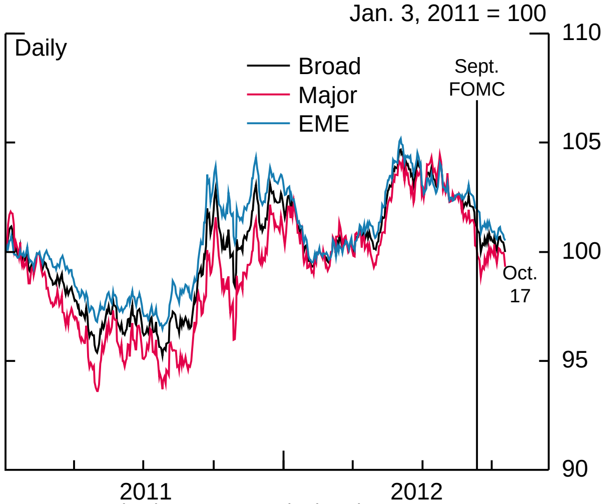
[4] The risk-neutral distributions of headline CPI inflation over the next 5 and 10 years derived from inflation caps and floors shifted to the right in almost parallel fashion on the day of and day after the statement's release, with the means of the distributions mirroring the moves in TIPS- and swaps-implied inflation compensation and little change in their variances or skewness.

[5] The decline in crude oil prices was largely driven by signals from Saudi Arabia that it would work to moderate prices.

Financial Developments

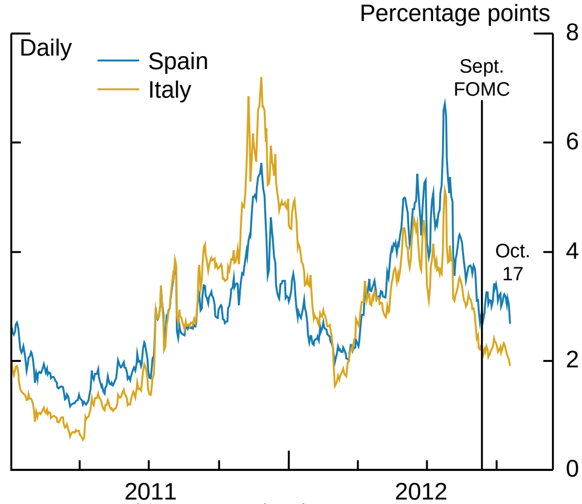
Foreign Developments

Dollar Exchange Rates



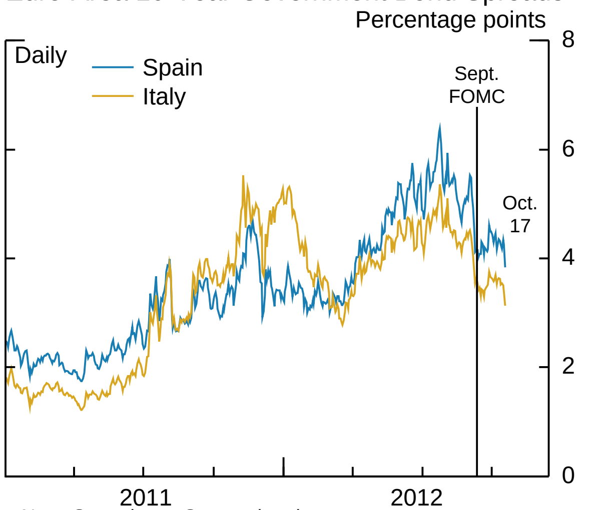
Source: Federal Reserve Board; Bloomberg.

Euro-Area 2-Year Government Bond Spreads



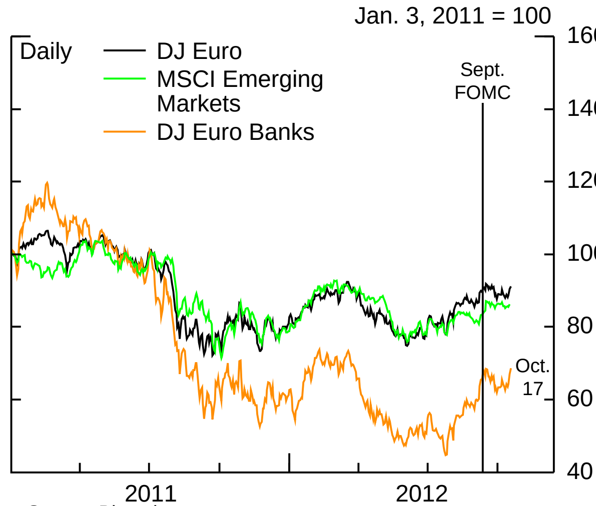
Note: Spread over German bunds.
Source: Bloomberg.

Euro-Area 10-Year Government Bond Spreads



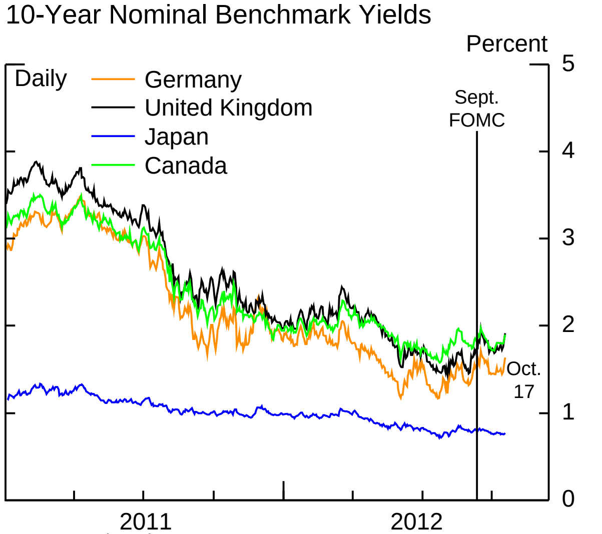
Note: Spread over German bunds.
Source: Bloomberg.

Stock Price Indexes



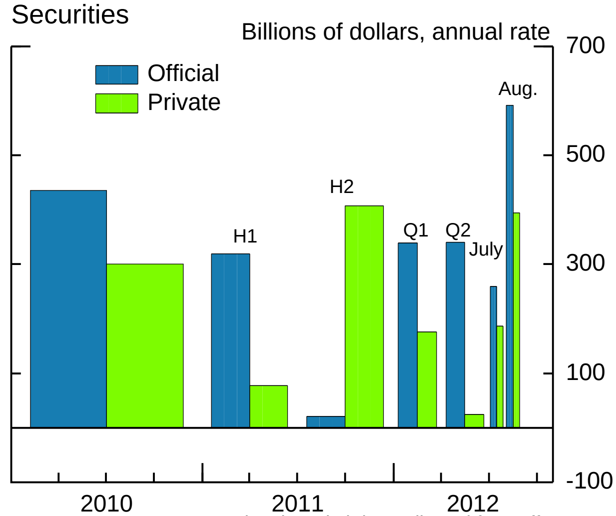
Source: Bloomberg.

10-Year Nominal Benchmark Yields



Source: Bloomberg.

Foreign Net Purchases of U.S. Treasury Securities



Source: Treasury International Capital data adjusted for staff estimates. August data are embargoed until October 16, 2012.

first rate increase. Dealers expect the monthly pace of Federal Reserve purchases for the next three meetings—extending through the first quarter of next year—to be $45 billion of Treasury securities and $40 billion of agency MBS, and they view the first quarter of 2014 as the most likely time for the end of these purchases. Compared with the regular September dealer survey, dealers have revised up the expected amount of Treasury and MBS holdings in the SOMA through the end of 2013 by about $410 billion and $330 billion, respectively. At the upcoming meeting, dealers expect no material changes to either the economic assessment or the policy stance.

Over the intermeeting period, the Desk purchased $85 billion in agency MBS, reflecting both the new open-ended MBS purchases announced at the September meeting and the ongoing program of reinvestment of agency debt and agency MBS principal payments. MBS yields declined significantly over the intermeeting period, as did the option-adjusted spread relative to Treasury securities. Some measures pointed to strains in the agency MBS market for a short time after the FOMC announcement, with bid–asked spreads widening temporarily and implied financing rates for dollar rolls falling to more-negative levels.[2] However, trading conditions normalized over subsequent days as the market's expectations for purchases and originations firmed. Settlements of the Federal Reserve's MBS purchases will ramp up over coming months, and market participants reportedly anticipate that the Desk would initiate additional dollar rolls in order to facilitate the settlement of purchases should any pressures emerge in the market. Separately, the Desk's outright purchases and sales of Treasury securities under the maturity extension program continued as planned and did not appear to have any material adverse effect on Treasury market functioning. (See the box "Balance Sheet Developments over the Intermeeting Period.")

Foreign Developments

The staff's broad nominal index of the foreign exchange value of the dollar depreciated ½ percent immediately after the September FOMC announcement. Since then, the dollar is little changed, on balance, as it subsequently appreciated against most advanced-economy currencies but fell further against the emerging Asian currencies. In

[2] The Desk may use dollar rolls to facilitate settlements associated with its unsettled agency MBS purchases. Dollar roll sales affect the timing or composition of the settlement of the Federal Reserve's agency MBS purchases, effectively postponing the settlement for up to three months after the initial settlement date.

Balance Sheet Developments over the Intermeeting Period

Over the intermeeting period, total assets of the Federal Reserve were little changed on net (see the table on the next page).

Since the September FOMC meeting, the Open Market Desk conducted 23 operations as part of the maturity extension program: The Desk purchased $56 billion in Treasury securities with remaining maturities of 6 to 30 years and sold or allowed to mature without reinvestment $40 billion in Treasury securities with remaining maturities of 3 years or less.[1] Since the maturity extension program was announced in September 2011, the average maturity of the Federal Reserve's Treasury holdings has risen from 6.1 years to 9.8 years. In addition, the Desk purchased $85 billion in agency MBS as part of both the new open-ended MBS purchases announced at the September FOMC meeting and the ongoing reinvestment program of agency debt and agency MBS principal payments. The majority of the purchases was in MBS with a 3 percent coupon. Given conventions in the MBS market, settlement of the transaction lags the trade by as much as a couple of months, and the settlement of the purchases to date will be spread across October, November, and December. The Desk also purchased a small amount in newly issued 2.5 percent coupon 30-year MBS and 2.0 percent coupon 15-year MBS. Of the MBS purchases since the September FOMC meeting, $10 billion have settled. The Desk sold $4 billion in MBS dollar rolls over the intermeeting period, reflecting the strains that temporarily emerged following the announcement of the new MBS purchases.[2]

Other assets changed only slightly. Foreign central bank liquidity swaps declined $7 billion to $13 billion, reflecting almost entirely a decrease in draws by the ECB. The net portfolio holdings of Maiden Lane III LLC decreased $2 billion following the September distribution of cash proceeds generated from sales of the remaining securities, which were completed on August 23, 2012. The remaining cash balance represents reserves held to meet trailing expenses and other obligations. The net portfolio holdings of Maiden Lane LLC and Maiden Lane II LLC were unchanged, as were the loans outstanding under the Term Asset-Backed Securities Loan Facility.

Liabilities on the Federal Reserve's balance sheet increased a bit. Reserve balances of depository institutions decreased slightly less than the increase in the U.S. Treasury's General Account.

[1] A sale of $8 billion conducted on September 12, 2012, is reflected in the table but not in the text, as the settlement occurred on September 13, 2012. A purchase of $5 billion conducted on October 15, 2012, is reflected in the text but not in the table, as the settlement will occur on October 16, 2012. A purchase of $5 billion conducted on October 16, 2012, is reflected in the text but not in the table, as the settlement will occur on October 17, 2012.

[2] The Desk may use dollar rolls to facilitate settlements associated with its unsettled agency MBS purchases. Dollar roll sales affect the timing or composition of the settlement of the Federal Reserve's agency MBS purchases, effectively postponing the settlement up to three months after the initial settlement date.

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (10/15/12)
Total assets	**4**	**2,829**
Selected assets:		
Liquidity programs for financial firms	-7	13
Primary, secondary, and seasonal credit	-0	+0
Foreign central bank liquidity swaps	-7	13
Term Asset-Backed Securities Loan Facility (TALF)	-0	1
Net portfolio holdings of Maiden Lane LLCs	-2	2
Maiden Lane	-0	2
Maiden Lane II	-0	+0
Maiden Lane III	-2	+0
Securities held outright*	4	2,586
U.S. Treasury securities	-2	1,649
Agency debt securities	-4	83
Agency mortgage-backed securities	10	854
Total liabilities	**4**	**2,774**
Selected liabilities:		
Federal Reserve notes in circulation	9	1,093
Reverse repurchase agreements	6	99
Foreign official and international accounts	9	99
Others	-3	0
Reserve balances of depository institutions**	-24	1,478
Term deposits held by depository institutions	0	0
U.S. Treasury, General Account	38	77
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	-27	7
Total capital	**+0**	**55**

Note: +0 (-0) denotes positive (negative) value rounded to zero.
* Par value.
** Includes overdrafts.

Financial Developments

particular, Chinese authorities have allowed the renminbi to appreciate 1 percent against the dollar. The recent appreciation of the dollar against the advanced-economy currencies reflected not only a modest resurgence in safe-haven flows amid some further concerns about the European situation, but also policy easing abroad. Both the Bank of Japan (BOJ) and the Reserve Bank of Australia (RBA) surprised market participants: The RBA cut its policy rate 25 basis points, and the BOJ announced a ¥10 trillion (about $128 billion) expansion of its asset purchase program. The BOJ cited foreign exchange market developments as a key risk to the economy and expressed concerns over a prospective global slowdown. The central banks of both Brazil and Korea also eased policy.

After declining significantly since late July, including between the date when the September Tealbook was completed and the subsequent FOMC meeting, the improvement in Spanish and Italian sovereign spreads stalled, in large part reflecting uncertainties about whether the Spanish government will request a package of financial assistance, which in turn would open the door for Spanish sovereign debt to be purchased by the European Central Bank under its newly announced Outright Monetary Transactions program. Standard & Poor's downgraded the Spanish government's bond rating to the lowest investment-grade rating, and the Bank of Spain warned that the country's recession was deepening, which could threaten next year's fiscal targets. The Spanish budget deficit this year is projected to reach 7.4 percent of GDP, well above its 6.3 percent target, partly because of the government's prior bank recapitalization commitments. Additional capital needs for Spanish banks, according to an independent stress test, were estimated to be somewhat less than €60 billion, in line with expectations.

Headline equity indexes for foreign economies rose after the September FOMC statement but subsequently retraced those gains in some markets, ending the intermeeting period slightly lower in the euro area and Japan but higher in most emerging markets. Along with U.S. Treasury yields, 10-year sovereign yields in Germany and the United Kingdom rose early in the period and then subsequently declined.

Foreign demand for U.S securities was robust during July and August, especially for Treasury securities, according to the latest TIC data. Private foreign investors increased their purchases of Treasury securities relative to the first half of the year, and their appetite for U.S. corporate securities rebounded somewhat, with a resumption of small net purchases of U.S. equity and corporate bonds. Foreign official investors acquired Treasury securities at a strong pace in July and August. Data on custody holdings at the Federal Reserve Bank of New York indicate that after a temporary slowdown in September, official inflows picked up in the first half of October.

FINANCIAL INSTITUTIONS AND SHORT-TERM FUNDING MARKETS

Indicators of the condition of domestic financial institutions improved over the intermeeting period. Indexes of equity prices for those institutions ended the period modestly higher. Both spreads on longer-term senior unsecured debt and CDS spreads for large financial institutions have declined in recent months, reportedly because of a reduced perception of tail risk from the European sovereign debt crisis. The third-quarter earnings of large bank holding companies that have reported to date have been roughly in line with expectations, on balance, with strong investment banking and trading income offset by generally weaker net interest margins.

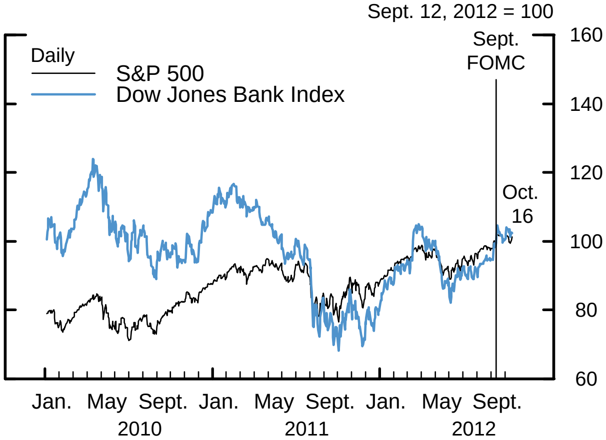
Conditions in unsecured short-term dollar funding markets appeared to improve some over the intermeeting period. LIBOR–OIS spreads continued to edge down, as did the spread between the rates implied by the three-month forward rate agreement and the OIS rate three to six months ahead—a forward-looking measure of potential funding pressures. The forward measure exhibited some volatility in advance of *The Wheatley Review of LIBOR: Final Report,* commissioned by the United Kingdom's Chancellor of the Exchequer; the report investigates and recommends potential improvements for determining LIBOR.[3] The average maturity of unsecured financial CP issued by institutions with European parents increased over the intermeeting period to about the same as that of such CP issued by institutions with U.S. parents. The amount of outstanding European unsecured financial CP was little changed on net. Dollar borrowing from the ECB funded by the Federal Reserve's swap line fell further from $19.5 billion to $12 billion.

In secured funding markets, repo rates increased further, on balance, over the intermeeting period across collateral types eligible for open market operations. Market participants continue to attribute the firmness in Treasury general collateral repo rates to

[3] Market participants reportedly viewed the recommendations in the final report as largely incremental changes to both the constituency of the LIBOR panel and the methodology for determining rates that were unlikely to affect LIBOR fixings in the near to medium term. It is currently unclear when, or if, any of these recommendations will be implemented.

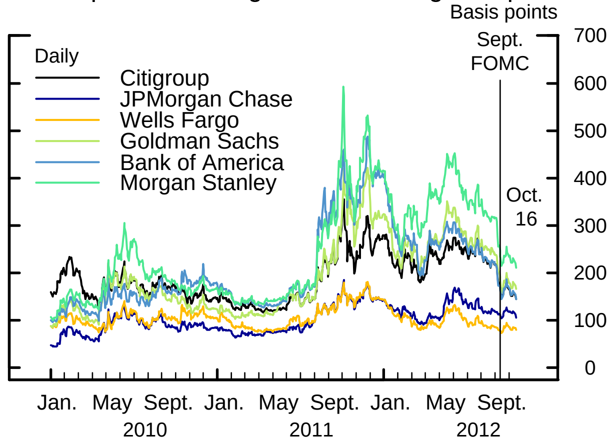
Financial Institutions and Short-Term Dollar Funding Markets

Stock Prices



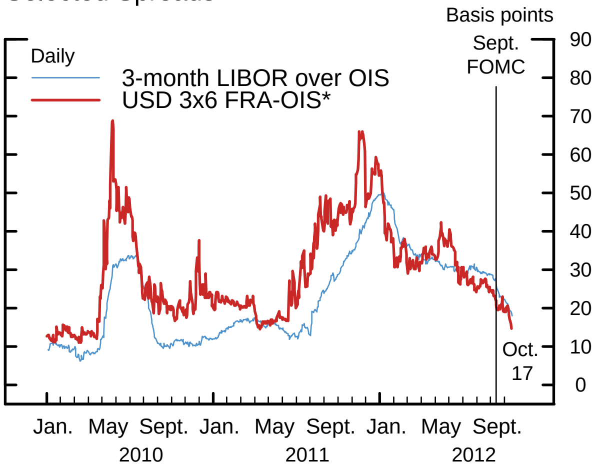
Source: Bloomberg.

CDS Spreads of Large Bank Holding Companies



Source: Markit.

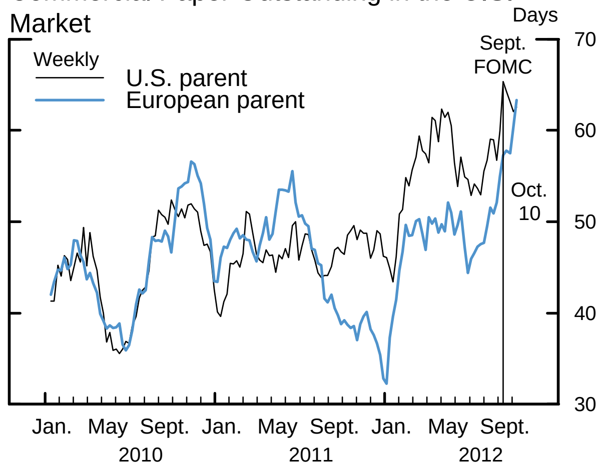
Selected Spreads



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

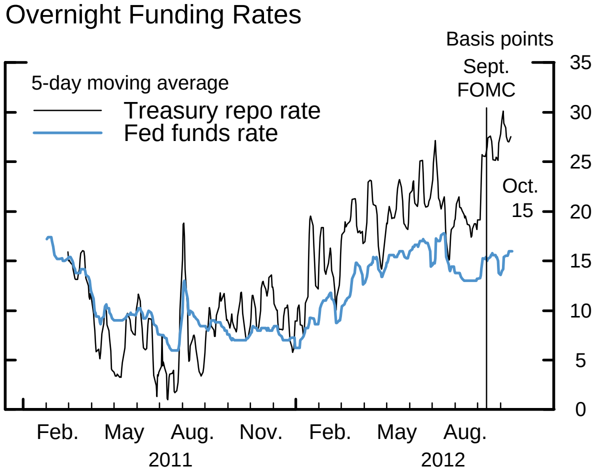
Source: Bloomberg.

Average Maturity for Unsecured Financial Commercial Paper Outstanding in the U.S. Market



Source: Federal Reserve Board staff calculations based on data from the Depository Trust & Clearing Corporation.

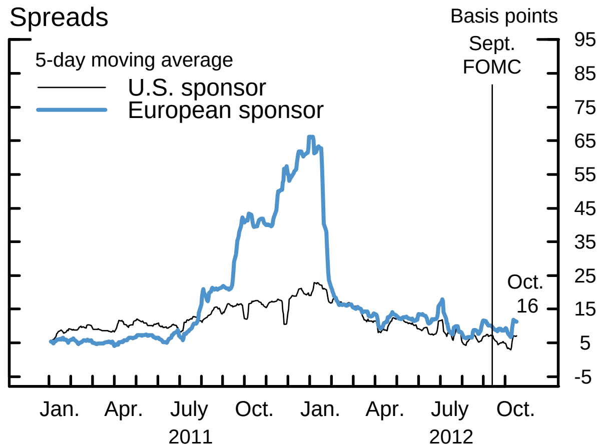
Overnight Funding Rates



Note: Weighted average of interest rates paid on general collateral finance (GCF) repurchase agreements (repos) based on Treasury securities.

Source: Depository Trust & Clearing Corporation.

Asset-Backed Commercial Paper Overnight Spreads



Note: Spreads computed over the AA nonfinancial unsecured rate.

Source: Depository Trust & Clearing Corporation.

elevated collateral supply and possibly to constraints on dealer balance sheets. Futures quotes indicate that market participants expect repo rates to decline over early 2013, an expectation perhaps related in part to the expiration of unlimited insurance on transactions accounts, which could cause some investors to move cash from bank deposits into the repo market. In asset-backed commercial paper (ABCP) markets, amounts outstanding have remained stable for programs with sponsors domiciled in Europe and have edged down for those with sponsors domiciled in the United States. Overnight spreads on ABCP are little changed, on net, and spreads on most European ABCP remain close to those on U.S. issues.

Other Domestic Asset Market Developments

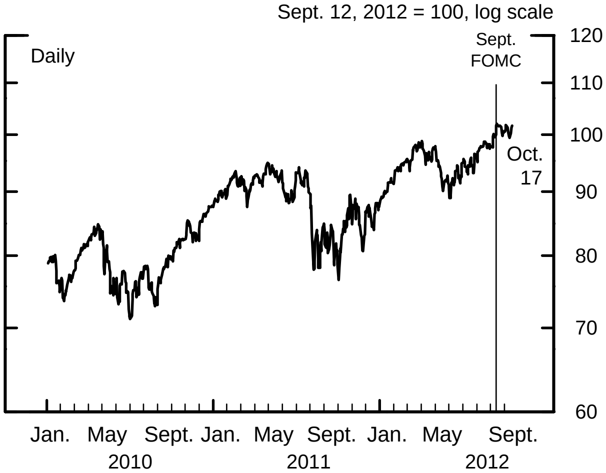
Broad equity price indexes are a little higher, on balance, over the intermeeting period, as gains following the September FOMC meeting and generally better-than-expected economic data releases have been muted by concerns about corporate profitability. The equity premium—as measured by the spread between the expected real equity return for the S&P 500 index and the real 10-year Treasury yield—remains very elevated by historical standards and was little changed over the period. The VIX, an index of option-implied one-month-ahead volatility for the S&P 500 index, fell notably following the September FOMC announcement but ended the period only a little lower.

With the reporting season for third-quarter earnings just having started, a forecast of aggregate operating earnings per share for firms in the S&P 500 index constructed from private-sector analysts' expectations suggests only slight growth from second-quarter levels. Moreover, forecasts of meager growth in profits are broad based across sectors. Looking forward, an index of revisions to analysts' forecasts of year-ahead earnings for S&P 500 firms was little changed in the four-week periods ending in mid-September and mid-October.

Yields on investment-grade corporate bonds reached a record low level during the intermeeting period, and their spreads to yields on comparable-maturity Treasury securities narrowed, on net, but remained somewhat elevated compared with their recent lows in the first half of 2011. Yields and spreads on speculative-grade corporate bonds also decreased. Spreads of rates on A2/P2-rated unsecured CP issued by nonfinancial firms over those on AA-rated nonfinancial issues were about flat, on net, over the period. Secondary-market prices for leveraged loans edged up slightly.

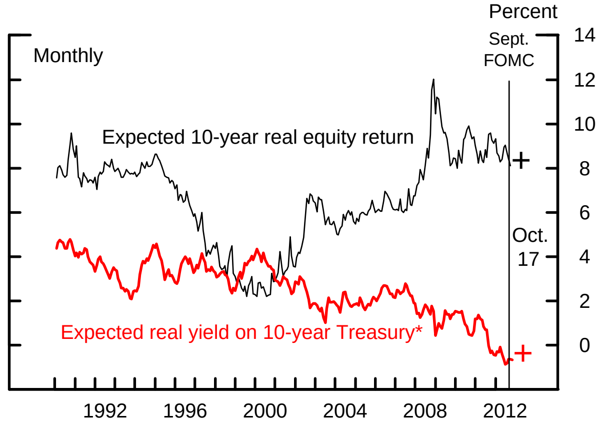
Other Domestic Asset Market Developments

S&P 500 Stock Price Index



Source: Bloomberg.

Equity Risk Premium

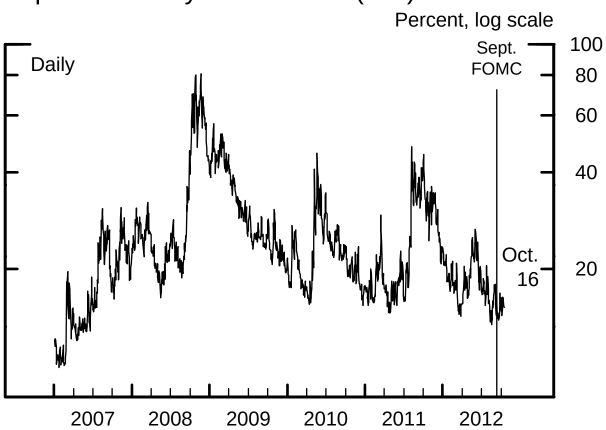


* Off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation.

\+ Denotes the latest observation using daily interest rates and stock prices and latest earnings data.

Source: Thomson Financial.

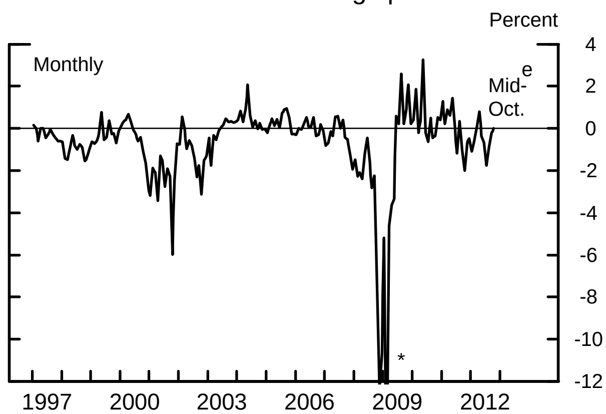
Implied Volatility on S&P 500 (VIX)



Note: Option-implied one-month-ahead volatility on the S&P 500 index.

Source: Chicago Board Options Exchange.

Revisions to S&P 500 Earnings per Share



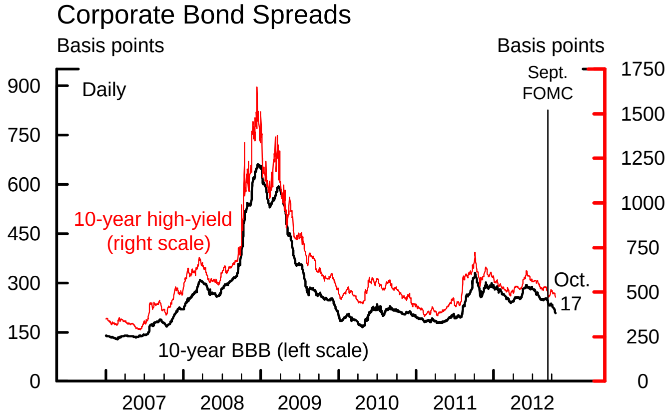
Note: Weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share.

e Estimate.

* EPS revision is -17.22 percent in Feb. 2009.

Source: Thomson Financial.

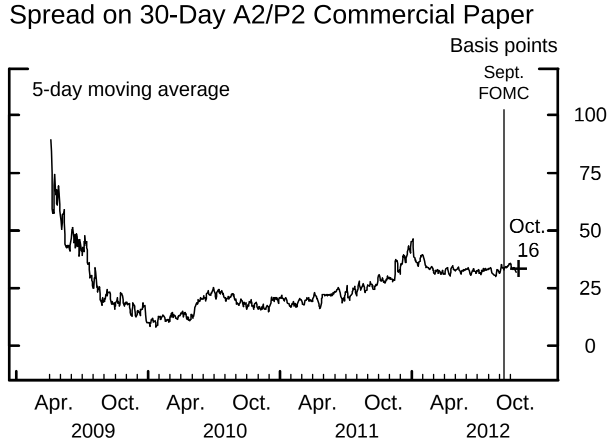
Corporate Bond Spreads



Note: Spreads are measured relative to a smoothed nominal off-the-run Treasury yield curve.

Source: Merrill Lynch and staff estimates.

Spread on 30-Day A2/P2 Commercial Paper



Note: The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.

\+ Denotes the latest available single-day observation.

Source: Depository Trust & Clearing Corporation.

Financial Developments

BUSINESS FINANCE

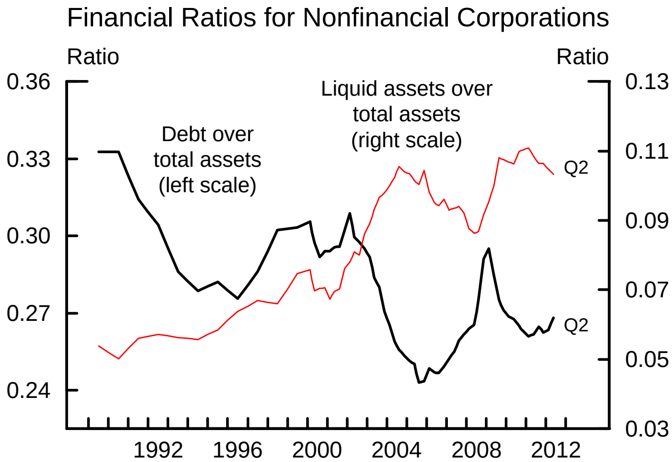
On balance, the credit quality of nonfinancial corporations remained solid, although a few indicators have weakened a little in recent months. In the second quarter, the aggregate liquid asset ratio for such firms was still near its highest level in more than 20 years, while the aggregate ratio of debt to assets has been trending up but remained well below its average for the same historical period. Moreover, the six-month trailing bond default rate for nonfinancial firms stayed low in September, as did the expected year-ahead default rate for nonfinancial firms from the Moody's KMV model. However, the volume of nonfinancial corporate bonds that were downgraded by Moody's, although modest overall, exceeded the volume of such bonds that were upgraded in the third quarter, an event last seen in the third quarter of 2009. The ratings downgrades were concentrated among speculative-grade issues.

The pace of investment- and speculative-grade bond issuance by nonfinancial firms picked up significantly in September from the already robust pace seen in previous months. Many issuers reported that they intended to use the proceeds to pay down other debt. Indeed, the volume of nonfinancial CP outstanding contracted as some issuers reportedly refinanced into longer-maturity bonds. Growth in C&I loans at commercial banks was slower in September than its robust pace earlier in the year.

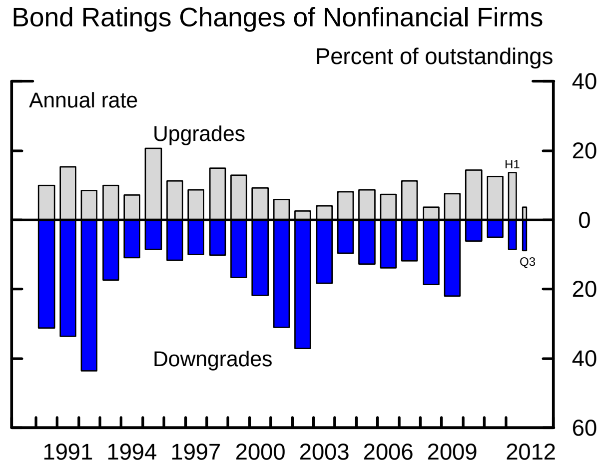
Leveraged-loan issuance through the first three quarters of 2012 lagged the pace seen over the same period in 2011 but nonetheless remained solid. Interest on the part of institutional investors has stayed particularly strong. For example, issuance of loans to collateralized loan obligations (CLOs) has continued apace, and the volume of CLO issuance during the first half of this year exceeded the level reached for all of 2011. Market participants have noted that a robust appetite for syndicated loans by institutional investors has resulted in a progressive easing of price and nonprice terms (including covenants and deal leverage), reminiscent of the dynamics last seen in the first half of 2011 before the European fiscal crisis intensified.

Robust share repurchases and cash-financed merger activity left net equity issuance deeply negative in the second quarter. The pace of gross public equity issuance by nonfinancial firms picked up some in September from the lackluster levels observed in prior months, but overall issuance in the third quarter remained subdued compared with the first half of 2012. Cash merger completions and announcements continued to be strong in the third quarter, but announcements of new repurchase programs slowed.

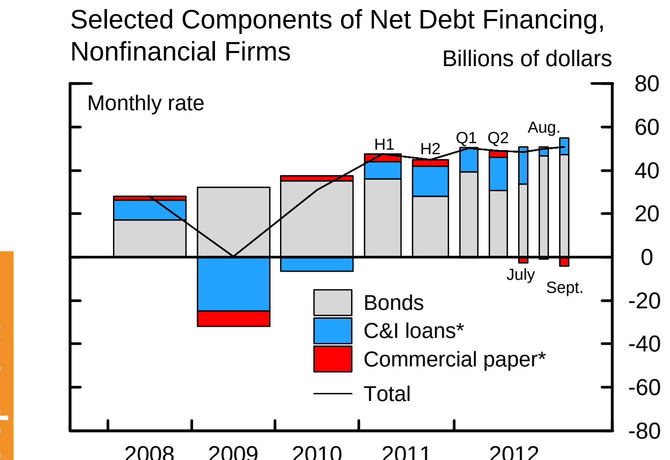
Business Finance



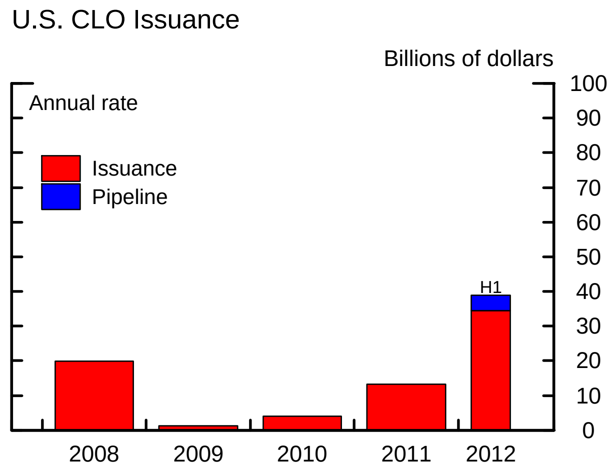
Note: Data are annual through 1999 and quarterly thereafter.
Source: Compustat.



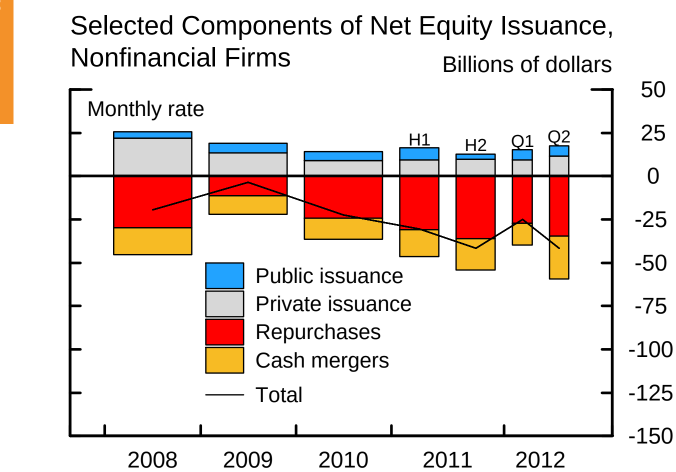
Source: Calculated using data from Moody's Investors Service.



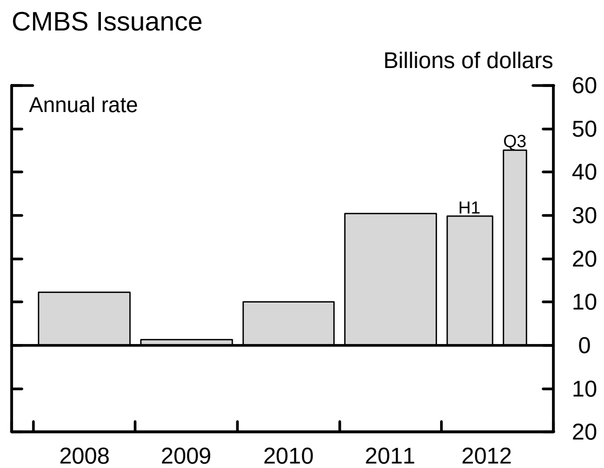
* Period-end basis, seasonally adjusted.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.



Note: CLO is collateralized loan obligation.
Source: Thomson Reuters LPC LoanConnector.



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



Note: CMBS is commercial mortgage-backed securities.
Source: Commercial Mortgage Alert.

Financial Developments

Financial conditions in the commercial real estate (CRE) sector remained weak amid elevated vacancy and delinquency rates. Commercial mortgage debt outstanding contracted at an annual rate of 5 percent in the second quarter. However, some indicators have pointed to modest improvement in this sector. Prices for CRE properties from repeat-sales indexes have continued to trend up from their troughs. In addition, spreads of yields on commercial mortgage-backed securities (CMBS) over swap rates narrowed, on net, over the intermeeting period in both the primary and secondary markets. Issuance of CMBS was solid in the third quarter and is expected to remain so through the end of the year. A relatively large fraction of commercial banks reported in the October SLOOS that they had experienced stronger demand for CRE loans, on net, over the past three months.

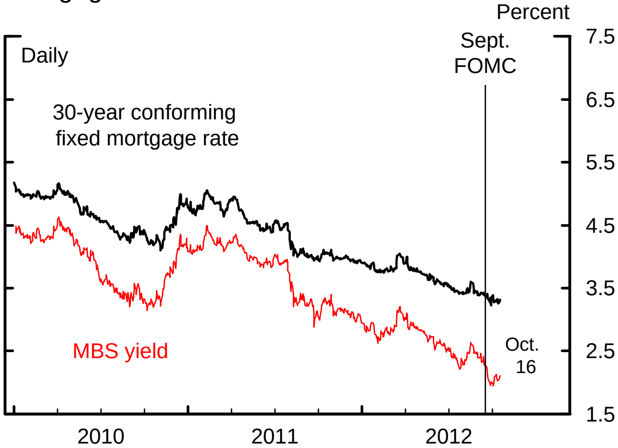
HOUSEHOLD FINANCE

Mortgage rates declined to historically low levels during the intermeeting period, with the interest rate on 30-year fixed-rate conforming mortgages falling to below 3.3 percent for a time. The decline in mortgage rates reflected the even larger drop in MBS yields that followed the September FOMC statement. The staff anticipates that the spread between mortgage rates and MBS yields will narrow over time, though the pace of the adjustment is expected to be gradual, in part because of continued capacity constraints at mortgage originators. Refinancing activity increased further in September and October, though it remained subdued relative to the prediction of staff models based on past behavior, as tight underwriting conditions, consolidation in the mortgage origination sector, and low levels of home equity continue to limit access to credit for many households.

House prices have continued to rise, and some indicators of credit quality on residential real estate loans have also improved. The CoreLogic aggregate house price index rose for the eighth consecutive month in August and has now increased nearly 6 percent from the low it reached at the end of last year. The fraction of existing mortgages that are seriously delinquent remained elevated, but the rate at which mortgages are entering delinquency continued to trend down in July, likely reflecting the effects of the tight underwriting conditions that have prevailed for the past few years. Many borrowers who have been shut out of the conventional market by tight underwriting standards have obtained FHA-insured mortgages instead, but a special question on the October SLOOS indicates that many lenders have also pulled back over

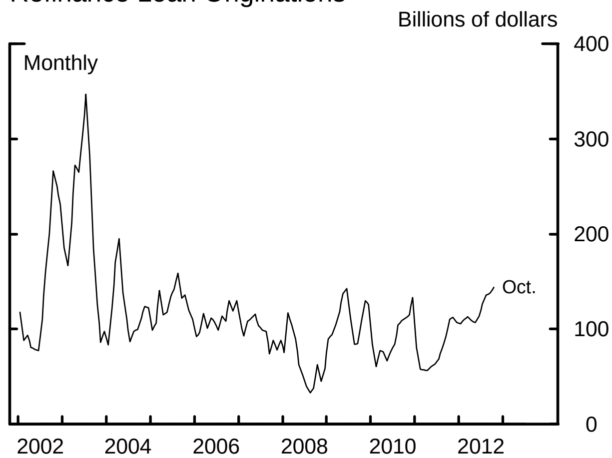
Household Finance

Mortgage Rate and MBS Yield



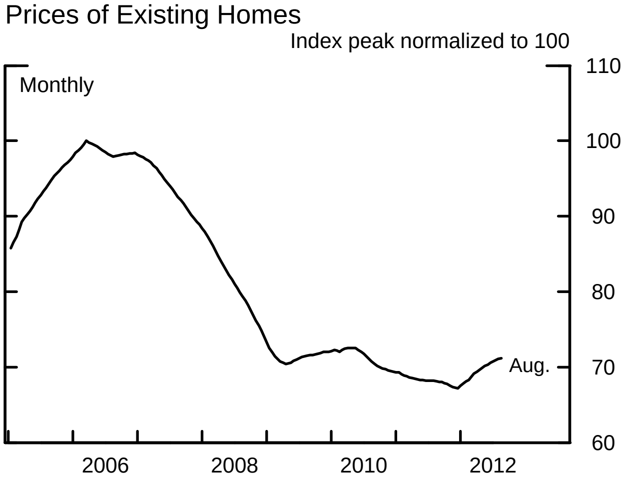
Note: For mortgage-backed securities (MBS) yield, the data consist of the Fannie Mae 30-year current-coupon rate.
Source: For MBS yield, Barclays; for mortgage rate, Loansifter.

Refinance Loan Originations



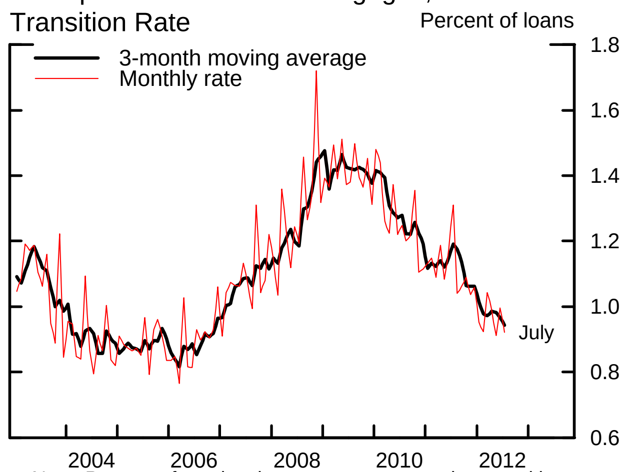
Note: Seasonally adjusted by FRB staff.
Source: Staff estimates.

Prices of Existing Homes



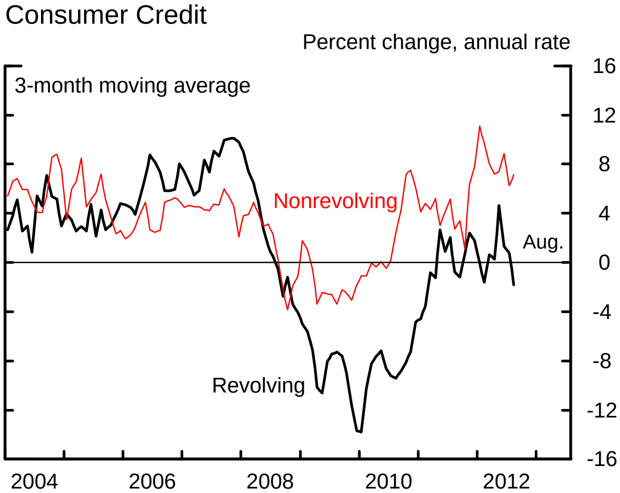
Source: CoreLogic.

Delinquencies on Prime Mortgages, Transition Rate



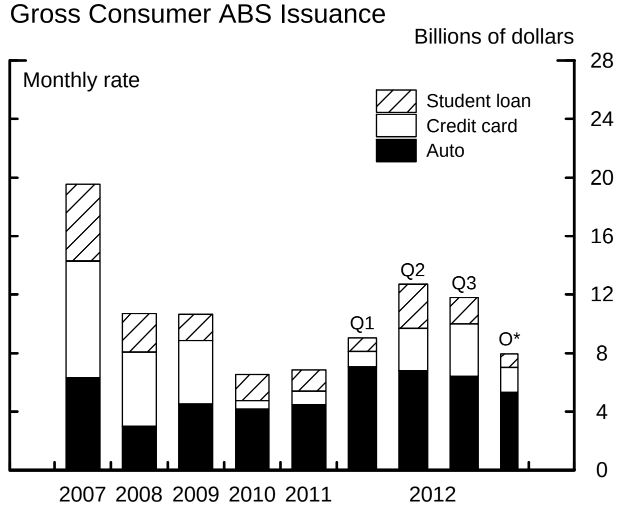
Note: Percent of previously current mortgages that transition to being at least 30 days delinquent each month.
Source: LPS Applied Analytics.

Consumer Credit



Source: Federal Reserve Board.

Gross Consumer ABS Issuance



*Month to date.
Source: Inside MBS & ABS; Merrill Lynch; Bloomberg; Federal Reserve Board.

the past few years from offering FHA loans to borrowers with FICO scores at the lower end of the range allowed by FHA underwriting standards, such as 580 or 620.

Consumer credit expanded briskly in August. Nonrevolving credit continued to increase at a robust pace because of growth in student and auto loans. Revolving credit increased in August but has been relatively little changed over the past few months on balance. Delinquency rates for consumer credit remained low, apparently reflecting a compositional shift toward higher-quality borrowers that is mainly due to still-tight credit conditions. Consumer ABS issuance was strong in the third quarter and close to the pace seen earlier this year.

Government Finance

Since the September FOMC meeting, the Treasury Department has auctioned $178 billion in nominal securities and $13 billion in 10-year TIPS. The auctions were generally well received, with bid-to-cover ratios mostly above their historical averages and indirect bidding ratios within recent ranges. Demand at the 10-year TIPS reopening was slightly weaker than expected, with the yield slightly higher than expected and the bid-to-cover ratio moderately below its recent average.

The pace of gross issuance of long-term municipal bonds was robust in September, primarily due to refunding issuance amid low yields. However, net issuance of long-term bonds in September was near zero, reflecting resistance among state and local governments to take on more debt in an environment of uncertainty about their fiscal positions.

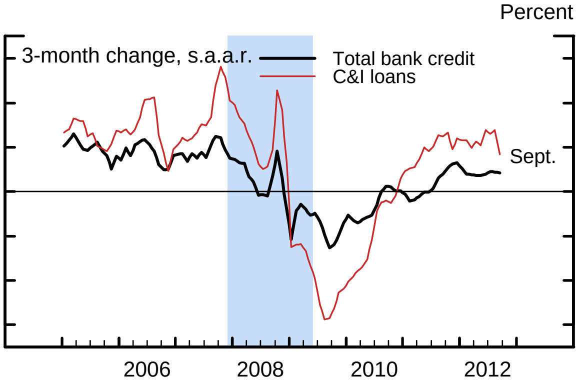
Consistent with the stressed budgets of many state and local governments, ratings downgrades of municipal bonds by Moody’s continued to substantially outpace upgrades in the second quarter, and higher-frequency data on ratings changes suggest that this trend continued in the third quarter. However, default rates on municipal bonds have not risen from their long-standing low levels. CDS spreads for states moved slightly lower over the intermeeting period, as did the ratio of yields on long-term general obligation municipal bonds to yields on comparable-maturity Treasury securities.

Commercial Banking and Money

Bank credit continued to expand at a moderate pace in the third quarter, with further modest growth in loans augumented by larger gains in securities holdings. On the

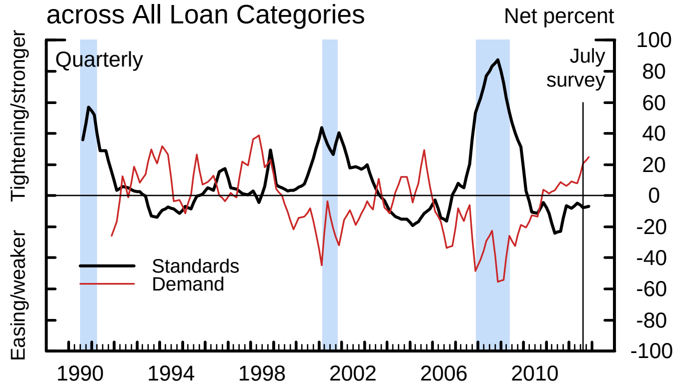
Commercial Banking and Money

Changes in Bank Credit



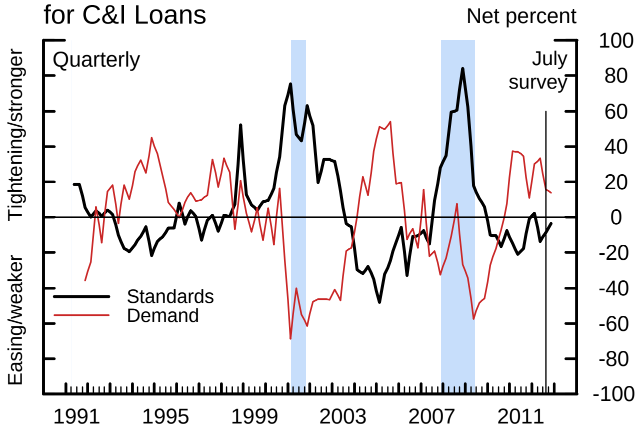
Note: The data have been adjusted to remove the estimated effects of certain changes to accounting standards and nonbank structure activity of $5 billion or more.
Source: Federal Reserve Board.

Changes in Standards and Demand across All Loan Categories



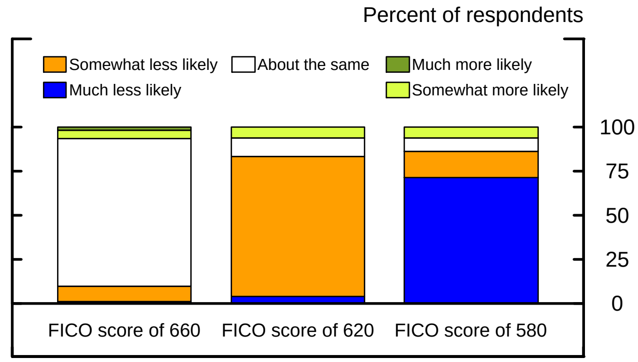
Note: A composite index that represents the net percentage of loans on respondents' balance sheets that were in categories for which banks reported tighter lending standards or stronger loan demand over the past 3 months, with results weighted by survey respondents' holdings of loans in each category.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

Changes in Standards and Demand for C&I Loans



Note: Results are weighted by survey respondents' holdings of commercial and industrial (C&I) loans.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Likelihood of Approving an Application for an FHA Home-Purchase Mortgage Loan Relative to 2006



Note: Results are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and home equity lines of credit).
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

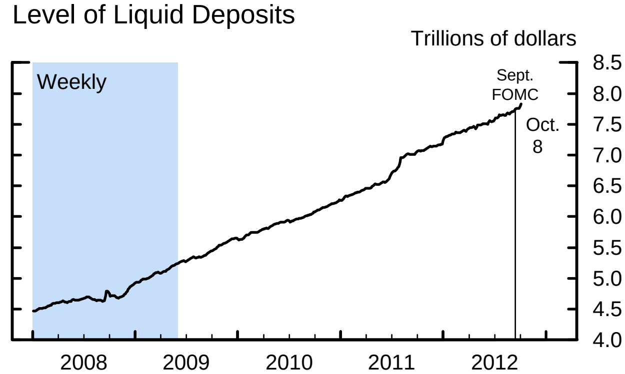
Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMFs	Curr.
2011	9.7	15.4	-18.4	-2.1	8.8
2012:H1	6.7	10.3	-16.8	-9.1	9.3
2012:Q3(p)	6.8	10.1	-17.8	-6.9	7.5
July	9.0	13.4	-18.9	-8.6	7.1
Aug.	4.5	6.9	-17.3	-5.8	8.1
Sept.(p)	10.2	13.4	-17.2	-1.0	11.6

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

Level of Liquid Deposits



Note: Seasonally adjusted.
Source: Federal Reserve Board.

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

business side, C&I loans maintained a double-digit increase in the third quarter. CRE loans continued contracting but at a somewhat slower pace. On the household side, modest growth in closed-end residential mortgage loans was partially offset by continued declines in home equity loans. Consumer credit card loans were little changed while other consumer loans increased slightly, in line with movements over the past year. Noncore loans—including reverse repos and loans to nonbank financial institutions—rose briskly in the quarter. Finally, banks' holdings of securities advanced markedly over the quarter, which was mainly attributed to increases in Treasury securities.

According to the October SLOOS, modest fractions (weighted by loans outstanding) of domestic banks continued to report having eased their lending standards, on balance, across major business and household loan categories. In addition, for the second straight quarter, reports of stronger demand were relatively widespread for many types of loans. Regarding C&I loans, however, the fraction reporting stronger demand was subdued compared with reports during most of 2011 and early 2012. Standards on C&I loans were little changed in the third quarter, suggesting that they remained about in the middle of their range since 2005, as indicated in the previous survey. However, relatively large fractions eased a number of terms on such loans.

M2 grew at an annual rate of about 10 percent in September, somewhat faster than in August. Strong growth in liquid deposits and currency was partially offset by ongoing declines in small time deposits and balances in retail money market funds. Liquid deposits, the largest component of M2, continued to expand briskly, likely reflecting low yields on investment alternatives and ongoing concerns over global growth. Robust foreign demand for U.S. bank notes contributed to brisk growth in currency. A large decline in reserve balances, which was mainly driven by an increase in the somewhat volatile level of the Treasury's General Account, more than offset currency growth over the period, resulting in a sizable drop in the monetary base in September.

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Appendix

Senior Loan Officer Opinion Survey on Bank Lending Practices

In the October Senior Loan Officer Opinion Survey on Bank Lending Practices, domestic banks, on balance, reported little change over the past three months in their standards for business lending and residential real estate lending, and a moderate easing of standards for consumer loans, on net.[1] Significant fractions of banks reported a strengthening of demand for some categories of business lending, prime residential mortgages, and auto loans, on balance, while demand for most other types of loans was about unchanged. The October survey included special questions on factors affecting C&I loan growth over the past year and lending to European banks. In another set of special questions, the survey queried banks about their participation in the revised Home Affordable Refinance Program (HARP 2.0) and about changes in their standards for approving applications for mortgages insured by the Federal Housing Administration (FHA) relative to pre-crisis levels.

On net, domestic and foreign respondents reported that C&I lending standards at their banks were about unchanged over the past three months, but most terms on such loans had eased in response to heightened competition from other lenders. Based on a weighting of institutions' responses by C&I loans outstanding at the end of the second quarter of 2012, a modest fraction reported that demand from large and middle-market firms had increased over the past three months on net.[2] Demand from small firms was reportedly about unchanged. On net, foreign respondents reported little change in demand for C&I loans over the survey period. A special question addressing the rapid C&I loan growth at commercial banks over the past year generally indicated that customers using bank loans to replace debt from nonbank sources was not an important reason for that growth. The responses to a second set of special questions on business lending indicated that standards to European banks and affiliates continued to tighten over the previous three months. A small fraction of banks reported that commercial real estate (CRE)

[1] The October 2012 survey addressed changes in the supply of, and demand for, loans to businesses and households over the past three months. This appendix is based on responses from 68 domestic banks and 23 U.S. branches and agencies of foreign banks. As part of the recent renewal of the survey, 6 domestic banks have been added to the previous sample of banks. These additions did not materially change the net fraction of banks responding to a particular question. Respondent banks received the survey on or after September 25, 2012, and responses were due by October 9, 2012.

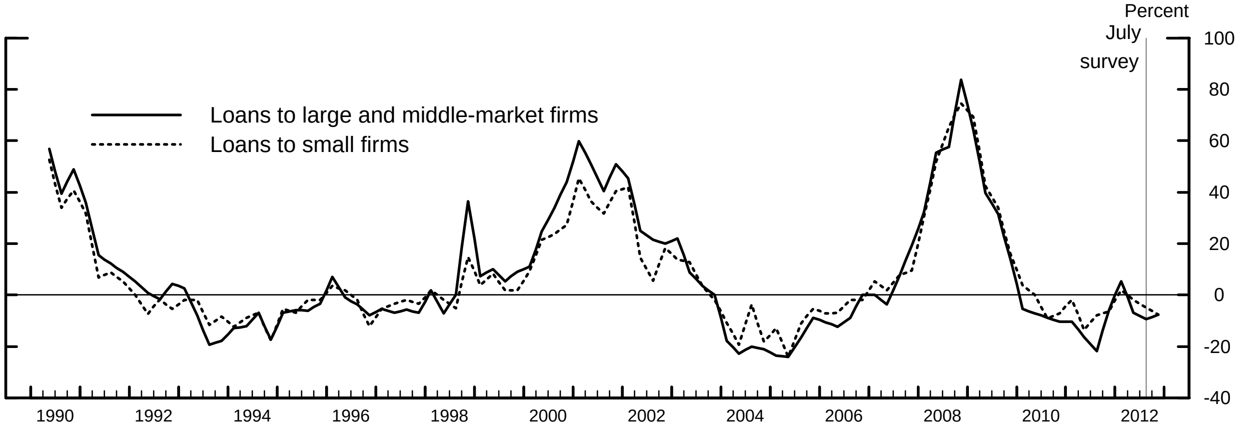
For questions that ask about lending standards or terms, reported net fractions equal the fraction of banks that reported having tightened standards minus the fraction of banks that reported having eased standards. For questions that ask about demand, reported net fractions equal the fractions of banks that reported stronger demand minus the fraction of banks that reported weaker demand.

[2] Unless otherwise noted, statements about banks' responses apply on a weighted and unweighted basis. Where the results based on weighted and unweighted analyses of responses are materially different, the approach used to summarize responses is explicitly stated.

Large and middle-market firms are generally defined as firms with annual sales of $50 million or more and *small firms* as those with annual sales of less than $50 million.

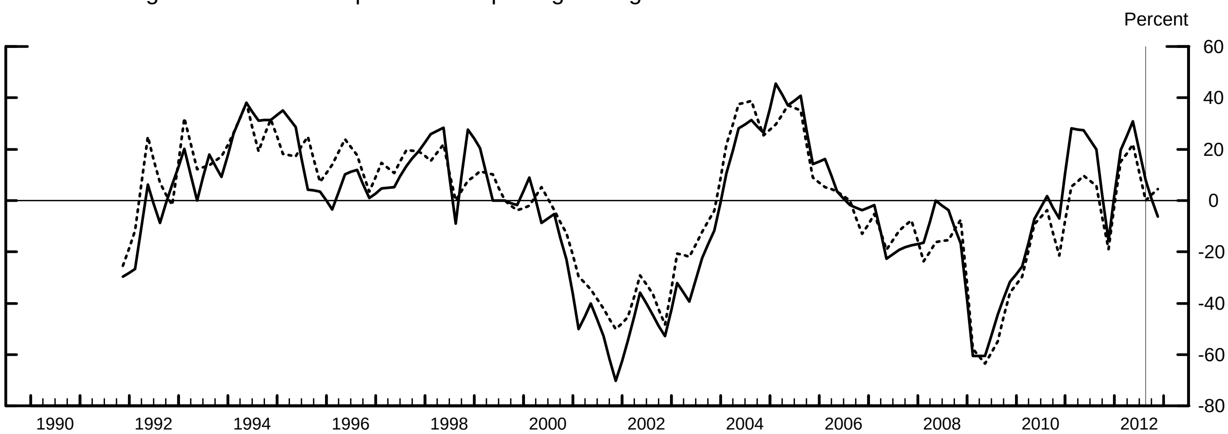
Measures of Supply and Demand for Commercial and Industrial Loans, by Size of Firm Seeking Loan

Net Percentage of Domestic Respondents Tightening Standards for Commercial and Industrial Loans



Net Percentage of Domestic Respondents Increasing Spreads of Loan Rates over Bank's Cost of Funds

Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial and Industrial Loans



Financial Developments

lending standards had eased over the past three months, while the percentage of banks that reported that demand for CRE loans had increased moved up appreciably on net.

Regarding residential real estate lending, banks reported that standards for both prime and nontraditional mortgages had remained unchanged over the past three months on balance. After weighting responses by residential mortgage loans outstanding, a sizeable fraction of respondents reported in both the July and October surveys that demand for prime residential mortgage loans had increased but demand for nontraditional mortgage loans had decreased on net.[3] Responding to a special question on FHA lending, most domestic banks indicated that their lending standards for approving an application for an FHA-insured purchase mortgage were about the same as before the financial crisis for a borrower with a credit score of 660, but that standards had tightened significantly for borrowers with lower FICO scores. In addition, banks continued to indicate that a material portion of refinance applications at their bank was attributable to HARP 2.0, and that they expected a significant portion of HARP 2.0 applications to be completed.

Within consumer lending, modest fractions of respondents continued to report an easing of standards on credit card and auto loans; respondents indicated that their standards on other types of consumer loans were about unchanged. On balance, terms on all types of consumer loans reportedly changed little over the past three months. While a modest percentage of banks continued to report an increase in demand for credit card and auto loans, demand for other consumer loans remained about the same over the survey period.

LENDING TO BUSINESSES

Questions on Commercial and Industrial Lending

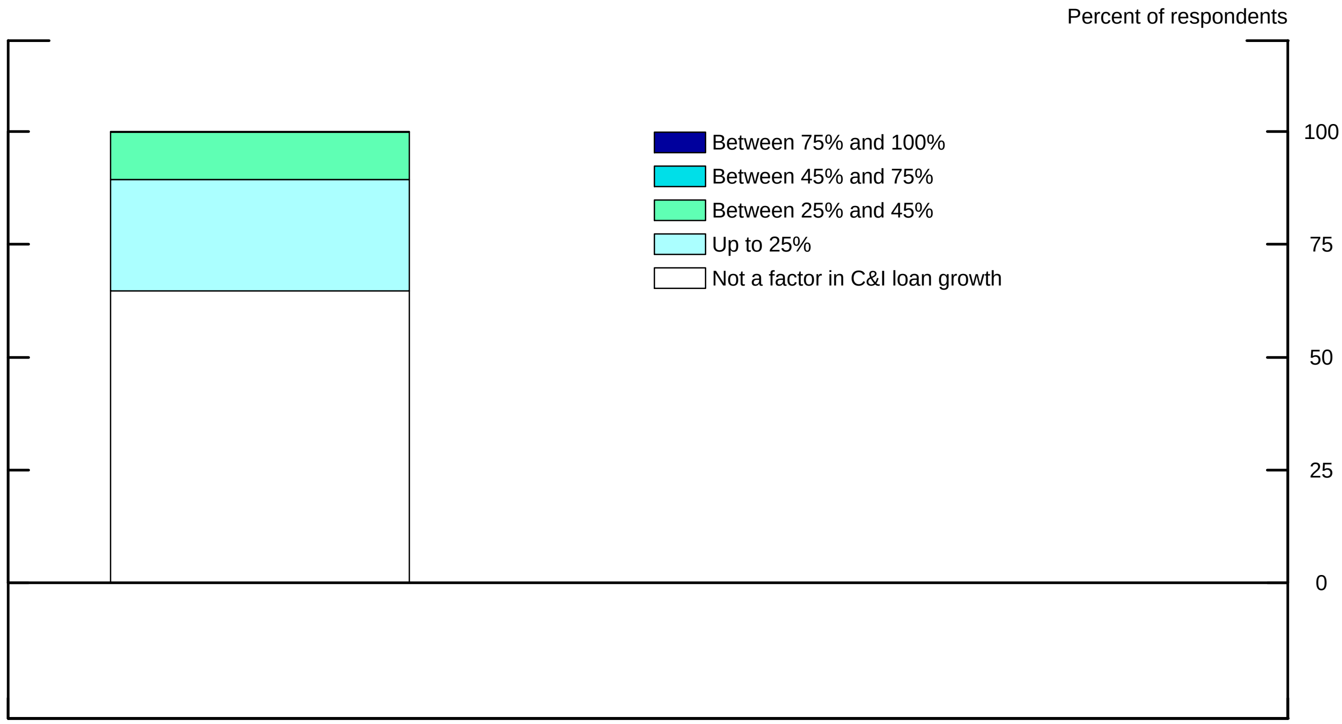
Weighting responses by institutions' C&I loans outstanding, domestic survey respondents indicated that their C&I lending standards to firms of all sizes were about unchanged over the past three months on balance. On the same basis, modest fractions of respondent banks had indicated an easing of standards on loans to large borrowers in each of the previous two surveys. While C&I lending standards were little changed, domestic banks reported having eased most C&I loan terms to borrowers of all sizes. For most terms, the easing was somewhat more widespread than it was reported to have been in the July survey. Of the respondents that reported easing either standards or terms over the past three months, almost all cited more-aggressive competition from other banks or nonbank lenders as an important reason for doing so. The number of banks citing more-aggressive competition as an important or very important reason for the change in their bank's lending position has been increasing since the October 2011 survey. As in the previous survey, no other reasons were broadly cited as important.

On balance, the weighted responses from domestic banks indicated that C&I loan demand had increased over the past three months. As in the July survey, around 15 percent of respondents indicated that demand from large firms had strengthened, on net, while demand from

[3] On an unweighted basis, positive net fractions of respondents to the October survey indicated that demand for both prime and nontraditional mortgage loans had increased.

Special Questions on C&I Lending

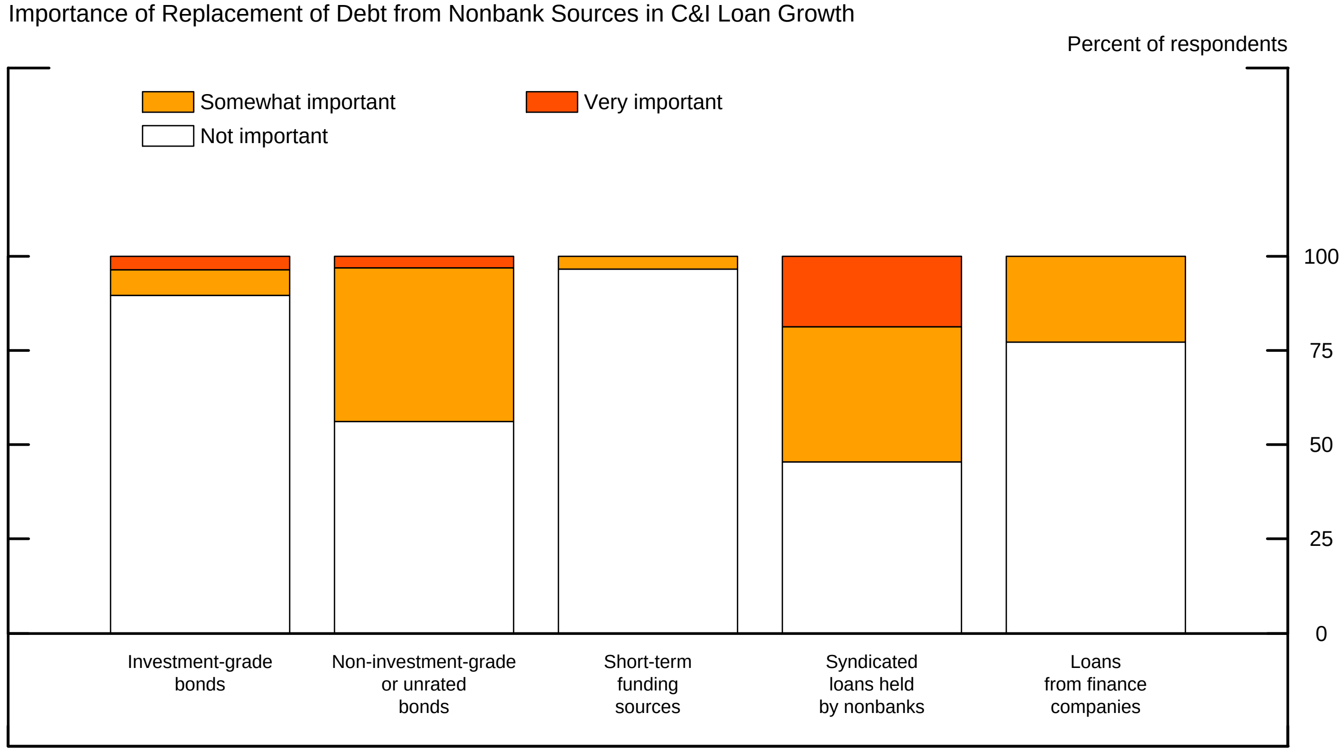
Share of the Increase in C&I Holdings Attributable to the Replacement of Debt from Nonbank Sources



Note: Responses are weighted by survey respondents' holdings of C&I loans.

Financial Developments

Importance of Replacement of Debt from Nonbank Sources in C&I Loan Growth



Note: Responses are weighted by survey respondents' holdings of C&I loans.

smaller firms remained little changed. Respondents that reported an increase in C&I loan demand broadly cited three reasons for the change: an increase in their customers' need to finance investment in plant and equipment, an increase in customers' merger and acquisition financing needs, and a shift to their bank from other sources of funding.

On balance, branches and agencies of foreign banks reported that their C&I lending standards had remained about the same over the past three months. Considering only branches and agencies of European banks, C&I lending standards were also about unchanged. In the past several surveys, the balance of respondents to the foreign survey had reported tightening their C&I standards. As was true for domestic respondents, the most widely cited reason for easing standards or terms among branches or agencies was more-aggressive competition from other lenders. After reporting a notable weakening of C&I loan demand in the July survey, the balance of foreign respondents reported little change in demand for such loans over the past three months.

Special Questions on Factors Affecting Recent C&I Loan Growth

The October survey included a set of special questions that asked banks about possible factors related to the brisk expansion in C&I lending at commercial banks over the past 12 months. Survey respondents were asked to quantify the share of the dollar volume of the increase in outstanding C&I loans at their banks that was attributable to customers who used the lending to replace debt that was previously provided by nonbank sources of funding. Respondents did not generally report that this factor was a significant explanation for recent C&I loan growth at their banks. Weighting the responses to this question by the dollar volume of institutions' increases in outstanding C&I loans over the past year, about 10 percent of respondents reported that replacement of debt from nonbank sources accounted for between 25 and 45 percent of the increase at their banks. Another 30 percent of the respondents reported that the replacement of nonbank debt accounted for less than 25 percent of the increase in C&I loans at their bank, and the remaining respondents reported that replacement of such debt was not a factor in C&I loan growth at their banks. Thus, on average, survey respondents estimated that the replacement of nonbank debt accounted for roughly 8 percent of the dollar volume of the increase in C&I lending at their institutions over the past year.[4] An additional question asked the banks that indicated that the replacement of nonbank debt had contributed to loan growth at their banks to identify the most important nonbank sources of such debt. In response to this question, non-investment-grade or unrated bonds and syndicated loans that are held by nonbanks were the most widely cited alternative funding sources.

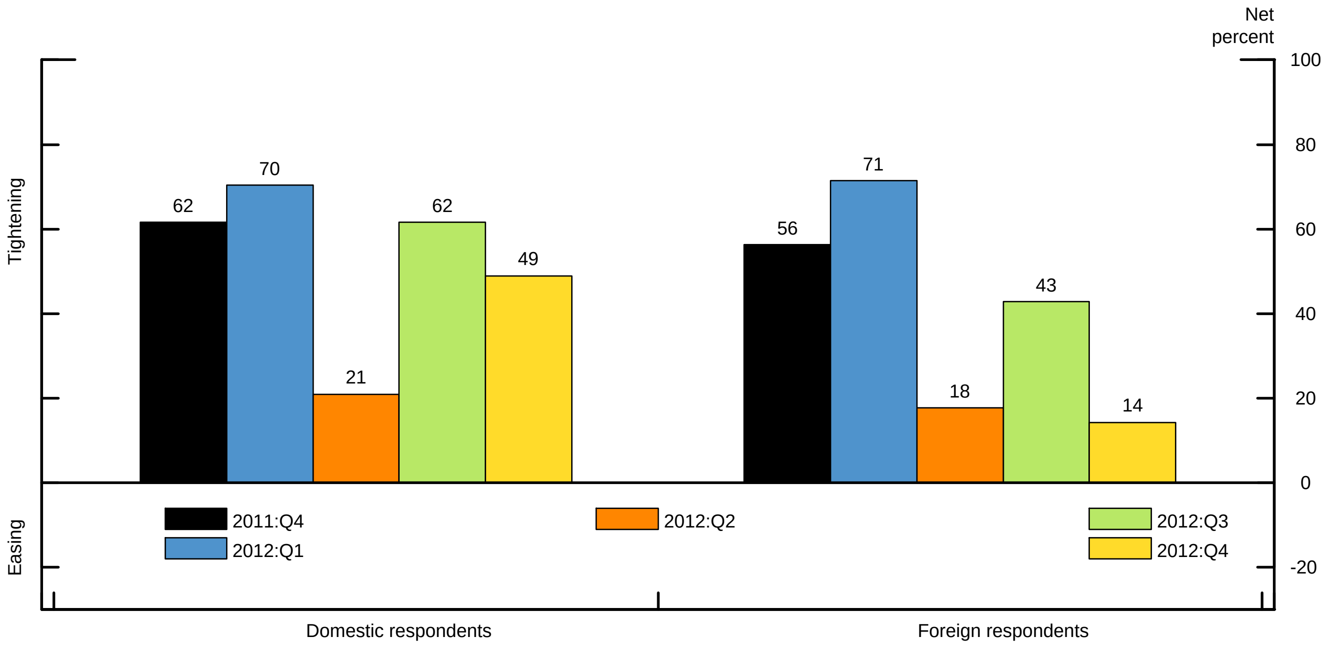
Special Questions on Lending to and Competition from European Banks

The October survey also included questions about European banking institutions and their affiliates that have been asked on several recent surveys. Respondents to the domestic and foreign survey continued to report that their lending standards to European banks and their

[4] Responses are assigned to the midpoints of the ranges provided in the question and then weighted by the dollar volume of the increase in C&I loans outstanding at respondent institutions on an end-of-period basis between the second quarter of 2011 and the second quarter of 2012.

Special Questions on Lending to and Competition from European Banks

Changes in Standards and Terms for Lending to European Banks*

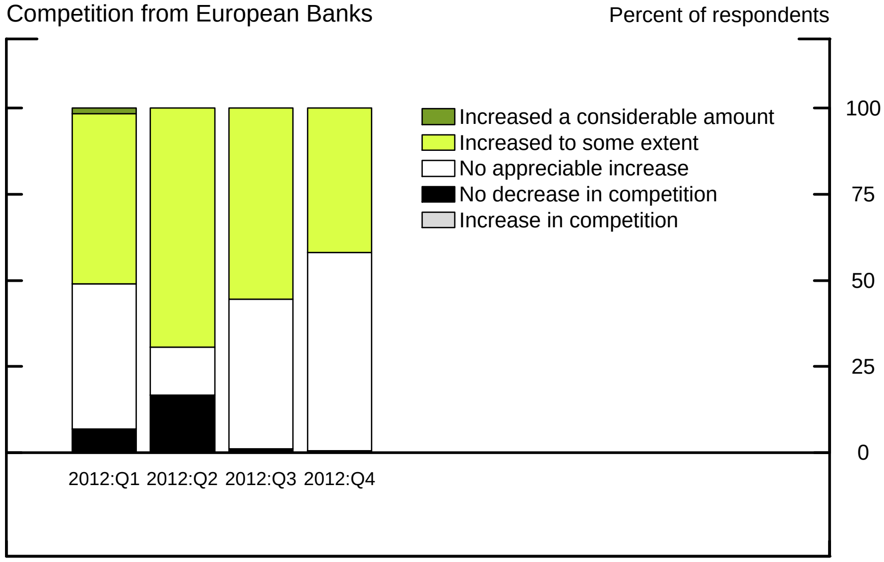


* Includes affiliates and subsidiaries.

Note: Domestic responses are weighted by survey respondents' holdings of C&I loans; because the C&I loans originated by a branch or agency of a foreign bank may not be sufficiently correlated with the loans the foreign bank chooses to hold on the balance sheet of that subsidiary, foreign responses are unweighted.

Financial Developments

Increase in Domestic Bank Business from Decreased Competition from European Banks



Note: Responses are weighted by survey respondents' holdings of C&I loans.

affiliates had tightened over the past three months, although the fractions of respondents indicating that they had tightened standards declined significantly between the July and October surveys on net. As in the July survey, domestic banks reported that they had experienced little change in demand for loans from European banks and their affiliates and subsidiaries.

The share of domestic banks that have observed an expansion of business associated with C&I lending because of a decrease in competition from European banks has trended down noticeably in the past two surveys. Weighting domestic banks' responses by outstanding C&I loans, just over one-third of domestic respondents indicated that they had experienced a decrease in competition from European competitors that had resulted in some increase in business at their banks. Almost all of the remaining domestic respondents reported having experienced a decrease in competition from European banks, but the decrease did not appreciably boost business at their banks.

Questions on Commercial Real Estate Lending

On balance, a small fraction of domestic respondents to the October survey reported that standards on CRE loans had eased over the previous three months. The fraction of banks that reported a strengthening of demand for CRE loans increased notably, moving to about 35 percent when responses are weighted by CRE loans on respondent banks' balance sheets. Branches and agencies of foreign banks reported similar trends in CRE lending conditions—the percentage of respondents that reported easing standards was just under 10 percent, while a moderate fraction reported that demand for CRE loans had strengthened over the same period on balance.

LENDING TO HOUSEHOLDS

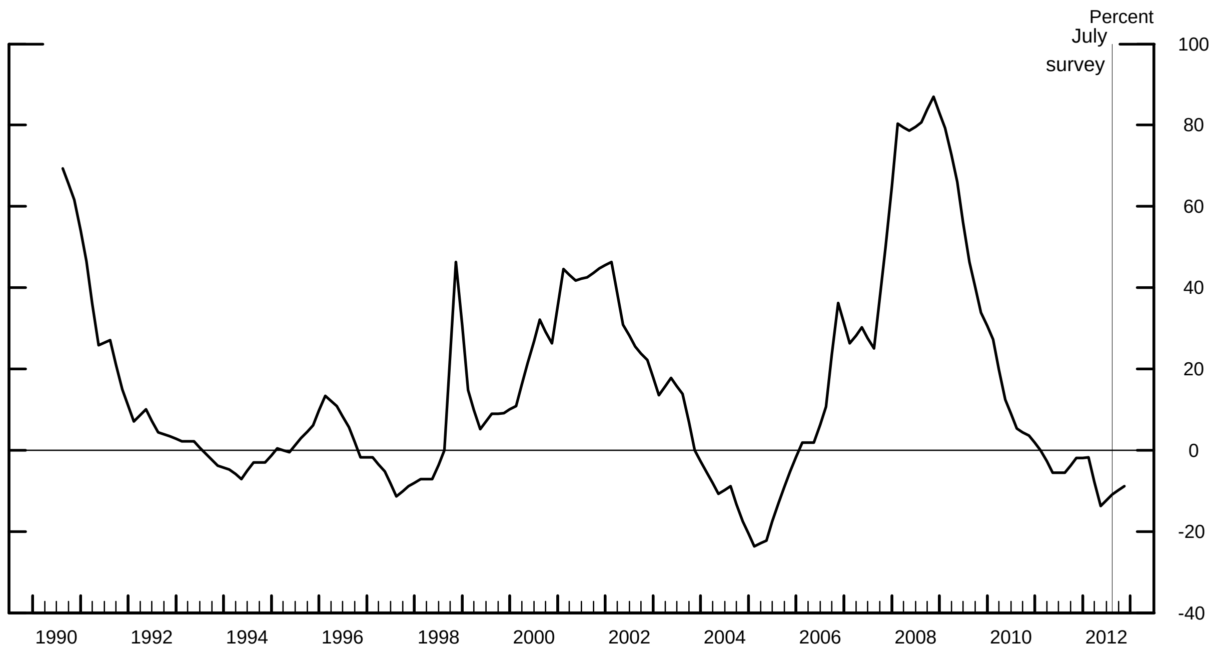
Questions on Residential Real Estate Lending

Banks' residential real estate lending standards reportedly remained about unchanged over the past three months, while demand for prime residential mortgages increased. As in each of the previous three surveys this year, respondents reported little change in their standards for prime mortgages. In the October survey, standards on nontraditional mortgages were reportedly unchanged, in contrast to the tightening reported earlier in the year. Weighting responses by respondent banks' holdings of residential real estate loans at the end of the second quarter of 2012, the fraction of banks that reported an increase in demand for prime residential mortgage loans remained close to its level in the July survey, which was at the very high end of its historical range over the past 10 years. In contrast, weighted responses continued to indicate that demand for nontraditional mortgages declined in the past two surveys.[5] Standards and demand for home equity lines of credit were reportedly unchanged.

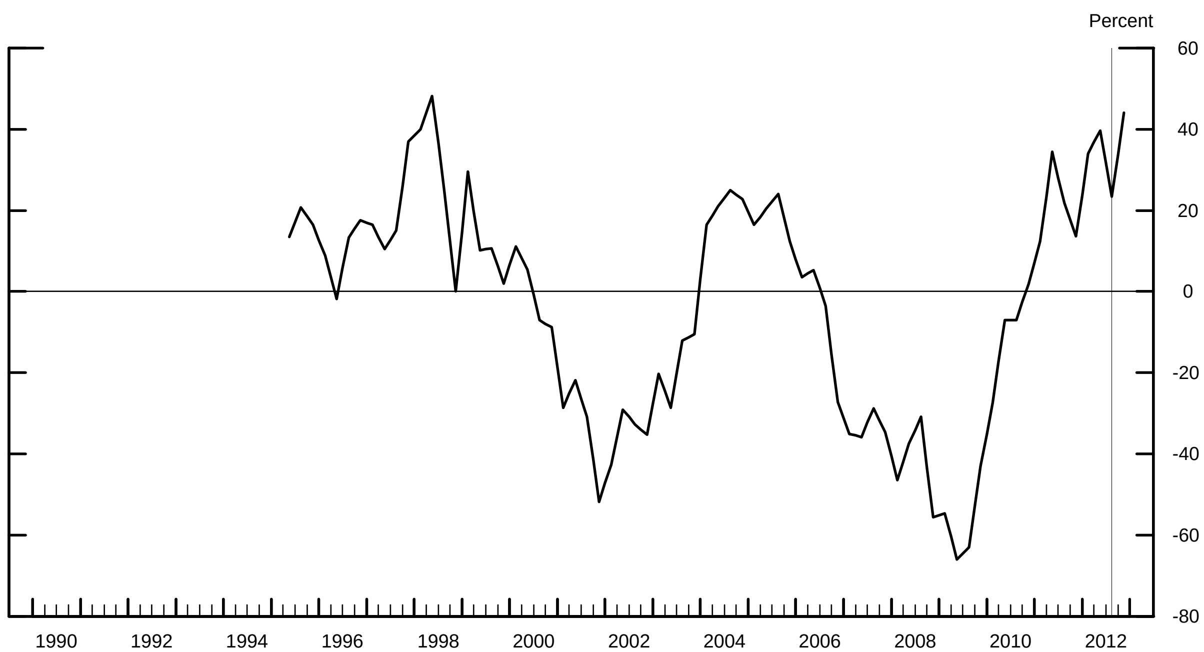
[5] Although the survey instructs respondents to exclude refinancing from their considerations about demand for residential mortgages, responses to the query about changes in demand may have been influenced by the volume of refinance applications that banks received over the past three months.

Measures of Supply and Demand for Commercial Real Estate Loans

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

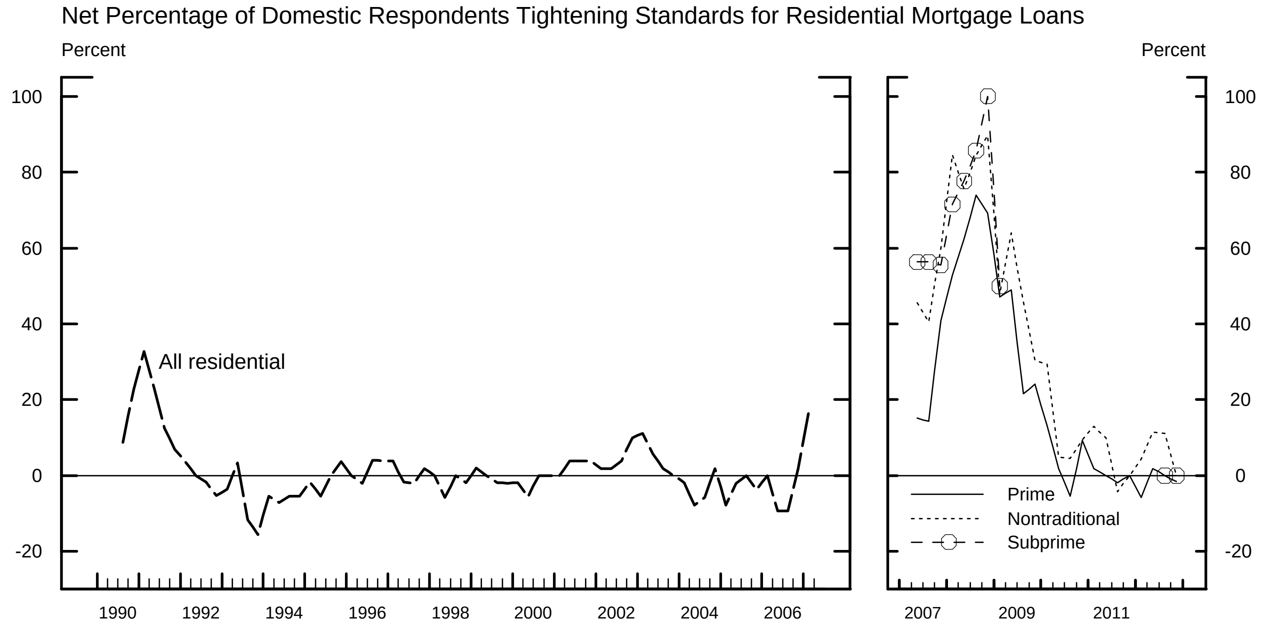


Net Percentage of Domestic Respondents Reporting Stronger Demand for Commercial Real Estate Loans

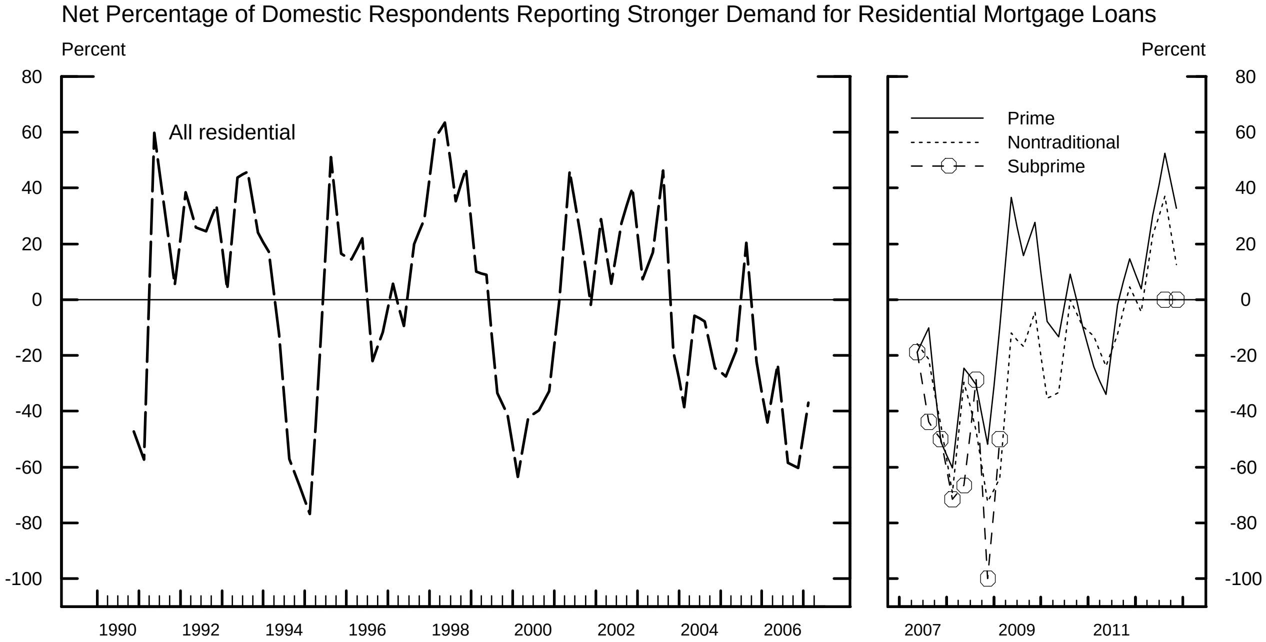


Financial Developments

Measures of Supply and Demand for Residential Mortgage Loans



Note: For data starting in 2007:Q2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is three or fewer.

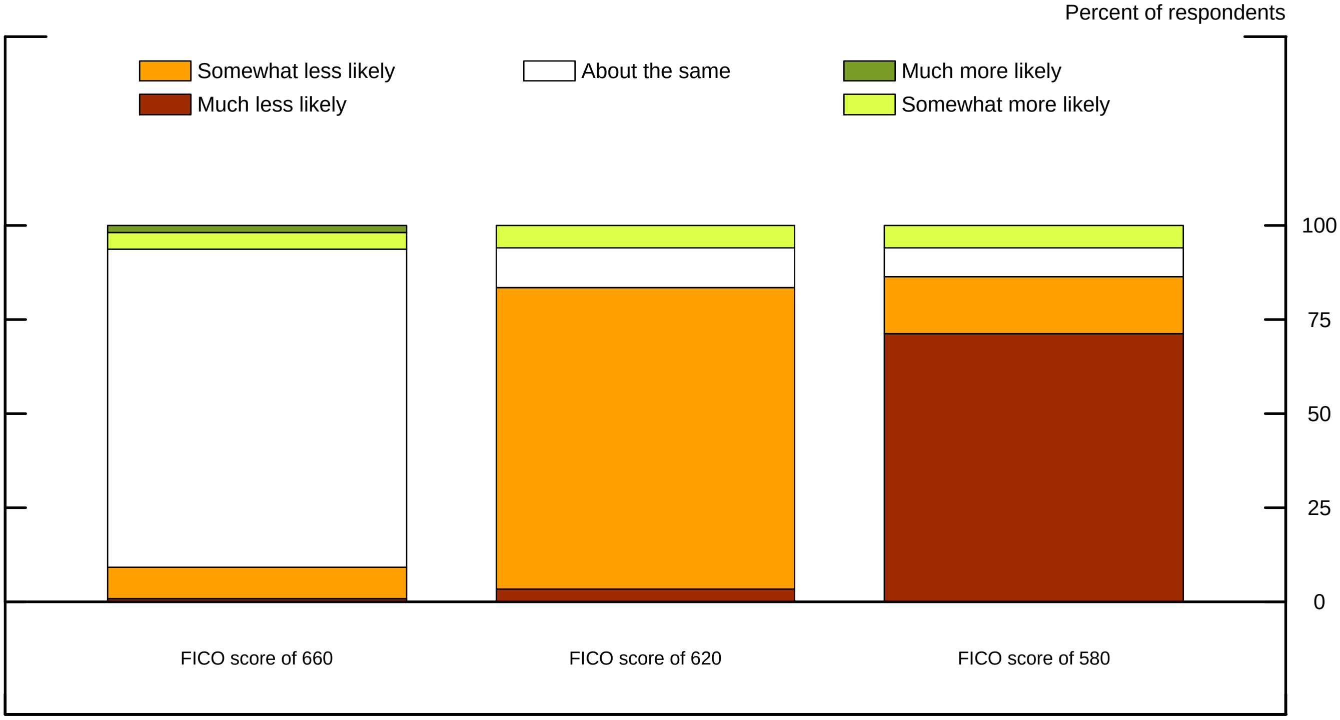


Note: For data starting in 2007:Q2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately. Series are not reported when the number of respondents is three or fewer.

Financial Developments

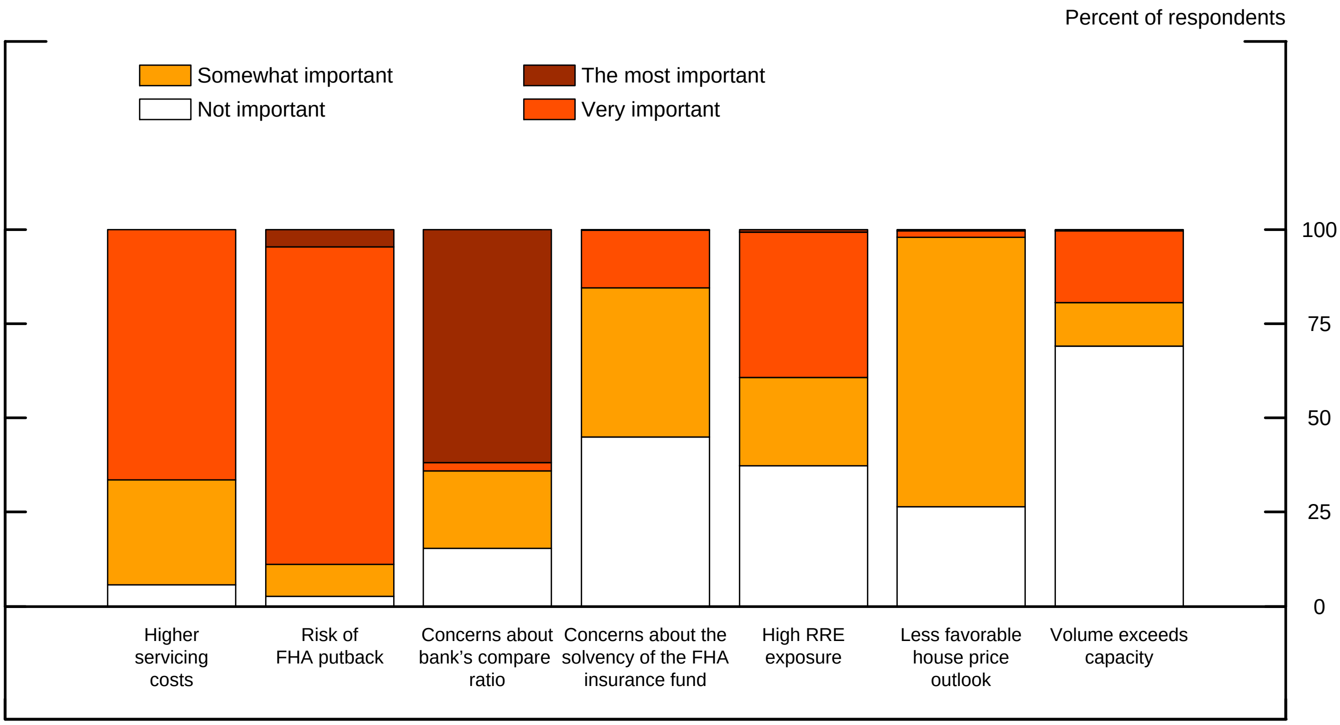
Special Questions on FHA Mortgages

Likelihood of Approving an Application for an FHA Home-Purchase Mortgage Loan Relative to 2006



Note: Responses are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and home equity lines of credit).

Reasons Much Less Likely or Somewhat Less Likely to Approve FHA Home-Purchase Mortgage Loans



Note: Responses are weighted by survey respondents' holdings of residential real estate (RRE) loans (excluding multifamily loans and home equity lines of credit).

Special Questions on Residential Real Estate Lending

A pair of special questions asked banks to compare their bank's standards for approving an application for an FHA-insured purchase mortgage for a borrower with a given FICO score with the standards that prevailed at their bank in 2006. Weighting responses by respondents' holdings of residential mortgage loans, about 80 percent of banks reported that their bank was about as likely to approve an application for an FHA mortgage from a borrower with a FICO score of 660 as they were in 2006. For a borrower with a FICO score of 620, most banks reported that they would be somewhat less likely to approve the loan under their current lending policies, and for a FICO score of 580, the majority of respondents indicated that they would be much less likely to approve such a loan using their current standards. A follow-up question asked banks that reported that they were currently less likely to approve an application for an FHA-insured mortgage about the reasons for the change in their lending position. Banks broadly cited three main explanatory factors: higher servicing cost if the mortgage were to become delinquent, higher risk of putback of delinquent mortgages by the FHA, and concerns that the bank's "compare ratio" could hinder its ability to participate in FHA programs.[6]

The October survey also repeated a pair of special questions from the July survey about HARP 2.0. In the October survey, about 40 percent of banks surveyed estimated that HARP 2.0 accounted for more than 30 percent of refinance applications, a bit below the percentage found in the July survey. Between the July and October surveys, there was a marked increase in the proportion of banks that estimated that the share of HARP applications that would be completed was between 80 and 100 percent. In the current survey, about one-fourth of banks reportedly anticipated that at least 80 percent of their bank's HARP 2.0 applications would be completed, as compared with about 10 percent of respondents that estimated the same completion rate in the July survey. Another one-fourth of respondents indicated that somewhere between 60 and 80 percent of applications would likely be completed, and almost all of the respondents categorized the percentage of HARP applications that would likely be completed as greater than 40 percent.

Questions on Consumer Lending

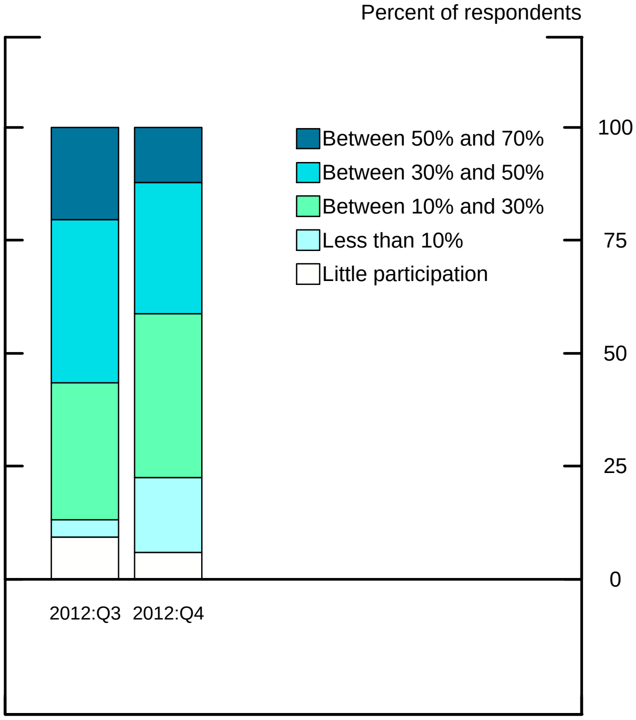
As in the July survey, domestic banks reported that they had eased standards on auto loans over the past three months, while standards on other consumer loans had remained about unchanged. However, the weighted fraction of banks that reported an easing of standards on credit card loans, which are highly concentrated among a handful of banks, climbed to about 30 percent, on net, a much higher reading than in the previous survey.[7] On balance, banks reported that most terms on all types of consumer loans were about unchanged over the past three months.

[6] A bank's compare ratio is the ratio of its FHA delinquency rate to the delinquency rate on FHA loans in the geographic area. Lenders with high compare ratios may face audits or other measures from the FHA.

[7] The unweighted net fraction of banks reporting an easing of credit card lending standards remained near 10 percent.

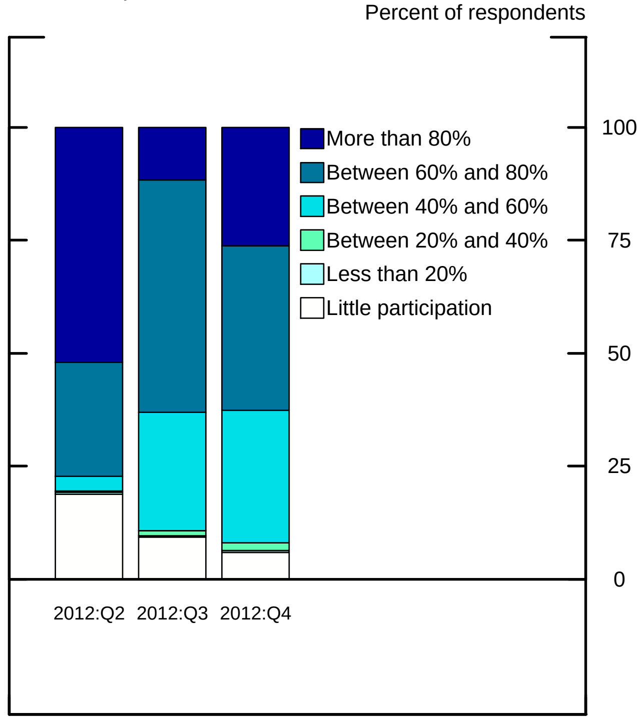
Special Questions on HARP 2.0

Proportion of Refinance Applications Attributable to HARP 2.0



Note: Responses are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and home equity lines of credit).

Share of HARP 2.0 Applications Anticipated to Be Completed



Note: Responses are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and home equity lines of credit).

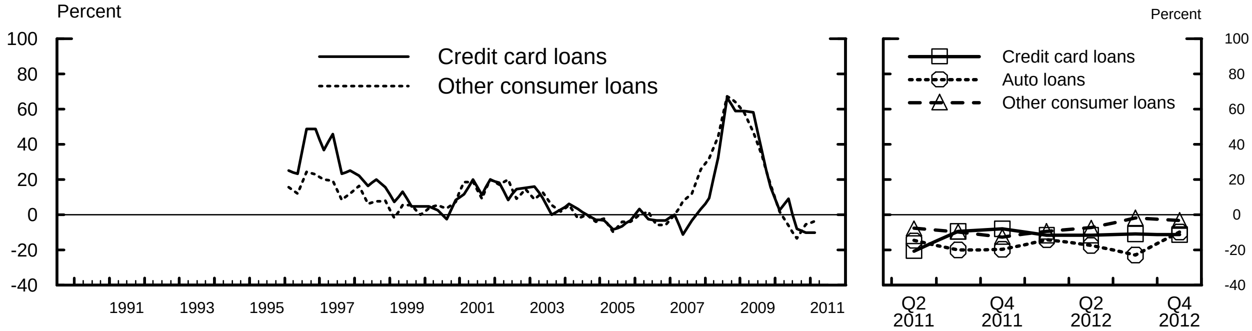
Financial Developments

Demand for credit card and auto loans reportedly increased, on balance, while it was about unchanged on other types of consumer loans. On a weighted basis, the fraction of banks that reported an increase in demand for both credit card and auto loans moved up noticeably in comparison with the previous survey. Demand for other consumer loans was about unchanged over the past three months.[8]

[8] On an unweighted basis, a modest net fraction of banks has reported stronger demand for credit card loans since late 2011.

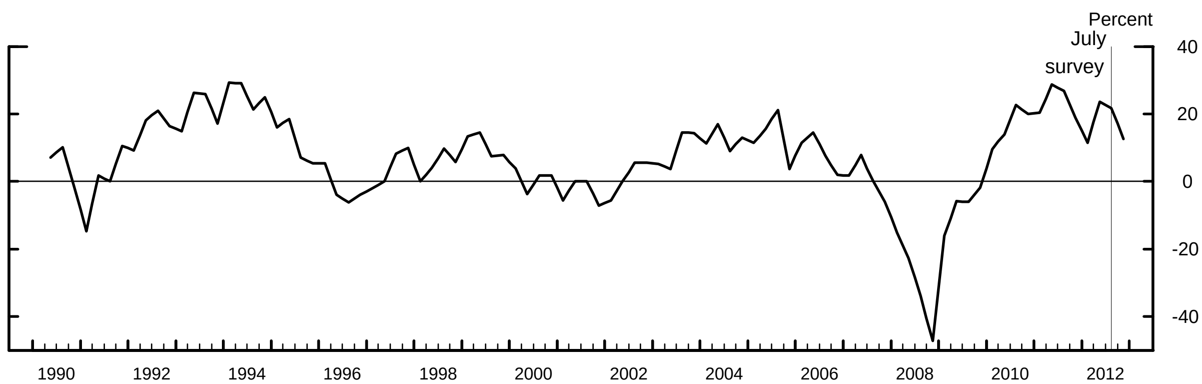
Measures of Supply and Demand for Consumer Loans

Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans

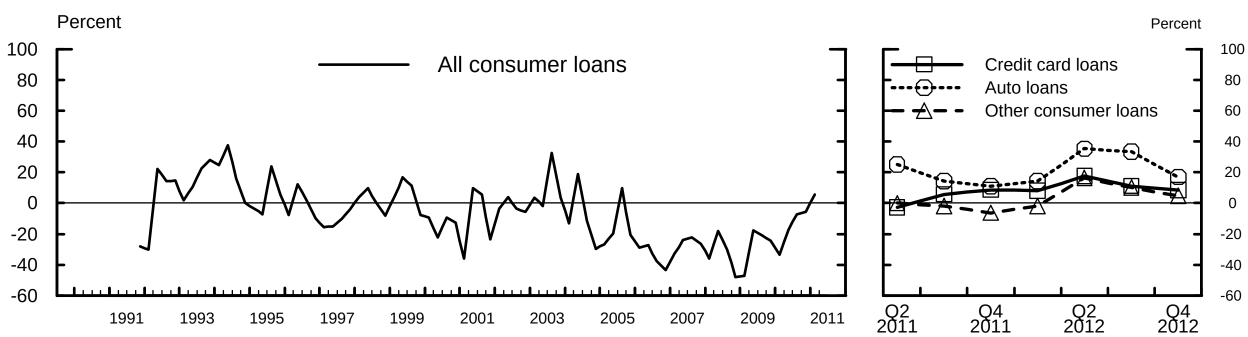


Note: For data starting in 2011:Q2, changes in standards for auto loans and consumer loans excluding credit card and auto loans are reported separately. In 2011:Q2 only, new and used auto loans are reported separately and equally weighted to calculate the auto loans series.

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



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



Note: For data starting in 2011:Q2, changes in demand for credit card loans, auto loans, and consumer loans excluding credit card and auto loans are reported separately.

Financial Developments

Risks and Uncertainty

ALTERNATIVE SCENARIOS

To illustrate some of the risks to the outlook, we construct a number of alternatives to the baseline projection using simulations of the staff's models. The first scenario examines the consequences of an even sharper fiscal contraction at the beginning of next year than assumed in the baseline. The next two scenarios consider a couple of upside risks to aggregate demand—first, that business and consumer confidence improve much more quickly than in the baseline and, second, that the recent encouraging readings on labor market conditions signal that the economic recovery is proceeding more quickly than we have assumed. The fourth scenario explores the risk that we have both underestimated the persistence of the headwinds restraining the recovery and overestimated the ability of monetary policy to offset that restraint. The fifth scenario focuses on the upside risk to inflation stemming from the possibility that we have misjudged the amount of labor market damage that has already occurred. The last two scenarios consider foreign risks to the domestic economy—first, that the European crisis could intensify with severe spillovers to the U.S. economy and, second, that the pace of economic growth in China and other Asian countries could slow markedly.

We generate the first five scenarios using the FRB/US model and the last two scenarios using the multicountry SIGMA model. For the FRB/US simulations, we use the estimated outcome-based rule to govern deviations of the federal funds rate from its baseline path, making adjustments to account for the additional accommodation implied by the Committee's current forward guidance; for the SIGMA simulations, we use a broadly similar policy rule that employs an alternative concept of resource utilization.[1]

[1] In the FRB/US simulations, the federal funds rate follows the estimated outcome-based rule described in the appendix on policy rules in Book B, with an intercept adjustment that reflects monetary policy as announced at the conclusion of the September FOMC meeting. The adjustment is calibrated to delay the first increase in the federal funds rate until the third quarter of 2015 under the economic outlook in the September Tealbook modified to incorporate changes announced at the conclusion of the September FOMC meeting. Beginning in the third quarter of 2015 this intercept adjustment is reduced and is zero beginning in the fourth quarter of 2017. However, to the degree that real activity in the scenarios is stronger or weaker relative to the September outlook, or inflation is higher or lower, liftoff will occur earlier or later. In the SIGMA simulations, the policy rule is broadly similar but uses a measure of slack equal to the difference between actual output and the model's estimate of the level of output that would occur in the absence of slow adjustment of wages and prices.

Alternative Scenarios

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

Measure and scenario	2012 H2	2013	2014	2015	2016-17
Real GDP					
Extended Tealbook baseline	2.0	2.6	3.5	3.7	2.7
Fiscal cliff	2.0	1.3	2.6	3.5	3.7
Greater expectations	2.9	4.5	3.8	2.5	2.0
More momentum	2.6	3.5	3.5	2.9	2.4
Headwinds and attenuation	2.0	1.9	2.1	2.3	2.6
Damaged labor market	1.8	2.4	3.1	2.7	1.5
European crisis with severe spillovers	1.1	-3.1	1.2	4.2	3.3
Hard landing in China	1.8	1.7	2.9	3.9	3.2
Unemployment rate[1]					
Extended Tealbook baseline	8.0	7.8	7.2	6.2	5.1
Fiscal cliff	8.0	8.3	8.2	7.4	5.5
Greater expectations	7.9	6.9	5.9	5.3	5.2
More momentum	7.8	7.3	6.6	5.8	5.3
Headwinds and attenuation	8.0	8.0	8.0	7.8	7.0
Damaged labor market	8.0	7.9	7.4	6.8	6.8
European crisis with severe spillovers	8.1	9.8	10.4	9.3	7.5
Hard landing in China	8.0	8.1	7.9	6.9	5.5
Total PCE prices					
Extended Tealbook baseline	1.9	1.3	1.4	1.5	1.9
Fiscal cliff	1.9	1.3	1.2	1.1	1.5
Greater expectations	1.9	1.4	1.7	1.9	2.2
More momentum	1.9	1.4	1.6	1.7	2.0
Headwinds and attenuation	1.9	1.3	1.3	1.1	1.2
Damaged labor market	2.0	1.5	1.9	2.2	2.5
European crisis with severe spillovers	1.2	-1.1	.4	1.6	2.2
Hard landing in China	1.6	.4	.7	1.3	2.0
Core PCE prices					
Extended Tealbook baseline	1.3	1.6	1.7	1.7	1.9
Fiscal cliff	1.3	1.6	1.5	1.3	1.5
Greater expectations	1.3	1.7	2.0	2.1	2.2
More momentum	1.3	1.7	1.9	1.9	2.0
Headwinds and attenuation	1.3	1.6	1.6	1.3	1.2
Damaged labor market	1.4	1.8	2.2	2.4	2.5
European crisis with severe spillovers	1.1	.3	.8	1.5	2.0
Hard landing in China	1.2	1.2	1.3	1.5	1.9
Federal funds rate[1]					
Extended Tealbook baseline	.1	.1	.1	.7	3.9
Fiscal cliff	.1	.1	.1	.1	3.4
Greater expectations	.1	.6	1.8	2.2	4.0
More momentum	.1	.1	.6	1.4	3.7
Headwinds and attenuation	.1	.1	.1	.1	.5
Damaged labor market	.1	.1	1.0	2.6	4.9
European crisis with severe spillovers	.1	.1	.1	.1	1.5
Hard landing in China	.1	.1	.1	.2	3.1

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

Risks & Uncertainty

In these scenarios, we have assumed that the size and composition of the SOMA portfolio follow their baseline paths.[2]

Fiscal Cliff

Our baseline projection assumes that the Congress will avert the fiscal cliff in its most severe form by extending the tax cuts initially enacted in 2001 and 2003, continuing to shield most taxpayers from the alternative minimum tax, and extending a number of other non-stimulus-related tax reductions. In contrast, this scenario assumes that none of these actions are taken, thereby increasing total tax payments by households and businesses next year by about 2½ percent of GDP relative to the baseline. Moreover, in the alternative, the automatic spending cuts required by the Budget Control Act's sequestration provisions take full effect in 2013, further restraining federal purchases by about ¼ percent of GDP relative to the baseline.[3] In addition, these fiscal policy developments are assumed to weigh on consumer and business confidence more than in the baseline. As a result, real GDP expands only 1¼ percent in 2013 and 2½ percent in 2014, on average 1 percentage point per year less than in the baseline.[4] The unemployment rate rises to 8¼ percent in 2013 and 2014. With a wider margin of resource slack, inflation declines to 1 percent in 2015, and the federal funds rate does not begin to increase from its effective lower bound until mid-2016.

Greater Expectations

Recent reductions in risk premiums on corporate bonds and other assets, along with increases in consumer sentiment, may point to a more rapid improvement in business and household expectations of future economic acitivity than is assumed in the baseline. Moreover, the public may take comfort from the FOMC's recent actions and

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[2] Given the guidance in the FOMC's September statement that the portfolio would be responsive to labor market conditions, it would be desirable to incorporate endogenous rule-based adjustments to the portfolio in our scenario analysis. The staff is currently investigating possible specifications for such adjustments.

[3] It is possible to envision an even worse outcome, as even in this scenario we assume that Congress raises the debt ceiling and does not default on Treasury debt.

After 2014, both tax revenues and government spending gradually return to their baseline trajectories, leading eventually to budget deficits that are about the same as in the baseline. However, because those deficits follow a period of greater fiscal restraint, the ratio of government debt to GDP is lower over the longer term in the alternative scenario.

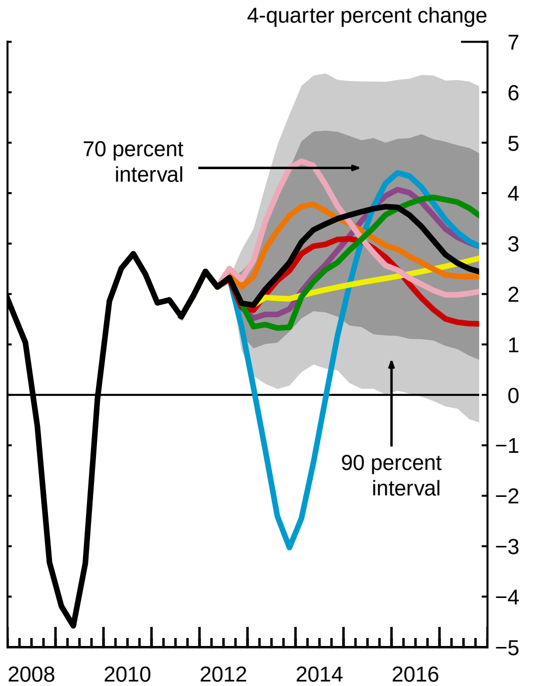
[4] Although taxes increase by more than 2 percent of GDP in 2013 in this scenario, the negative effect on real GDP next year is smaller as households in the FRB/US model adjust their spending gradually in response to the decline in their disposable income; accordingly, real GDP in 2014 is also restrained.

Forecast Confidence Intervals and Alternative Scenarios

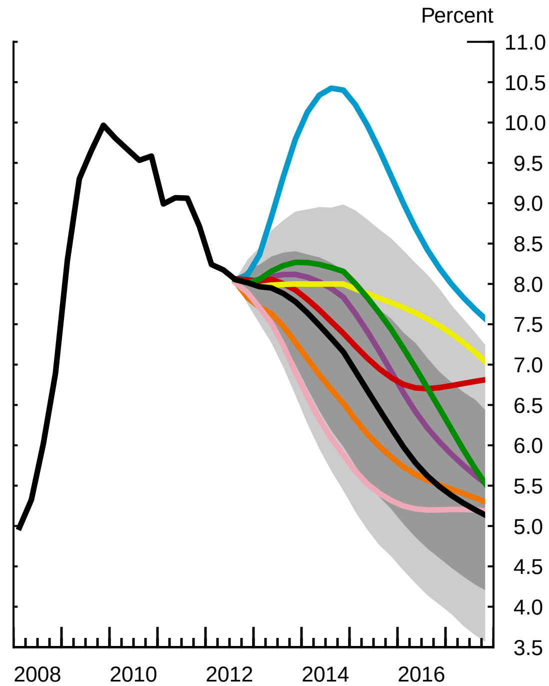
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- Fiscal cliff
- Greater expectations
- More momentum
- Headwinds and attenuation
- Damaged labor market
- European crisis with severe spillovers
- Hard landing in China

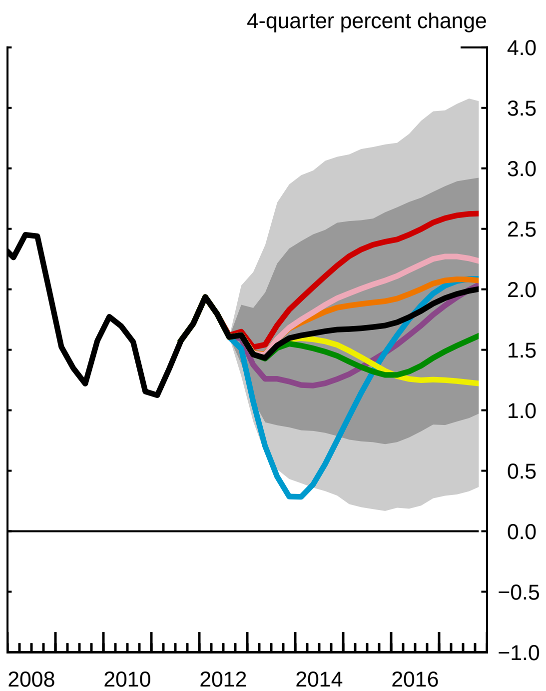
Real GDP



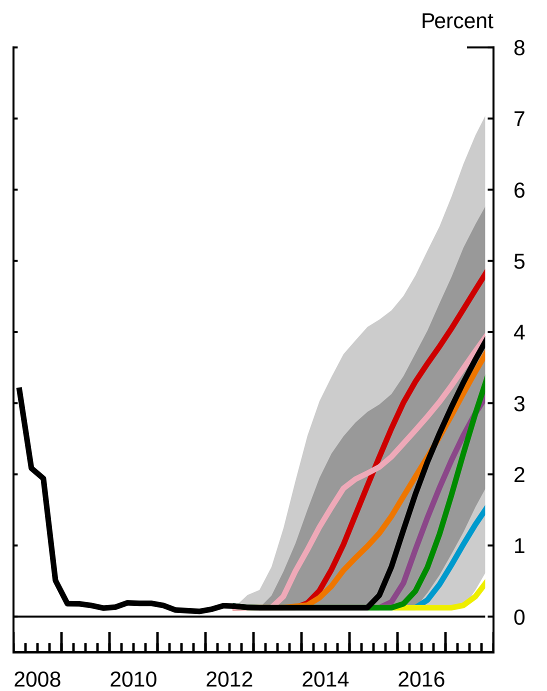
Unemployment Rate



PCE Prices excluding Food and Energy



Federal Funds Rate



place less weight on downside risks to the recovery. Accordingly, this scenario assumes that household and business pessimism about the economic outlook and uncertainty about the durability of the recovery lift more quickly than in the baseline, providing a significant boost to aggregate demand. Increased confidence also causes house values to recover more quickly, bringing their level 10 percent above the baseline by late 2014, with favorable implications for construction, household wealth, and the willingness of financial institutions to extend credit. As a result, a more robust cycle of increased household and business confidence, employment, credit availability, and spending boosts the pace of the recovery. Real GDP accelerates to an average annual growth rate of about 4 percent in 2013 and 2014, and the unemployment rate falls below 6 percent by the end of 2014. Upward pressure on inflation is initially tempered by the effects of increased capital investment on labor productivity and unit labor costs. But, with resource utilization tighter, eventually unit labor costs rise more rapidly than in the baseline, and inflation increases to 2¼ percent later in the decade. In response to higher inflation and the stronger pace of real activity, the federal funds rate lifts off earlier and stays higher than in the baseline.[5]

More Momentum

The decline in the unemployment rate over the past year could be a sign that the underlying pace of economic activity is stronger than we have assumed in the baseline. Indeed, although we have taken some signal from recent upside surprises in retail sales and housing construction, perhaps we should have taken more. This scenario takes on board this possibility and assumes that the transition of the economy to a self-sustaining recovery—in which increases in employment and labor income spur greater spending, credit availability, and business and consumer confidence—occurs sooner and a little more rapidly than in the baseline. In addition, this scenario assumes that firms seek to more quickly rebuild their workforces, which have remained relatively lean throughout the recovery, providing an extra boost to labor demand. As a result, the unemployment

[5] As noted earlier, we assume that the size and composition of the SOMA portfolio in these alternative scenarios are the same as in the baseline. However, if the unemployment rate were to decline as rapidly as shown in the Greater Expectations scenario, the FOMC might choose to purchase a smaller amount of securities than assumed in the baseline. One ad hoc way to account for this possibility might be to assume that the FOMC ceases adding to its SOMA portfolio beginning in the first quarter of next year, reducing the amount of purchases in the first half of 2013 by $500 billion relative to the baseline. Staff analysis of the effect of LSAPs on the economy suggests that this would raise the unemployment rate by 0.2 percentage point in the fourth quarter of 2014 relative to the Greater Expectations scenario. Of course, similar considerations could apply to all of the scenarios.

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

Measure	2012	2013	2014	2015	2016	2017
Real GDP						
(percent change, Q4 to Q4)						
Projection	1.8	2.6	3.5	3.7	3.1	2.4
Confidence interval						
Tealbook forecast errors	1.3–2.3	.9–4.3	1.6–5.4	. . .	. . .	. . .
FRB/US stochastic simulations	1.2–2.4	1.3–4.5	1.6–5.2	1.2–5.0	1.1–5.1	.7–4.8
Civilian unemployment rate						
(percent, Q4)						
Projection	8.0	7.8	7.2	6.2	5.5	5.1
Confidence interval						
Tealbook forecast errors	7.9–8.1	7.1–8.5	6.0–8.4	. . .	. . .	. . .
FRB/US stochastic simulations	7.9–8.2	7.0–8.4	6.0–8.2	5.2–7.6	4.6–6.9	4.2–6.4
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	1.7	1.3	1.4	1.5	1.8	2.0
Confidence interval						
Tealbook forecast errors	1.5–2.0	.0–2.5	.1–2.7	. . .	. . .	. . .
FRB/US stochastic simulations	1.4–2.2	.3–2.3	.2–2.6	.2–2.7	.5–2.9	.7–3.1
PCE prices excluding food and energy						
(percent change, Q4 to Q4)						
Projection	1.6	1.6	1.7	1.7	1.9	2.0
Confidence interval						
Tealbook forecast errors	1.4–1.8	.9–2.3	.9–2.5	. . .	. . .	. . .
FRB/US stochastic simulations	1.4–1.9	.9–2.3	.8–2.6	.7–2.6	.9–2.8	1.0–2.9
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.1	.7	2.6	3.9
Confidence interval						
FRB/US stochastic simulations	.1–.1	.1–1.0	.1–2.5	.1–3.1	.6–4.4	1.9–5.8

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

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

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

rate falls more rapidly than in the baseline, reaching 6½ percent by the end of 2014, and inflation rises a bit faster. Liftoff of the federal funds rate occurs in mid-2014.

Headwinds and Attenuation

The slow pace of the recovery over the past few years despite a highly accommodative monetary policy suggests that we could be underestimating the persistence of the headwinds restraining the economy, overestimating the stimulus from monetary policy, or both. In this scenario, the unfavorable baseline assumptions for fiscal policy, foreign economic conditions, and credit availability turn out to have a more restrictive effect on aggregate demand than anticipated; in addition, the effectiveness of monetary policy to offset those headwinds turns out to be more attenuated. As a result, the pace of recovery does not pick up: Real GDP grows at an annual rate of only 2 percent in 2013 and 2014, and increases in real GDP remain below the baseline into the second half of the decade. Wide margins of resource slack put downward pressure on inflation and cause inflation expectations to edge lower; as a result, consumer inflation falls to 1 percent in 2015. With inflation well below the FOMC's longer-run objective and the unemployment rate far above its natural rate, the federal funds rate remains at its effective lower bound until late 2017. Despite the weaker aggregate demand in this scenario, we have not built in any degradation to aggregate supply other than the endogenous effects of weaker demand on capital deepening.

Damaged Labor Market

The unusual depth and breadth of the downturn may have impaired the efficiency of the labor market by more than we judge. In this scenario, we assume that the natural rate of unemployment reached 7 percent in early 2011 (1 percentage point above the baseline), and that it will remain at that level for the indefinite future. Furthermore, the trend labor force participation rate is assumed to be declining more quickly, ending 2015 more than 1 percentage point below the baseline. These conditions imply lower long-run levels of household income and business earnings; as a result underlying aggregate demand is weaker and the unemployment rate declines more slowly than in the baseline. Nevertheless, with a higher natural rate, labor market slack is narrower, resulting in higher unit labor costs and greater upward pressures on consumer prices. These inflation pressures are magnified by the assumption that policymakers initially fail to recognize the weaker supply-side conditions, which leads them to maintain a more accommodative stance of monetary policy through late 2014 than they would have chosen with a more accurate assessment of the supply side. In response, the public's long-run inflation expectations are assumed to move up, and consumer price inflation rises to around 2½ percent after 2015. Largely reflecting these more inflationary conditions, the federal funds rate begins to rise earlier than in the baseline.

European Crisis with Severe Spillovers

In this scenario, the current economic and financial stress in Europe intensifies sharply, causing Europe to plunge into a severe financial crisis and a deep recession. Reflecting the greater stress, both sovereign and private borrowing costs in Europe soar—with corporate bond spreads rising 400 basis points above the baseline—and the confidence of European households and businesses plummets. Real GDP in Europe declines about 8½ percent relative to the baseline by the first half of 2014, despite a 25 percent depreciation in the real effective exchange value of the euro. Europe's difficulties are assumed to have important financial and economic spillovers to the rest of the world, including the United States. U.S. economic activity contracts sharply, as U.S. corporate bond spreads rise more than 300 basis points, equity prices plunge, credit availability is restricted, and household and business confidence erodes. In addition, weaker foreign economic activity and the stronger exchange value of the dollar depress U.S. net exports. In all, U.S. real GDP rises only 1 percent at an annual rate in the second half of this year before falling 3 percent next year. The unemployment rate rises to 10½ percent in 2014 before beginning to gradually decline. With substantially greater resource slack and lower import prices, overall U.S. consumer prices decrease in 2013; prices begin to rise in 2014 as economic activity starts to recover.[6] Under these conditions, the federal funds rate remains at its effective lower bound until mid-2016.

Hard Landing in China

Although real GDP growth in China has slowed substantially in recent quarters, to an annual rate of roughly 7 percent, in our baseline forecast we expect that China's economy will pick up to a growth rate of close to 8 percent in 2013 and 2014.

[6] The rebound in consumer price inflation after 2013 in the simulation reflects the forward-looking nature of inflation determination in SIGMA and the relatively modest degree of structural inflation persistence. In particular, long-run inflation expectations remain firmly anchored at 2 percent, marginal costs are expected to rise as the economy recovers, and productivity is weaker (reflecting reduced capital spending). In addition, import price inflation runs significantly higher than in the baseline as the initial appreciation in the exchange value of the dollar is gradually reversed. Under alternative specifications of SIGMA that, for instance, allowed for more structural persistence in the inflation process or a less firm anchoring of inflation expectations, inflation would remain low for a longer period.

Nevertheless, important downside risks attend this outlook, including the possibility of a collapse in real estate values or a sharp deceleration in the supply of credit if problems mount in China's banking sector. In this scenario, we assume that these risks materialize, and despite stimulative government policies, real GDP in China rises at only a 5 percent annual pace over the next two years due to tighter credit conditions, lower investment spending, and reduced household and business confidence. Moreover, we assume that the slowdown in China's economy has pronounced global spillovers, especially to other major U.S. trading partners in Asia. In this environment, the trade-weighted exchange value of the dollar appreciates about 5 percent relative to the baseline. U.S. real net exports decline relative to the baseline in response to weaker foreign economic growth and the dollar's appreciation. U.S. real GDP expands at an annual rate of only 1¾ percent in 2013, and the unemployment rate stays above 8 percent until late 2014, about ¾ percentage point higher than in the baseline. Core PCE inflation declines to 1¼ percent in 2013 and 2014 because of both the appreciation in the foreign exchange value of the dollar and lower resource utilization. The liftoff of the federal funds rate from its effective lower bound is delayed until early 2016.

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

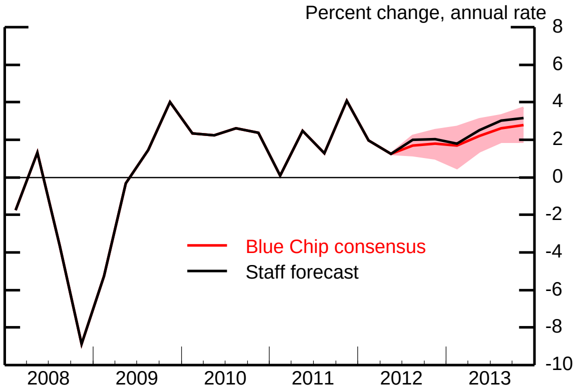
Measure and projection	2012		2013		2014	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP						
Staff	1.6	1.8	2.4	2.6	3.2	3.5
FRB/US	1.5	1.4	1.7	1.9	2.9	3.1
EDO	1.9	2.0	3.1	3.2	3.1	3.2
Blue Chip	1.8	1.7	2.4	2.3	...	...
Unemployment rate[1]						
Staff	8.3	8.0	8.0	7.8	7.6	7.2
FRB/US	8.4	8.1	8.8	8.5	8.5	8.1
EDO	8.2	8.1	7.8	7.7	7.4	7.4
Blue Chip	8.1	8.1	7.7	7.8	...	...
Total PCE prices						
Staff	1.7	1.7	1.4	1.3	1.4	1.4
FRB/US	1.7	1.8	1.2	1.2	1.0	1.0
EDO	1.6	1.6	1.6	1.5	1.6	1.6
Blue Chip[2]	1.9	1.9	2.2	2.1	...	...
Core PCE prices						
Staff	1.7	1.6	1.6	1.6	1.6	1.7
FRB/US	1.7	1.7	1.5	1.5	1.2	1.3
EDO	1.7	1.6	1.6	1.5	1.6	1.6
Blue Chip	...	...	...	...	...	...
Federal funds rate[1]						
Staff	.1	.1	.1	.1	.6	.1
FRB/US	.2	.3	.2	.5	.9	1.6
EDO	.4	.3	1.2	1.2	1.9	1.9
Blue Chip[3]	.1	.1	.2	.2	...	...

Note: Blue Chip forecast completed on October 10, 2012.
1. Percent, average for Q4.
2. Consumer price index.
3. Treasury bill rate.
... Not applicable. The Blue Chip forecast typically extends about 2 years.

Risks & Uncertainty

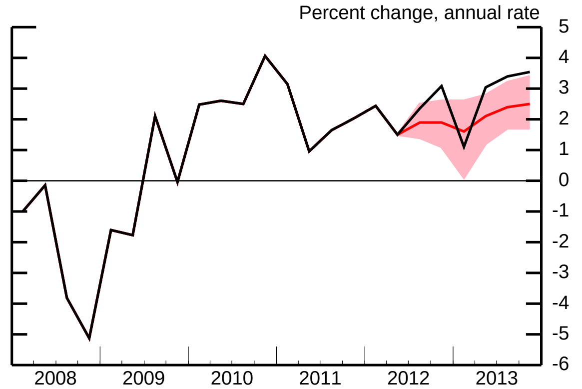
Tealbook Forecast Compared with Blue Chip
(Blue Chip survey released October 10, 2012)

Real GDP

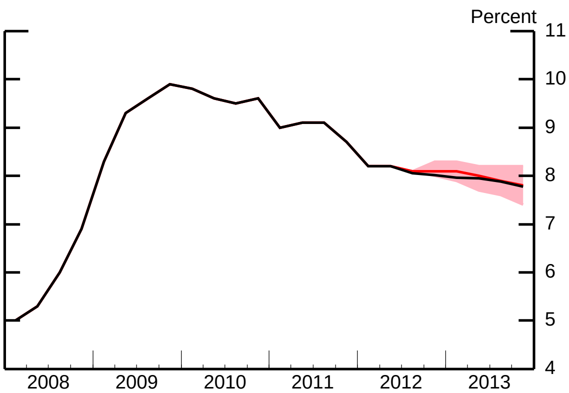


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

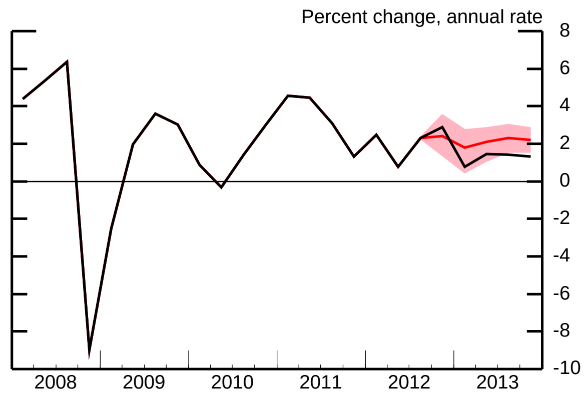
Real PCE



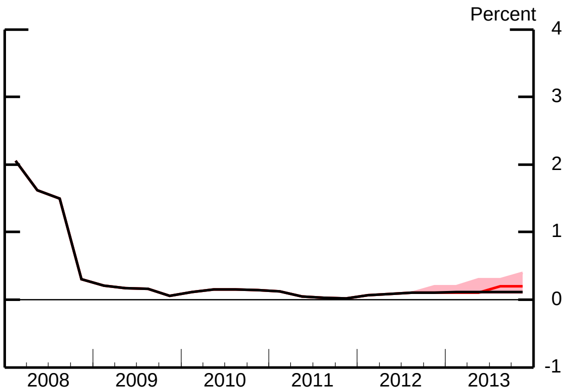
Unemployment Rate



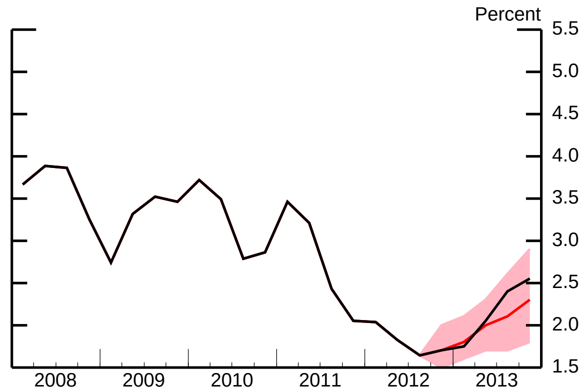
Consumer Price Index



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—2013:Q3)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
Greater than 3 percent				
Current Tealbook	.06	.07	.11	.14
Previous Tealbook	.07	.06	.11	.14
Less than 1 percent				
Current Tealbook	.29	.26	.32	.09
Previous Tealbook	.27	.31	.32	.10

Probability of Unemployment Events
(4 quarters ahead—2013:Q3)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
Increase by 1 percentage point				
Current Tealbook	.02	.15	.17	.01
Previous Tealbook	.02	.16	.16	.02
Decrease by 1 percentage point				
Current Tealbook	.04	.00	.29	.30
Previous Tealbook	.06	.00	.32	.14

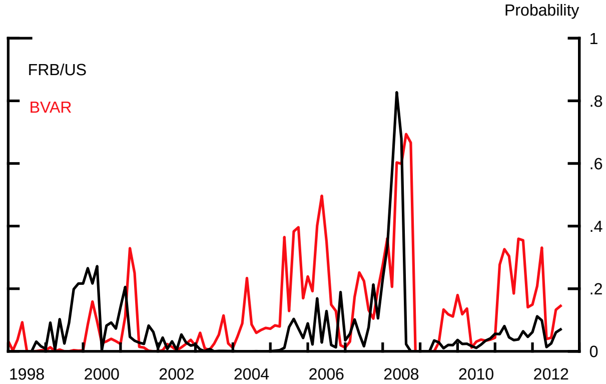
Probability of Near-Term Recession

Probability that real GDP declines in each of 2012:Q4 and 2013:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.03	.06	.06	.03	.24
Previous Tealbook	.03	.07	.05	.03	.21

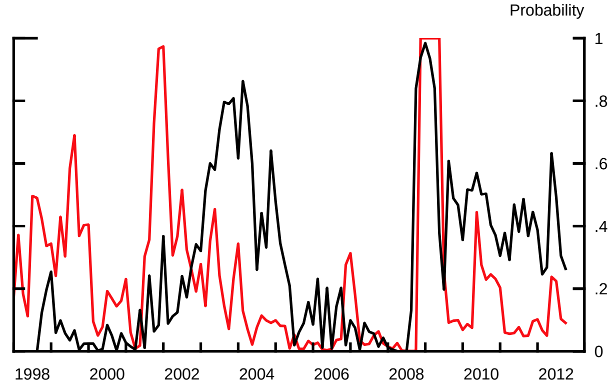
Note: “Staff” represents Tealbook forecast errors applied to the Tealbook baseline; baselines for FRB/US, BVAR, EDO, and the factor model are generated by those models themselves, up to the current-quarter estimate. The current quarter is taken as data from the staff estimate for the second Tealbook in each quarter, otherwise the preceding quarter is taken as the latest historical observation.

Assessment of Key Macroeconomic Risks (2)

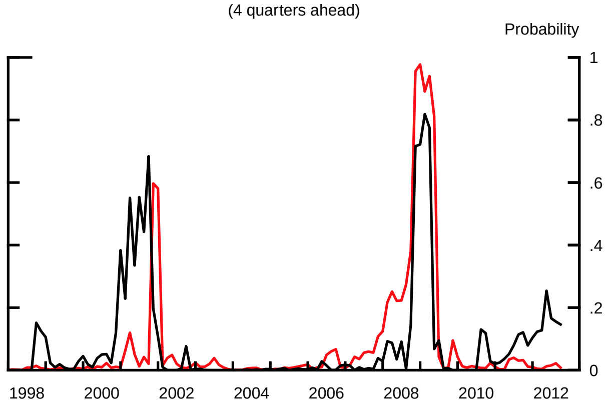
Probability that Total PCE Inflation Is above 3 Percent
(4 quarters ahead)



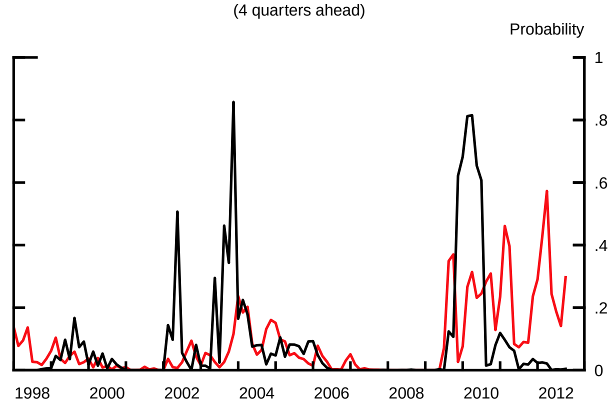
Probability that Total PCE Inflation Is below 1 Percent
(4 quarters ahead)



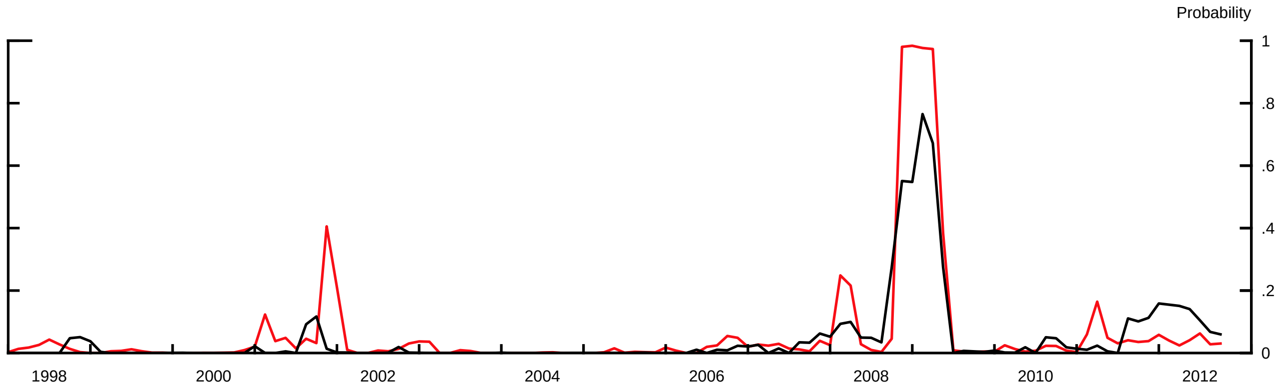
Probability that the Unemployment Rate Increases 1 ppt
(4 quarters ahead)



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



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



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

Risks & Uncertainty

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

Interval	Nominal GDP 09/05/12	Nominal GDP 10/17/12	Real GDP 09/05/12	Real GDP 10/17/12	PCE price index 09/05/12	PCE price index 10/17/12	Core PCE price index 09/05/12	Core PCE price index 10/17/12	Unemployment rate[1] 09/05/12	Unemployment rate[1] 10/17/12
Quarterly										
2011:Q1	2.2	2.2	.1	.1	3.2	3.2	1.3	1.3	9.0	9.0
Q2	5.2	5.2	2.5	2.5	3.6	3.6	2.3	2.3	9.1	9.1
Q3	4.3	4.3	1.3	1.3	2.3	2.3	1.9	1.9	9.1	9.1
Q4	4.2	4.2	4.1	4.1	1.1	1.1	1.3	1.3	8.7	8.7
2012:Q1	4.2	4.2	2.0	2.0	2.5	2.5	2.2	2.2	8.2	8.2
Q2	3.3	2.8	1.7	1.3	.7	.7	1.8	1.7	8.2	8.2
Q3	4.3	5.2	1.3	2.0	1.9	1.7	1.3	1.2	8.3	8.1
Q4	3.1	4.3	1.7	2.0	1.7	2.1	1.5	1.4	8.3	8.0
2013:Q1	3.4	2.8	2.0	1.8	1.2	.9	1.6	1.6	8.2	8.0
Q2	3.8	4.0	2.3	2.5	1.5	1.4	1.6	1.6	8.2	8.0
Q3	4.1	4.4	2.6	3.0	1.4	1.4	1.6	1.6	8.1	7.9
Q4	4.3	4.5	2.8	3.1	1.3	1.3	1.6	1.6	8.0	7.8
Two-quarter[2]										
2011:Q2	3.7	3.7	1.3	1.3	3.4	3.4	1.8	1.8	-.5	-.5
Q4	4.3	4.3	2.7	2.7	1.7	1.7	1.6	1.6	-.4	-.4
2012:Q2	3.7	3.5	1.8	1.6	1.6	1.6	2.0	2.0	-.5	-.5
Q4	3.7	4.7	1.5	2.0	1.8	1.9	1.4	1.3	.1	-.2
2013:Q2	3.6	3.4	2.1	2.2	1.4	1.2	1.6	1.6	-.1	.0
Q4	4.2	4.5	2.7	3.1	1.4	1.4	1.6	1.6	-.2	-.2
Four-quarter[3]										
2010:Q4	4.3	4.3	2.4	2.4	1.5	1.5	1.2	1.2	-.3	-.3
2011:Q4	4.0	4.0	2.0	2.0	2.5	2.5	1.7	1.7	-.9	-.9
2012:Q4	3.7	4.1	1.6	1.8	1.7	1.7	1.7	1.6	-.4	-.7
2013:Q4	3.9	3.9	2.4	2.6	1.4	1.3	1.6	1.6	-.3	-.2
2014:Q4	4.7	5.0	3.2	3.5	1.4	1.4	1.6	1.7	-.4	-.6
Annual										
2010	3.8	3.8	2.4	2.4	1.9	1.9	1.5	1.5	9.6	9.6
2011	4.0	4.0	1.8	1.8	2.4	2.4	1.4	1.4	8.9	8.9
2012	4.0	4.1	2.1	2.2	1.8	1.8	1.8	1.7	8.2	8.1
2013	3.7	3.9	2.0	2.2	1.5	1.4	1.6	1.5	8.1	7.9
2014	4.5	4.8	3.0	3.3	1.4	1.4	1.6	1.6	7.8	7.4

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

Greensheets

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

Item	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2011[1]	2012[1]	2013[1]	2014[1]
Real GDP	2.5	1.3	4.1	2.0	1.3	2.0	2.0	1.8	2.5	3.0	3.1	2.0	1.8	2.6	3.5
Previous Tealbook	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6	2.8	2.0	1.6	2.4	3.2
Final sales	2.4	2.3	1.5	2.4	1.7	1.9	2.1	1.0	2.7	3.2	3.0	1.7	2.0	2.5	3.5
Previous Tealbook	2.4	2.3	1.5	2.4	1.9	1.4	1.4	.8	2.4	2.7	2.5	1.7	1.8	2.1	3.1
Priv. dom. final purch.	2.5	3.6	3.2	3.5	1.9	2.1	3.1	1.4	3.5	4.0	4.1	2.9	2.7	3.2	4.3
Previous Tealbook	2.5	3.6	3.2	3.5	2.0	2.1	2.2	1.3	3.3	3.5	3.6	2.9	2.5	2.9	4.0
Personal cons. expend.	1.0	1.7	2.0	2.4	1.5	2.3	3.1	1.1	3.0	3.4	3.5	1.9	2.3	2.8	3.7
Previous Tealbook	1.0	1.7	2.0	2.4	1.7	2.3	2.2	1.1	2.8	2.8	3.0	1.9	2.2	2.4	3.4
Durables	-2.3	5.4	13.9	11.5	-.2	8.0	12.4	2.3	10.4	10.1	9.8	5.9	7.8	8.1	9.6
Nondurables	-.3	-.4	1.8	1.6	.6	2.9	2.7	.9	1.8	2.3	2.6	1.4	2.0	1.9	2.9
Services	1.9	1.8	.3	1.3	2.1	1.3	1.7	1.0	2.3	2.7	2.8	1.5	1.6	2.2	3.0
Residential investment	4.1	1.4	12.1	20.5	8.5	14.3	13.9	13.4	14.9	15.6	15.2	3.9	14.2	14.8	13.2
Previous Tealbook	4.1	1.4	12.1	20.5	8.4	9.7	5.5	10.5	12.0	12.4	12.6	3.9	10.9	11.9	12.4
Business fixed invest.	14.5	19.0	9.5	7.5	3.6	-2.5	.8	1.0	3.7	5.2	5.2	10.2	2.3	3.8	6.0
Previous Tealbook	14.5	19.0	9.5	7.5	3.1	-1.0	1.5	.6	4.5	6.1	5.9	10.2	2.7	4.2	5.7
Equipment & software	7.8	18.3	8.8	5.4	4.8	-1.0	2.0	1.0	4.2	5.5	6.1	11.4	2.8	4.2	7.5
Previous Tealbook	7.8	18.3	8.8	5.4	4.1	.7	2.0	.2	5.4	7.5	7.3	11.4	3.0	5.1	7.2
Nonres. structures	35.2	20.7	11.5	12.9	.6	-6.1	-2.2	.9	2.7	4.4	3.0	6.9	1.0	2.7	2.3
Previous Tealbook	35.2	20.7	11.5	12.9	.5	-5.0	.5	1.4	2.3	2.6	2.6	6.9	2.0	2.2	2.2
Net exports[2]	-400	-398	-418	-416	-407	-406	-413	-409	-406	-402	-408	-408	-411	-406	-411
Previous Tealbook[2]	-400	-398	-418	-416	-405	-405	-411	-412	-414	-414	-423	-408	-409	-416	-430
Exports	4.1	6.1	1.4	4.4	5.3	-1.3	3.5	4.8	5.3	5.0	5.3	4.3	2.9	5.1	6.2
Imports	.1	4.7	4.9	3.1	2.8	-1.2	4.1	3.1	3.8	3.4	5.4	3.5	2.2	3.9	5.0
Gov't. cons. & invest.	-.8	-2.9	-2.2	-3.0	-.7	.6	-1.6	-1.5	-1.5	-1.4	-1.4	-3.3	-1.2	-1.5	-1.1
Previous Tealbook	-.8	-2.9	-2.2	-3.0	-.7	-1.7	-1.1	-1.5	-1.5	-1.4	-1.4	-3.3	-1.6	-1.5	-1.1
Federal	2.8	-4.3	-4.4	-4.2	-.2	1.4	-4.2	-4.0	-4.3	-4.1	-4.3	-4.2	-1.8	-4.2	-4.2
Defense	8.3	2.6	-10.6	-7.1	-.2	3.4	-4.9	-4.7	-5.1	-4.8	-5.1	-4.0	-2.3	-4.9	-4.9
Nondefense	-7.5	-17.4	10.2	1.8	-.4	-2.4	-2.7	-2.7	-2.7	-2.8	-2.8	-4.6	-.9	-2.7	-2.9
State & local	-3.2	-2.0	-.7	-2.2	-1.0	.0	.1	.2	.3	.3	.4	-2.7	-.8	.3	.9
Change in bus. inventories[2]	28	-4	71	57	41	48	48	74	69	64	70	31	49	69	78
Previous Tealbook[2]	28	-4	71	57	53	47	54	94	90	87	97	31	53	92	107
Nonfarm[2]	36	-1	74	62	53	67	67	68	61	57	63	36	63	62	73
Farm[2]	-6	-3	-2	-3	-8	-19	-19	7	7	7	7	-4	-12	7	5

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

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP	2.8	2.4	2.2	-3.3	-.1	2.4	2.0	1.8	2.6	3.5
Previous Tealbook	2.8	2.4	2.2	-3.3	-.1	2.4	2.0	1.6	2.4	3.2
Final sales	2.7	2.8	2.4	-2.6	-.5	1.7	1.7	2.0	2.5	3.5
Previous Tealbook	2.7	2.8	2.4	-2.6	-.5	1.7	1.7	1.8	2.1	3.1
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.8	3.2	2.9	2.7	3.2	4.3
Previous Tealbook	3.2	2.4	1.2	-4.5	-2.8	3.2	2.9	2.5	2.9	4.0
Personal cons. expend.	2.8	3.2	1.7	-2.5	-.3	2.9	1.9	2.3	2.8	3.7
Previous Tealbook	2.8	3.2	1.7	-2.5	-.3	2.9	1.9	2.2	2.4	3.4
Durables	2.8	7.0	4.6	-13.0	3.0	9.5	5.9	7.8	8.1	9.6
Nondurables	3.1	2.9	.8	-3.1	.4	3.0	1.4	2.0	1.9	2.9
Services	2.7	2.6	1.4	-.5	-1.1	1.9	1.5	1.6	2.2	3.0
Residential investment	5.3	-15.7	-20.7	-24.4	-13.3	-5.7	3.9	14.2	14.8	13.2
Previous Tealbook	5.3	-15.7	-20.7	-24.4	-13.3	-5.7	3.9	10.9	11.9	12.4
Business fixed invest.	4.5	7.8	7.9	-9.4	-15.7	7.7	10.2	2.3	3.8	6.0
Previous Tealbook	4.5	7.8	7.9	-9.4	-15.7	7.7	10.2	2.7	4.2	5.7
Equipment & software	6.2	6.0	3.9	-13.6	-7.8	11.9	11.4	2.8	4.2	7.5
Previous Tealbook	6.2	6.0	3.9	-13.6	-7.8	11.9	11.4	3.0	5.1	7.2
Nonres. structures	-.1	13.0	17.3	-1.2	-29.4	-1.8	6.9	1.0	2.7	2.3
Previous Tealbook	-.1	13.0	17.3	-1.2	-29.4	-1.8	6.9	2.0	2.2	2.2
Net exports[1]	-723	-729	-649	-495	-355	-420	-408	-411	-406	-411
Previous Tealbook[1]	-723	-729	-649	-495	-355	-420	-408	-409	-416	-430
Exports	6.7	10.2	10.1	-2.5	.3	8.8	4.3	2.9	5.1	6.2
Imports	5.2	4.1	.8	-5.9	-6.1	10.9	3.5	2.2	3.9	5.0
Gov't. cons. & invest.	.7	1.5	1.9	2.7	4.0	-1.3	-3.3	-1.2	-1.5	-1.1
Previous Tealbook	.7	1.5	1.9	2.7	4.0	-1.3	-3.3	-1.6	-1.5	-1.1
Federal	1.2	2.2	3.1	8.8	5.1	2.3	-4.2	-1.8	-4.2	-4.2
Defense	.4	4.4	2.6	9.8	4.1	1.0	-4.0	-2.3	-4.9	-4.9
Nondefense	2.6	-2.3	4.2	6.8	7.2	5.2	-4.6	-.9	-2.7	-2.9
State & local	.4	1.2	1.2	-.9	3.3	-3.6	-2.7	-.8	.3	.9
Change in bus. inventories[1]	50	59	28	-36	-139	51	31	49	69	78
Previous Tealbook[1]	50	59	28	-36	-139	51	31	53	92	107
Nonfarm[1]	50	63	29	-38	-138	58	36	63	62	73
Farm[1]	0	-4	-1	1	-1	-6	-4	-12	7	5

1. Billions of chained (2005) dollars.

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

Item	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2011[1]	2012[1]	2013[1]	2014[1]
Real GDP	2.5	1.3	4.1	2.0	1.3	2.0	2.0	1.8	2.5	3.0	3.1	2.0	1.8	2.6	3.5
Previous Tealbook	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6	2.8	2.0	1.6	2.4	3.2
Final sales	2.5	2.3	1.6	2.4	1.7	1.9	2.1	1.0	2.7	3.1	3.0	1.7	2.0	2.5	3.4
Previous Tealbook	2.5	2.3	1.6	2.4	1.9	1.4	1.4	.8	2.4	2.7	2.5	1.7	1.8	2.1	3.1
Priv. dom. final purch.	2.1	2.9	2.7	2.9	1.6	1.7	2.6	1.2	2.9	3.3	3.4	2.4	2.2	2.7	3.6
Previous Tealbook	2.1	2.9	2.7	2.9	1.7	1.8	1.9	1.1	2.7	2.9	3.0	2.4	2.1	2.5	3.3
Personal cons. expend.	.7	1.2	1.5	1.7	1.1	1.7	2.2	.8	2.2	2.4	2.5	1.4	1.7	2.0	2.7
Previous Tealbook	.7	1.2	1.5	1.7	1.2	1.7	1.6	.8	2.0	2.0	2.1	1.4	1.5	1.7	2.4
Durables	-.2	.4	1.0	.9	.0	.6	.9	.2	.8	.8	.8	.4	.6	.6	.8
Nondurables	-.1	-.1	.3	.3	.1	.5	.4	.1	.3	.4	.4	.2	.3	.3	.5
Services	.9	.9	.2	.6	1.0	.6	.8	.5	1.1	1.3	1.3	.7	.8	1.0	1.4
Residential investment	.1	.0	.3	.4	.2	.3	.3	.3	.4	.4	.4	.1	.3	.4	.4
Previous Tealbook	.1	.0	.3	.4	.2	.2	.1	.2	.3	.3	.3	.1	.2	.3	.3
Business fixed invest.	1.3	1.7	.9	.7	.4	-.3	.1	.1	.4	.5	.5	1.0	.2	.4	.6
Previous Tealbook	1.3	1.7	.9	.7	.3	-.1	.2	.1	.5	.6	.6	1.0	.3	.4	.6
Equipment & software	.5	1.2	.6	.4	.4	-.1	.1	.1	.3	.4	.4	.8	.2	.3	.5
Previous Tealbook	.5	1.2	.6	.4	.3	.0	.1	.0	.4	.5	.5	.8	.2	.4	.5
Nonres. structures	.8	.5	.3	.4	.0	-.2	-.1	.0	.1	.1	.1	.2	.0	.1	.1
Previous Tealbook	.8	.5	.3	.4	.0	-.1	.0	.0	.1	.1	.1	.2	.1	.1	.1
Net exports	.5	.0	-.6	.1	.2	.0	-.2	.1	.1	.1	-.2	.0	.0	.0	.0
Previous Tealbook	.5	.0	-.6	.1	.3	.0	-.2	.0	-.1	.0	-.3	.0	.0	-.1	.0
Exports	.6	.8	.2	.6	.7	-.2	.5	.7	.7	.7	.7	.6	.4	.7	.9
Imports	.0	-.8	-.9	-.5	-.5	.2	-.7	-.5	-.7	-.6	-.9	-.6	-.4	-.7	-.9
Gov't. cons. & invest.	-.2	-.6	-.4	-.6	-.1	.1	-.3	-.3	-.3	-.3	-.3	-.7	-.2	-.3	-.2
Previous Tealbook	-.2	-.6	-.4	-.6	-.1	-.3	-.2	-.3	-.3	-.3	-.3	-.7	-.3	-.3	-.2
Federal	.2	-.4	-.4	-.3	.0	.1	-.3	-.3	-.3	-.3	-.3	-.4	-.1	-.3	-.3
Defense	.5	.2	-.6	-.4	.0	.2	-.3	-.2	-.3	-.2	-.2	-.2	-.1	-.2	-.2
Nondefense	-.2	-.5	.3	.1	.0	-.1	-.1	-.1	-.1	-.1	-.1	-.1	.0	-.1	-.1
State & local	-.4	-.2	-.1	-.3	-.1	.0	.0	.0	.0	.0	.1	-.3	-.1	.0	.1
Change in bus. inventories	.0	-1.1	2.5	-.4	-.5	.1	.0	.8	-.2	-.1	.2	.3	-.2	.2	.0
Previous Tealbook	.0	-1.1	2.5	-.4	-.2	-.1	.2	1.2	-.1	-.1	.3	.3	-.1	.3	.1
Nonfarm	.0	-1.2	2.5	-.4	-.3	.5	.0	.0	-.2	-.1	.2	.1	-.1	.0	.1
Farm	.0	.1	.1	.0	-.2	-.3	.0	.7	.0	.0	.0	.1	-.1	.2	.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	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2011[1]	2012[1]	2013[1]	2014[1]
GDP chain-wt. price index	2.6	3.0	.4	2.0	1.6	3.0	2.1	1.0	1.4	1.3	1.3	2.0	2.2	1.3	1.4
Previous Tealbook	2.6	3.0	.4	2.0	1.6	2.9	1.4	1.4	1.5	1.5	1.4	2.0	2.0	1.5	1.5
PCE chain-wt. price index	3.6	2.3	1.1	2.5	.7	1.7	2.1	.9	1.4	1.4	1.3	2.5	1.7	1.3	1.4
Previous Tealbook	3.6	2.3	1.1	2.5	.7	1.9	1.7	1.2	1.5	1.4	1.3	2.5	1.7	1.4	1.4
Energy	20.5	4.7	-5.0	8.1	-13.6	10.5	11.6	-10.7	-3.0	-2.6	-2.4	11.9	3.6	-4.7	-2.3
Previous Tealbook	20.5	4.7	-5.0	8.1	-13.5	10.3	2.5	-6.5	-2.4	-2.5	-2.2	11.9	1.4	-3.4	-2.2
Food	6.0	5.1	3.3	1.3	.7	.6	2.6	3.5	2.9	2.2	1.0	5.1	1.3	2.4	1.0
Previous Tealbook	6.0	5.1	3.3	1.3	.7	1.4	3.4	3.6	3.4	2.5	.8	5.1	1.7	2.6	.9
Ex. food & energy	2.3	1.9	1.3	2.2	1.7	1.2	1.4	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.7
Previous Tealbook	2.3	1.9	1.3	2.2	1.8	1.3	1.5	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.6
Ex. food & energy, market based	2.3	2.1	1.5	2.2	1.8	1.3	1.2	1.5	1.5	1.5	1.5	1.9	1.6	1.5	1.6
Previous Tealbook	2.3	2.1	1.5	2.2	1.7	1.4	1.4	1.5	1.5	1.5	1.5	1.9	1.7	1.5	1.5
CPI	4.4	3.1	1.3	2.5	.8	2.3	2.9	.8	1.5	1.4	1.3	3.3	2.1	1.2	1.4
Previous Tealbook	4.4	3.1	1.3	2.5	.8	2.5	2.1	1.2	1.6	1.4	1.3	3.3	2.0	1.4	1.3
Ex. food & energy	2.4	2.5	1.9	2.1	2.6	1.5	1.7	1.7	1.7	1.7	1.7	2.2	2.0	1.7	1.8
Previous Tealbook	2.4	2.5	1.9	2.1	2.6	1.8	1.8	1.7	1.7	1.7	1.7	2.2	2.1	1.7	1.7
ECI, hourly compensation[2]	3.2	1.4	2.1	1.7	2.1	2.3	2.4	2.5	2.6	2.7	2.7	2.2	2.1	2.6	2.9
Previous Tealbook[2]	3.2	1.4	2.1	1.7	2.1	2.3	2.4	2.5	2.6	2.6	2.7	2.2	2.1	2.6	2.9
Nonfarm business sector															
Output per hour	1.2	.6	2.8	-.5	1.9	1.6	.7	.4	1.7	1.7	1.2	.6	.9	1.3	1.6
Previous Tealbook	1.2	.6	2.8	-.5	2.2	1.0	.8	.9	1.8	1.3	1.2	.6	.8	1.3	1.6
Compensation per hour	-.2	.0	-.7	5.8	3.5	2.2	2.4	2.6	2.7	2.8	2.9	2.0	3.5	2.8	3.1
Previous Tealbook	-.2	.0	-.7	5.8	3.7	2.3	2.3	2.5	2.6	2.7	2.8	2.0	3.5	2.7	3.0
Unit labor costs	-1.3	-.6	-3.3	6.4	1.6	.6	1.7	2.2	1.0	1.1	1.6	1.4	2.6	1.5	1.5
Previous Tealbook	-1.3	-.6	-3.3	6.4	1.5	1.3	1.5	1.6	.8	1.5	1.6	1.4	2.6	1.4	1.4
Core goods imports chain-wt. price index[3]	7.2	2.3	-.6	-.2	1.2	-3.4	1.6	1.8	1.1	1.4	1.3	4.3	-.2	1.4	1.5
Previous Tealbook[3]	7.2	2.3	-.6	-.2	1.2	-2.6	.4	.9	1.0	1.2	1.3	4.3	-.3	1.1	1.4

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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP chain-wt. price index	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.2	1.3	1.4
Previous Tealbook	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.0	1.5	1.5
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.3	1.4
Previous Tealbook	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.4	1.4
Energy	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	3.6	-4.7	-2.3
Previous Tealbook	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	1.4	-3.4	-2.2
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.3	2.4	1.0
Previous Tealbook	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.7	2.6	.9
Ex. food & energy	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.6	1.6	1.7
Previous Tealbook	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.7	1.6	1.6
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.6	1.5	1.6
Previous Tealbook	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.7	1.5	1.5
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.1	1.2	1.4
Previous Tealbook	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.4	1.3
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.0	1.7	1.8
Previous Tealbook	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.1	1.7	1.7
ECI, hourly compensation[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
Previous Tealbook[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
Nonfarm business sector										
Output per hour	1.6	.8	2.5	-1.1	5.6	1.8	.6	.9	1.3	1.6
Previous Tealbook	1.6	.8	2.5	-1.1	5.6	1.8	.6	.8	1.3	1.6
Compensation per hour	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.8	3.1
Previous Tealbook	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.7	3.0
Unit labor costs	1.9	3.6	1.1	3.7	-3.9	-.2	1.4	2.6	1.5	1.5
Previous Tealbook	1.9	3.6	1.1	3.7	-3.9	-.2	1.4	2.6	1.4	1.4
Core goods imports chain-wt. price index[2]	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-.2	1.4	1.5
Previous Tealbook[2]	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-.3	1.1	1.4

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

Other Macroeconomic Indicators

Item	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2011[1]	2012[1]	2013[1]	2014[1]
Employment and production															
Nonfarm payroll employment[2]	.6	.3	.5	.7	.3	.4	.4	.4	.4	.5	.6	1.8	1.8	2.0	2.9
Unemployment rate[3]	9.1	9.1	8.7	8.2	8.2	8.1	8.0	8.0	8.0	7.9	7.8	8.7	8.0	7.8	7.2
Previous Tealbook[3]	9.1	9.1	8.7	8.2	8.2	8.3	8.3	8.2	8.2	8.1	8.0	8.7	8.3	8.0	7.6
Natural rate of unemployment[3]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Previous Tealbook[3]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
GDP gap[4]	-4.6	-4.6	-4.0	-4.0	-4.1	-4.1	-4.0	-4.1	-3.9	-3.7	-3.4	-4.0	-4.0	-3.4	-2.0
Previous Tealbook[4]	-4.9	-5.0	-4.4	-4.4	-4.4	-4.5	-4.6	-4.6	-4.5	-4.3	-4.1	-4.4	-4.6	-4.1	-3.1
Industrial production[5]	1.2	5.6	5.1	5.9	2.6	-.4	2.8	5.0	3.7	3.4	3.6	4.1	2.7	4.0	3.9
Previous Tealbook[5]	1.2	5.6	5.1	5.8	2.5	1.2	4.8	4.1	2.9	3.0	3.1	4.1	3.5	3.3	3.5
Manufacturing industr. prod.[5]	.2	5.1	5.6	9.8	1.0	-.9	1.6	4.0	3.7	3.6	4.0	4.2	2.8	3.8	4.3
Previous Tealbook[5]	.2	5.1	5.6	9.7	1.0	1.9	2.8	2.6	2.7	3.1	3.5	4.2	3.8	3.0	3.9
Capacity utilization rate - mfg.[3]	74.4	75.2	76.1	77.6	77.5	77.1	77.1	77.5	77.9	78.2	78.7	76.1	77.1	78.7	80.1
Previous Tealbook[3]	74.4	75.2	76.1	77.6	77.5	77.6	77.8	78.0	78.2	78.4	78.7	76.1	77.8	78.7	79.9
Housing starts[6]	.6	.6	.7	.7	.7	.8	.9	.9	1.0	1.0	1.1	.6	.8	1.0	1.2
Light motor vehicle sales[6]	12.2	12.6	13.4	14.2	14.1	14.5	14.7	14.9	15.1	15.3	15.5	12.7	14.4	15.2	16.1
Income and saving															
Nominal GDP[5]	5.2	4.3	4.2	4.2	2.8	5.2	4.3	2.8	4.0	4.4	4.5	4.0	4.1	3.9	5.0
Real disposable pers. income[5]	-1.5	-1.3	-.2	3.7	3.1	2.0	2.1	-1.6	3.0	3.6	3.7	.3	2.7	2.2	4.2
Previous Tealbook[5]	-1.5	-1.3	-.2	3.7	3.1	1.9	2.8	-1.3	2.9	3.6	3.5	.3	2.9	2.2	3.5
Personal saving rate[3]	4.6	3.9	3.4	3.6	4.0	4.0	3.8	3.1	3.1	3.1	3.1	3.4	3.8	3.1	3.5
Previous Tealbook[3]	4.6	3.9	3.4	3.6	4.0	3.9	4.1	3.5	3.5	3.6	3.7	3.4	4.1	3.7	3.8
Corporate profits[7]	19.3	6.7	29.6	-10.4	4.7	4.2	-.7	-5.1	-3.6	-.8	-.7	9.2	-.8	-2.5	-.6
Profit share of GNP[3]	11.8	11.9	12.5	12.1	12.1	12.1	12.0	11.7	11.5	11.4	11.3	12.5	12.0	11.3	10.7
Net federal saving[8]	-1,308	-1,232	-1,183	-1,059	-1,106	-1,053	-1,084	-826	-795	-772	-750	-1,237	-1,075	-786	-665
Net state & local saving[8]	-75	-118	-117	-128	-124	-117	-110	-100	-80	-72	-62	-102	-120	-79	-44
Gross national saving rate[3]	11.8	11.8	12.4	12.4	12.5	12.8	12.2	12.6	12.7	12.7	12.8	12.4	12.2	12.8	13.3
Net national saving rate[3]	-1.0	-1.0	-.3	-.3	-.1	.4	-.2	.3	.3	.4	.4	-.3	-.2	.4	1.1

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

Greensheets

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Employment and production										
Nonfarm payroll employment[1]	2.4	2.1	1.2	-2.8	-5.6	.8	1.8	1.8	2.0	2.9
Unemployment rate[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.0	7.8	7.2
Previous Tealbook[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.3	8.0	7.6
Natural rate of unemployment[2]	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0	6.0
Previous Tealbook[2]	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0	6.0
GDP gap[3]	.6	.8	.8	-4.4	-5.5	-4.4	-4.0	-4.0	-3.4	-2.0
Previous Tealbook[3]	.6	.8	.8	-4.5	-5.7	-4.7	-4.4	-4.6	-4.1	-3.1
Industrial production[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	2.7	4.0	3.9
Previous Tealbook[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	3.5	3.3	3.5
Manufacturing industr. prod.[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	2.8	3.8	4.3
Previous Tealbook[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	3.8	3.0	3.9
Capacity utilization rate - mfg.[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.1	78.7	80.1
Previous Tealbook[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.8	78.7	79.9
Housing starts[5]	2.1	1.8	1.4	.9	.6	.6	.6	.8	1.0	1.2
Light motor vehicle sales[5]	16.9	16.5	16.1	13.1	10.4	11.5	12.7	14.4	15.2	16.1
Income and saving										
Nominal GDP[4]	6.4	5.3	4.9	-1.2	.4	4.3	4.0	4.1	3.9	5.0
Real disposable pers. income[4]	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.7	2.2	4.2
Previous Tealbook[4]	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.9	2.2	3.5
Personal saving rate[2]	1.6	2.8	2.5	6.2	3.8	4.8	3.4	3.8	3.1	3.5
Previous Tealbook[2]	1.6	2.8	2.5	6.2	3.8	4.8	3.4	4.1	3.7	3.8
Corporate profits[6]	19.6	3.7	-8.1	-33.5	57.0	17.3	9.2	-.8	-2.5	-.6
Profit share of GNP[2]	11.8	11.6	10.1	6.8	10.7	12.0	12.5	12.0	11.3	10.7
Net federal saving[7]	-283	-204	-245	-613	-1229	-1308	-1237	-1075	-786	-665
Net state & local saving[7]	26	51	12	-72	-113	-90	-102	-120	-79	-44
Gross national saving rate[2]	15.6	16.5	13.9	12.6	11.0	12.1	12.4	12.2	12.8	13.3
Net national saving rate[2]	3.6	4.4	1.7	-.6	-2.3	-.6	-.3	-.2	.4	1.1

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				2012				2013				2014			
	2012[a]	2013	2014	2015	Q1[a]	Q2[a]	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2,449	2,705	2,981	3,230	509	760	625	587	570	837	712	677	626	922	756	726
Outlays[1]	3,538	3,501	3,598	3,784	966	885	810	912	886	863	840	910	920	894	874	963
Surplus/deficit[1]	-1,089	-795	-617	-554	-457	-125	-185	-324	-317	-26	-128	-233	-294	28	-118	-237
Previous Tealbook	*-1,106*	*-837*	*-638*	*-597*	*-457*	*-125*	*-202*	*-331*	*-328*	*-34*	*-144*	*-232*	*-291*	*17*	*-131*	*-239*
On-budget	-1,151	-798	-627	-556	-458	-187	-160	-330	-298	-73	-96	-255	-272	-17	-82	-256
Off-budget	62	3	10	2	1	62	-25	6	-19	47	-32	23	-22	45	-36	19
Means of financing																
Borrowing	1,152	832	697	634	398	198	230	275	307	101	148	253	314	-8	138	257
Cash decrease	-27	15	0	0	42	-48	6	40	30	-55	0	0	0	0	0	0
Other[2]	-36	-52	-80	-80	17	-25	-51	9	-21	-20	-20	-20	-20	-20	-20	-20
Cash operating balance, end of period	85	70	70	70	43	91	85	45	15	70	70	70	70	70	70	70
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2,637	2,911	3,164	3,400	2,665	2,669	2,681	2,713	2,943	2,976	3,014	3,052	3,159	3,199	3,246	3,288
Expenditures	3,737	3,780	3,852	3,993	3,724	3,775	3,734	3,797	3,768	3,770	3,786	3,803	3,837	3,865	3,902	3,945
Consumption expenditures	1,056	1,047	1,021	1,001	1,056	1,055	1,060	1,054	1,052	1,045	1,038	1,031	1,025	1,018	1,011	1,004
Defense	704	697	675	660	703	701	707	702	700	694	689	684	678	673	667	662
Nondefense	352	351	346	340	352	354	353	352	352	351	349	348	347	345	343	342
Other spending	2,682	2,733	2,831	2,992	2,668	2,720	2,674	2,743	2,716	2,725	2,747	2,772	2,813	2,847	2,892	2,941
Current account surplus	-1,100	-869	-688	-593	-1,059	-1,106	-1,053	-1,084	-826	-795	-772	-750	-678	-666	-656	-657
Gross investment	156	153	144	137	152	156	158	156	154	151	149	147	145	142	140	138
Gross saving less gross investment[3]	-1,116	-876	-681	-575	-1,071	-1,121	-1,068	-1,096	-835	-800	-774	-749	-674	-658	-645	-643
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-892.5	-647.0	-508.7	-482.3	-851.2	-899.2	-853.1	-877.9	-596.1	-565.2	-548.9	-536.1	-496.1	-498.5	-503.9	-521.9
Change in HEB, percent of potential GDP	-1.1	-1.7	-.9	-.2	-.8	.3	-.3	.1	-1.7	-.2	-.1	-.1	-.3	.0	.0	.1
Fiscal impetus (FI), percent of GDP	-.6	-1.2	-.5	-.3	-.7	-.7	-.3	-.6	-2.0	-1.1	-.9	-.8	-.6	-.6	-.5	-.4
Previous Tealbook	*-.6*	*-1.2*	*-.5*	*-.2*	*-.7*	*-.7*	*-.6*	*-.5*	*-2.0*	*-1.1*	*-.9*	*-.8*	*-.6*	*-.6*	*-.5*	*-.4*

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 (2005) 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

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

Period[1]	Total	Households: Total	Households: Home mortgages	Households: Consumer credit	Business	State and local governments	Federal government	Memo: Nominal GDP
Year								
2008	5.9	-.2	-.5	.8	6.1	.7	24.2	-1.2
2009	3.1	-1.7	-1.4	-4.5	-2.3	3.9	22.7	.4
2010	4.1	-2.2	-2.9	-1.2	.8	2.2	20.2	4.3
2011	3.6	-1.6	-2.3	3.4	4.7	-1.9	11.4	4.0
2012	4.4	.6	-1.6	5.8	4.3	-.2	10.7	4.1
2013	4.0	2.3	.9	6.7	3.9	.6	7.0	3.9
2014	3.8	2.5	.9	7.5	4.0	.9	5.7	5.0
2015	3.7	2.8	1.2	7.5	4.0	1.0	4.8	5.3
Quarter								
2011:1	2.5	-2.0	-2.6	2.6	3.7	-2.8	9.1	2.2
2	2.6	-2.7	-2.4	3.1	5.2	-2.6	8.2	5.2
3	4.3	-1.7	-1.8	1.9	4.2	-.2	13.7	4.3
4	4.9	.1	-2.5	5.9	5.3	-2.1	12.7	4.2
2012:1	4.5	-.9	-3.3	5.7	3.8	-1.2	13.7	4.2
2	4.8	1.3	-2.1	6.5	3.9	.8	10.9	2.8
3	3.6	.5	-.9	4.5	5.1	-.9	6.7	5.2
4	4.7	1.5	.0	6.0	4.3	.3	9.9	4.3
2013:1	4.3	2.0	.9	5.4	4.1	.6	8.0	2.8
2	4.1	2.4	1.0	6.6	3.8	.6	7.3	4.0
3	3.0	2.4	.9	7.0	3.7	.6	3.5	4.4
4	4.5	2.4	.8	7.2	3.8	.6	8.5	4.5
2014:1	4.3	2.4	.7	7.3	3.9	.9	7.7	4.9
2	3.1	2.4	.8	7.3	3.9	.9	3.3	5.0
3	3.0	2.5	.9	7.3	4.0	.9	3.0	5.0
4	4.6	2.6	1.0	7.3	4.1	.9	8.1	5.1

Note: Quarterly data are at seasonally adjusted annual rates.
1. Data after 2012:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

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

Category	2012	2013	2014	2015	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1296.4	1266.4	1216.3	1221.0	958.5	1481.3	1376.3	1312.5	875.0	1501.8	1433.9	920.3	911.8	1599.1
Net equity issuance	-398.1	-340.0	-360.0	-360.0	-431.4	-360.0	-340.0	-340.0	-340.0	-340.0	-360.0	-360.0	-360.0	-360.0
Net debt issuance	1694.5	1606.4	1576.3	1581.0	1389.8	1841.3	1716.3	1652.5	1215.0	1841.8	1793.9	1280.3	1271.8	1959.1
Borrowing indicators														
Debt (percent of GDP)[1]	248.5	249.3	247.3	243.8	248.5	248.4	249.5	249.7	249.2	248.8	248.5	247.8	246.6	245.9
Borrowing (percent of GDP)	10.8	9.8	9.2	8.8	8.8	11.5	10.7	10.2	7.4	11.1	10.7	7.5	7.4	11.3
Households														
Net borrowing[2]	74.2	300.4	334.8	387.5	62.1	192.2	264.7	308.0	314.1	314.9	312.9	327.4	342.0	356.8
Home mortgages	-153.7	86.4	82.3	117.4	-86.3	0.0	86.1	95.9	86.5	77.1	67.6	77.4	87.2	97.1
Consumer credit	152.5	186.1	221.6	238.1	122.6	165.7	151.2	184.8	199.5	208.9	215.6	219.6	223.5	227.6
Debt/DPI (percent)[3]	108.6	106.9	103.7	101.6	108.0	107.1	107.8	107.2	106.5	105.8	104.8	104.1	103.3	102.7
Business														
Financing gap[4]	-106.1	49.1	223.1	263.0	-146.8	-119.4	2.3	32.7	61.4	99.9	195.1	222.9	237.5	236.9
Net equity issuance	-398.1	-340.0	-360.0	-360.0	-431.4	-360.0	-340.0	-340.0	-340.0	-340.0	-360.0	-360.0	-360.0	-360.0
Credit market borrowing	508.8	479.1	514.9	533.0	607.9	520.6	503.2	468.5	464.2	480.6	498.1	504.7	524.9	531.9
State and local governments														
Net borrowing	-7.3	17.9	25.9	29.9	-25.6	9.9	17.9	17.9	17.9	17.9	25.9	25.9	25.9	25.9
Current surplus[5]	146.3	168.8	211.7	262.1	123.6	133.0	144.3	166.4	176.1	188.3	187.4	209.7	219.2	230.7
Federal government														
Net borrowing	1101.6	809.0	700.7	630.6	745.5	1118.7	930.6	858.1	418.8	1028.5	957.0	422.3	378.9	1044.6
Net borrowing (n.s.a.)	1101.6	809.0	700.7	630.6	229.8	275.3	307.5	100.6	148.1	252.8	314.1	-8.3	138.1	256.8
Unified deficit (n.s.a.)	1091.9	703.6	620.7	550.6	185.1	324.3	316.9	25.8	128.1	232.8	294.1	-28.3	118.1	236.8
Depository institutions														
Funds supplied	426.2	562.7	642.7	699.0	547.1	527.0	552.8	547.4	565.0	585.7	608.2	632.1	645.3	685.1

Note: Data after 2012:Q1 are staff projections.
1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
2. Includes change in liabilities not shown in home mortgages and consumer credit.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. For corporations, excess of capital expenditures over U.S. internal funds.
5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
n.s.a. Not seasonally adjusted.

Greensheets

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

Measure and country	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4
							Projected					
Real GDP [1]												
Total foreign	3.5	2.4	3.8	1.6	3.2	2.2	2.0	2.1	2.4	2.7	3.0	3.2
Previous Tealbook	*3.5*	*2.3*	*3.9*	*1.6*	*3.2*	*2.3*	*2.3*	*2.3*	*2.5*	*2.7*	*2.9*	*3.1*
Advanced foreign economies	1.6	.0	3.1	.4	1.5	.6	.7	.6	.9	1.1	1.5	1.8
Canada	3.6	-1.0	4.5	1.9	1.8	1.8	1.9	1.8	1.7	1.8	2.2	2.5
Japan	-7.9	-1.3	6.9	.3	5.3	.7	-1.0	.4	.9	1.2	1.3	1.6
United Kingdom	2.0	.3	2.1	-1.4	-1.2	-1.5	2.4	.3	1.1	1.5	2.0	2.1
Euro area	2.6	.9	.3	-1.3	.0	-.7	-.8	-1.0	-.5	.0	.4	.8
Germany	5.0	1.8	1.5	-.6	2.0	1.1	.0	-.3	.0	.5	.8	1.4
Emerging market economies	5.6	4.9	4.6	2.8	5.0	3.9	3.4	3.6	4.1	4.5	4.6	4.7
Asia	7.6	5.1	5.0	2.5	5.7	4.5	4.2	4.2	4.7	5.3	5.6	5.7
Korea	5.3	3.4	3.4	1.3	3.5	1.1	2.2	2.3	2.8	3.6	3.8	4.0
China	9.1	10.0	9.5	7.8	6.6	7.4	7.0	7.1	7.4	7.6	7.8	8.0
Latin America	3.3	4.8	4.0	3.0	4.2	3.2	2.6	3.0	3.5	3.6	3.7	3.7
Mexico	2.1	5.5	4.9	3.0	4.9	3.5	2.4	2.9	3.6	3.7	3.7	3.7
Brazil	3.3	2.3	-.6	.5	.5	1.6	2.8	3.3	3.4	3.5	3.8	3.8
Consumer prices [2]												
Total foreign	4.1	3.5	3.1	2.7	2.6	1.9	2.2	2.7	2.3	2.2	2.2	2.3
Previous Tealbook	*4.1*	*3.5*	*3.1*	*2.7*	*2.6*	*1.9*	*1.8*	*2.6*	*2.3*	*2.3*	*2.2*	*2.2*
Advanced foreign economies	3.0	2.3	1.3	2.4	2.1	.6	.7	1.8	1.3	1.2	1.2	1.2
Canada	3.3	3.4	1.0	2.9	2.1	.1	.1	2.1	1.6	1.5	1.6	1.7
Japan	.0	-.7	.1	-.7	2.3	-.9	-2.0	.5	.0	-.2	-.1	-.1
United Kingdom	6.7	4.0	3.9	4.0	1.9	1.2	2.6	3.8	2.0	1.5	1.5	2.0
Euro Area	3.4	2.9	1.9	3.6	2.4	2.0	2.3	2.1	1.6	1.6	1.4	1.4
Germany	3.3	2.5	1.9	2.8	2.4	1.4	1.8	2.2	2.2	2.1	1.7	1.7
Emerging market economies	5.1	4.5	4.5	3.0	2.9	3.0	3.3	3.3	3.1	3.1	3.1	3.0
Asia	5.5	5.2	4.9	2.1	2.3	3.2	2.1	3.0	2.9	2.9	2.9	2.9
Korea	5.5	3.4	4.4	2.6	1.6	1.2	1.0	2.3	2.8	2.8	2.8	2.8
China	5.1	6.1	5.7	1.4	2.0	2.5	1.7	2.5	2.7	2.8	2.8	2.8
Latin America	3.7	2.9	3.9	5.2	4.6	2.6	6.3	3.9	3.6	3.6	3.5	3.5
Mexico	3.2	2.4	3.5	4.9	4.5	2.5	6.5	3.6	3.4	3.3	3.2	3.2
Brazil	7.8	6.8	6.2	6.0	4.0	3.8	7.3	6.1	5.2	5.4	5.6	5.6

[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	2006	2007	2008	2009	2010	2011	------------Projected------------ 2012	2013	2014
Real GDP [1]									
Total foreign	4.2	4.3	-.9	.9	4.5	2.8	2.4	2.8	3.4
Previous Tealbook	*4.2*	*4.3*	*-.9*	*.9*	*4.5*	*2.8*	*2.5*	*2.8*	*3.3*
Advanced foreign economies	2.6	2.6	-1.9	-1.4	2.9	1.3	.9	1.3	2.0
Canada	1.9	2.5	-.7	-1.4	3.3	2.2	1.8	2.0	2.7
Japan	2.1	1.6	-4.8	-.6	3.4	-.6	1.3	1.2	.8
United Kingdom	2.0	3.8	-4.6	-.9	1.5	.7	.0	1.7	2.3
Euro area	3.8	2.3	-2.1	-2.3	2.2	.6	-.6	.2	1.3
Germany	4.9	2.4	-1.9	-2.2	4.2	1.9	.7	.7	1.8
Emerging market economies	6.3	6.7	.4	3.6	6.2	4.5	4.0	4.5	4.8
Asia	7.8	8.8	.8	8.0	7.7	5.0	4.7	5.3	5.8
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	2.3	3.5	4.2
China	12.8	13.7	7.7	11.3	9.7	9.1	7.0	7.7	8.1
Latin America	4.8	4.4	-.2	-.7	4.6	3.8	3.3	3.6	3.7
Mexico	4.1	3.5	-1.1	-2.1	4.3	3.9	3.4	3.7	3.7
Brazil	4.9	6.6	.9	5.3	5.3	1.4	2.1	3.6	4.0
Consumer prices [2]									
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.3	2.3	2.5
Previous Tealbook	*2.2*	*3.7*	*3.3*	*1.3*	*3.2*	*3.4*	*2.2*	*2.3*	*2.5*
Advanced foreign economies	1.4	2.2	2.0	.2	1.7	2.2	1.3	1.2	1.7
Canada	1.4	2.5	1.8	.8	2.2	2.7	1.1	1.6	1.9
Japan	.3	.5	1.1	-2.0	-.3	-.3	.0	-.1	1.7
United Kingdom	2.7	2.1	3.9	2.2	3.4	4.7	2.4	1.7	1.6
Euro Area	1.8	2.9	2.3	.4	2.0	2.9	2.2	1.5	1.5
Germany	1.3	3.1	1.7	.3	1.6	2.6	1.9	1.9	1.8
Emerging market economies	2.9	5.1	4.6	2.1	4.3	4.3	3.1	3.1	3.2
Asia	2.4	5.5	3.6	1.3	4.3	4.4	2.6	2.9	3.1
Korea	2.1	3.4	4.5	2.4	3.2	4.0	1.5	2.8	3.0
China	2.1	6.7	2.5	.6	4.6	4.6	2.2	2.8	3.0
Latin America	4.1	4.2	6.7	3.9	4.4	3.9	4.3	3.5	3.6
Mexico	4.1	3.8	6.2	4.0	4.3	3.5	4.3	3.3	3.3
Brazil	3.1	4.3	6.3	4.3	5.6	6.7	5.3	5.4	5.6

[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

	2011				2012				2013			
							----Projected----					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Billions of dollars, s.a.a.r.							
U.S. current account balance	**-480.0**	**-476.5**	**-432.6**	**-474.6**	**-534.5**	**-469.6**	**-436.6**	**-449.4**	**-465.7**	**-442.9**	**-455.3**	**-490.0**
Previous Tealbook	*-480.0*	*-476.5*	*-432.6*	*-474.6*	*-549.3*	*-493.3*	*-455.5*	*-491.7*	*-514.4*	*-496.7*	*-509.4*	*-547.0*
Current account as percent of GDP	-3.2	-3.2	-2.9	-3.1	-3.5	-3.0	-2.8	-2.8	-2.9	-2.7	-2.8	-3.0
Previous Tealbook	*-3.2*	*-3.2*	*-2.9*	*-3.1*	*-3.5*	*-3.2*	*-2.9*	*-3.1*	*-3.2*	*-3.1*	*-3.1*	*-3.3*
Net goods & services	-548.9	-566.2	-539.3	-585.1	-593.5	-557.3	-515.9	-528.7	-546.0	-517.4	-516.3	-538.8
Investment income, net	217.9	232.8	241.9	247.4	197.4	229.7	220.1	222.1	221.7	211.9	201.8	191.6
Direct, net	314.9	318.2	323.4	330.2	282.9	305.5	281.7	276.6	275.2	267.7	265.8	266.7
Portfolio, net	-97.1	-85.4	-81.4	-82.8	-85.6	-75.8	-61.7	-54.5	-53.5	-55.7	-64.0	-75.0
Other income and transfers, net	-148.9	-143.1	-135.3	-136.9	-138.4	-142.0	-140.8	-142.9	-141.4	-137.5	-140.8	-142.9

Annual Data

							----Projected----		
	2006	2007	2008	2009	2010	2011	2012	2013	2014
					Billions of dollars				
U.S. current account balance	**-800.6**	**-710.3**	**-677.1**	**-381.9**	**-442.0**	**-465.9**	**-472.5**	**-463.5**	**-506.9**
Previous Tealbook	*-800.6*	*-710.3*	*-677.1*	*-381.9*	*-442.0*	*-465.9*	*-497.4*	*-516.9*	*-572.1*
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.0	-3.1	-3.0	-2.8	-3.0
Previous Tealbook	*-6.0*	*-5.1*	*-4.7*	*-2.7*	*-3.0*	*-3.1*	*-3.2*	*-3.2*	*-3.4*
Net goods & services	-753.3	-696.7	-698.3	-379.2	-494.7	-559.9	-548.8	-529.6	-542.1
Investment income, net	54.7	111.1	157.8	127.6	191.0	235.0	217.3	206.8	175.8
Direct, net	174.0	244.6	284.3	253.0	297.9	321.7	286.7	268.8	276.9
Portfolio, net	-119.4	-133.5	-126.5	-125.4	-106.9	-86.7	-69.4	-62.1	-101.1
Other income and transfers, net	-102.0	-124.7	-136.6	-130.3	-138.2	-141.1	-141.0	-140.6	-140.6

Abbreviations

ABCP	asset-backed commercial paper
ABS	asset-backed securities
AFE	advanced foreign economy
BLS	Bureau of Labor Statistics
BOE	Bank of England
BOJ	Bank of Japan
CDS	credit default swap
C&I	commercial and industrial
CLO	collateralized loan obligation
CMBS	commercial mortgage-backed securities
CP	commercial paper
CPI	consumer price index
CRE	commercial real estate
ECB	European Central Bank
EME	emerging market economy
E&S	equipment and software
EU	European Union
EUC	emergency unemployment compensation
FHA	Federal Housing Administration
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
HARP 2.0	revised Home Affordable Refinance Program
IMF	International Monetary Fund
ISM	Institute for Supply Management
LIBOR	London interbank offered rate
LSAP	large-scale asset purchase
MBS	mortgage-backed securities

MEP	maturity extension program
NIPA	national income and product accounts
OIS	overnight index swap
OMT	Outright Monetary Transactions
PCE	personal consumption expenditures
PMI	purchasing managers index
RBA	Reserve Bank of Australia
repo	repurchase agreement
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
S&P	Standard & Poor's
TIC	Treasury International Capital
TIPS	Treasury inflation-protected securities
VIX	Chicago Board Options Exchange Market Volatility Index
WTI	West Texas Intermediate