Prefatory Note

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

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

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Report to the FOMC on Economic Conditions and Monetary Policy

Book A

Economic and Financial Conditions: Current Situation and Outlook

June 13, 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 Econ Devel & Outlook

Domestic Economic Developments and Outlook

We have downgraded our assessment of the pace of real GDP growth since the April Tealbook. With regard to the first half of this year, this revision in view reflects weaker-than-expected incoming indicators of government purchases (both federal and state and local) and net exports. Our revised estimate of real GDP growth in the first half of this year—at 1¾ percent at an annual rate—is ½ percentage point below our previous forecast.

With regard to the second half of this year and beyond, the most important development has been the darkening in the global outlook and the greater restraint on the domestic economy that it portends. In particular, as discussed in the International Economic Developments and Outlook section, we now assume that the situation in Europe will deteriorate significantly until late this year and that it will begin to improve thereafter. Some of the associated restraint on aggregate demand is anticipated to operate through the familiar trade channel, but some is likely to arise from financial spillovers, which are already at work raising risk premiums, depressing U.S. equity prices and weakening business confidence. To be sure, there are some offsets: The same flight-to-safety asset demands that have elevated the dollar have also served to depress Treasury yields, residential mortgage rates, and borrowing rates for some investment-grade firms; in addition, oil prices have declined, boosting the purchasing power of household incomes. However, these buffering influences are comparatively modest in effect.

Other factors corroborating a weaker assessment of real activity include the downward revisions to the BEA's estimates of personal income in recent quarters, which point to less support for household spending going forward; the slower-than-expected pace of private-sector job gains in the past few months; and the noticeably softer trajectory of industrial production in the second quarter than we had expected. In all, we now project real GDP to expand about 2 percent in 2012 and 2¼ percent over 2013, down ½ percentage point in both years from the April Tealbook. In 2014, with the drag from fiscal policy receding and the European situation anticipated to have stabilized, we see real GDP accelerating to about 3 percent, materially above the rate of growth of potential output, but still ¼ percentage point less than what we wrote down for the April Tealbook.

With growth in real GDP expected to be close to that of potential output through 2013, no material progress is made on reducing the slack in labor markets until late in the forecast period. We project that the jobless rate will edge down just ¼ percentage point to 8 percent by the end of 2013, but even that slight decline is attributable, in our reckoning, to the expiration of emergency unemployment benefits; the unemployment rate then falls to 7¾ percent by the end of 2014. Over the forecast period as a whole, the unemployment rate averages ¼ percentage point higher than in the previous Tealbook.

The fundamental inflation picture remains as it has for some time: With slack in labor and product markets expected to stay persistently elevated, but long-term inflation expectations remaining well anchored, our baseline inflation forecast is running somewhat below 2 percent over the medium term. Relative to the April Tealbook, we have revised down our forecast for headline PCE inflation, largely as a consequence of the sharply lower price of crude oil. For this year, we now predict headline prices to rise 1.2 percent, down from 1.9 percent in April; with oil prices forecast to decline a bit further in both years, headline inflation runs a bit below core inflation in 2013 and 2014, at 1.5 percent. Core inflation in this forecast is just a touch below what we wrote down in the April Tealbook.

Key Background Factors

Monetary Policy

Consistent with a mechanical reading of the estimated outcome-based policy rule, we assume that liftoff of the target federal funds rate from its effective lower bound will occur in the third quarter of 2014.[1] This liftoff occurs two quarters later than in the April Tealbook, reflecting the weaker economic outlook in this projection. We also assume that the Committee will maintain the Federal Reserve’s current portfolio-related policies, with the timing adjusted to correspond with the revised liftoff date.

The path of the federal funds rate in the baseline projection is sensitive to the choice of policy rule. As discussed in Book B, had we instead determined the trajectory of the federal funds rate using the Taylor (1999) rule, liftoff would occur in 2014:Q4. But using a rule that targets the level of nominal GDP would delay the onset of conventional tightening until 2015:Q2, while an optimal-control exercise indicates a

[1] For details on the outcome-based and other policy rules, see the appendix on policy rules in Book B of the Tealbook.

Domestic Econ Devel & Outlook

Revisions to the Staff Projection since the Previous SEP

The FOMC published its most recent Survey of Economic Projections (SEP) following the previous FOMC meeting, in April. Thus, revisions to the staff economic projection since the April Tealbook are discussed in the main text. Nonetheless, for ease of reference, our projections for the SEP variables in the current and previous Tealbooks are shown in the table below.

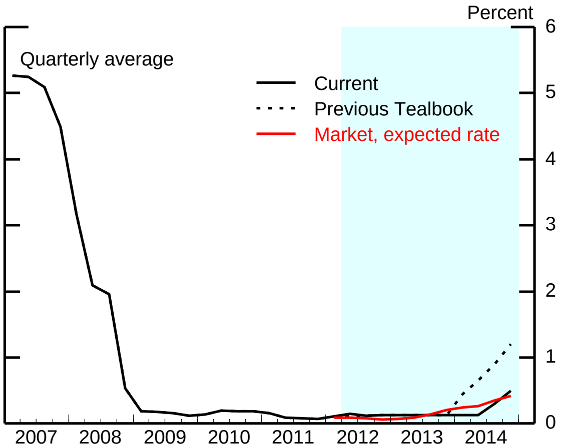
Staff Economic Projections Compared with the April Tealbook

Variable	2012		2012	2013	2014	Longer run
	H1	H2				
Real GDP[1]	1.8	1.9	1.9	2.2	3.1	2.5
April Tealbook	2.3	2.7	2.5	2.8	3.3	2.5
Unemployment rate[2]	8.2	8.2	8.2	8.0	7.7	5.2
April Tealbook	8.2	8.0	8.0	7.7	7.4	5.2
PCE inflation[1]	1.5	.8	1.2	1.5	1.5	2.0
April Tealbook	2.0	1.7	1.9	1.5	1.5	2.0
Core PCE inflation[1]	1.9	1.5	1.7	1.6	1.6	n.a.
April Tealbook	2.0	1.7	1.8	1.7	1.7	n.a.
Federal funds rate[2]	.15	.13	.13	.13	.50	4.25
April Tealbook	.12	.13	.13	.13	1.20	4.25
Memo:						
Federal funds rate, end of period	.13	.13	.13	.13	.50	4.25
April Tealbook	.13	.13	.13	.13	1.25	4.25

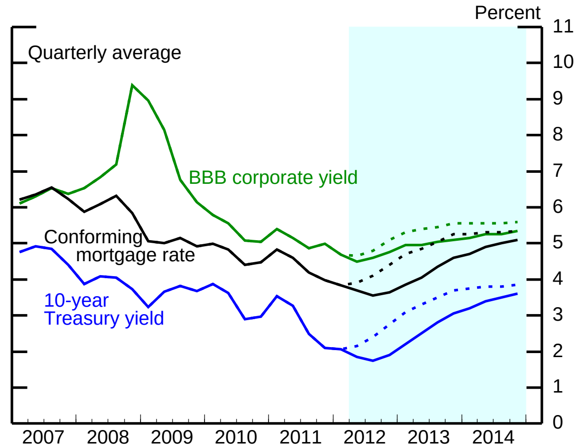
1. Percent change from final quarter of preceding period to final quarter of period indicated.
2. Percent, final quarter of period indicated.
n.a. Not available.

Key Background Factors underlying the Baseline Staff Projection

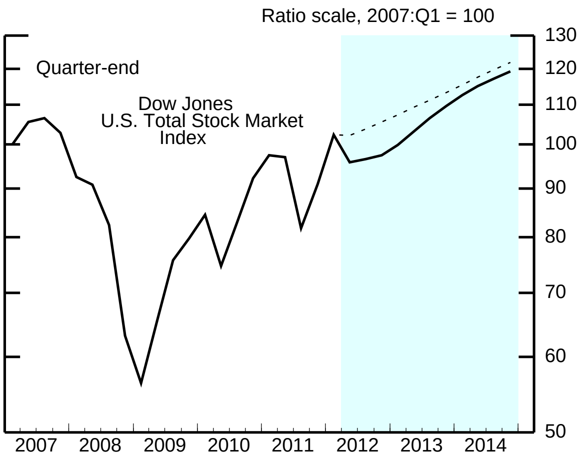
Federal Funds Rate



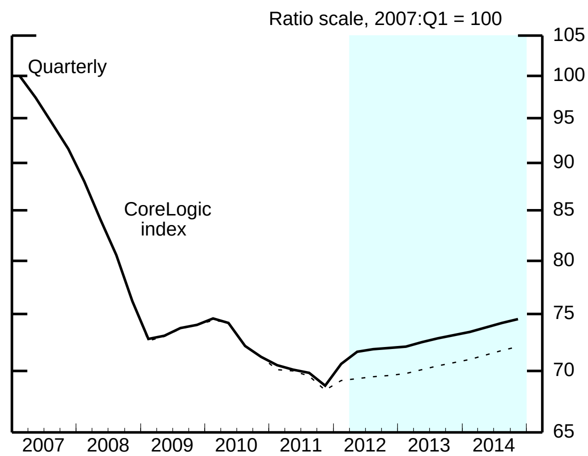
Long-Term Interest Rates



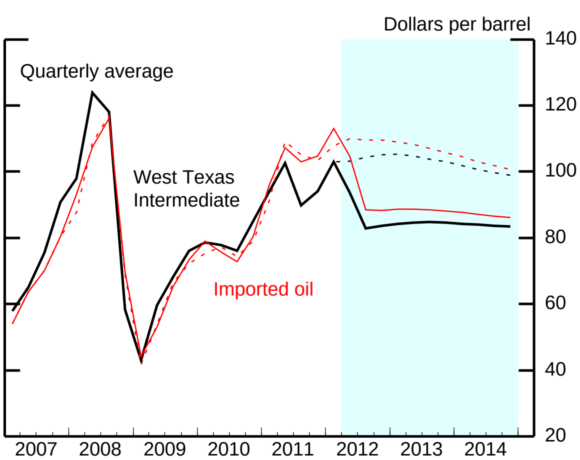
Equity Prices



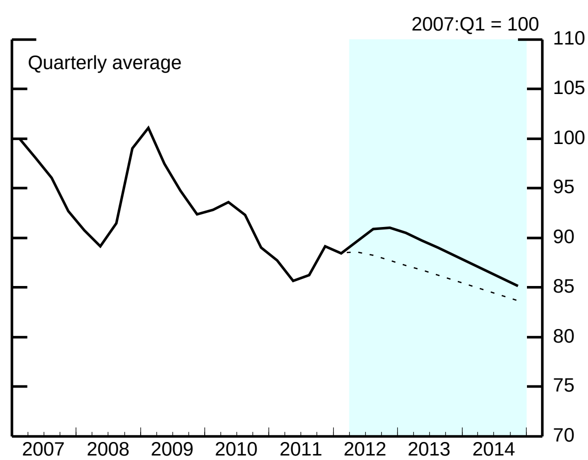
House Prices



Crude Oil Prices



Broad Real Dollar



postponement until 2016:Q2.[2] In contrast, the Taylor (1993) rule and the first-difference rule call for firming to begin earlier than under the outcome-based rule; in fact, the Taylor (1993) rule prescribes increasing the federal funds rate immediately.[3]

Other Interest Rates

The yield on 10-year Treasury securities has declined about 40 basis points, on net, since the April Tealbook. Part of the decline in rates stems from weaker-than-expected economic news and concerns about Europe that caused investors to shift their demands toward relatively safe assets and to expect a more accommodative stance of future monetary policy. We nonetheless continue to expect the 10-year Treasury yield to rise substantially, bringing the rate to around 3½ percent by late 2014. As always, this projection reflects the movement of the valuation window through the period of near-zero short-term interest rates along with a gradual waning of the effects of nonconventional monetary policy. It also assumes the eventual unwinding of the flight-to-safety demands that we believe are depressing Treasury rates currently, as apprehensions related to the European financial crisis abate and the durability of the U.S. economic recovery becomes more assured. All told, the path of this yield over the next 2½ years is about 60 basis points lower on average than we had assumed in April.

Yields on investment-grade corporate bonds also fell over the intermeeting period, albeit by not as much as did Treasury yields. We have carried forward this widening of spreads for a time, but the BBB bond rate still averages about 35 basis points lower in this forecast than in the previous one. In contrast, conventional mortgage rates have moved roughly in tandem with Treasury rates and are expected to continue to do so.

Equity Prices and Home Prices

Broad U.S. stock price indexes have decreased about 5¼ percent, on net, since the April Tealbook. We now project that stock prices will rise only modestly through the second half of 2012, as tensions in financial markets remain elevated. With these

[2] The optimal-control policy noted in the text is conducted under the admittedly strong assumption that, if economic conditions were to evolve as expected, future Committees would honor the commitment to carry out the plan deemed optimal today rather than opportunistically reoptimizing. If future Committees were instead assumed to reoptimize—that is, follow the discretionary policy—then the optimal-control liftoff date would shift back to 2015:Q2 and the associated losses would be higher.

[3] All of these estimates allow for dynamic feedback from the stance of monetary policy to the real economy and inflation, which can have important implications for the estimated timing of tightening under the different rules.

tensions anticipated to ease thereafter, equity prices are projected to rise at an average annual rate of about 10 percent in 2013 and 2014.

The CoreLogic house price index increased in March and April by more than we had anticipated. In response, we have revised up our forecast for house prices in the near term and now project them to rise 4¾ percent in 2012, about 3 percentage points more than in the April Tealbook. We expect increases in house prices to moderate in 2013 and 2014, consistent with the modest pace of the overall economic recovery and the anticipated increase in the number of foreclosed homes listed for sale.

Fiscal Policy

Our fiscal policy assumptions are essentially unchanged in this forecast and continue to imply that federal fiscal policy will exert a substantial drag on economic activity over the medium term. In particular, we still assume that the temporary payroll tax cut and the Emergency Unemployment Compensation (EUC) 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 set in the Budget Control Act and by reductions in defense spending as overseas military operations are wound down further. However, the additional cuts slated to take effect in January 2013 under the automatic sequestration stipulated by the Budget Control Act are assumed to 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 that most expiring federal tax provisions—including the tax cuts initially enacted in 2001 and 2003, relief for most taxpayers from the alternative minimum tax, and a number of other non-stimulus-related tax reductions—will not be allowed to expire at the end of this year but instead will be eventually extended.[4]

The legislative process for extending these tax cuts, along with replacing the automatic spending sequestration with deficit reduction measures that are more gradual, is likely to be contentious and protracted. Indeed the baseline projection embodies the likelihood that the process for reaching agreement will involve a number of short-term extensions at the end of this year and in 2013. This legislative wrangling is assumed to weigh on household and business confidence in early 2013.

[4] An alternative scenario that assumes that all of these tax provisions are allowed to expire, and that the automatic discretionary spending sequestration takes full effect, is presented in the Risks and Uncertainty section of this Tealbook.

We project that, in aggregate, fiscal policy will directly restrain the rate of real GDP growth (excluding multiplier effects) by ½ percentage point this year, 1 percentage point in 2013, and ¼ percentage point in 2014. Fiscal restraint in 2012 is somewhat greater than in the April Tealbook, largely reflecting surprisingly low spending both by the Department of Defense and by state and local governments. (See the box "State and Local Government Fiscal Conditions.") In light of overall fiscal restraint and folding in an anticipated pickup in tax receipts as the economic recovery strengthens, we project that the federal budget deficit will narrow from $1.1 trillion (7¼ percent of GDP) in fiscal 2012 to about $700 billion (4 percent of GDP) in fiscal 2014, much the same as in our previous projection.

The Dollar and Foreign Activity

Since the time of the April Tealbook, the nominal exchange value of the dollar has moved up significantly, and we expect the dollar to continue to appreciate into the fourth quarter of 2012, consistent with our assumption that the financial stresses in the euro area will increase further this year. Thereafter, we assume that the dollar depreciates in real terms at about a 3¼ percent annual rate through the end of 2014—1 percentage point more rapidly than previously projected—reflecting both the gradual abatement of financial stresses that pushed up the dollar earlier as well as a resumption of the trend decline of the dollar against emerging market currencies. The depreciation notwithstanding, the level of the real dollar remains about 2 percent higher at the end of the forecast period than we thought in April.

We estimate that foreign real GDP increased at an annual rate of only 2½ percent in the second quarter, ½ percentage point less than in the April Tealbook, reflecting weaker-than-expected recent economic data in a number of economies, including China, and increased financial stresses in Europe. The expected persistence of the crisis in Europe, together with the weaker U.S. outlook, has led us to revise down foreign growth through the medium term as well. We now forecast foreign activity to expand at an annualized pace of about 2½ percent in the second half of this year and 2¾ percent in 2013. In 2014, economic growth picks up to 3¼ percent as foreign financial conditions improve and the U.S. recovery firms. Our assumption that financial stresses emanating from Europe will be begin to recede around year-end is a critical factor shaping this

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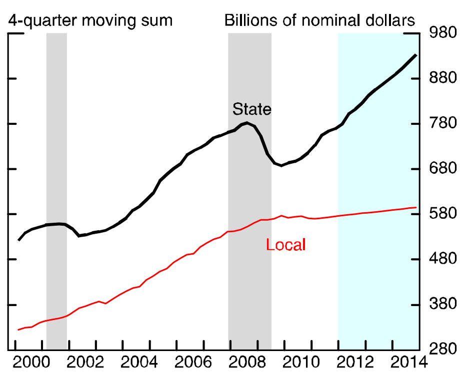
State and Local Government Fiscal Conditions

The overall fiscal condition of state and local governments is slowly improving, although their budgets remain under significant strain. State government budgets appear to have stabilized more than local government budgets have, as state tax receipts—primarily from income and sales taxes—have continued to rise solidly with the economic recovery (the black line in the lower-left figure). As a result, only a few states reported mid-year budget shortfalls during fiscal year 2012 (which ends on June 30 in most states). In contrast, over the preceding three fiscal years, many states were forced to make sizable mid-year budget cuts. Nevertheless, nominal state tax revenue only recently returned to its 2008 peak, and reserve funds remain depleted in many states. At the local level (the red line in the lower-left figure), property taxes—the largest source of tax revenue for these governments—moved sideways in 2010 and 2011 as downward pressure from the lagged effects of the fall in real estate prices has been stemmed by increases in property tax rates. Local governments have also seen reductions in grants-in-aid from state governments as the states have passed a portion of their budget strain down to the local level. Finally, the stimulus grants-in-aid to both states and localities from the federal government were mostly phased out by the end of 2011.

States and localities have continued to trim their payrolls. However, as shown in the lower-right figure, the pace of job losses has eased significantly thus far this year after state and local employment had cumulatively declined by around 600,000 over the preceding three and a half years, a reduction equal to 3 percent of the sector's workforce. As employee compensation is the largest single expense for these governments, the slowing in job losses is consistent with easing budget pressure.

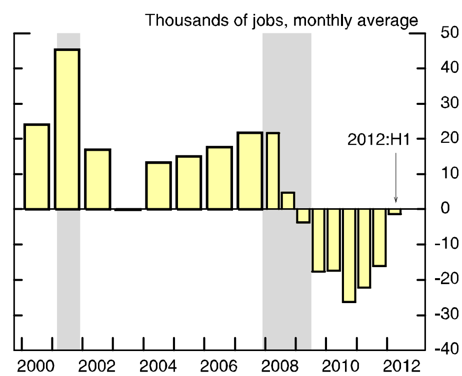
In contrast to the slowing pace of job cuts, state and local governments have continued to sharply decrease their capital expenditures. As shown in the lower-left figure on the next page, real construction outlays have fallen more than 20 percent from their 2007 peak and currently stand at their lowest levels since the mid-1990s. Capital budgets are exempt from the balanced budget requirements that typically restrict states and localities from issuing bonds to finance current

State and Local Taxes



Note: Starting in 2008:Q4 local taxes are adjusted to reflect a change in the sample. The shaded gray bars indicate a period of business recession as defined by the National Bureau of Economic Research.
Source: Census Bureau and staff projection.

Net Change in State and Local Employment



Note: 2012:H1 is the average monthly change in the first 5 months of the year. The shaded gray bars indicate a period of business recession as defined by the National Bureau of Economic Research.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

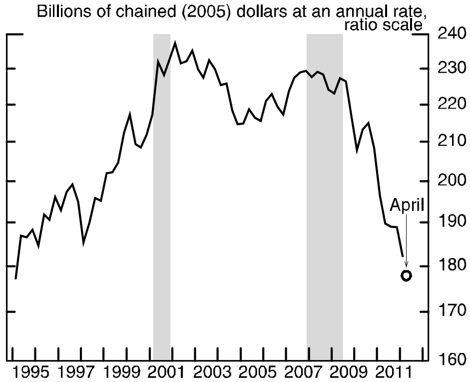
operations, and conditions in the municipal bond market are generally accommodative.[1] Thus, the pullback in construction spending likely does not reflect constraints on borrowing but, instead, tightness in operating budgets: New construction often requires an increase in operating expenditures once the project is complete (for example, a new school building not replacing an existing one requires hiring additional staff), and debt service payments are made out of operating budgets. Similarly, policymakers may be shoring up operating budgets by diverting taxes and fees typically earmarked for capital accounts.

Medicaid outlays, which account for nearly one-fourth of state government expenditures, rose rapidly in the aftermath of the recession as demand for the program surged (not shown). In recent quarters, though, these outlays have been subdued, likely attributable to improving economic conditions slowing the growth in caseloads and aggressive cost containment measures adopted by the states. This easing in the growth of Medicaid expenditures should help reduce the pressure on other areas of state budgets.[2]

Looking ahead, we expect state and local government spending to recover only gradually. Although state budgets should continue to be bolstered by rising tax revenues, local property tax revenue is projected to remain subdued for several more years. Furthermore, given the severity of the current fiscal strains, governments are likely to be cautious and emphasize replenishing depleted reserve funds before ramping up spending. As shown in the lower-right figure, we project that real purchases by state and local governments will be a moderate drag on real GDP growth this year, a roughly neutral factor in 2013, and provide only a modest boost in 2014.

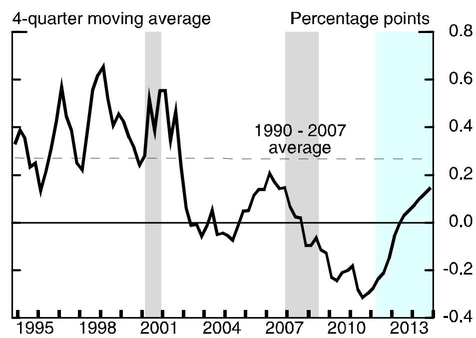
State and Local Real Construction

Billions of chained (2005) dollars at an annual rate, ratio scale



Note: Nominal construction put in place (CPIP) deflated by BEA prices through Q1 and by a staff projection thereafter. The shaded gray bars indicate a period of business recession as defined by the National Bureau of Economic Research.
Source: Census Bureau.

Contribution of State and Local Real Purchases to Real GDP Growth



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

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[1] Consistent with the plunge in construction outlays, state and local debt has decelerated markedly since the start of the recession and posted a small decline in 2011.

[2] In the NIPA, state Medicaid expenditures are booked as personal transfer payments and Medicaid health services show up primarily in personal consumption expenditures. Thus, state Medicaid expenditures are not included in the contribution of state and local government real purchases to the growth in real GDP (shown in the lower-right figure).

outlook. But both the trajectory of the crisis in Europe and its potential spillovers—and hence the global outlook—are extremely uncertain.[5]

Oil and Other Commodity Prices

Oil prices have fallen sharply in recent weeks, with the spot price of Brent crude oil closing on June 12 at $97 per barrel, down over $20 since the time of the April Tealbook.[6] The decline in prices appears to reflect increasing pessimism regarding the strength of global growth as well as the recent rise in the dollar. In addition, increased crude oil production in Saudi Arabia—which has raised Saudi output to near-record levels since the beginning of the year—and some easing of geopolitical tensions associated with Iran have also likely been in play, reducing oil prices more than the prices of other commodities (discussed later). Futures prices over the Tealbook forecast period have also moved lower, but not by as much as spot prices. As a result, the Brent futures curve is now flatter than before; even so, it remains downward sloping. Our forecast for the price of imported oil has also shifted down.[7] Specifically, we project the price of imported oil to drop sharply from $105 per barrel in the current quarter to about $88 per barrel in the third quarter and then to decline further over the remainder of the Tealbook forecast to end 2014 at $86 per barrel, about $12 below the level projected in the April Tealbook.

A broad index of nonfuel commodity prices has fallen over 2 percent since the April Tealbook, with prices of metals recording some of the largest declines. The recent appreciation of the dollar and growing concerns over the strength of global demand have likely played a role in the fall in commodity prices. For the remainder of the forecast period we expect nonfuel commodity prices to remain almost flat, a trajectory that is in line with quotes from futures markets.

Recent Developments and the Near-Term Outlook

We project that real GDP growth will slow from an annual rate of 2¼ percent in the first quarter to about 1¾ percent in the second and third quarters, on average, about

[5] An alternative scenario that has the situation in Europe deteriorating to a much greater extent than in our baseline forecast is presented in the Risks and Uncertainty section of this Tealbook.

[6] The spot price of WTI crude oil closed on June 12 at $83 per barrel, also about $20 lower than at the time of the April Tealbook.

[7] In addition to the decline in futures prices, our lower forecast for the price of imported oil also incorporates a negative adjustment to the futures curve, reflecting our more pessimistic outlook for global growth compared with outside forecasters.

½ percentage point less than in the April Tealbook. The revision reflects the disappointing news on retail sales, job growth, personal income, government spending, and—as recent adverse developments in Europe start to show through—a more negative outlook for net exports.

The Labor Market

After improving significantly during the late fall and winter, the labor market has essentially moved sideways over the past few months, with private payrolls posting mediocre gains and the unemployment rate leveling out.

Private payroll employment rose only 100,000 per month in the three months ending in May, compared with about 250,000 per month in the previous three months. While some of this slowing likely reflects payback from the warm winter weather and distortions to seasonal adjustment related to the sharp employment declines in late 2008 and early 2009, the underlying pace of employment growth appears to have slowed this spring—and by more than we had been projecting in the April Tealbook. The unemployment rate edged up in May, and at 8.2 percent, stood just 0.1 percentage point below its level in January of this year. Initial claims for unemployment insurance have been running at a pace consistent with only modest job gains in coming months.

Taken together, the recent data on the labor market and our less favorable outlook for the broader economy have led us to weaken our near-term forecast for employment and the unemployment rate. We now expect private payrolls to rise at an average monthly rate of about 115,000 through the end of the third quarter.[8] Abstracting from weather-related and seasonal factors, this pace represents no acceleration from the average over the past three months and is about 65,000 per month below our forecast in the April Tealbook. We expect the unemployment rate to remain near its current 8.2 percent level during the third quarter rather than edging down as in our previous projection.

[8] Our forecast assumes that distortion of seasonal adjustment factors owing to the timing of the steep employment losses during the recession will subtract an average of 15,000 per month from the change in private employment over the near term. We think that payback from the effects of the warm winter weather is now complete and will have no effect on employment growth over the remainder of the near term. Seasonal adjustment distortions are not thought to have affected the unemployment rate.

Summary of the Near-Term Outlook

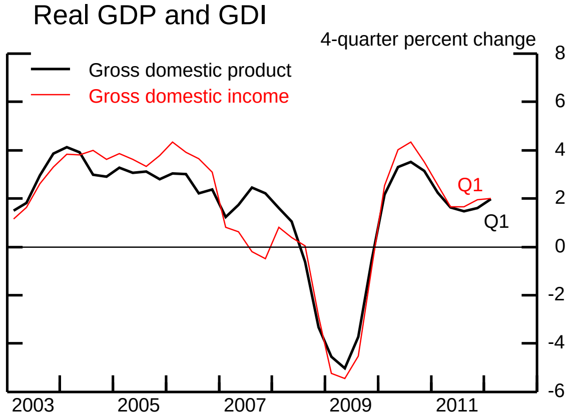
(Percent change at annual rate except as noted)

Measure	2012:Q1		2012:Q2		2012:Q3	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	**2.5**	**2.2**	**2.1**	**1.5**	**2.5**	**1.9**
Private domestic final purchases	2.4	3.3	3.2	2.3	3.3	2.7
Personal consumption expenditures	2.2	2.9	2.5	1.9	2.9	2.5
Residential investment	17.8	19.7	11.6	11.5	9.7	8.3
Business fixed investment	.6	2.8	6.1	2.5	4.5	2.8
Government purchases	.1	-4.0	-.9	-2.0	-1.0	-1.9
Contributions to change in real GDP						
Inventory investment[1]	.2	.1	-.4	.2	.2	.5
Net exports[1]	.3	.1	.0	-.3	-.3	-.4
Unemployment Rate[2]	**8.2**	**8.2**	**8.2**	**8.2**	**8.1**	**8.2**
PCE Chain Price Index	**2.5**	**2.4**	**1.6**	**.6**	**1.8**	**.1**
Ex. food and energy	2.2	2.1	1.8	1.7	1.7	1.6

1. Percentage points.
2. Percent.

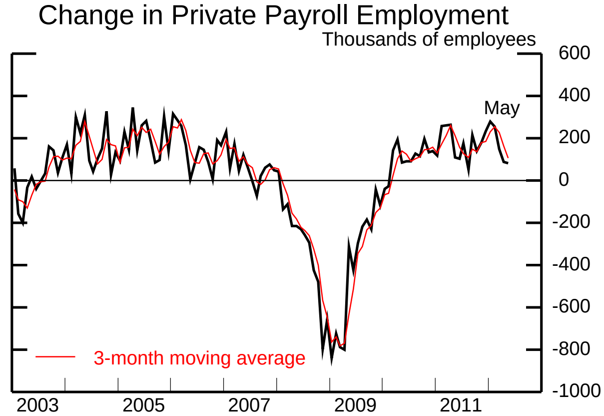
Recent Nonfinancial Developments (1)

Real GDP and GDI



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

Change in Private Payroll Employment

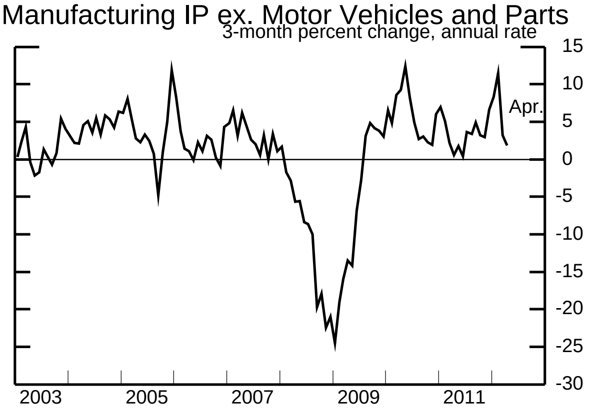


Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Unemployment Rate

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

Manufacturing IP ex. Motor Vehicles and Parts



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

The Industrial Sector

After having increased at an annual rate of nearly 10 percent in the first quarter, manufacturing output is projected to decelerate sharply to a 1¾ percent pace in the second quarter. In part, the slowing reflects the pattern of motor vehicle assemblies, which jumped more than 800,000 units to an annual rate of 9.8 million units in the first quarter and appear on track to rise by a smaller amount at a 10.2 million unit pace in the second quarter. However, the larger influence is a sharp deceleration outside of motor vehicles where production was about flat, on net, in March and April and, given the reported drop in production-worker hours, likely fell in May; we think the softening in the last few months cannot be fully written off to special factors. Looking ahead, motor vehicle assemblies are projected to remain near their second-quarter pace in coming months, while near-term indicators of industrial activity, such as the various regional and national surveys of purchasing managers, point to modest gains. Accordingly, we expect manufacturing output to rise at an annual rate of about 2¾ percent in the third quarter.

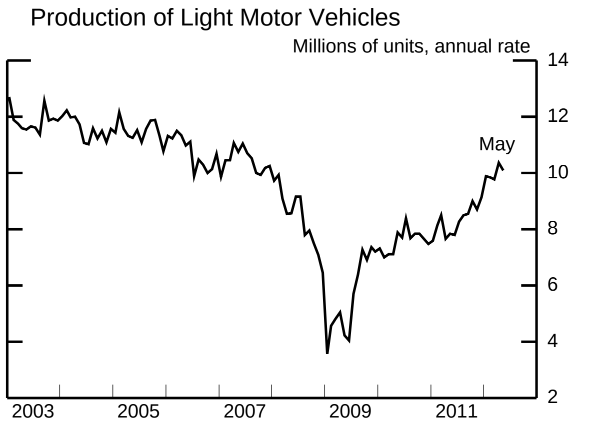
Household Spending

The incoming data on retail sales suggest that real PCE is on track to rise at a 2 percent annual rate in the second quarter after a brisk 3 percent gain in the first quarter. On average, growth in the first half was close to what we wrote down in the April Tealbook. Meanwhile, the recent news on disposable personal income (DPI) has been disappointing. Indeed, over the four quarters ending in 2012:Q1, the BEA now estimates that real DPI edged up a meager ¼ percent, nearly ½ percentage point less than expected at the time of the April Tealbook.[9] The downward surprise in energy prices since the previous Tealbook was sufficient to prevent us from revising down our forecast for the *growth* of real DPI in the near term despite the slower pace of job gains that we now project; nonetheless, the *level* of real DPI remains below our forecast in the April Tealbook. In total, we now expect real PCE growth of 2½ percent pace in the third quarter, about ½ percentage point lower than in our previous forecast.

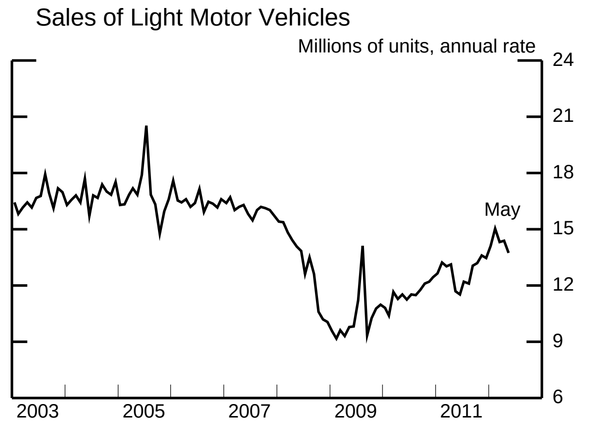
Housing activity appears to be on a gradual uptrend, albeit from a very depressed level. Smoothing as best we can through the volatility associated with the unseasonably warm weather earlier in the year, single-family housing starts and permits look to have moved up a little from their levels late last year. In addition, some signs indicate that

[9] The lower estimate for the growth of real DPI over this period largely reflects a substantial downward revision to compensation in the fourth quarter of last year—a revision that was informed by the data derived from state unemployment insurance systems.

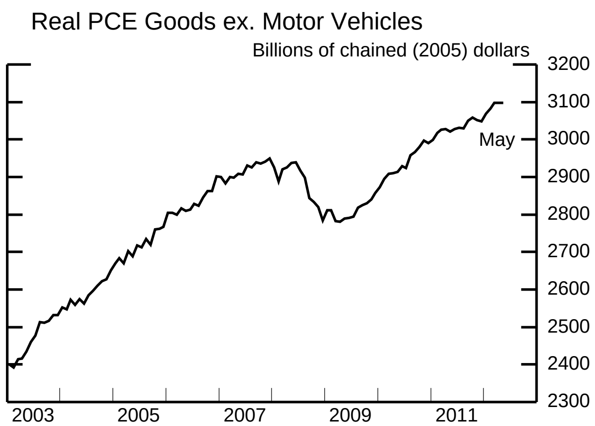
Recent Nonfinancial Developments (2)



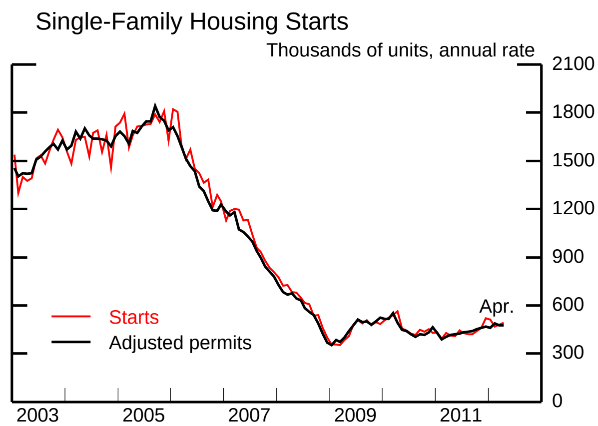
Source: Ward's Auto Infobank.



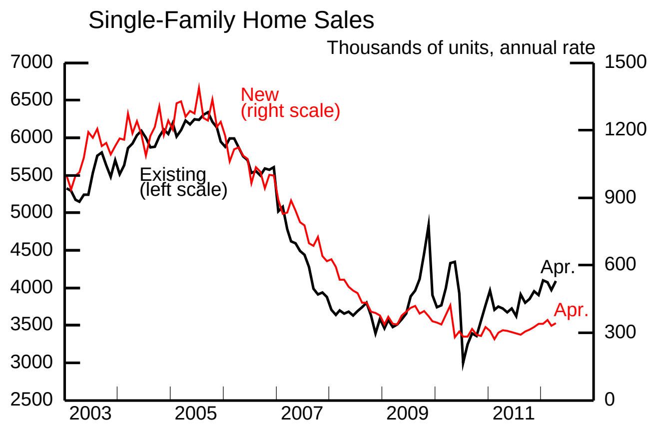
Source: Ward's Auto Infobank.



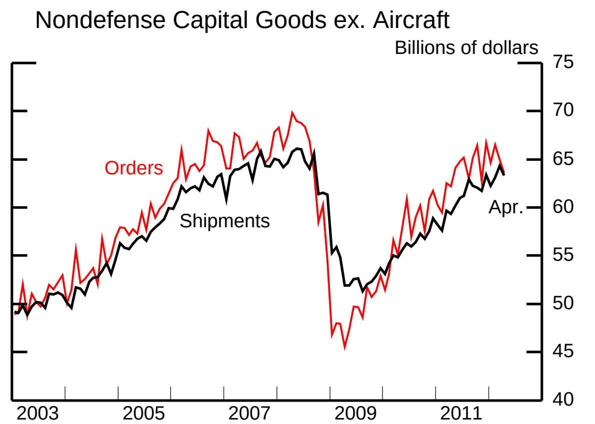
Note: Figures for March, April, and May are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.



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



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



Source: U.S. Census Bureau.

housing demand is slowly improving: Both new and existing home sales have been edging up since last summer, and measures of house prices have turned up in recent months. Nonetheless, given the ongoing restraint on demand from difficult credit conditions and uncertainty about employment and income prospects, as well as the likelihood that the abundant stock of relatively inexpensive vacant houses will divert demand from new construction, we project single-family starts to increase only slightly over the near term.

In contrast, construction activity in the multifamily sector has picked up more rapidly, likely in response to rising rents and falling vacancy rates. With the factors restraining home purchases expected to add further to the demand for rental apartments, we project multifamily starts to continue to move up in coming months.

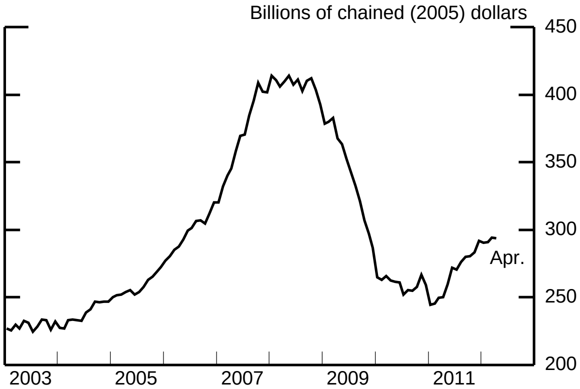
Business Investment

After rising at a double-digit rate in the second half of last year, real spending on equipment and software decelerated to an annual rate of 3¾ percent in the first quarter, and we expect it to continue to rise at about this pace, on average, in the second and third quarters. Our near-term forecast is somewhat weaker than in the April Tealbook, partly reflecting weaker-than-expected data on orders and shipments of nondefense capital goods and lower levels of business purchases of motor vehicles. In addition, forward-looking indicators of investment demand, including surveys of business sentiment and capital spending plans, have softened recently.

Following a period of surprising strength through much of 2011, incoming data suggest that spending on nonresidential construction (excluding drilling and mining) will rise only modestly in the first half of this year. Such a deceleration would be in line with the sector’s fundamentals. Although there are hints of some easing in financing conditions for existing commercial real estate, we anticipate that high vacancy rates, low commercial real estate prices, and difficult financing conditions for new construction will continue to put downward pressure on building activity for the foreseeable future. Meanwhile, after brisk increases over the past two years, investment in the drilling and mining sector fell sharply in the first quarter, a drop that is probably related to the low level of natural gas prices. Outlays for drilling and mining structures are expected to fall a bit further in the second and third quarters as the recent drop in oil prices further curbs the incentive to invest.

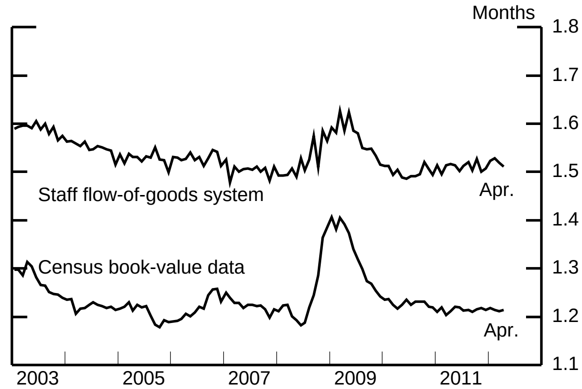
Recent Nonfinancial Developments (3)

Nonresidential Construction Put in Place



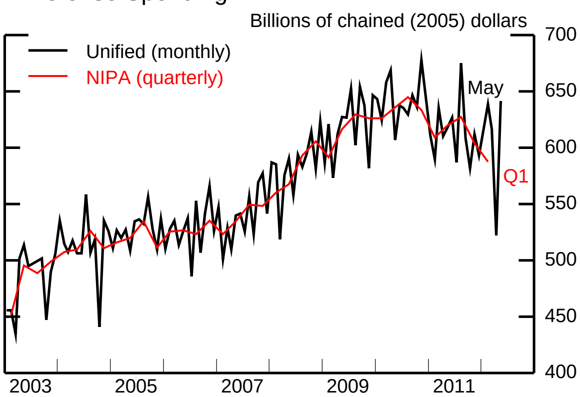
Source: U.S. Census Bureau.

Inventory Ratios ex. Motor Vehicles



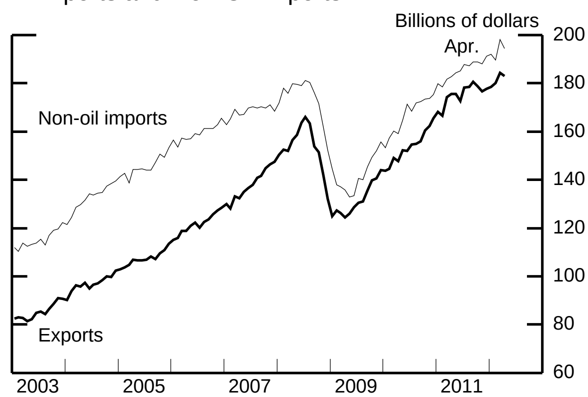
Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.
Source: U.S. Census Bureau; staff calculation.

Defense Spending



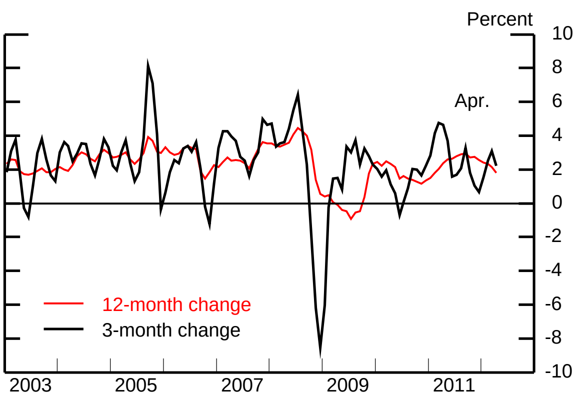
Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.
Source: *Monthly Treasury Statement*; U.S. Dept. of Commerce, Bureau of Economic Analysis.

Exports and Non-Oil Imports



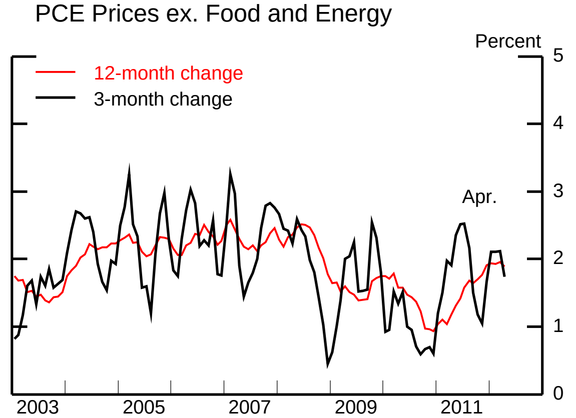
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Total PCE Prices



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

PCE Prices ex. Food and Energy



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

In the aggregate, firms in the nonfarm business sector are forecast to build inventories in the first half of this year at a pace a little above that in the fourth quarter, broadly consistent with the moderate trajectory of final sales growth. Estimates from the staff's flow-of-goods system, book-value measures of inventory-to-sales ratios, reports on dealer inventories of motor vehicles, and surveys of private inventory satisfaction and plans, all point to stocks that are fairly well aligned with sales. Looking ahead, with producers thought to be apprehensive about accumulating excess inventories in the face of uncertainty about the sustainability of the recovery, the pace of stockbuilding is projected to rise slowly and to add only modestly to GDP growth in the near term.

Government

Real federal purchases fell at an annual rate of 6 percent in the first quarter, led by a surprisingly large drop in defense expenditures. Moreover, monthly Treasury data for spending through May point to a slightly greater-than-expected decline in real federal purchases in the second quarter. We anticipate that the downtrend in expenditures will continue over the second half of the year, although at a slower pace than in the first half. In the state and local sector, the incoming data have also been weaker, on balance, than we had expected. Although state and local payrolls have only ticked down, on net, thus far this year—about as anticipated—construction spending by these governments through April was weaker than expected. In addition, the BEA's estimate of the remaining components of state and local purchases in the first quarter was much weaker than anticipated, and we have carried some of this surprise forward. All told, total real government purchases are expected to subtract almost ½ percentage point from the rate of real GDP growth this year, about double what we had written down in the April Tealbook.

Foreign Trade

Real exports of goods and services are expected to increase at a 4 percent pace in the second and third quarters. Relative to the April Tealbook, this projection is down about 1½ percentage points, reflecting both the weaker outlook for foreign growth and the higher exchange value of the dollar. Real imports are projected to expand 5 percent on average in the second and third quarters, a rate in line with the relatively modest pace of U.S. demand growth. All told, the external sector is now expected to subtract about ¼ percentage point from the growth of real GDP in the second quarter and ½ percentage point in the third quarter, a greater drag than in the previous Tealbook on account of the downward revision to export growth.

Prices and Wages

Total PCE price inflation is expected to slow from an annual rate of 2½ percent in the first quarter to about ½ percent in the second quarter and essentially zero in the third quarter. The projected step-down in headline inflation is significantly larger than in the April Tealbook and is driven primarily by an unexpected steep drop in consumer energy prices. After having risen steadily over the first three months of this year, crude oil prices have tumbled since April, and gasoline prices have declined roughly in line with crude costs. As a result, PCE energy prices are now expected to fall at an annual rate of more than 15 percent in both the second and third quarters. Consumer food price inflation has slowed noticeably in recent months but no more than expected, as the upward pressure from last year's jump in farm commodity prices appears to have largely dissipated.

Meanwhile, core PCE prices are expected to increase at an annual rate of about 1¾ percent over the second and third quarters, just a bit below the 2 percent annual pace recorded in the first quarter. As of this writing, the incoming data on prices have come in about as we were expecting, and thus our near-term forecast for core price inflation is little changed from before.

The incoming data on labor compensation have been weaker than anticipated. Estimates of hourly compensation in the nonfarm business sector in the fourth and first quarters were revised down to show no change on net. In addition, the readings on average hourly earnings for April and May surprised us to the downside. In light of this information, we have shaved our projection for annualized growth in hourly compensation to 1¾ percent over the second and third quarters. Likewise, the first-quarter reading on compensation from the employment cost index (ECI) was somewhat lower than we were expecting, and we have marked down our forecast in the second and third quarters in response. The revisions to compensation growth in the fourth and first quarters reduced the level in unit labor costs in the first quarter roughly 1½ percent relative to the April Tealbook. We project unit labor costs will increase at an annual rate of about 1 percent over the second and third quarters, a bit slower than previously forecast.

THE MEDIUM-TERM OUTLOOK

The broad contour of the medium-term projection is noticeably more subdued than in the April Tealbook, largely the result of the less hospitable foreign conditions and the associated higher exchange value of the dollar and reduced level of equity prices.

Long-term interest rates in the United States and global oil prices have moved sharply lower, largely reflecting the events in Europe; these factors cushion the effects from the dollar and the stock market but are not enough, in our estimation, to offset them. Finally, we have once again trimmed our estimate of the level and growth rate of potential output in response to labor market developments and overall output growth over the past few quarters; in the medium-term forecast, the lower projected growth rate of potential output is allowed to show through to actual GDP growth.

The gloomy news notwithstanding, we continue to project a modest acceleration, on average, in real GDP over the forecast period, with the expansion supported by accommodative monetary policy, an eventual containment of the financial crisis in Europe, improving financial conditions, and increasing credit availability. Still, these influences are not sufficient, in our projection, to produce a rapid turnaround in activity, and with the drag from fiscal policy expected to increase next year, real GDP growth does not materially exceed the growth rate of potential until 2014. All told, real GDP is projected to increase about 2¼ percent in 2013 before picking up to a touch over 3 percent in 2014.

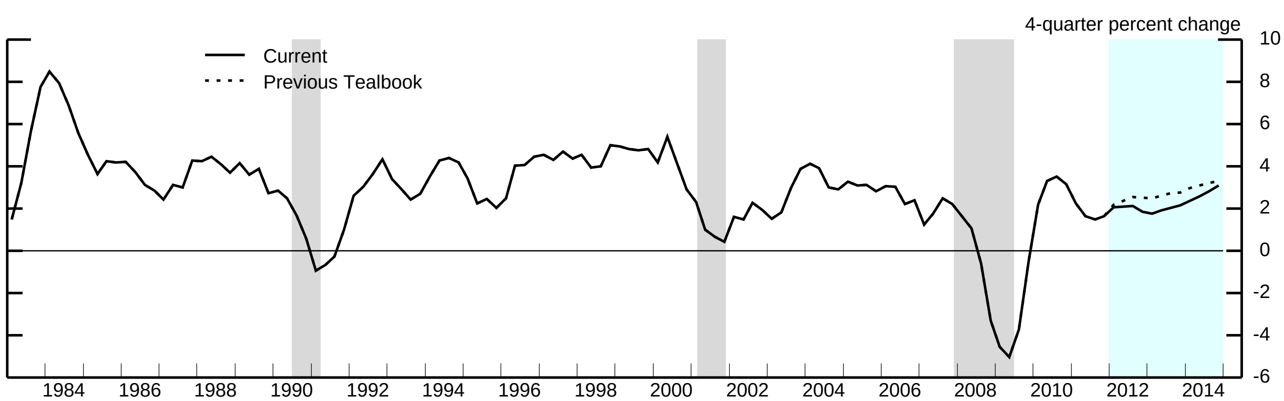
We see the expansion in aggregate demand through 2013 as too weak to make much headway in reducing the unemployment rate. Our projection for a small decline in unemployment next year reflects the expiration of the EUC program rather than an improvement in labor market conditions. Only in 2014, when real GDP is projected to increase more than potential, does the jobless rate drop below 8 percent.

The darker outlook for Europe in this projection and the associated upward revision to the path of the real exchange rate have their most direct effect on the forecast for foreign trade. Exports are expected to grow at about a 3½ percent annual rate in the second half of 2012 and in 2013, about 2 percentage points less than in our April projection. In 2014, export growth is projected to pick up to 5½ percent—again, less than in the April Tealbook—supported by renewed dollar depreciation and some recuperation in foreign activity. Meanwhile, we anticipate imports increasing at about a 4 percent pace over the medium term, held back by the sluggish U.S. recovery. Overall, net trade is expected to subtract about ¼ percentage point from U.S. GDP growth in the second half of 2012 and in 2013 and then be about neutral for growth in 2014 as exports pick up. Relative to the April Tealbook, this forecast is about ¼ percentage point weaker this year and next.

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	**1.6**	**1.8**	**1.9**	**2.2**	**3.1**
Previous Tealbook	1.6	2.3	2.7	2.8	3.3
Final sales	1.5	1.6	1.6	1.9	2.9
Previous Tealbook	1.5	2.4	2.4	2.5	3.2
Personal consumption expenditures	1.6	2.4	2.6	2.3	3.2
Previous Tealbook	1.6	2.4	3.0	2.7	3.2
Residential investment	3.5	15.5	7.5	10.2	10.8
Previous Tealbook	3.5	14.6	8.2	9.3	13.0
Nonresidential structures	4.4	.1	-1.7	.7	2.1
Previous Tealbook	4.4	-1.6	.4	2.7	3.5
Equipment and software	9.6	3.6	4.9	5.6	5.9
Previous Tealbook	9.6	5.2	5.9	6.2	6.5
Federal purchases	-3.2	-4.3	-3.1	-4.1	-4.2
Previous Tealbook	-3.2	-.7	-2.6	-4.1	-4.4
State and local purchases	-2.5	-2.1	-.5	.5	1.3
Previous Tealbook	-2.5	-.2	.0	.7	2.1
Exports	4.7	4.0	3.4	3.7	5.5
Previous Tealbook	4.7	5.9	5.3	5.6	6.4
Imports	3.6	3.7	5.0	4.2	4.5
Previous Tealbook	3.6	3.7	5.2	4.2	4.9
	Contributions to change in real GDP (percentage points)				
Inventory change	.1	.2	.3	.3	.2
Previous Tealbook	.1	-.1	.3	.3	.1
Net exports	.0	-.1	-.4	-.2	.0
Previous Tealbook	.0	.1	-.2	.0	.0

Real GDP

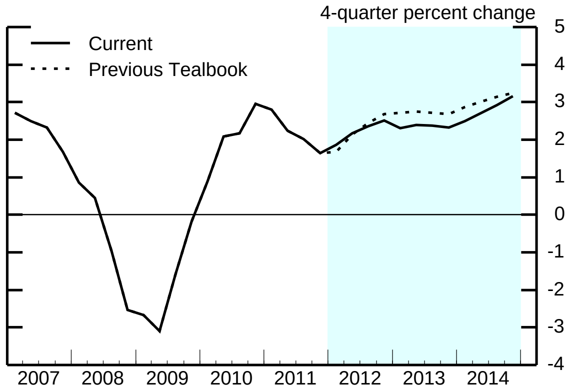


Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

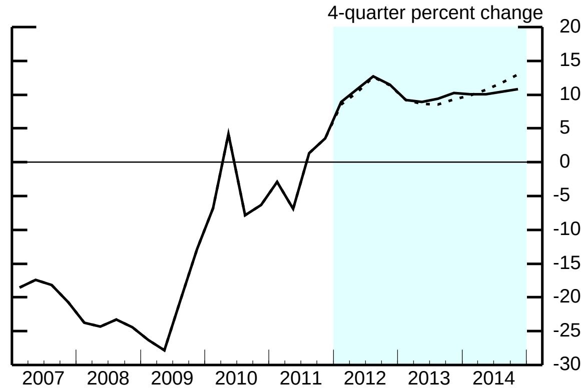
Domestic Econ Devel & Outlook

Components of Final Demand

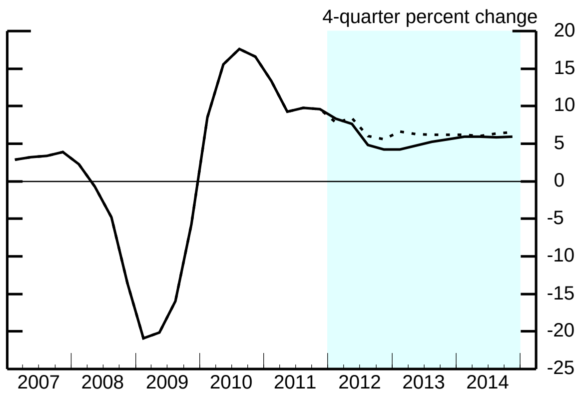
Personal Consumption Expenditures



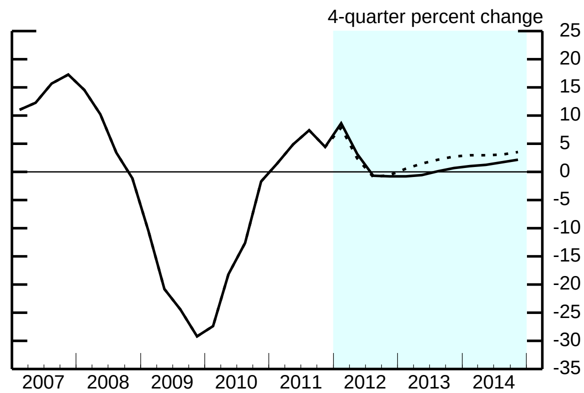
Residential Investment



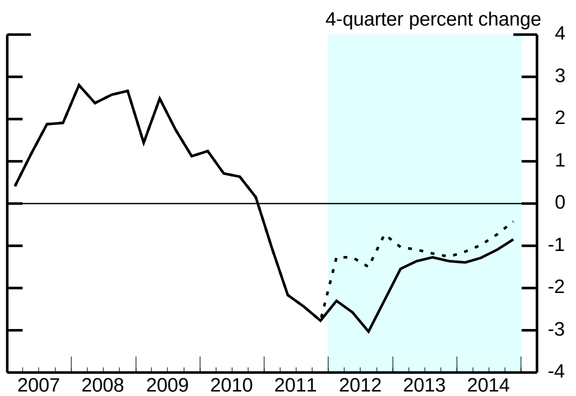
Equipment and Software



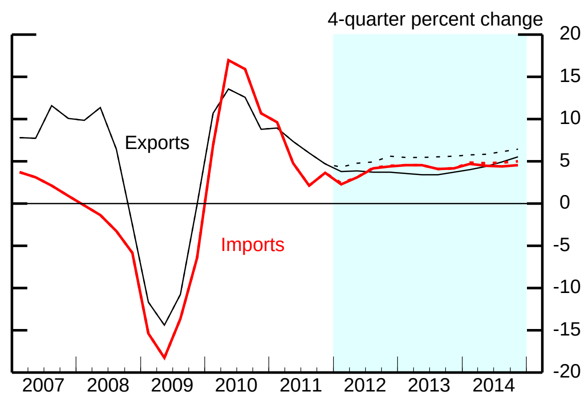
Nonresidential Structures



Government Consumption & Investment



Exports and Imports

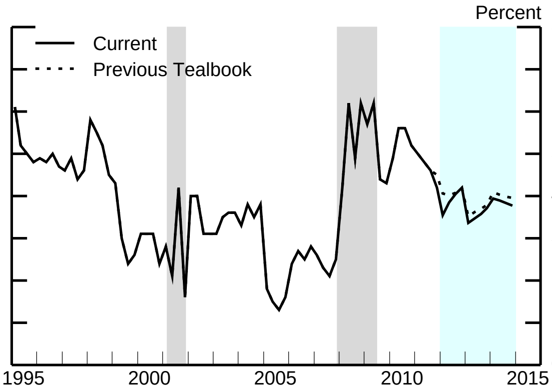


Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Domestic Econ Devel & Outlook

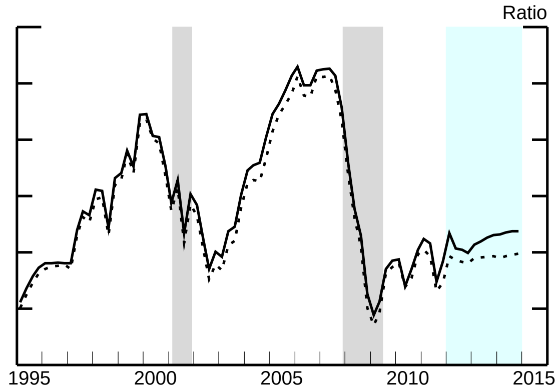
Aspects of the Medium-Term Projection

Personal Saving Rate



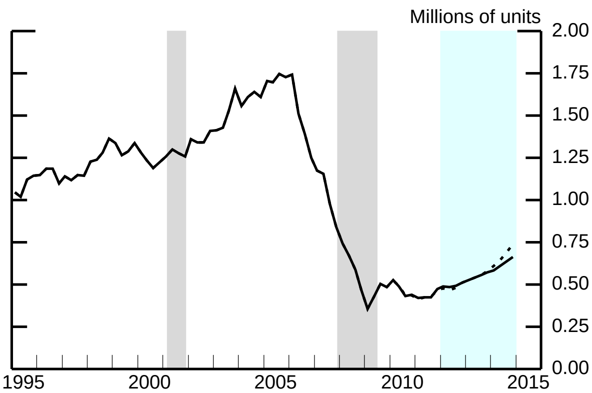
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



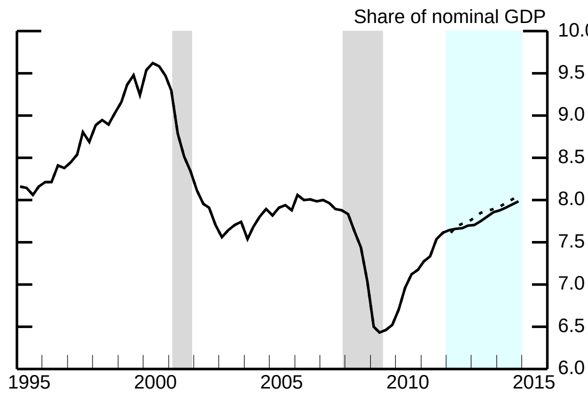
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



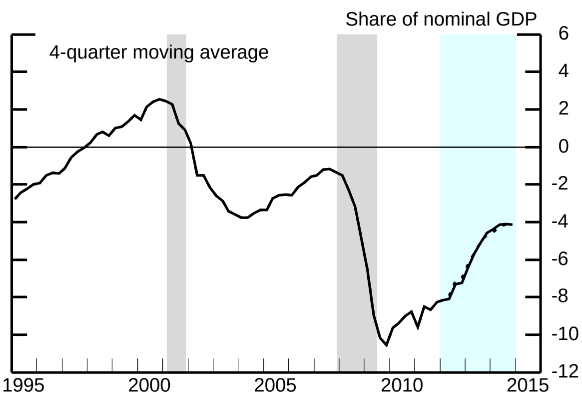
Source: U.S. Census Bureau.

Equipment and Software Spending



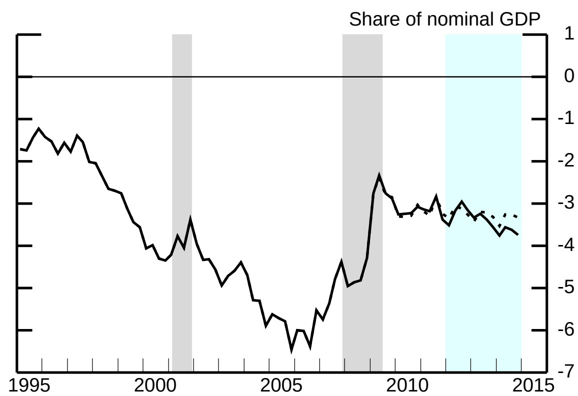
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.

Our projection for the business sector also reflects the ongoing tumult in foreign markets. Although firms have ample cash on hand, many likely see little reason to expand capacity extensively in an environment of sluggish product demand. Moreover, higher equity risk premiums and wider bond spreads suggest that uncertainty has increased significantly, implying that firms should be more reluctant to invest than earlier in the year, all else equal. Incorporating all of these influences, we expect expenditures on equipment and software to rise at only a 5¾ percent annual rate over the medium term. Many of the same factors are holding back investment in structures (other than drilling and mining), where we foresee small declines through next year and only very tepid growth in 2014. Investment in drilling and mining is also revised down in this projection in response to lower oil prices, although the continued deployment of horizontal drilling techniques should keep growth in this sector at respectable rates.

Real PCE growth is expected to be restrained next year by the expiration of the payroll tax reduction and EUC benefits before rebounding in 2014. The projection for growth in consumer spending this year and next is about ¼ percentage point per year weaker than we wrote down in April as a result of the adverse financial market developments, the lower level of DPI, and the weaker labor market in this projection. In all, real PCE is expected to rise 2¼ and 3¼ percent, respectively, in 2013 and 2014, supported by low interest rates, strengthening consumer confidence, and continued improvements in household net worth. With spending projected to rise roughly in line with income, our forecast calls for the personal saving rate to remain near 3½ percent over the medium term.

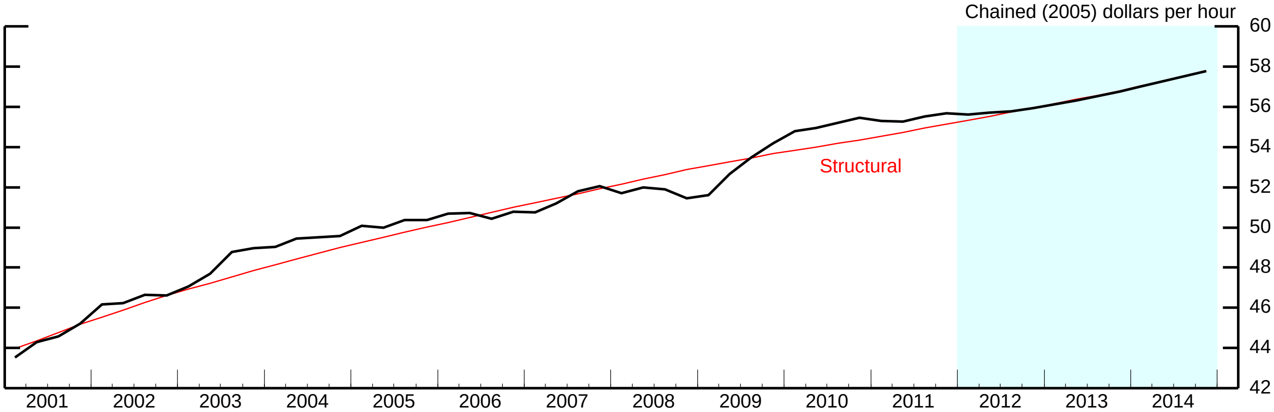
The increasingly less accommodative fiscal policy assumed in our projection is expected to not only temper real PCE growth next year, but also to markedly reduce federal government expenditures for goods and services. Real federal purchases are anticipated to decrease a little more than 4 percent in both 2013 and 2014, reflecting the effects of the Budget Control Act and a further drawdown of overseas military operations. Our medium-term forecast for the change in federal purchases is the same as in the April Tealbook, as the sizable downward revision to the growth in federal spending in the first half of this year is not anticipated to persist. At the state and local level, real purchases by these governments are expected to pick up only very slowly over the medium term. This spending forecast is a little weaker than in the previous Tealbook, as state and local tax revenues are expected to increase a bit more sluggishly with the more subdued economic recovery in this projection.

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

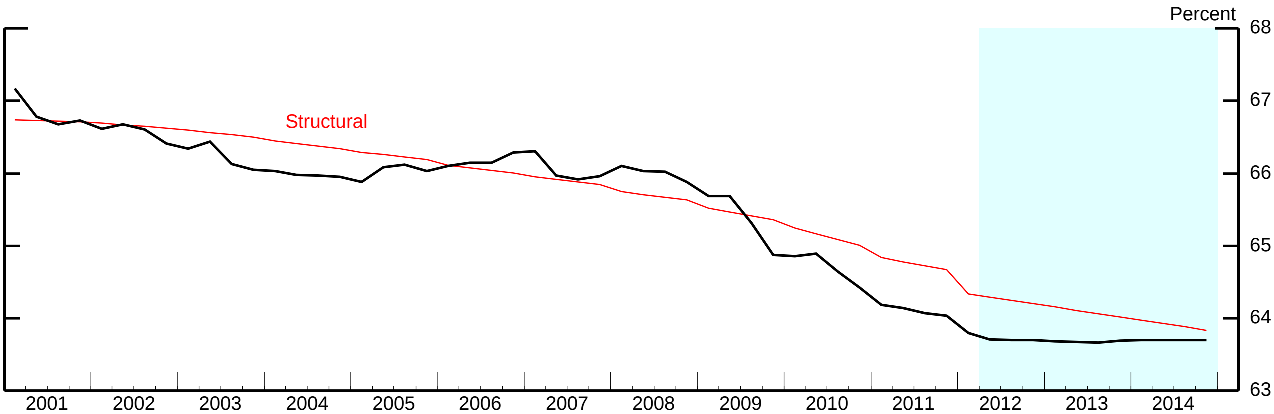
Measure	1974-1995	1996-2000	2001-2010	2011	2012	2013	2014
Potential real GDP	3.0	3.4	2.2	1.7	1.8	2.0	2.1
Previous Tealbook	3.0	3.4	2.2	1.7	2.0	2.1	2.3
Selected contributions[1]							
Structural labor productivity	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Previous Tealbook	1.4	2.6	2.2	1.5	1.6	1.7	1.9
Capital deepening	.7	1.5	.7	.5	.5	.6	.7
Previous Tealbook	.7	1.5	.7	.6	.6	.8	.9
Multifactor productivity	.5	.8	1.2	.8	.8	.9	.9
Previous Tealbook	.5	.8	1.2	.8	.9	.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.

Despite the downward revisions to overall GDP growth in this projection, we have revised up the outlook for residential construction modestly for the second half of this year and into 2013, as incoming data on activity and house prices further corroborate that a recovery in this sector is taking hold. That said, we continue to expect the recovery in housing construction to be a slow one. Historically low mortgage rates are expected to bolster home purchases and new construction over the medium term, as is the economic recovery more generally. However, these positive influences are likely to be attenuated by ongoing difficulties in households' access to mortgage credit and by persistent uncertainty about job and income prospects. In addition, we continue to expect the flow of homes from foreclosure into the resale market to remain substantial, keeping the stock of vacant houses at a high level and thus limiting the demand for new construction. Accordingly, we project single-family housing starts to only gradually move up over the forecast period to a little over 600,000 units in 2014, still less than half of the average rate over the past 40 years.

AGGREGATE SUPPLY, THE LABOR MARKET, AND INFLATION

Potential GDP and the NAIRU

Based on the range of analyses we use to gauge the NAIRU—including Beveridge curve models that track the relationship between job vacancies and unemployment, models that infer a path for the NAIRU from the behavior of inflation or other variables the unemployment gap is thought to influence, and a variety of other research by Board and Reserve Bank staff—we have judged for some time that the NAIRU increased during the recession to about 6 percent.[10] In this projection we have maintained that judgment and thus continue to estimate that a considerable margin of slack remains in the utilization of labor resources remains in the labor market.

In contrast, we made another downward adjustment to our estimate of potential output. This adjustment was mainly intended to prevent a further deterioration in the alignment between our estimates of the GDP gap and the unemployment gap. The adjustment lowered the level of potential output 0.4 percent at the end of 2011; it also changed the tilt of potential output over the past few years, and we carried forward some

[10] In addition, we estimate that the emergency and extended unemployment insurance program boosted the "effective" NAIRU further, though we estimate that this effect has already diminished and is worth only about ¼ percentage point at present.

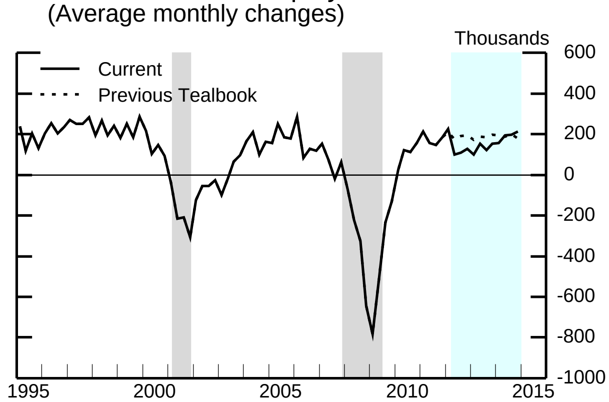
Domestic Econ Devel & Outlook

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	.4	.2	.7	1.5	1.8
Previous Tealbook	.3	.6	1.7	1.7	1.9
Nonfarm private employment[1]	175	163	118	132	190
Previous Tealbook	175	193	193	186	191
Labor force participation rate[2]	64.0	63.7	63.7	63.7	63.7
Previous Tealbook	64.0	63.8	63.8	63.7	63.7
Civilian unemployment rate[2]	8.7	8.2	8.2	8.0	7.7
Previous Tealbook	8.7	8.2	8.0	7.7	7.4
Memo:					
GDP gap[3]	-4.5	-4.5	-4.5	-4.3	-3.4
Previous Tealbook	-4.8	-4.7	-4.3	-3.7	-2.7

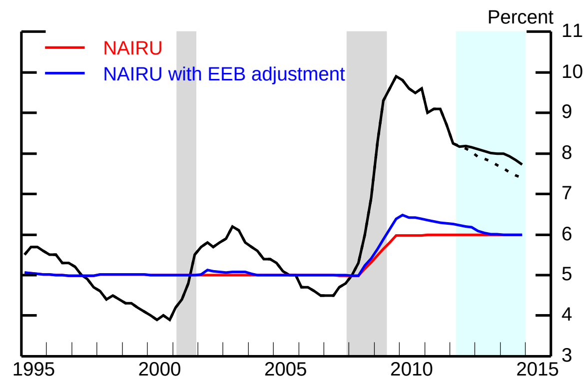
1. Thousands, average monthly changes.
2. Percent, average for the final quarter in the period.
3. Percent difference between actual and potential GDP in the final quarter of the period indicated. A negative number indicates that the economy is operating below potential.
Source: U.S. Department of Labor,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

Nonfarm Private Employment
(Average monthly changes)



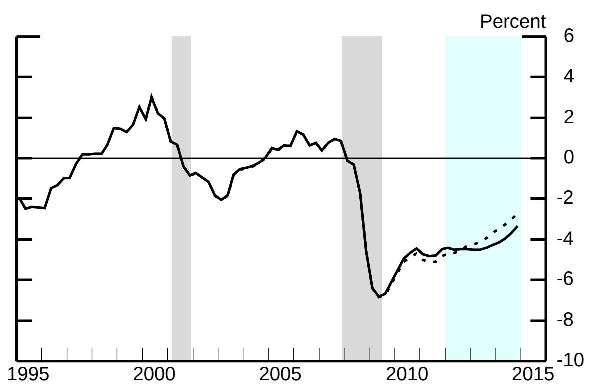
Source: U.S. Dept. of Labor, BLS.

Unemployment Rate



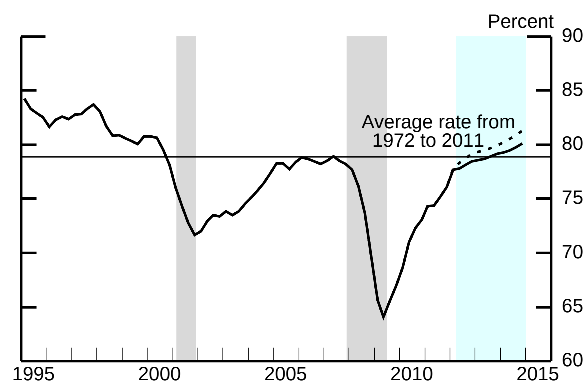
Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU.
Source: U.S. Dept. of Labor, BLS; staff assumptions.

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.

of the slower growth into the projection period. Consequently, we now project potential output to increase around 2 percent per year in 2013 and 2014.

Productivity and the Labor Market

Given the available data on hours worked and our estimate of real GDP growth, we now judge that labor productivity in the nonfarm business sector rose at an annual pace of less than 1 percent in the first half of this year. In our estimation, the level of productivity nonetheless remains a little above its structural trend. Thus, we anticipate increases in labor productivity over the remainder of this year will fall short of trend but rise about in line with trend thereafter.

We expect the pace of private employment growth to rebound some from the low rates of April and May but to remain subdued, with private job gains averaging only about 115,000 per month through mid-2013—down sharply from our April forecast. We project the pace to pick up to 200,000 per month by 2014 as output growth steps up. In the government sector, state and local employment is expected to change little this year and then to rise modestly over the next two years as budget pressures ease somewhat. In the end, it is the expiration of the EUC program, more than the paltry gains in employment, that allows the unemployment rate to drift down from 8¼ percent currently to 8 percent by the end of 2013. Stronger real growth in 2014 reduces the unemployment rate to 7¾ percent by the end of that year, which is nevertheless about ¼ percentage point higher than in the April Tealbook at that point.

Resource Utilization

In light of the weaker projection for real activity in this Tealbook, labor market slack is wider than in April, with the unemployment rate still 1¾ percentage points above the NAIRU at the end of 2014. Although the revisions we made to potential GDP leave the output gap—at negative 4½ percent—a little narrower in the current quarter, it closes only slightly over the course of this year and next and ends the forecast at negative 3½ percent, ½ percentage point wider than its value in the April Tealbook.

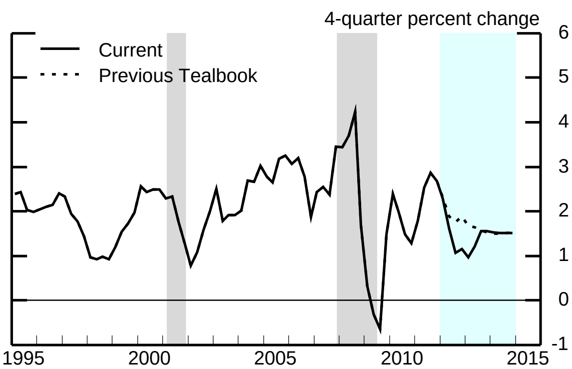
Unlike the staff's measure of potential GDP, which directly incorporates trends in labor input, our concept of capacity for the industrial sector focuses on the capability of plants to produce with the equipment that is in place and ready to operate; it does not take account of the potential workforce, either inside the industrial sector or outside of it. Between 2008 and 2010, factory capacity plunged about 6 percent, and, as a result,

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	2.7	1.5	.8	1.5	1.5
Previous Tealbook	2.7	2.0	1.7	1.5	1.5
Food and beverages	5.2	1.4	1.6	1.5	1.4
Previous Tealbook	5.2	1.4	1.7	1.6	1.5
Energy	12.8	-4.8	-10.1	.7	-.4
Previous Tealbook	12.8	3.2	2.8	-1.1	-1.7
Excluding food and energy	1.8	1.9	1.5	1.6	1.6
Previous Tealbook	1.8	2.0	1.7	1.7	1.7
Prices of core goods imports[1]	4.3	1.2	-1.0	1.4	1.6
Previous Tealbook	4.3	.7	1.1	1.5	1.5

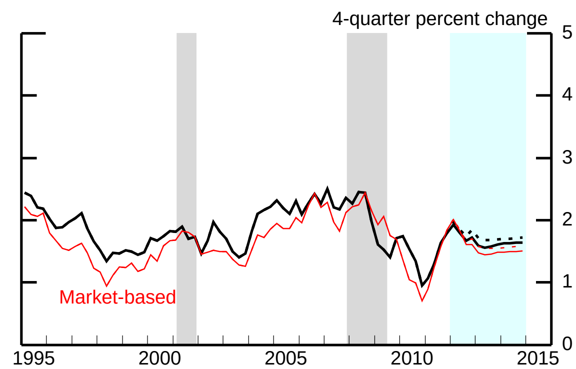
1. Core goods imports exclude computers, semiconductors, oil, and natural gas.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE Prices



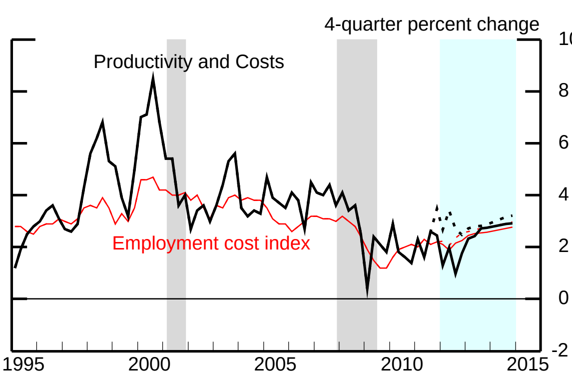
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



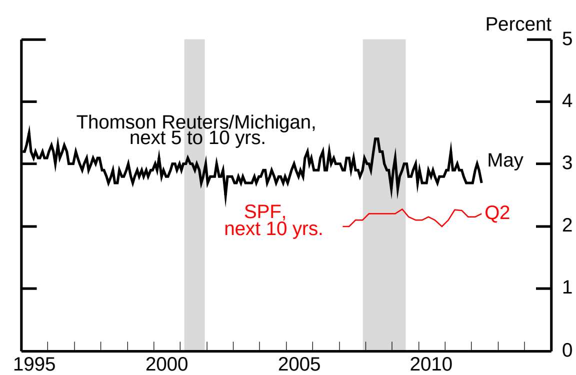
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.

resource utilization in the industrial sector is currently higher than in the broader economy; indeed, capacity utilization in the manufacturing sector in April was 77.9 percent, less than 1 percentage point below its long-run average rate. Looking ahead, manufacturing capacity is projected to rise less rapidly than potential GDP over the next two years, in part because of the definitional differences mentioned previously; our projection calls for the factory operating rate to rise to its long-run average next year and then to later move still higher despite a still-sizable GDP gap.

Prices and Compensation

After increasing ½ percent at an annual rate in the first quarter of 2012, prices of imported core goods are expected to increase 2 percent in the current quarter, pushed up by the lagged effect of the run-up in commodity prices that occurred in the first quarter. In the second half of 2012, we expect core import prices to decrease at a 1 percent pace—a downward revision of 2 percentage points relative to the April Tealbook—owing to the recent appreciation of the dollar and lower commodity prices. For the remainder of the forecast period, core import price inflation is expected to be about 1½ percent, in line with a relatively flat trajectory for commodity prices and the assumed pace of dollar depreciation.

Readings on longer-term inflation expectations have mostly edged down over the period since the April Tealbook was wrapped up. The median 5-to-10-year-ahead inflation expectation from the Michigan survey fell to 2.7 percent in May, 0.2 percentage point below the April reading, and now lies near the bottom of its recent range. TIPS-based measures of inflation compensation for the next 5 years and the corresponding measure for 5 to 10 years ahead have also both moved down about ¼ percentage point. Readings from the second-quarter Survey of Professional Forecasters, however, were mixed, with 10-year expectations for PCE price inflation unchanged, but expectations for the CPI were up 0.2 percentage point from the first-quarter survey. On the whole, we continue to view longer-term inflation expectations as essentially stable.

Given stable long-term inflation expectations and the low levels of resource utilization in this Tealbook, along with the downward revisions to commodity and oil prices and the higher exchange value of the dollar, we expect inflation pressures to remain quite subdued over the medium term. Indeed, we nudged down our forecast for core inflation by a tenth throughout the forecast period, leaving core PCE inflation at 1.6 percent in the second half of 2012 and 1.6 percent in both 2013 and 2014. The first-

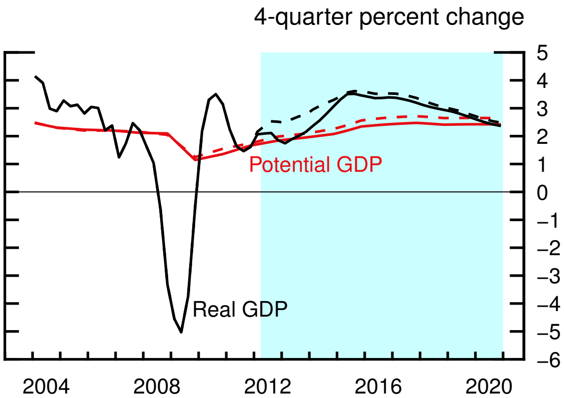
The Long-Term Outlook

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

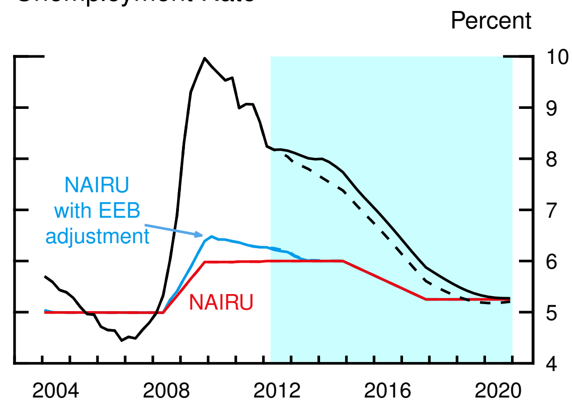
Measure	2012	2013	2014	2015	2016	2017
Real GDP	1.9	2.2	3.1	3.5	3.4	3.2
Previous Tealbook	2.5	2.8	3.3	3.6	3.5	3.4
Civilian unemployment rate[1]	8.2	8.0	7.7	7.1	6.5	5.9
Previous Tealbook	8.0	7.7	7.4	6.8	6.2	5.6
PCE prices, total	1.2	1.5	1.5	1.6	1.7	1.8
Previous Tealbook	1.9	1.5	1.5	1.7	1.7	1.9
Core PCE prices	1.7	1.6	1.6	1.7	1.8	1.8
Previous Tealbook	1.8	1.7	1.7	1.8	1.8	1.9
Federal funds rate[1]	.1	.1	.5	1.6	2.6	3.4
Previous Tealbook	.1	.1	1.2	2.3	3.1	3.8
10-year Treasury yield[1]	1.9	3.1	3.6	3.8	4.1	4.2
Previous Tealbook	2.8	3.7	3.9	4.1	4.2	4.4

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

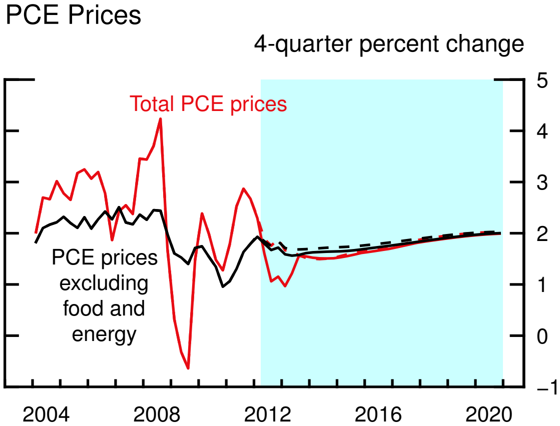
Real GDP



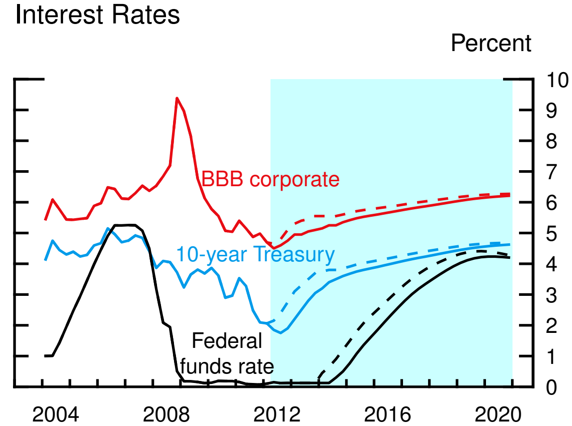
Unemployment Rate



PCE Prices



Interest Rates



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

half decline in energy prices was larger and occurred more rapidly than we had expected in April, and on that basis we revised down our projection for headline PCE inflation to 1.2 percent this year. With consumer energy prices expected to hold roughly flat over the remainder of the forecast period, headline inflation is expected to run a little below core inflation in both 2013 and 2014.

As noted earlier, measures of labor compensation have come in lower than had been expected at the time of our previous forecast. With the margin of slack in the labor market projected to be wider than in the April Tealbook, and with consumer price inflation anticipated to be lower, we took some signal from these readings and reduced our projection for compensation growth by about ¼ percentage point in both 2013 and 2014. Thus, we project both nonfarm hourly compensation and the employment cost index to rise a little less than 3 percent in both 2013 and 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, consistent with the Committee's statement after the January 2012 meeting on its longer-run goals and monetary policy strategies. The federal funds rate continues to be set according to the estimated outcome-based rule.

- The Federal Reserve's holdings of securities continue to put downward pressure on longer-term interest rates over the 2014–17 period, but as the time of portfolio normalization draws nearer, this downward pressure wanes and thereby contributes somewhat to the rise in the 10-year Treasury yield. Beyond 2017, the System's asset holdings are expected to have little influence on the level of term premiums.

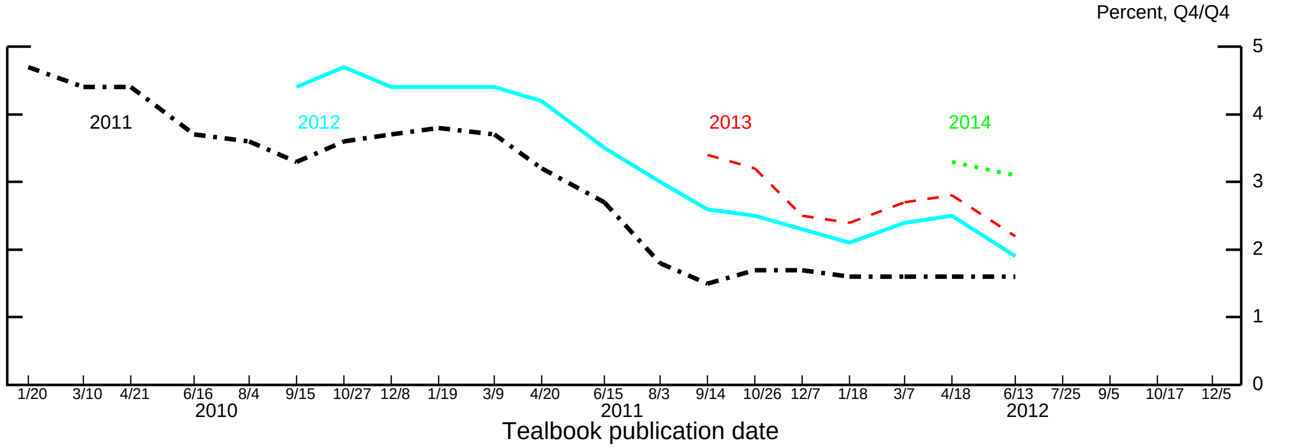
- Risk premiums on corporate equities and bonds decrease gradually to normal levels, and banks further ease their lending standards.

- The federal government budget deficit (measured on a NIPA basis) narrows from 4 percent of GDP in 2014 to 3¼ percent of GDP in 2017, while federal debt held by the public hovers around 73 percent of GDP, contained by the

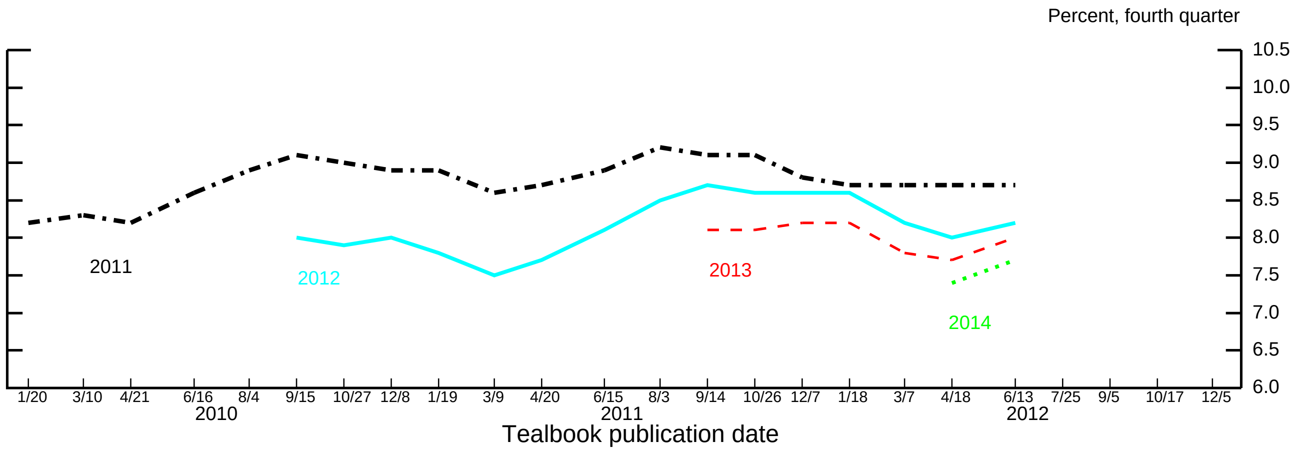
Domestic Econ Devel & Outlook

Evolution of the Staff Forecast

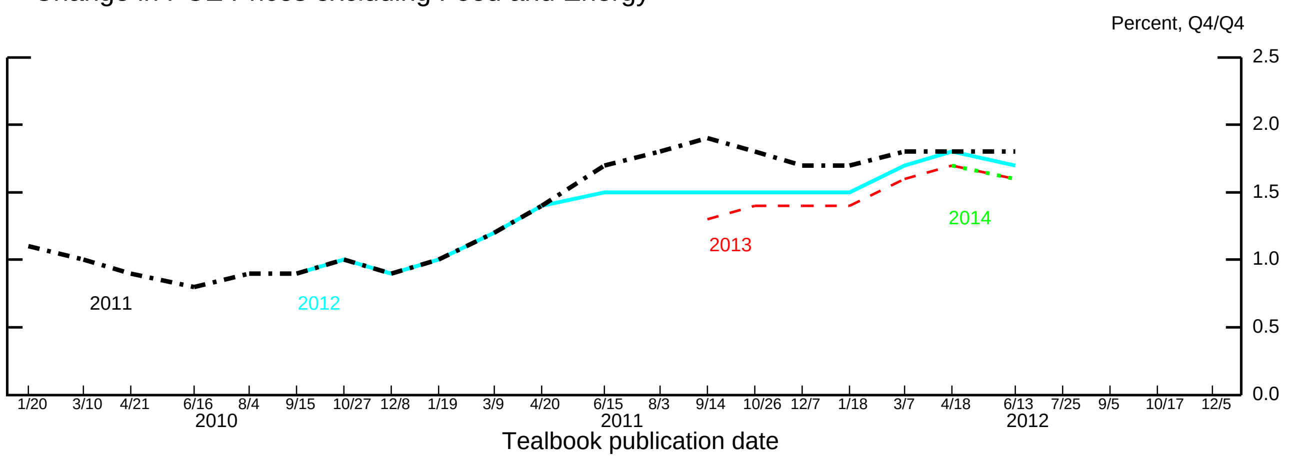
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



effects of the recovery on tax receipts and the budgetary restraint imposed by the Budget Control Act. Later in the decade, the deficit widens and the ratio of federal debt to GDP begins to increase because of fast-rising transfer payments, mostly for programs related to health care.

- The real foreign exchange value of the dollar depreciates 2 percent per year from 2014 to 2017. The pace of dollar depreciation tapers off thereafter. The nominal price of crude oil remains roughly flat from 2014 to 2016 and then holds steady in real terms. Foreign real GDP rises at an average annual rate of 3½ percent in 2015 through 2017 and then gradually edges down to a 3 percent pace by late in the decade.

- The NAIRU 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 5¼ percent in the long run. Potential GDP increases at an average annual rate of about 2½ percent from 2015 through the end of the decade.

The economy is projected to enter 2015 with output still below its potential level, the unemployment rate above the assumed NAIRU, and inflation lower than the long-run objective of the Committee. In the staff's long-term forecast, further improvements in household and business confidence, diminishing uncertainty, and more-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; by the end of 2017, the unemployment rate is about 6 percent. With the margin of slack in labor and product markets diminishing, consumer price inflation edges up gradually but is still only 1¾ percent in 2017. Late in the decade, the economy settles down with an unemployment rate near 5¼ percent (the assumed long-run NAIRU), inflation at 2 percent (the Committee's objective), and a nominal federal funds rate close to 4¼ percent.

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International Economic Developments and Outlook

Financial conditions in Europe have deteriorated over the past two months, with market concerns focused on the health of Spanish banks and the possibility of a Greek exit from the euro area. (See the box “Recent Developments in the Euro Area” for more details.) The stronger financial headwinds have contributed to a worse outlook for global economic activity. In addition, a number of emerging market economies (EMEs), including China, appear to have less momentum than previously anticipated. Hence, we now estimate that foreign real GDP growth slowed to 2½ percent in the second quarter, down from nearly 3½ percent in the first and ½ percentage point lower than expected at the time of the April Tealbook.

Our baseline forecast envisions financial stresses in Europe worsening—although not catastrophically—through much of the rest of this year before only gradually improving, as European leaders are forced to take further and more aggressive steps to avert a more serious intensification of the crisis. Largely as a consequence of the heightened financial stress and a relatively weak U.S. economy, foreign real GDP growth in the second half of this year is projected to remain depressed, averaging just under 2½ percent. Next year, as the euro-area recession comes to an end, foreign growth is expected to edge up, and by 2014, with the recovery in the United States and Europe firming, growth is expected to reach 3¼ percent, a little above its trend rate.

Our projection for foreign growth has been revised down from that in the April Tealbook by about ½ percentage point. Not only is the outlook gloomier, but it is also unusually uncertain. A financial meltdown triggered by a Greek exit from the euro area or revelations of greater problems among Spanish banks represent a significant downside risk; so, too, does a hard landing in China, although its effects would likely be less disruptive. Both of these scenarios are discussed in the Risks and Uncertainty section in this Tealbook.

Since the time of the April Tealbook, only a few countries, including China and Brazil, have loosened monetary policy, but we expect that the subdued economic outlook will lead to additional easing in the advanced foreign economies (AFEs) and the EMEs in coming quarters and to a greater degree than envisioned at the time of the April Tealbook. Quiescent inflation in many economies should also support the decision to

Recent Developments in the Euro Area

Financial stresses in the euro area have deepened considerably since the time of the April Tealbook. Sovereign spreads have widened further in Spain and Italy to levels last seen in late 2011 (as shown in lower-left figure on the next page). Euro-area bank stock prices have fallen sharply, and bank CDS spreads have risen.

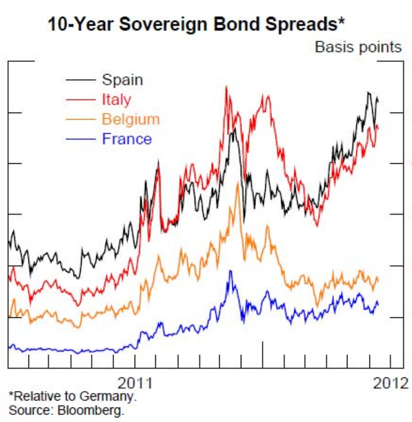
Fears about a possible Greek exit from the euro area increased following the May 6 Greek parliamentary elections, which revealed strong political backlash against Greece's EU–IMF program. The voters rewarded anti-program parties, and the resulting political landscape became highly fragmented. The newly elected representatives were unable to form a majority government, and a weak interim caretaker government was installed with new elections to be held on June 17. It remains unclear whether the June elections will produce a government that can agree with the EU and the IMF on a way forward for Greece's program. Continued political impasse could jeopardize the flow of official financing to Greece, both to the Greek government from the EU and IMF and to Greek banks from Eurosystem liquidity support operations. Ultimately this political deadlock could lead to severe financial instability and, possibly, Greece's exit from the euro area, a development that could trigger turmoil throughout the region. Timely data are not available, but there have been reports that withdrawals of Greek bank deposits surged in the weeks following the May 6 election.

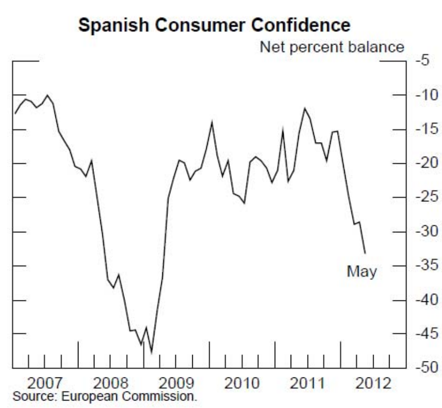
The deterioration in market sentiment toward Spain reflects mounting concerns about its public finances and the cost of stabilizing its banks (see the box "Developments in the Spanish Banking System" in the Financial Developments section in this Tealbook). Those concerns have been heightened by further slippage in the fiscal performance of regional governments and by muddled communications from Spanish public officials. In addition, the recession is deepening and consumer confidence has plummeted in recent months (see lower-right figure on the next page), suggesting that domestic consumption and output will decline further in the near term. The economic weakness threatens to compound Spain's banking and fiscal difficulties, potentially undermining the government's efforts to fund further interventions in the banking system.

In light of market pressures, the Spanish government announced on June 9 that it intends to ask for European financial assistance for its banking system. In response, European authorities indicated they would provide sufficient assistance to cover all capital requirements of Spanish banks, as estimated by currently ongoing external audits, plus an additional safety margin, and estimated the total required amount would be up to €100 billion. Markets failed to respond positively to the announcement, however, as the proposal lacked details and, because the assistance will be a contingent liability of the Spanish government, did little to reassure investors regarding the sustainability of Spain's sovereign debt.

More generally, as euro-area financial stresses have intensified, markets and policymakers have focused on the risks of bank failures and deposit runs, not only in Greece and Spain, but elsewhere in Europe as well. Although the euro-area rescue package for Spain sets a useful precedent of targeted banking-sector assistance, this approach would not address either a regional run on deposits or the long-run fiscal burdens faced by individual countries in recapitalizing their banks. Germany has signaled a new willingness to consider ambitious policy options for broader burden-sharing among euro-area governments, but only as part of a wider integration initiative that also includes more centralization of fiscal and financial supervision. At their next summit on June 28–29, 2012, European leaders are to discuss a European Commission proposal for a European "banking union" that would include a single EU deposit guarantee scheme covering all EU banks as well as a common EU resolution authority, resolution fund, and financial supervisor for systemic and cross-border banks. Such a banking union could partially relieve some European governments of the fiscal burden of stabilizing their banks. However, even if political consensus on this proposal were reached, implementation of such a banking union would likely require years of time-consuming negotiations over details, legislation by national parliaments of all participating countries, and amendments of the EU treaty.

Finally, European leaders have been discussing strategies for governments to support near-term growth even as they attempt to reduce fiscal deficits. At their May 23 summit, European leaders affirmed an earlier agreement that the European Investment Bank (EIB) would allocate €230 million to guarantee privately issued bonds to finance infrastructure projects. In addition, leaders discussed a possible increase in the capital of the EIB, which would enable it to finance more projects across the EU. Although these efforts may provide some stimulus to growth if concentrated in the smaller peripheral countries (Greece, Ireland, and Portugal), they are unlikely to materially affect growth prospects for Spain, Italy, or the euro area more broadly.

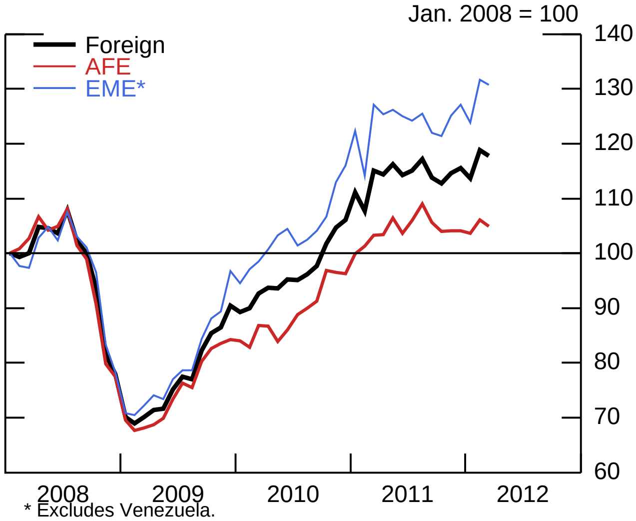




Int'l Econ Devel & Outlook

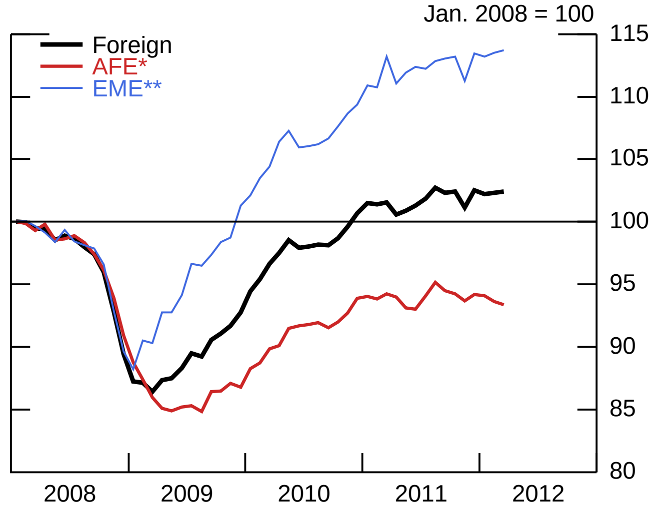
Recent Foreign Indicators

Nominal Exports



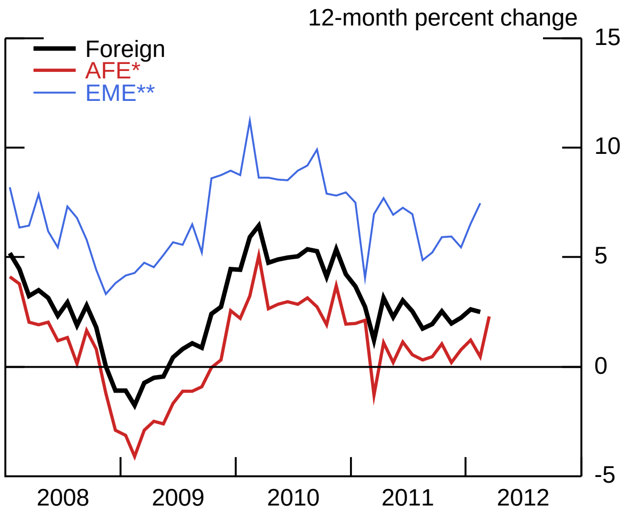
* Excludes Venezuela.

Industrial Production



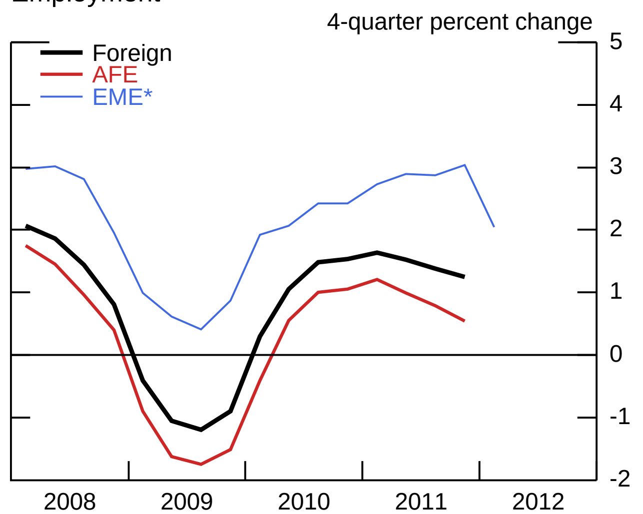
* Excludes Australia and Switzerland.
** Excludes Colombia, Hong Kong, Philippines, and Venezuela.

Retail Sales



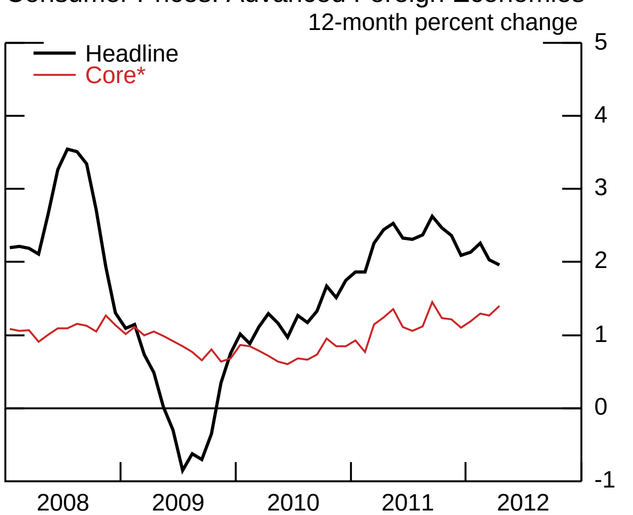
* Excludes Australia and Switzerland.
** Includes Brazil, China, Israel, Korea, Singapore, and Taiwan.

Employment



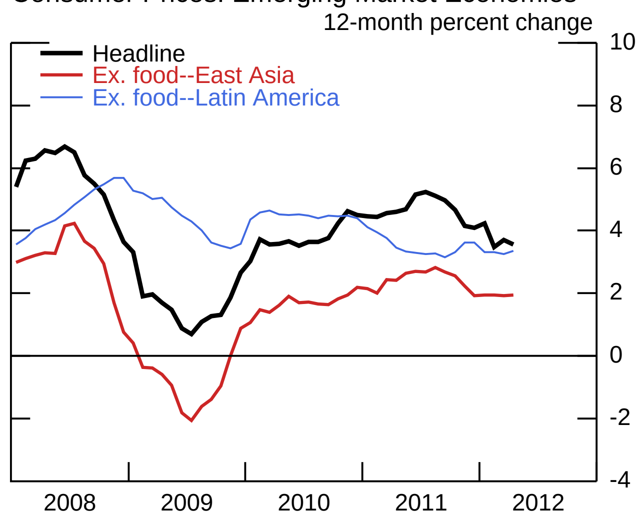
* Excludes Argentina and Mexico.

Consumer Prices: Advanced Foreign Economies



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

Consumer Prices: Emerging Market Economies



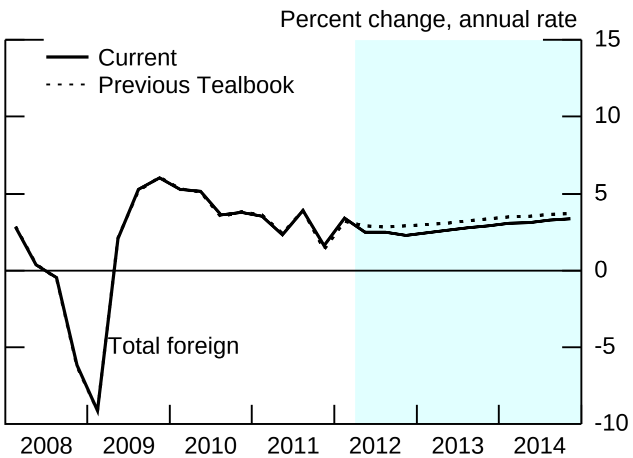
The Foreign Outlook
(Percent change, annual rate)

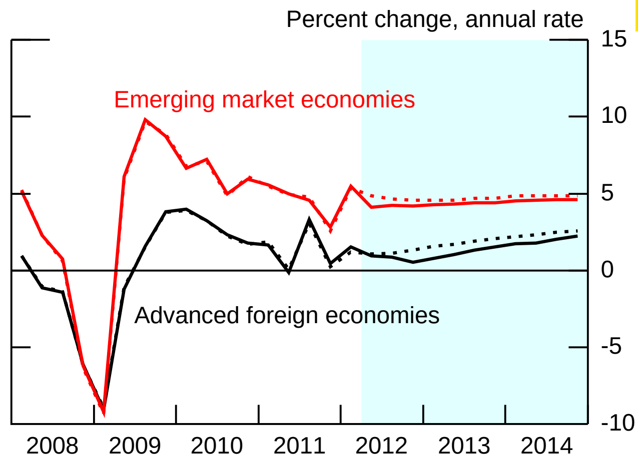
	2011			2012					
	H1	Q3	Q4	Q1	Q2	Q3	Q4	2013	2014
Real GDP									
Total foreign	2.9	3.9	1.6	3.4	2.5	2.5	2.3	2.7	3.2
Previous Tealbook	3.0	3.9	1.4	3.2	2.9	2.8	2.9	3.2	3.6
Advanced foreign economies	.7	3.3	.4	1.5	1.0	.9	.5	1.2	1.9
Previous Tealbook	1.0	3.1	.2	1.2	1.1	1.1	1.3	1.8	2.4
Emerging market economies	5.3	4.6	2.8	5.5	4.1	4.2	4.2	4.3	4.6
Previous Tealbook	5.2	4.8	2.6	5.3	4.8	4.6	4.6	4.6	4.9
Consumer Prices									
Total foreign	3.8	3.0	2.8	2.6	2.3	2.0	2.2	2.2	2.5
Previous Tealbook	3.7	3.1	2.9	2.5	2.1	2.4	2.4	2.4	2.5
Advanced foreign economies	2.6	1.2	2.5	2.2	1.4	1.1	1.3	1.2	1.5
Previous Tealbook	2.7	1.1	2.5	2.1	1.5	1.4	1.4	1.3	1.4
Emerging market economies	4.8	4.5	3.0	3.0	3.0	2.8	2.9	3.1	3.2
Previous Tealbook	4.6	4.7	3.2	2.7	2.7	3.2	3.2	3.2	3.3

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

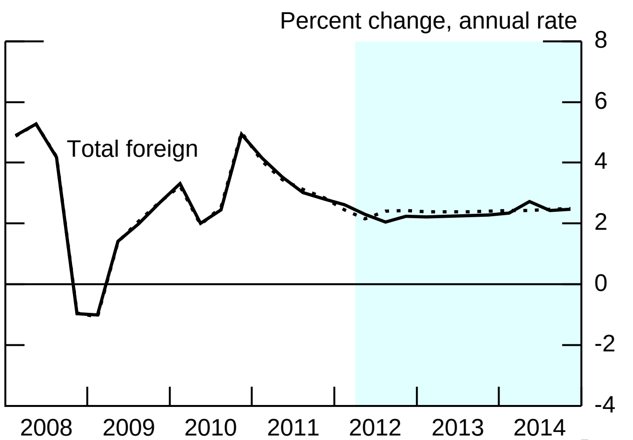
Int'l Econ Devel & Outlook

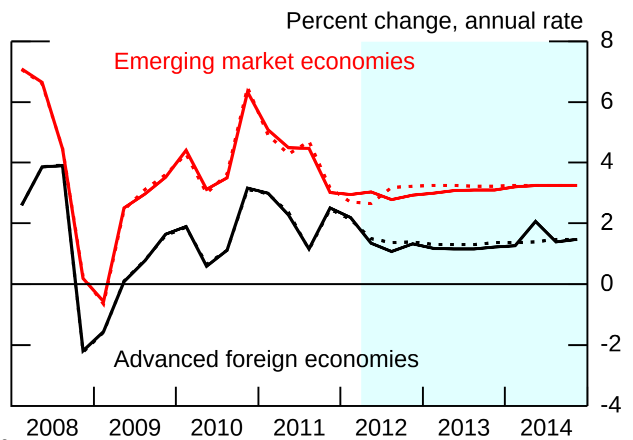
Real GDP





Consumer Prices





ease policies further. We estimate that foreign prices rose 2¼ percent at an annual rate in the second quarter and project that inflation will stay around that rate through the forecast period. This projection is a little lower than in the April Tealbook, reflecting the weaker outlook for global demand and lower commodity prices, particularly for oil.

ADVANCED FOREIGN ECONOMIES

We anticipate that the financial crisis and recession in Europe will hold down real GDP growth in the AFEs to only 1 percent in 2012, with growth edging up to 2 percent by 2014 as the crisis gradually abates and the euro area begins to recover. All told, the output gap in the AFEs widens for the next year and a half before narrowing a bit in 2014. Relative to the April Tealbook, we have revised down our projection of AFE growth an average of about ½ percentage point over the forecast period. These revisions are largest in the euro area, where, as a result of a deeper recession and slower recovery, growth is expected to average about 1 percentage point less than previously anticipated; the forecast for the other major AFEs is down roughly ¼ percentage point. The weaker forecast for the U.S. economy also has contributed to the downward revision to the AFE outlook.

Our forecast for inflation in the AFEs is down slightly this year and next compared to the April Tealbook, in line with our projections for weaker economic growth and a lower path of oil prices. With inflation contained—aggregate AFE inflation is expected to remain at or below 1½ percent through 2014—and weaker economic activity, we envision more accommodative monetary policy across the AFEs than assumed in the April Tealbook. In particular, we expect the Bank of Canada to push back its first policy rate hike, and we foresee greater asset purchases by the Bank of Japan and the Bank of England. We also now expect the European Central Bank (ECB) to cut its policy rate and to provide more liquidity support to banks.

Euro Area

In putting together our outlook for the euro area, we struggled to consider the effects of developments that are hard to predict but which have critical implications for our forecast. Most obviously, Greek elections (scheduled for June 17) may fail to deliver a government that will agree with other euro-area authorities and the IMF on a way to sustain Greece's official financing. Such a failure could potentially lead to Greece's exit from the euro area and—with European policymakers currently unprepared to manage the consequences—severe contagion to other peripheral European economies and global financial markets more generally. Alternatively, even without a Greek exit, concerns over the safety of banks in Greece, Spain, and elsewhere could lead to deposit runs that would destabilize domestic financial systems, exacerbate the fiscal burdens on governments, and again destabilize international markets. Notably, the euro-area rescue package for Spanish banks announced over the weekend has done little to boost investor confidence in that country's financial and fiscal position. (See the box "Developments in the Spanish Banking System" in the Financial Developments section in this Tealbook.)

In the end, we decided that, although the risk of such adverse developments has become more pronounced, the most likely outcome is not a Lehman Brothers–style global meltdown. Greece's situation will be extremely difficult regardless of who wins the election, but polls show the Greek people overwhelmingly prefer to stick with the euro. Our sense is that negotiations between Greece and its official creditors will likely drag on for a number of months. Even were these negotiations to ultimately break down, the Greek government would likely employ a variety of means—for example, bank holidays, capital controls, and running arrears—to put off switching to a new currency. These actions could delay a Greek exit, giving markets and policymakers more time to prepare for such an event. By the same token, our baseline forecast does not assume a widespread run on deposits in euro-area banks. Retail depositors have stopped short of an outright run even in Greece, with its acute banking difficulties and nontrivial risk of abandoning the euro. For Spain and Italy, where stresses are not nearly so severe, we assume that most depositors will count on actions of the official sector to protect them—such as official-sector support for banks and sovereigns, the ECB's ample liquidity provision to banks, and progress on plans for an EU-wide deposit insurance scheme—and will avoid destabilizing bank runs.

All that being said, even if Europe avoids the most dire outcomes, the ongoing difficulties in the region, combined with the deepening recession and the mounting realization by markets that current policy responses have been inadequate, strongly suggest that the crisis will become more pronounced in the coming months. Our working assumption is that financial conditions will continue to deteriorate until the European authorities have no choice but to adopt additional measures to turn the situation around. Our best guess is that such measures will be relatively limited in scope—providing new euro area–IMF programs to vulnerable governments or further easing the terms of Eurosystem liquidity support to banks—and will lead to only slow improvement in financial and economic conditions thereafter, say, by next year. However, we cannot preclude the possibility that European policymakers could be pushed to more aggressive and sweeping solutions, such as the EU deposit insurance scheme and the bank resolution fund currently being discussed, which could lead to a more rapid recovery.

Against this backdrop, we now forecast a more severe and prolonged economic contraction in the euro area than in the April Tealbook. In the first quarter, real GDP was flat, pulled down by a fourth consecutive quarter of contracting domestic demand. Preliminary indicators for the second quarter point to a decline in overall economic activity, with the composite PMI and business confidence falling in May to their lowest levels in more than two years. In addition, industrial production fell further in April, led by sharp declines in Germany, Italy, and Spain. Indicators for consumption also remain weak, with consumer confidence depressed and retail sales down sharply in April. The euro-area unemployment rate held steady at 11 percent in April, its highest level since the launch of the common currency.

We now expect real GDP to fall at a 1¼ percent rate this quarter and about 1½ percent in the second half of this year. Eventually, as policymakers take additional actions to prevent a catastrophic event, we expect financial conditions to gradually improve and the economy to begin to slowly recover in the second half of 2013. With fiscal austerity and continued tight credit conditions, we anticipate that real GDP growth will pick up only modestly to a 1½ percent pace by the end of 2014.

We estimate that euro-area inflation moderated from 2½ percent in the first quarter to slightly less than 2 percent in the second, as energy prices decelerated. With the output gap widening, we expect inflation to moderate further to 1½ percent in the second half of 2012 and to remain at or below that rate through 2014.

At its June meeting, the ECB left its benchmark policy rate unchanged at 1 percent and announced an extension through the end of the year of its provision of unlimited liquidity through short-term refinancing operations. In light of the weaker outlook, we now expect the ECB to reduce its policy rate 25 basis points in the second half of the year and substantially expand its liquidity support to banks, including by offering longer-term refinancing operations, which will push the overnight interest rate even closer to zero in coming months.

United Kingdom

Real GDP contracted 1¼ percent in the first quarter, the same as in the fourth, partly owing to a drawdown of inventories. However, employment edged up and the composite PMI remained consistent with positive economic growth. Going forward, the intensification of the crisis in the euro area has led us to cut our forecast for average U.K. GDP growth in the last three quarters of 2012 to 1 percent. With weaker global growth expected and further fiscal consolidation planned, we project U.K. growth to pick up only gradually, to 1½ percent in 2013 and 2½ percent in 2014, both down almost ½ percentage point from the projection in the April Tealbook.

A planned tuition hike should lift quarterly inflation from around 1½ percent in the second and third quarters to nearly 3½ percent in the fourth. We project inflation will then subside to about 1½ percent in 2013 and 2014. This path is a touch lower than in the April Tealbook due to a wider output gap and lower commodity prices. With subdued inflation and ample spare capacity, we now expect the Bank of England to expand its quantitative easing program later this year by £75 billion, to £400 billion (26 percent of GDP). In the April Tealbook, we had assumed a £50 billion expansion.

Japan

Real GDP grew 4¾ percent in the first quarter, 2 percentage points more than estimated in the April Tealbook, boosted by temporary factors, including the reconnection of supply chains with Thailand, a subsidy for the purchase of fuel-efficient cars, and a step-up in post-earthquake reconstruction activity. However, recent data suggest that activity has decelerated—industrial production rose only slightly in April, and the May manufacturing PMI points to only moderate expansion. Accordingly, we estimate real GDP growth declined to 2¼ percent in the current quarter, in line with the April Tealbook. The recent appreciation of the yen, the expiration of stimulus measures, and weak external demand should slow GDP growth further to an average pace of just below 1 percent in the second half of this year. Thereafter, as the global recovery gains momentum, output growth should gradually pick up to 1½ percent by the end of the forecast period. Relative to the April Tealbook, growth is down ¾ percentage point in the second half of 2012 and about ¼ percentage point over the remainder of the forecast period.

Consumer prices rose at an annual pace of 2¼ percent in the first quarter, boosted by increases in food and energy prices. However, we expect a return to mild deflation through the remainder of this year and next. The near-term path of prices has been marked down, reflecting the recent drop in commodity prices and the appreciation of the yen. Amid sizable output gaps and persistent deflation, we anticipate that the Bank of Japan will moderately expand its asset purchase program. We also now assume that the Noda administration will win parliamentary approval for a doubling of the consumption tax to 10 percent; an initial 3 percentage point hike is expected in April 2014. The tax increase is a first step toward fiscal consolidation, with the fiscal deficit expected to decline only gradually from nearly 10 percent of GDP this year.

Canada

First-quarter GDP grew at about a 2 percent pace, a little less than expected, with a negative contribution from net exports partly offsetting a strong boost from investment spending. Recent indicators generally have been positive; employment rose at a solid pace on average in April and May, and the manufacturing PMI rose for the fourth straight month in May. Thus, we expect GDP growth to remain around 2 percent in the current quarter, in line with the April Tealbook. However, given the downward revision to the U.S. and global growth outlook, we lowered the Canadian growth forecast for the remainder of the forecast period about ¼ percentage point. We now expect Canadian GDP to expand 2 percent in 2012 and 2013 and 2½ percent in 2014.

Driven mainly by the lower path for oil prices, we expect inflation to moderate to about 1½ percent in the second half of 2012 before edging up to 2 percent in 2014. Relative to the April Tealbook, this forecast is down about ¼ percentage point over the remainder of 2012 and little changed thereafter. Given the prospective slower progress in closing the output gap and only modest inflation pressures, we now expect the Bank of Canada to delay the first increase of its policy rate until the second quarter of 2014, one quarter later than anticipated in the April Tealbook.

Emerging Market Economies

A nearly complete set of first-quarter GDP releases confirms that the EMEs rebounded from the floods in Thailand, with economic growth rising to an annual rate of 5½ percent, from 2¾ percent in the fourth quarter. However, the overall tone of more recent economic data from the emerging market world—including PMIs, industrial production, and exports—has been decidedly weaker than expected, reflecting in part sluggish growth in the advanced economies and financial spillovers from the turmoil in Europe. Accordingly, we estimate EME growth retreated to just over 4 percent this quarter and will remain there during the second half of this year. Compared with the April Tealbook, our forecast for the current quarter is about ¾ percentage point lower and for the second half almost ½ percentage point lower.

Growth in the EMEs should strengthen a bit over the forecast period, reaching about 4½ percent by 2014, as the advanced economies recover somewhat and as some EME policymakers take measures to support activity. However, our projection in 2013 and 2014 is about ¼ percentage point lower than in the April Tealbook, reflecting the substantially slower pace of recovery envisioned in Europe and the United States as well as reduced incomes for commodity exporters. Moreover, there are significant downside risks related to a further deterioration of the crisis in Europe and, although less likely, a sharp slowdown of the Chinese economy.

With weaker growth, we estimate headline inflation in the EMEs remained at a modest annual rate of 3 percent in the second quarter. Inflation is expected to dip slightly in the second half of this year and then edge up to about 3¼ percent in 2014. Subdued inflation will provide some scope for additional monetary policy accommodation. Most EME central banks have kept policy rates unchanged since the April Tealbook, but central banks in Brazil and China eased monetary policy, and we expect additional easing in these two countries as well as in India. We have also pushed back monetary tightening in some other countries, including Colombia, Indonesia, and Thailand. A flight to quality and falling commodity prices induced sharp currency depreciations in a number of EMEs. The downward pressure on their currencies led authorities in Brazil, India, and Mexico, among others, to intervene to support their currencies.

China

In China, data for April and May indicate that growth remained restrained in the second quarter, at least by historical Chinese standards. Industrial production was below its March level, and retail sales and investment growth also slowed. Accordingly, we revised down our estimate of Chinese real GDP growth in the current quarter 1 percentage point to 7½ percent. We have also lowered the forecast for economic growth over the remainder of the forecast period by ¼ percentage point, to about 8 percent, reflecting our take that the weaker outlook for the advanced economies and, to a lesser extent, weaker domestic momentum will not be entirely offset by recent and future Chinese policy responses.

In early June, the People's Bank of China (PBOC) cut the one-year lending and deposit rates 25 basis points, to 6.31 percent and 3.25 percent, respectively, the first change in these rates since they were raised in July 2011. In addition, the PBOC reduced banks' required reserve ratios 50 basis points in May—the third such reduction since authorities began to loosen monetary policy last November—bringing the ratio for large banks to 20 percent. Authorities have also announced new fiscal stimulus measures focused on infrastructure investment and energy efficiency, such as rebates for efficient appliances and automobiles. The current package of stimulus measures is considerably smaller than the one introduced in 2008 following the global financial crisis. Our baseline calls for additional monetary and fiscal accommodation.

Inflation has continued to edge lower and was 3 percent on a 12-month basis in May, providing more leeway for authorities to focus policies on supporting growth. Our baseline forecast for China still calls for stable and relatively solid economic growth, with authorities being able to use expansionary fiscal and monetary policies to cope with moderate negative shocks to the economy.

However, the risk of a Chinese hard landing, as described in the alternative scenarios in the Risks and Uncertainty section, has increased since the previous Tealbook. The property market is one source of risk, given a sharp run-up in property prices from 2009 through early 2011 driven by a surge in credit. Authorities could falter on the delicate line of trying to lead property prices gradually lower without causing investment to plummet. A collapse of the property market would exacerbate problems in the banking sector, which is burdened by loans for infrastructure projects—related to the 2008 fiscal stimulus package—many of which are likely to be unprofitable. These projects also led to a large increase in local government debt, which may inhibit local authorities' ability to initiate new projects to spur growth. Another source of risk is that a collapse in external demand similar to the one in late 2008 could drag Chinese economic growth down along with that in the rest of the world. In the end, however, authorities are likely to do whatever possible to avoid a sharp slowing, especially during the once-a-decade political transition scheduled for the end of this year, when a new president and premier will be selected. But if the shocks to the economy are sufficiently large, authorities might only be able to cushion rather than avert a hard landing.

Other Emerging Asia

Elsewhere in emerging Asia, real GDP growth rebounded to an annual pace of 5¾ percent in the first quarter after being flat in the fourth, as supply chains disrupted by flooding were largely restored. But this increase is ¾ percentage point lower than our April Tealbook forecast, as activity in India, Hong Kong, and Taiwan surprised on the downside. Second-quarter indicators, including weak export growth, also disappointed, and we now estimate that output growth in the region slowed more in the current quarter than previously anticipated, to about 4 percent. Going forward, we expect growth in these economies to edge up to 4½ percent by 2014. This projection is about ¼ percentage point below our April Tealbook forecast, primarily reflecting the more pessimistic outlook for the advanced economies.

Inflation in the region is estimated to have increased to an annual rate of 4½ percent in the current quarter, largely driven by a spike in Indian inflation; upward consumer price pressures in India partly reflect pass-through from the sharp depreciation of the Indian rupee. We expect inflation in the region to moderate to 3¼ percent next quarter and stay at about that level over the remainder of the forecast period.

Latin America

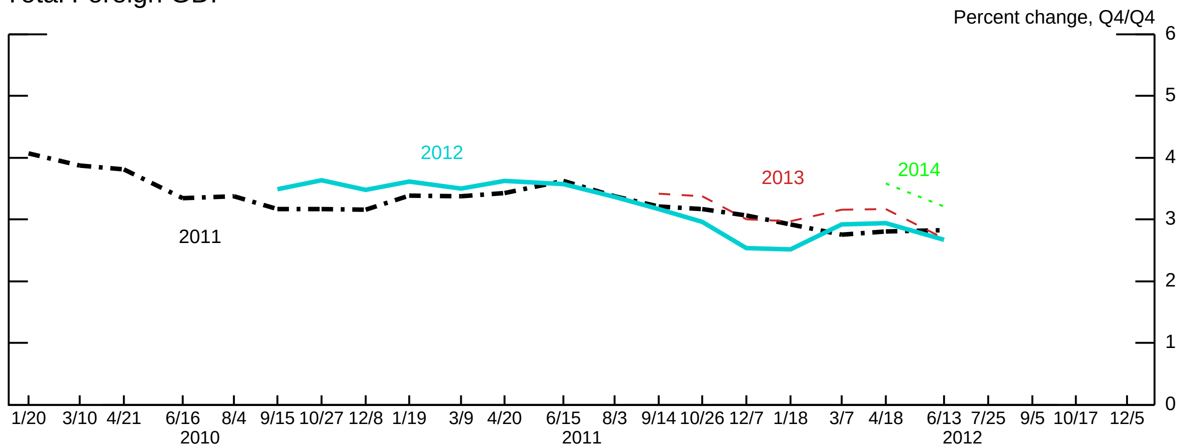
In Mexico, real GDP grew at an annual rate of 5¼ percent in the first quarter, up from a pace of 3 percent in the fourth quarter. The step-up in Mexican activity was led by growth in industrial output—mirroring a spike in U.S. manufacturing production—and agricultural output also rebounded. Based on the path of U.S. manufacturing output, we estimate that Mexican GDP growth moderated back to a 3 percent pace in the current quarter and will stay around that rate over the remainder of the forecast period.

We estimate South American GDP growth slowed from an annual rate of 3¾ percent in the first quarter to 3 percent during the current quarter, and we project that it will edge back up to 3¾ percent by the end of 2014. We revised down our outlook for the region by more than ¼ percentage point, owing to the weaker outlook for the advanced economies and the lower path of commodity prices. In Brazil, where performance has lagged the rest of the continent, real GDP registered an increase of only ¾ percent at an annual rate in the first quarter—the fourth consecutive quarter of growth below 2 percent. Economic activity in Brazil has been depressed owing in part to previous monetary policy tightening and the fall in commodity prices. However, Brazilian growth should gradually firm over the forecast period, to reach about 4 percent in 2014, supported by now-accommodative monetary and fiscal policies as well as the recovery of economic activity in the advanced economies.

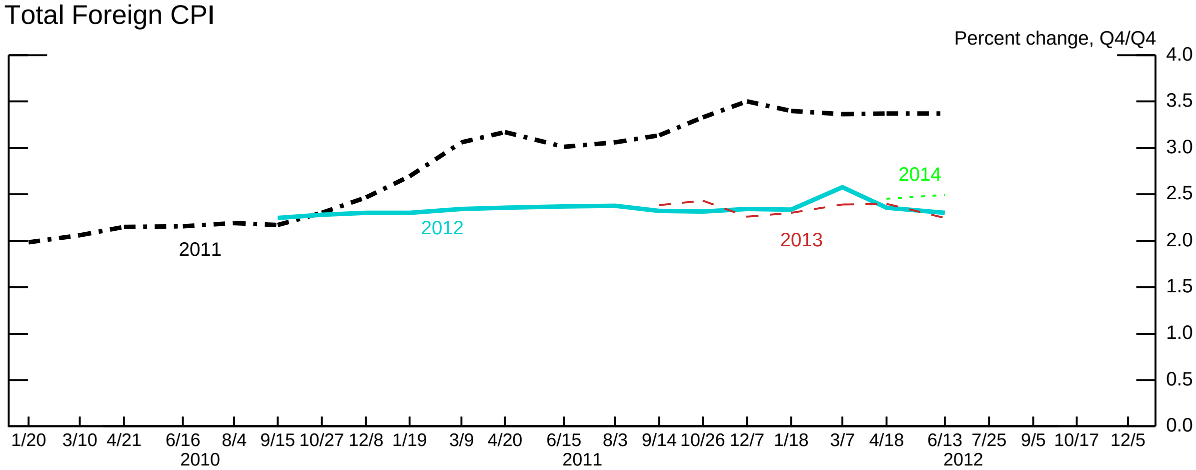
In Mexico, headline inflation plummeted in the second quarter, owing to waning food price inflation and electricity subsidies. We see inflation settling at about 3½ percent over the remainder of the forecast period, below the upper bound of the central bank's target range. In Brazil, with economic growth having stalled recently, we estimate inflation moderated to less than 4 percent in the second quarter. The central bank has cut the Selic rate by a cumulative 4 percentage points since August, including the most recent 50 basis point cut that occurred in late May, to 8½ percent. We project that Brazilian inflation will move back up a bit next year as the economy recovers.

Evolution of Staff's International Forecast

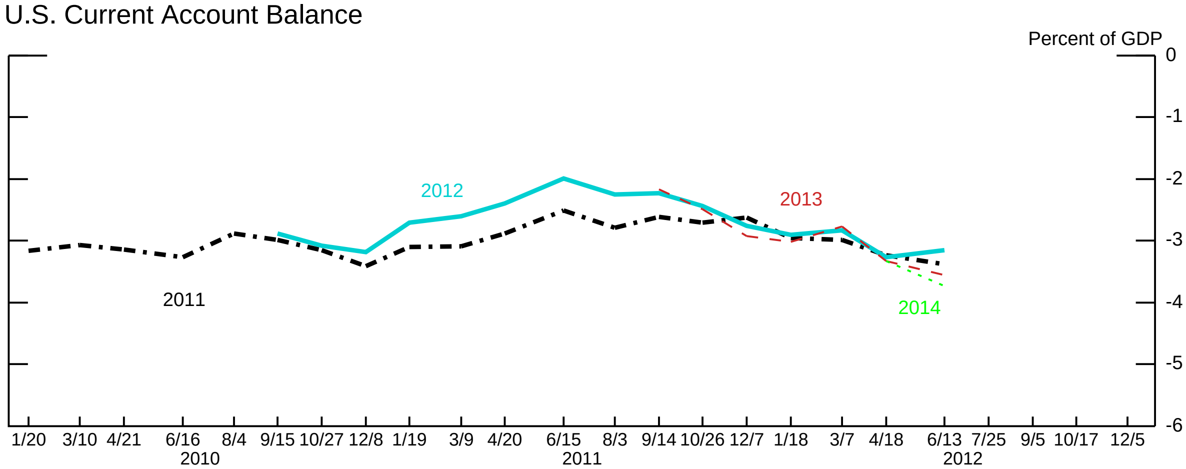
Total Foreign GDP



Total Foreign CPI



U.S. Current Account Balance



Int'l Econ Devel & Outlook

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Financial Developments

Investors pulled back from risk-taking over the intermeeting period amid mounting concerns about the euro area and evidence of slowing economic growth at home and abroad. Subsequently, the deterioration in sentiment was tempered by expectations of further policy accommodation by central banks as well as anticipation of measures by European authorities to mitigate the banking crisis in Spain. However, last weekend's announcement that euro-area authorities would provide funds to support Spanish banks has failed to spur further improvement in market sentiment.

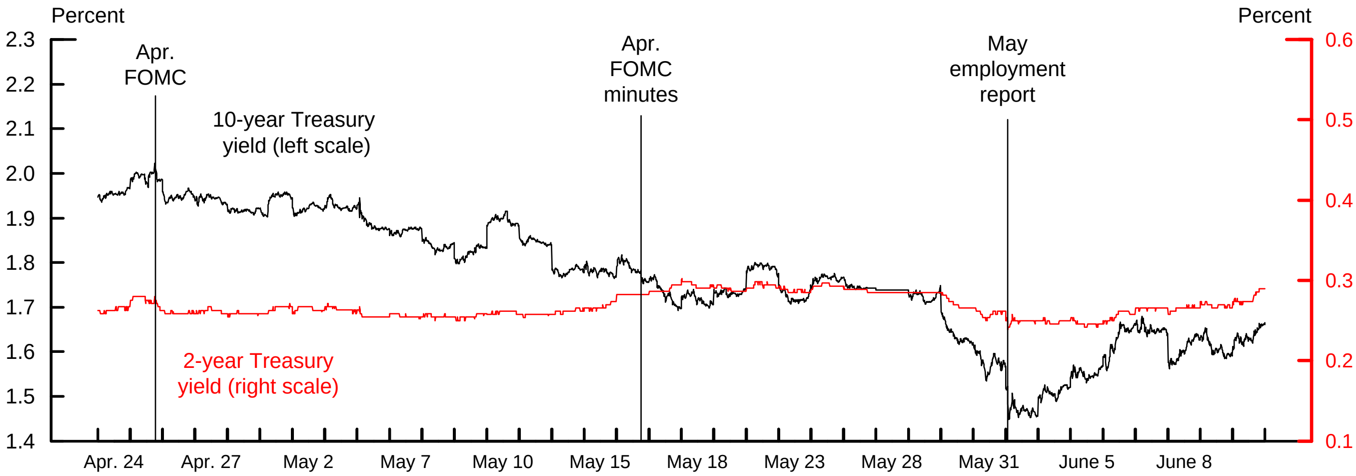
On net over the intermeeting period, the expected path for the federal funds rate shifted down in 2014 and beyond. Yields on long-dated nominal Treasury securities fell notably over the period, consistent with the revision in the policy path, increased safe-haven demands, and increased odds market participants put on further accommodative balance sheet actions by the Federal Reserve. TIPS-based measures of inflation compensation edged down as commodity prices declined. Broad indexes of U.S. equity prices posted losses, spreads on investment- and speculative-grade corporate bonds relative to comparable-maturity Treasury securities increased, and option-implied measures of volatility of equity prices and longer-dated Treasury yields rose.

Stock prices declined even more sharply in most major foreign financial markets. However, measures of stress in funding markets for European financial institutions showed little sign of deterioration, likely owing in part to the earlier provision of ample liquidity by the European Central Bank (ECB) through its longer-term refinancing operations. Yield spreads of peripheral European sovereign debt to German bonds rose, and the U.S. dollar appreciated against the euro and most other currencies. Reflecting the overall pullback from risk and the weaker economic outlook, yields on U.K. and German bonds fell notably.

In the United States, recent trends in financing flows remained mostly in place. Bond issuance was robust for investment-grade corporations, and commercial and industrial (C&I) loans grew at a solid pace; in contrast, high-yield bond issuance slowed. In the household sector, nonrevolving consumer credit expanded briskly, while the growth of revolving credit remained subdued. Mortgage refinancing activity edged up as

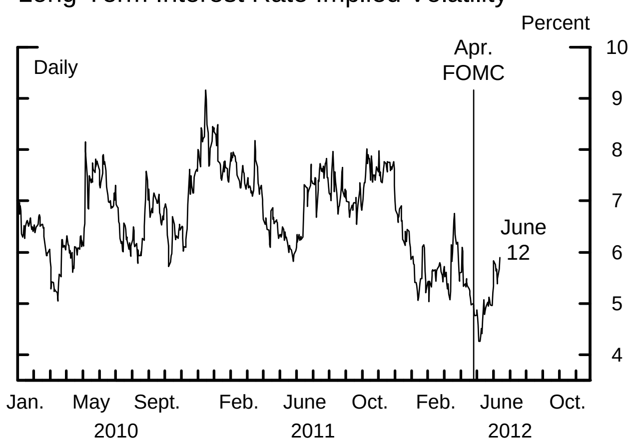
Policy Expectations and Treasury Yields

Selected Interest Rates



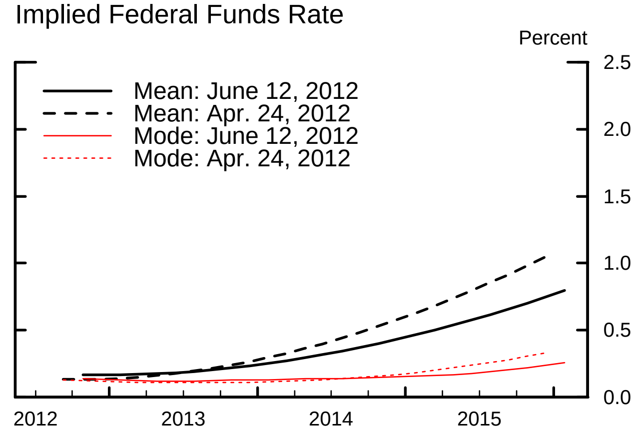
Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.
Source: Bloomberg.

Long-Term Interest Rate Implied Volatility



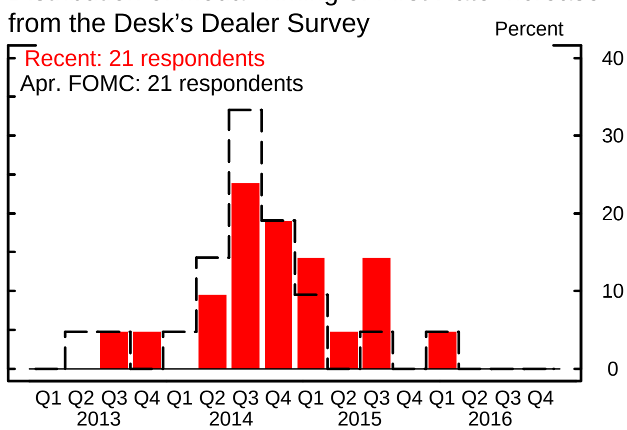
Note: Derived from options on 10-year Treasury note futures.
Source: Bloomberg.

Implied Federal Funds Rate



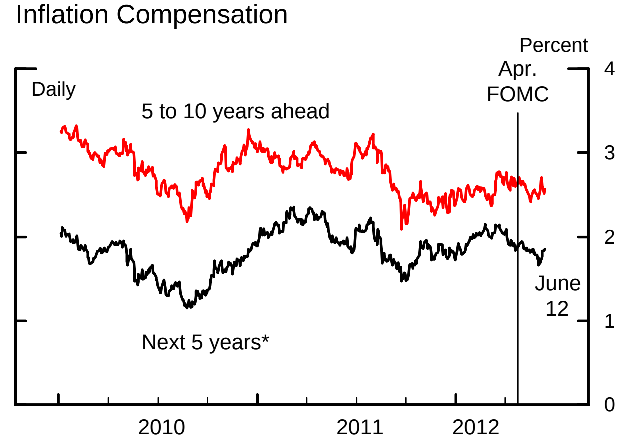
Note: Mean is estimated using overnight index swap quotes. Mode is estimated from the distribution of federal funds rate implied by interest rate caps. Both include a term premium of zero basis points per month.
Source: Bloomberg and CME Group.

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



Source: Desk's Dealer Survey from June 11, 2012.

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.

interest rates declined, though the increase continued to be damped by capacity constraints and tight lending conditions.

POLICY EXPECTATIONS AND TREASURY YIELDS

Rising concerns about the European fiscal crisis and generally weaker-than-expected domestic and global economic data pushed yields on Treasury securities and agency MBS substantially lower over the intermeeting period. The weak tone in economic data releases, particularly the May employment report, contributed to a notable downward revision in the expected path of policy and prompted considerable speculation about the potential for further balance sheet actions by the Federal Reserve. Concerns about the situation in Europe reportedly also prompted strong safe-haven demands for Treasury securities.

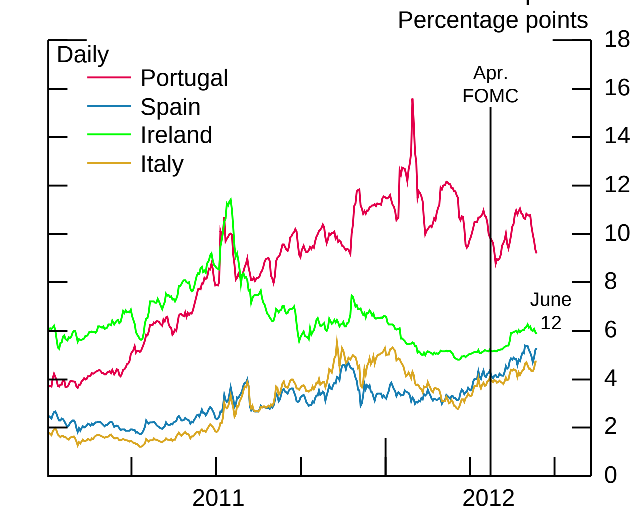
The expected path of the federal funds rate derived from overnight index swap (OIS) rates rotated down, with the rate anticipated at the end of 2015 lower by about 30 basis points. The expected federal funds rate now first rises above the current target range in the first quarter of 2014, one quarter later than at the time of the April FOMC meeting. The modal path—the most likely values for future federal funds rates based on implied risk-neutral distributions estimated from interest rate caps—remained within the current target range through late 2015.[1]

Results from the Open Market Desk's latest survey of primary dealers also showed a notable decline in medium-term policy expectations. In particular, the distribution of the most likely time of the first rate increase shifted to the right, with the median date moving from the third quarter of 2014 to the fourth quarter. In addition, dealers revised up the probability from 20 percent to 40 percent that, within the next year, the FOMC will seek to further increase the average duration of the SOMA portfolio, while keeping the probability that the FOMC will announce additional asset purchases roughly unchanged at 50 percent. The combined probability that one or both programs will be announced within the next year stood at 70 percent, while the odds that such programs will be announced at the June meeting was only slightly lower at 50 percent. Dealers also revised up the probability that the FOMC will change its federal funds rate guidance within the next year from 30 percent to 50 percent, but only saw a 15 percent chance that such an action will be announced at the June meeting.

[1] The effective federal funds rate averaged 16 basis points over the intermeeting period, with the intraday standard deviation averaging about 3 basis points.

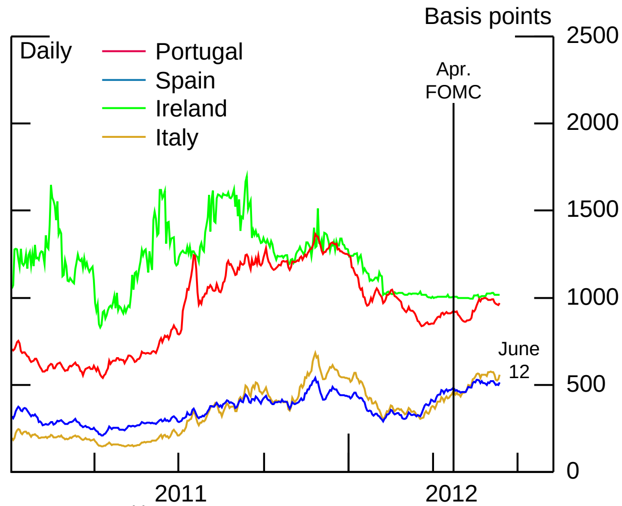
Foreign Developments

Euro-Area 10-Year Government Bond Spreads



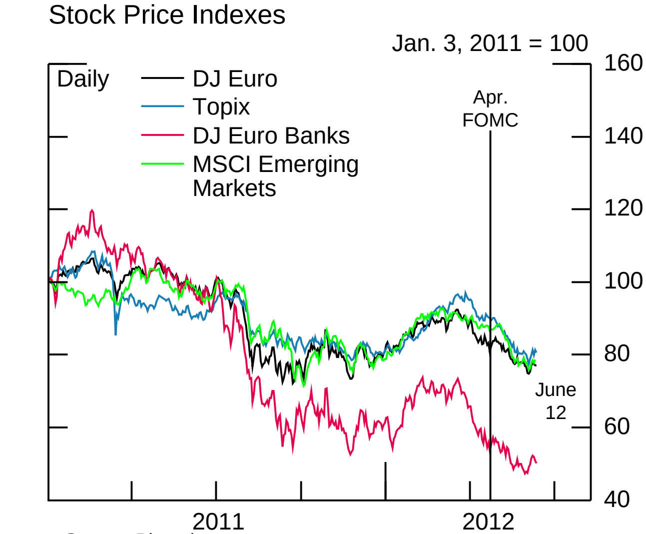
Note: Spread over German bunds.
Source: Bloomberg.

Bank CDS Premiums



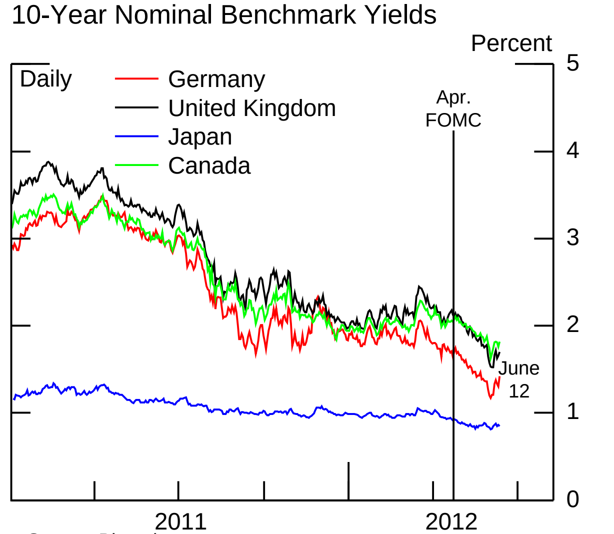
Source: Markit.

Stock Price Indexes



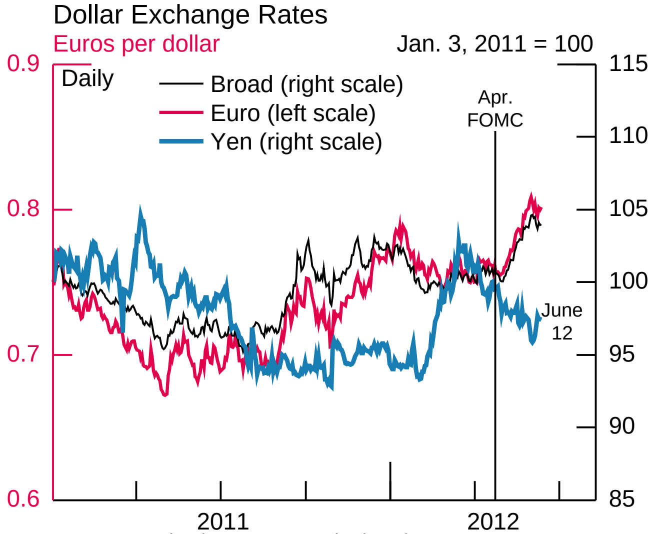
Source: Bloomberg.

10-Year Nominal Benchmark Yields



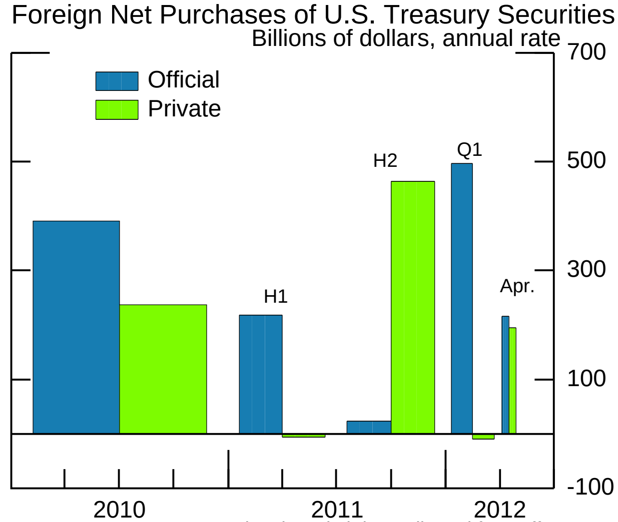
Source: Bloomberg.

Dollar Exchange Rates



Source: Federal Reserve Board; Bloomberg.

Foreign Net Purchases of U.S. Treasury Securities



Source: Treasury International Capital data adjusted for staff estimates.

Financial Developments

The Treasury yield curve flattened considerably over the intermeeting period. While 2-year yields were roughly unchanged, 10-year and 30-year yields declined by as much as 60 basis points to 1.44 percent and 2.50 percent, respectively (their lowest levels on record), on June 1 before finishing the period about 35 basis points lower on net. The staff's term structure models attribute about half of the decline in longer-term Treasury yields over the period to lower real term premiums, presumably reflecting elevated investor demand for the safety and liquidity of Treasury securities amid the intensification of the European crisis as well as increased investor expectations for additional Federal Reserve balance sheet actions.

Additional factors contributing to the decline in 10-year nominal Treasury yields include lower inflation expectations and reduced inflation risk premiums. Likely reflecting sharp declines in commodity prices, TIPS-based inflation compensation over the next five years fell 6 basis points, on net, and swaps- and caps-based measures posted even larger declines. In addition, the probability of deflation over the next five years derived from inflation caps edged up, although it remained within its recent range. The TIPS-based and swaps-based five-year forward measures of inflation compensation fell 10 basis points, on balance, while the caps-based measure was little changed.

FOREIGN DEVELOPMENTS

Heightened financial strains within the euro area and weak macroeconomic data weighed on foreign financial markets during the intermeeting period. Yields on most euro-area peripheral sovereign debt rose as investor sentiment worsened notably after Greek elections failed to produce a new government. News that Spain had partly nationalized the troubled lender Bankia and would need to inject an additional €19 billion into the bank and its holding company added to concerns about the region, leading to plans for an official aid package of up to €100 billion to recapitalize Spanish banks. (See the box "Developments in the Spanish Banking System.") Data showing that private-sector deposits in Spanish banks fell 1.9 percent in April likely added to the pressures, and a reported sharpening of deposit outflows from Greek banks reinforced concerns that Greece may be on its way out of the euro area. Banking woes were widespread: Rating agencies downgraded major banks in Germany, Italy, Spain, and several other European countries; euro-area bank stocks fell sharply; and credit spreads of European banks widened. However, indicators of funding market stresses remained muted, as many banks accessed funds from the ECB rather than interbank markets. Euro LIBOR–OIS

Developments in the Spanish Banking System

Concerns about the vulnerability of the Spanish banking system and the sustainability of Spain's sovereign debt increased significantly during the intermeeting period. In response, euro-area policymakers reached an agreement in principle on June 9 that European financial stability funds would provide loans, possibly totaling as much as €100 billion, for use in recapitalizing Spanish banks. Although markets rallied in anticipation of the agreement, initial market reaction to the announcement itself was generally negative: European bank stock price indexes fell a bit, and yields on Spain's sovereign debt rose. Many commentators noted that important details remain to be worked out. Moreover, because drawings on the assistance package will increase the debt of the Spanish government, concerns about the effect of supporting the banks on Spain's fiscal sustainability remain unaddressed.

Spanish banks had accumulated substantial exposures to real estate during Spain's property boom. Such exposures were particularly large at savings banks (cajas), most of which were controlled by regional or local governments or other nonprofit entities. The subsequent bust, with real estate prices having dropped about 30 percent from their 2007 peak, has pushed nonperforming loan (NPL) balances up to about 8 percent to total loans as of March of this year, led by NPLs on land development and construction loans (over 20 percent of such loans are nonperforming). The potential for more loans of all types to become nonperforming is large and increasing: Spain's unemployment rate has risen to about 24 percent, its second recession of the past three years is deepening, and real estate prices continue to fall. Concerns about solvency have put pressure on the liquidity of Spanish banks, with deposits from nonbank euro-area residents down about 4 percent during the six months ending in April 2012, replaced in part by funds from the ECB. Withdrawals by nervous depositors likely account for some of the decline, although a portion probably represents a natural response to the lower cost of ECB funding and to regulatory changes.

Financial Developments

To be sure, the Spanish authorities have taken fairly aggressive actions in response to the real estate bust to support and strengthen the banking system. Since 2009, all savings banks have been converted into commercial banks and many have been merged or acquired, sometimes with assistance from the deposit insurance fund or the government's vehicle for conducting bank recapitalizations (the Fund for Orderly Bank Restructuring, or FROB). Regulatory policies in place prior to 2009 required Spanish banks to hold relatively large loan loss reserves and high-quality capital, and government decrees in February 2011 and February and May 2012 required further increases in loan loss reserves and capital buffers, with the threat of government takeover or other actions in the case of banks unable to meet the requirements. The most prominent recent case is Bankia, which has requested €19 billion (about 2 percent of GDP) of government assistance to enable it to meet the new loan loss reserve and capital requirements.

Even so, markets have become very concerned that losses on loans will grow so large and the scale of needed recapitalization will become so great that the Spanish government will be unable to provide it. The amount of capital needed to cover losses is highly uncertain. Analysts' estimates of credit losses to be charged off over the next couple of years vary according to the severity of the scenario they envision, but many estimates cluster in the neighborhood of €230 billion, or more than 20 percent of GDP. Our own estimates of Spanish banks' credit losses in a severe stress scenario are similar. Such estimates are consistent with loan loss rates that are somewhat higher than those experienced by the Nordic nations in their banking crisis of the early 1990s, although smaller than those in Ireland more recently. However, with existing loan loss reserves likely to absorb much of such losses, estimates of the amount needed for bank capital injections are smaller: At €37 billion, a recent IMF estimate is toward the low end of a wide range of values, while most other estimates do not exceed €100 billion (about 10 percent of GDP).[1] The Spanish government had maintained that additional amounts of government assistance needed by banks would be smaller than €40 billion. In response to widespread skepticism by investors, the authorities engaged external auditors to provide estimates of Spanish banks' recapitalization needs, with initial numbers due by June 21 and more-detailed estimates due by the end of July.

The size of the banks' recapitalization needs is of particular concern to markets because the burden is believed to have the potential to undermine the solvency of the Spanish government. Although the country's debt-to-GDP ratio is projected to be only 80 percent at the end of 2012 (not counting any loans from euro-area financial stability facilities), below the euro-area average, Spain's ability to pursue budget-cutting measures to reduce its large fiscal deficits is uncertain (see the box "Recent Developments in the Euro Area" in the International Economic Developments and Outlook section in this Tealbook). Accordingly, yields on Spanish sovereign debt have become quite sensitive to news about potential needs to issue additional debt, either to cover fiscal deficits or the costs of bank recapitalization. For example, news of Bankia's need for additional capital drove up Spanish sovereign debt yields considerably. Bankia's request for €19 billion exceeded market expectations, which were between €7 billion and €15 billion, and highlighted the potential for further adverse surprises regarding the capital needs of Spanish banks. Additionally, markets may have been concerned that the Spanish government would be unable to issue €19 billion in bonds under current market conditions.

The European assistance package announced by euro-area finance ministers on June 9 represents an attempt to rebuild confidence in Spanish banks. The assistance will enable the FROB to obtain loans from Europe's financial stability facilities to fund injections into banks as needed. However, it is not clear how much will be drawn from the facilities, what subset of banks will receive assistance, what conditions will be imposed on the Spanish banking system, and whether the loans will be senior to existing Spanish sovereign debt. Moreover, because repayment of any such assistance must be backed by the Spanish government, the assistance will increase Spain's consolidated sovereign debt. Thus, the package may fail to induce a sustained improvement in confidence in Spain's banks and fiscal sustainability. In the days leading up to the June 9 announcement, markets rallied on expectations of a financial assistance package. Since then, stock prices and credit default swap spreads of the six largest Spanish banks have been little changed, though spreads on Spanish sovereign debt have risen.

[1] Estimates vary not only because of differences in estimated credit losses, but also because of differing assumptions about pre-provision net income over the next few years and about drawdowns of existing buffers of capital above regulatory minimums to absorb losses.

spreads and implied basis spreads from euro–dollar swaps are little changed at shorter maturities. Moreover, the amount of dollar swaps outstanding with the ECB declined on balance.

The negative news from Europe had a clear effect on global financial markets. Equity prices declined worldwide, particularly in Japan and many emerging market economies (EMEs), although they staged a modest rally late in the period on expectations that Spain would receive aid in recapitalizing its banks. Flight-to-safety flows helped push U.K. and German 10-year sovereign yields down more than 50 basis points to record lows before they partially retraced as sentiment improved in June.

The staff's broad nominal dollar index ended the intermeeting period up about 3 percent. On net, the dollar appreciated against most currencies except the yen, which rose over 2 percent against the dollar. The dollar ended the period up nearly 5½ percent against the euro and reached multiyear highs against both the Brazilian *real* and the Indian rupee, sparking interventions by authorities in Brazil and India to support their currencies. Flight-to-safety flows also reportedly led to sizable interventions by the Swiss National Bank in order to maintain its ceiling of 1.2 euros per Swiss franc.

Signs of a slowdown in global growth added to downdrafts in financial markets and prompted easing by some central banks. Brazil's central bank cut rates to a record-low rate of 8.5 percent. Responding to weak April data, the People's Bank of China cut benchmark lending and deposit rates 25 basis points and reduced bank reserve requirement ratios 50 basis points. In contrast, the ECB and the Bank of England held their main policy rates steady and left their liquidity programs unchanged.

Foreign official inflows into U.S. securities slowed in April and May from the robust pace earlier in the year, as appreciation of the dollar against EME currencies during those months reduced purchases of dollars by EME authorities. Private foreign investors purchased U.S. Treasury securities, on net, in April while selling U.S. corporate bonds and reducing net purchases of U.S. equities to about zero. U.S. investors' net purchases of foreign securities were also about zero in April.

Short-Term Dollar Funding Markets and Financial Institutions

There was no visible evidence of new significant strains in short-term dollar funding markets over the intermeeting period. The three-month LIBOR–OIS spread edged lower, and 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—was about unchanged on net. In addition, the three-month euro–dollar basis swap spread, which reflects the cost of shifting euros into dollars over the near term, was up only slightly. All of these spreads remained well below peak levels reached in late 2011, as the ECB's long-term refinancing operations provided significant liquidity, especially to Spanish and Italian banks. In addition, in recent quarters, some European institutions have reduced their holdings of dollar-denominated assets, reduced exposures to certain business lines that rely heavily on dollar financing, and reportedly turned to secured funding for their illiquid legacy assets. Reflecting these developments, the amount of dollar swaps outstanding with the ECB declined over the intermeeting period and is well below its peak earlier this year.

Outstanding unsecured financial commercial paper (CP) from issuers with European parents moved down to its lowest level since the turn of the year, mostly reflecting decreases at institutions with parents domiciled in France and the United Kingdom. In addition, the fraction of issuance of unsecured financial CP with very short maturities (one to four days) for institutions with parents in France and the United Kingdom remained noticeably above that for institutions with parents in the United States. The exposures of U.S. money market funds to Europe edged down 3 percent in May but still totaled \$790 billion, including \$360 billion in euro-zone holdings. Net flows to prime money market funds showed little evidence of heightened concern about Europe in recent weeks.

In secured funding markets, Treasury general collateral repo rates continued to edge higher than the level observed around the turn of the year. Sales through the Federal Reserve's maturity extension program and somewhat heavier-than-anticipated bill issuance by the Treasury Department may have led to elevated primary dealer holdings of shorter-dated Treasury securities. (See the box "Recent Upward Pressure on Overnight Money Market Rates.") In asset-backed commercial paper (ABCP) markets, amounts outstanding have remained stable for programs with U.S. sponsors but have decreased a bit for programs with European sponsors. Overnight spreads on ABCP are about unchanged on net.

According to responses to the June Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS), terms in a variety of dealer-intermediated markets

Recent Upward Pressure on Overnight Money Market Rates

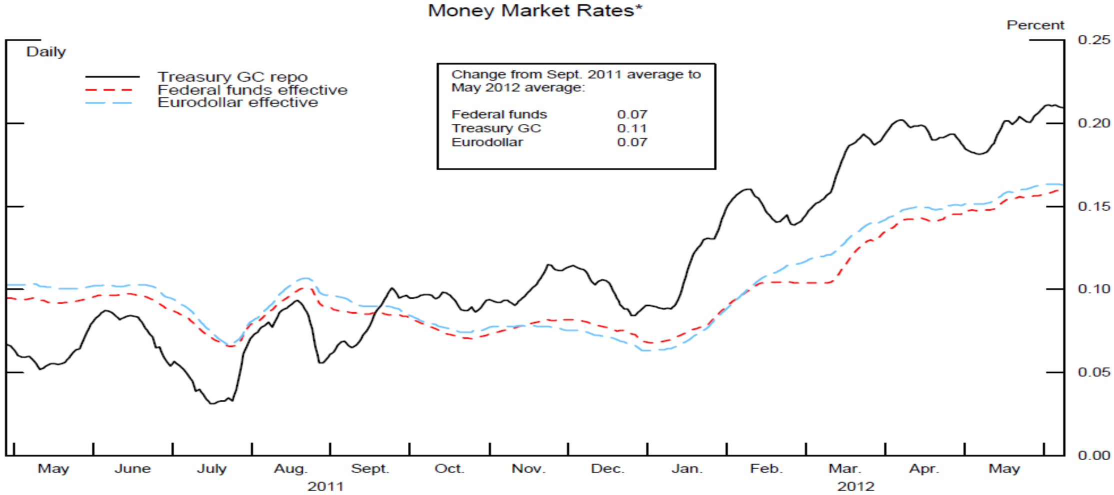
As shown in the top figure on the next page, the May 2012 averages for overnight federal funds, Treasury general collateral (GC) repo, and Eurodollar rates were 7 to 11 basis points higher than their respective average values in September of last year. A variety of factors can move money market rates, and over the period since the target range for the federal funds rate has been 0 to ¼ percent, these rates have at times been near the bottom and at the top of this range. Recently, elevated credit default swaps and other measures of perceived riskiness of securities dealers, for example, could result in higher funding costs for these entities, resulting in higher money market rates overall. Market participants have suggested that the firming in money market rates over the past several months likely reflects, at least in part, the increase in short-dated Treasury securities held by the public over that time. As shown in the middle figure on the next page, net issuance of short-dated Treasury securities increased over this period with only a slight pause after tax season (the red bars). At the same time, Federal Reserve sales of Treasury securities with remaining maturities of 3 months to 3 years under the maturity extension program (MEP) led to an even larger increase in the amount of publicly held short-dated Treasury securities (the yellow bars).

In addition to the overall increase in short-dated securities held by the public, upward pressure on money market rates could stem from securities dealers' financing of their inventories. As shown in the bottom figure on the next page, the increase in publicly held short-dated securities has been accompanied by an increase in primary dealers' net Treasury securities inventories, which have risen to an average of about $100 billion in May, compared with an average level of about $20 billion in September 2011. It is noteworthy that this increase has been concentrated in Treasury securities maturing in 3 years or less. Because primary dealers tend to finance their inventories largely in the repo market, the resulting increased demand for funding may have put upward pressure on the Treasury GC repo rate.[1] Consistent with this view, staff regression analysis suggests that increases in dealers' inventories of securities are associated with increases in the Treasury GC repo rate.[2] Moreover, this analysis also suggests that increases in repo rates are linked to increases in a broader set of money market rates.

[1] Market commentary suggests that even with the rise in the Treasury GC repo rate over the period of the MEP, dealers are making profits on their holdings of shorter-dated Treasury securities, consistent with the relatively high bid-to-cover ratios on the MEP sales operations.

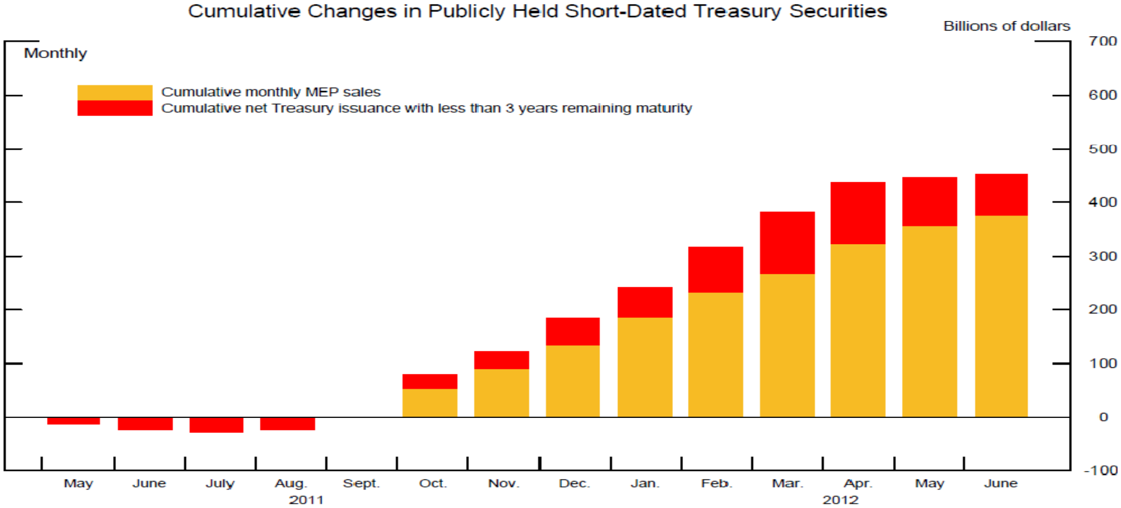
[2] Other empirical work shows that the increase in net Treasury issuance may have also contributed to the recent increase in the Treasury GC repo rate; see Eric LeSueur and Lisa Stowe (2012) "What Accounts for the Recent Upward Pressure in Repo?" Federal Reserve Bank of New York "MarketSOURCE" (webpage), April 17.

Money Market Rates*



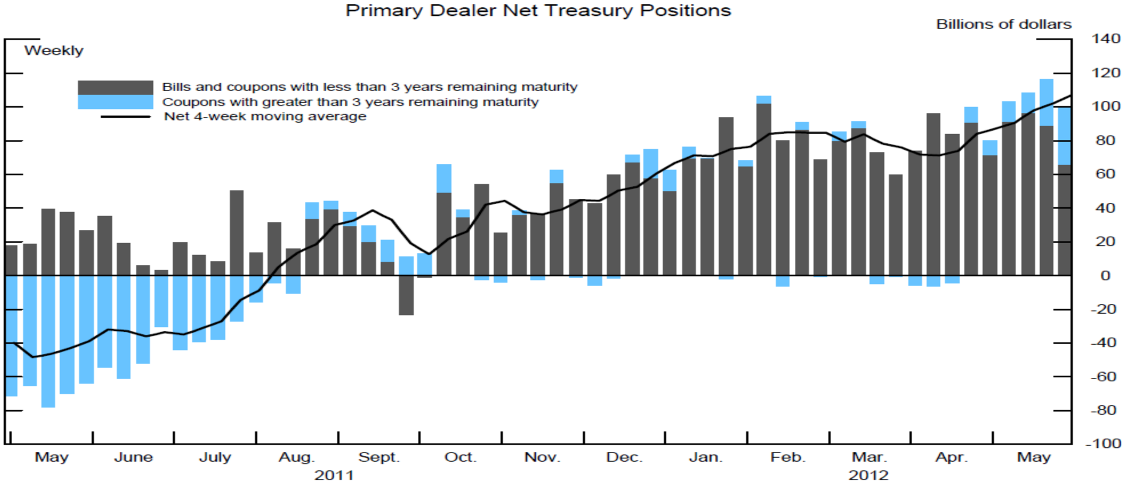
* 4-week moving average.
Source: Federal Reserve Bank of New York and the Depository Trust & Clearing Corporation.

Cumulative Changes in Publicly Held Short-Dated Treasury Securities



Source: Federal Reserve Bank of New York and the Department of the Treasury.

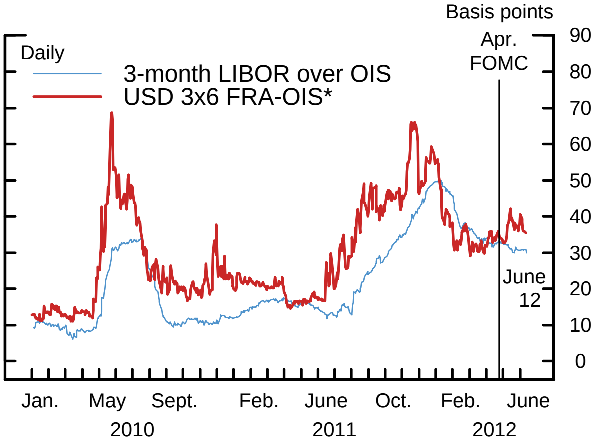
Primary Dealer Net Treasury Positions



Source: Federal Reserve Bank of New York (FR2004).

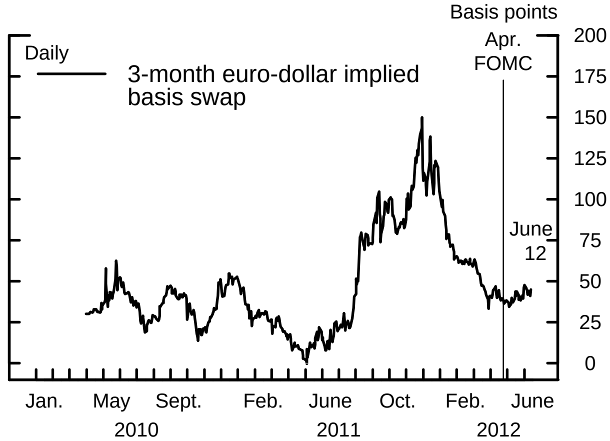
Short-Term Dollar Funding Markets and Financial Institutions

Selected Spreads



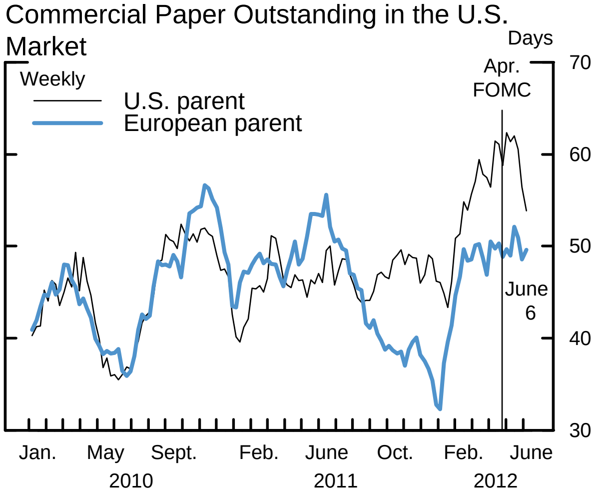
*Spread is calculated from a LIBOR forward rate agreement (FRA) 3 to 6 months in the future and the implied forward overnight index swap (OIS) rate for the same period.
Source: Bloomberg.

Dollar Funding Spread



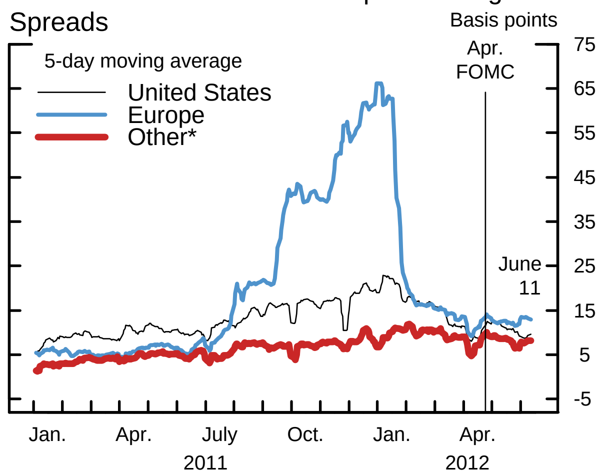
Source: Bloomberg.

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



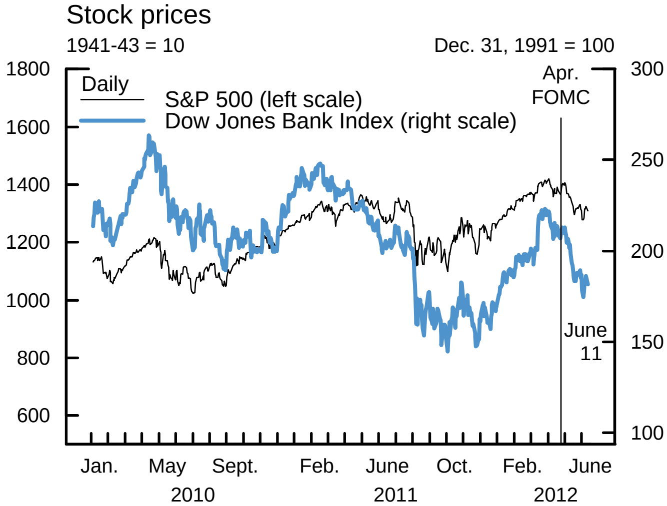
Source: Federal Reserve Board staff calculations based on data from the Depository Trust & Clearing Corporation.

Asset-Backed Commercial Paper Overnight Spreads



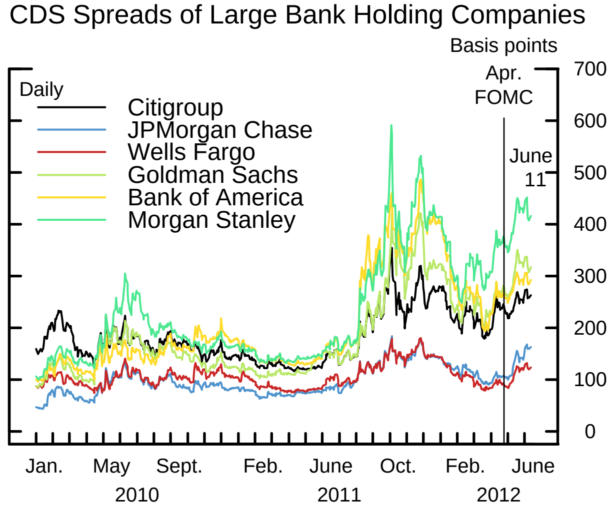
Note: Spreads computed over the AA nonfinancial unsecured rate.
*Other institutions include nonbanking institutions and banks domiciled outside Europe and the United States.
Source: Depository Trust & Clearing Corporation.

Stock prices



Source: Bloomberg.

CDS Spreads of Large Bank Holding Companies



Source: Markit.

Financial Developments

were little changed over the past three months (see appendix). However, some dealers reported a decline in the use of leverage across various transaction types by hedge funds over the same period. More recently, market participants have reported reduced liquidity in some markets, including those for corporate bonds and loans, as dealers reduce inventory amid the overall pullback from risk.

Over the intermeeting period, equity prices for large domestic banks, particularly those with substantial investment banking operations, significantly underperformed broad stock market indexes on concerns about Europe and the domestic economy. Bank shares also declined broadly after the announcement of trading losses at JPMorgan Chase, in part because of increased investor concerns about the quality of risk management at other banks with substantial trading operations, as well as potential regulatory fallout from the event. Share prices of some large banks fell more than 15 percent, and CDS spreads widened on net.

Securities prices may have been influenced by concerns about the possible size of the downgrades by Moody's Investors Service of the credit ratings of five of the six largest U.S. banks that are anticipated by the end of June. The downgrades (expected to be from one to three notches) could limit the affected banks' access to short-term funding or pose other liquidity difficulties.[2] Downgrades could also make it more difficult for borrowers to issue instruments (such as ABCP and variable-rate demand obligations) that depend on liquidity support from banks.[3] Perhaps in anticipation of these downgrades, responses from the June SCOOS indicate that dealers increased their attention on concentrated exposures to other dealers.

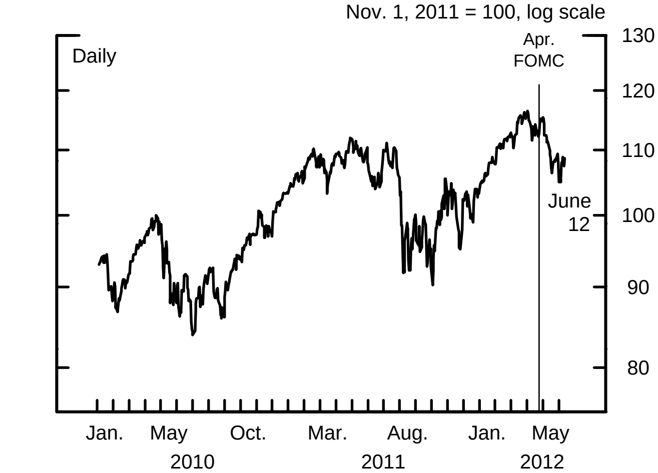
[2] The domestic institutions on watch for downgrade have relatively little reliance on unsecured short-term funding, and although they do rely significantly on repo, the bulk of their repo is secured by Treasury and agency collateral, which should mitigate, in part, liquidity concerns. Downgrades to long-term ratings could trigger additional liquidity demands stemming from requirements to post additional collateral or make termination payments under derivatives contracts or trading agreements, but the institutions report that they anticipate these amounts would be relatively small. It is less clear to what extent downgraded institutions might see clients or counterparties pull balances or move business away, have difficulty rolling over longer-term debt, or have to put instruments for which they provide liquidity support onto their own balance sheets. Notably, however, all of the largest U.S. BHCs now maintain reserves of cash and liquid securities on the order of 20 percent of their assets, providing a sizable cushion.

[3] In addition, money market funds may no longer wish or be allowed to hold variable-rate demand obligations (VRDOs) with liquidity support from downgraded banks, resulting in the municipalities that issued the VRDOs needing to find alternative liquidity backstops or potentially face accelerated amortization of the loan balance on the VRDOs.

Other Domestic Asset Market Developments

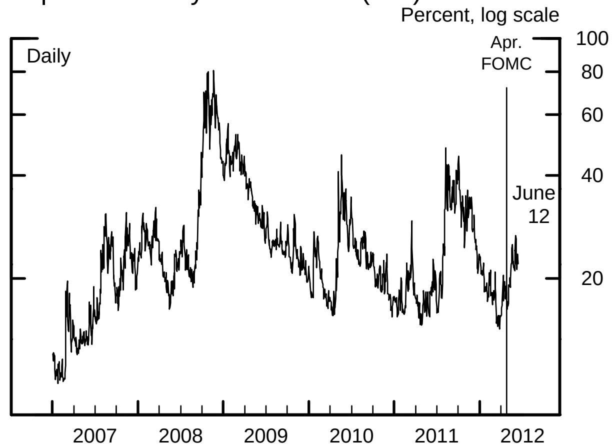
Financial Developments

S&P 500 Stock Price Index



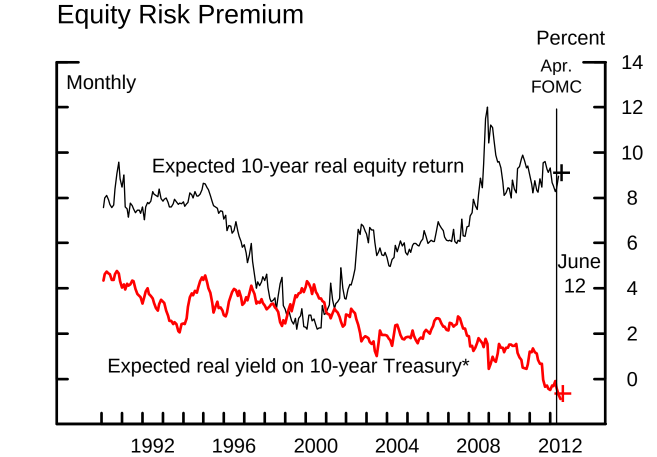
Source: Bloomberg.

Implied Volatility on S&P 500 (VIX)



Source: Chicago Board Options Exchange.

Equity Risk Premium

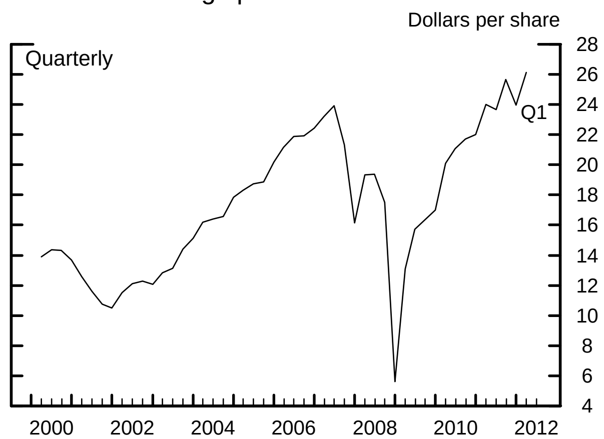


* Off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation.

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

Source: Thomson Financial.

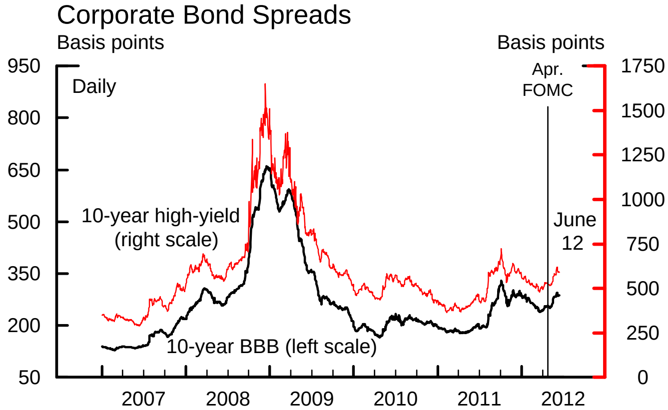
S&P 500 Earnings per Share



Note: Data are seasonally adjusted by staff.

Source: Thomson Financial.

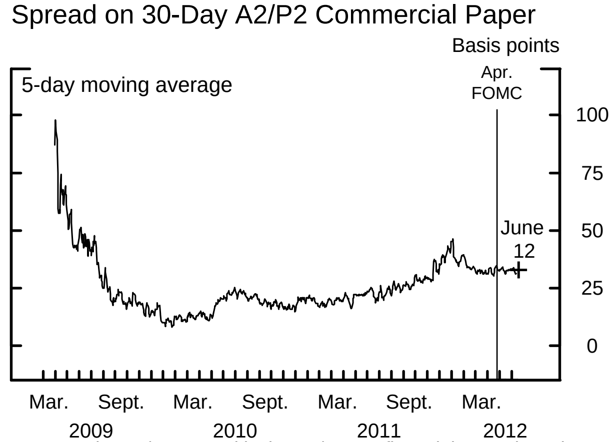
Corporate Bond Spreads



Note: 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.

Other Domestic Asset Market Developments

Broad U.S. equity price indexes fell, on net, over the intermeeting period, consistent with the widespread retreat from risky assets across global financial markets. As stock prices and yields on Treasury securities dropped, the staff's estimate of the spread between the expected real equity return for the S&P 500 index and the real 10-year Treasury yield—a gauge of the equity premium—ramped up close to its historical high in early 2009. Option-implied volatility on the S&P 500 index also rose, though it remained below the levels seen in late 2011, and the share of downside risk for the S&P 500 implied by option prices reached a very high level.

Although aggregate operating earnings per share (EPS) for firms in the S&P 500 index in the first quarter of 2012 increased at a 6 percent quarterly rate, most of the gain was attributed to financial firms, and profits for the firms in the nonfinancial sector were about flat. Looking forward, Wall Street analysts still expect aggregate EPS for S&P 500 firms to grow at a healthy rate over the coming year, though forecasts of year-ahead earnings were revised down a touch over the intermeeting period.

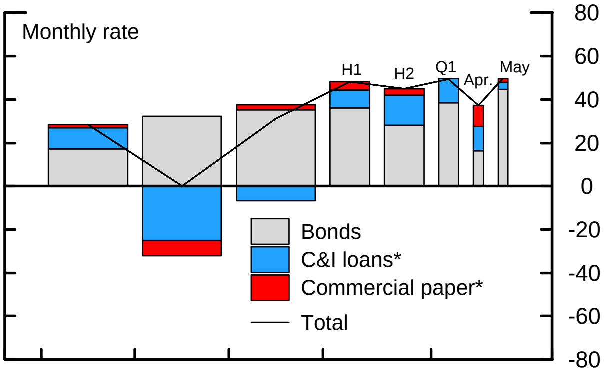
Yields on investment-grade corporate bonds fell slightly, on net, over the intermeeting period, reaching historically low levels, while yields on speculative-grade corporate bonds rose slightly, although they, too, remained quite low by historical standards. However, spreads on both investment- and speculative-grade corporate bonds widened considerably, although they remain a bit below their previous peaks observed last fall. The spreads of yields on A2/P2-rated unsecured CP issued by nonfinancial firms over yields on highly rated nonfinancial issues were little changed, on balance, over the intermeeting period.

Business Finance

Nonfinancial firms continued to raise funds at a solid pace in April and May. Although earnings-related blackout periods limited bond issuance in April, investment-grade bond issuance made a strong comeback in May as issuers took advantage of low yields; speculative-grade issuance stepped down in May and has since slowed to a trickle. While some issuance proceeds were used to finance mergers and acquisitions, much of the new bond issuance continued to be used to refinance existing debt. Both C&I loans and nonfinancial CP outstanding increased, on net, over April and May.

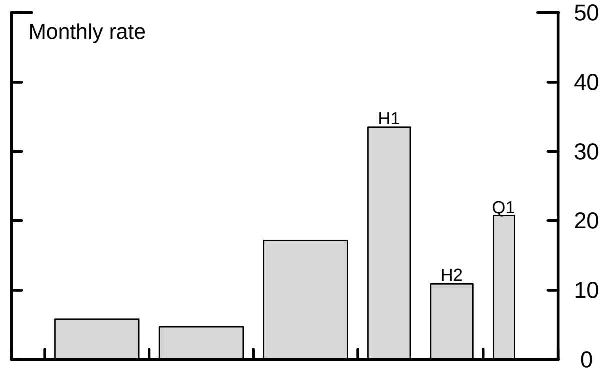
Business Finance

Selected Components of Net Debt Financing, Nonfinancial Firms



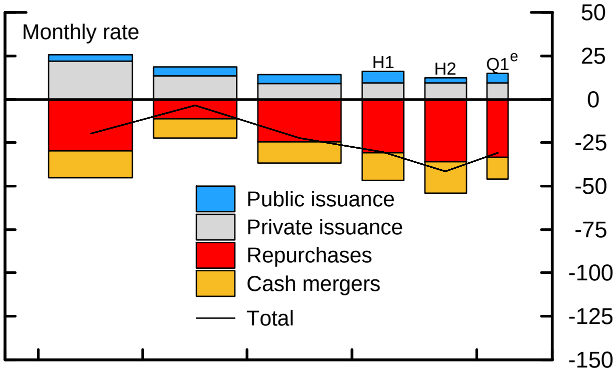
* Period-end basis, seasonally adjusted.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

Gross Issuance of Institutional Leveraged Loans



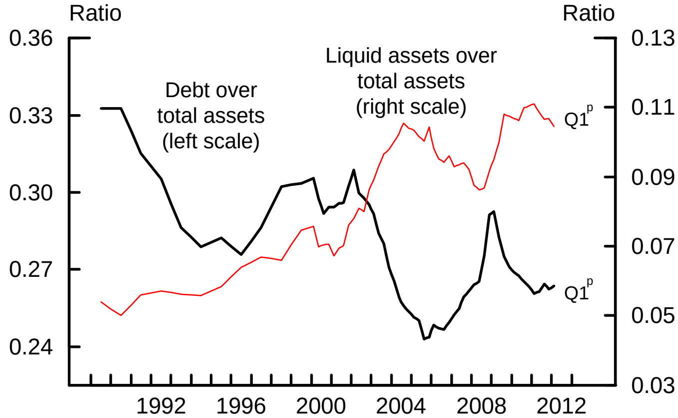
Source: Reuters Loan Pricing Corporation.

Selected Components of Net Equity Issuance, Nonfinancial Firms



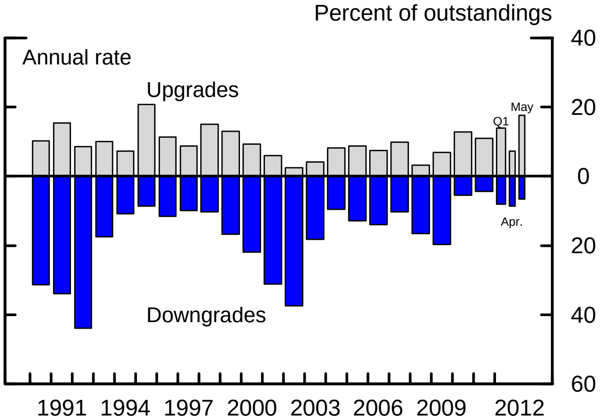
e Estimate.
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

Financial Ratios for Nonfinancial Corporations



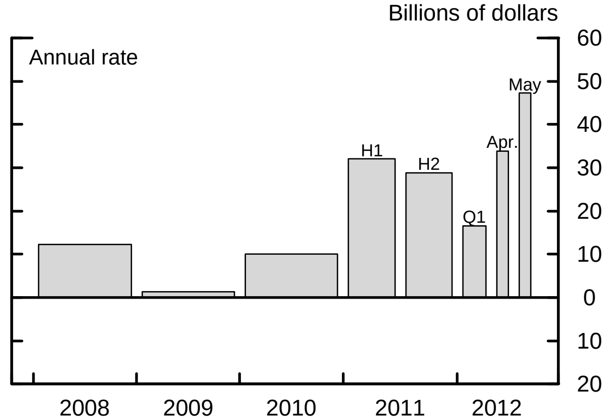
Note: Data are annual through 1999 and quarterly thereafter.
p Preliminary.
Source: Compustat.

Bond Ratings Changes of Nonfinancial Firms



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

CMBS Issuance



Source: Commercial Mortgage Alert.

Financial Developments

Secondary-market prices for syndicated leveraged loans declined, particularly for more liquid, widely traded names. However, issuance of new syndicated loans appears to have remained solid in April and May despite some reports of tightening terms for issuers. Continued growth of collateralized loan obligations contributed to the strength in the market.

Gross public equity issuance by nonfinancial firms continued apace in April and then shot up in May with the completion of the Facebook IPO. However, IPOs have since dried up, as a handful of deals were postponed after the poor performance of the IPO for Facebook, whose share price plummeted in the days following the offering. In the first quarter, share repurchases and cash-financed mergers by nonfinancial firms remained robust, leaving net equity issuance deeply negative. However, fewer mergers and new share repurchase programs were announced in the second quarter, indicating that equity retirements will likely slow, possibly reflecting increased concerns about the domestic economy and Europe.

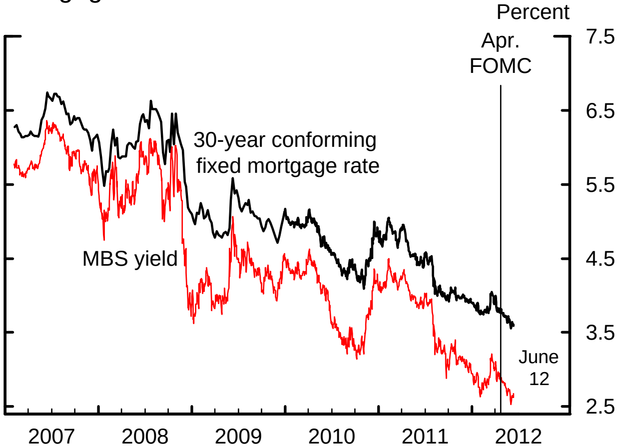
Available indicators of the credit quality of nonfinancial corporations continued to be quite solid. The aggregate ratio of debt to assets is estimated to have been stable at a relatively low level in the first quarter. The liquid asset ratio fell some but remained near its highest level in more than 20 years. In April and May, the pace at which Moody's upgraded nonfinancial corporate bonds exceeded that of downgrades. The six-month trailing bond default rate for nonfinancial firms remained low in April and May, and the C&I loan delinquency rate fell again in the first quarter. The expected year-ahead default rate for nonfinancial firms from the Moody's KMV model was unchanged in May.

Financial conditions in the commercial real estate (CRE) sector remained strained amid weak fundamentals and tight underwriting conditions. Prices for CRE properties continued to fluctuate at low levels, as vacancy and delinquency rates remained elevated. Spreads on commercial mortgage CDSs widened somewhat over the intermeeting period, reflecting the broader pullback from risky assets. Nonetheless, CMBS issuance during April and May has outpaced such issuance during the first quarter. Moreover, commitments by banks to fund commercial construction have increased in recent quarters.[4]

[4] The sale of CMBS-backed CDOs from the Maiden Lane III portfolio had little sustained price effect in CRE financing markets.

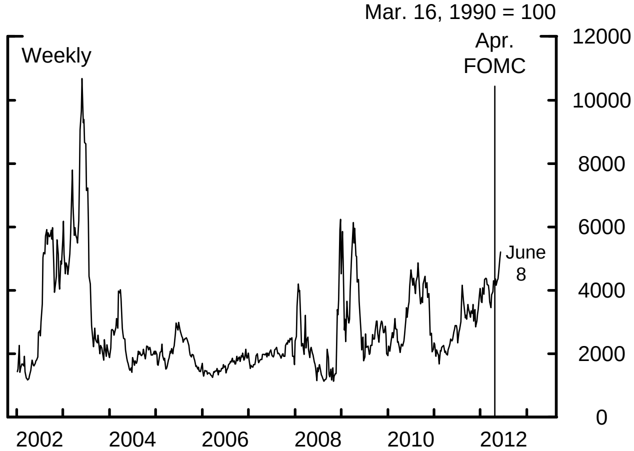
Household Finance

Mortgage Rate and MBS Yield



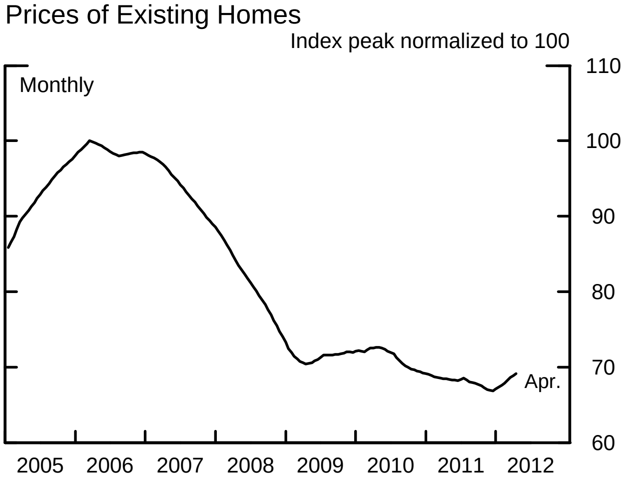
Note: For mortgage-backed securities (MBS) yield, the data are daily and consist of the Fannie Mae 30-year current-coupon rate; for mortgage rate, the data are weekly before 2010 and daily thereafter.
Source: For MBS yield, Barclays; for mortgage rate, Freddie Mac (before 2010) and Loansifter (after 2010).

Refinance Activity



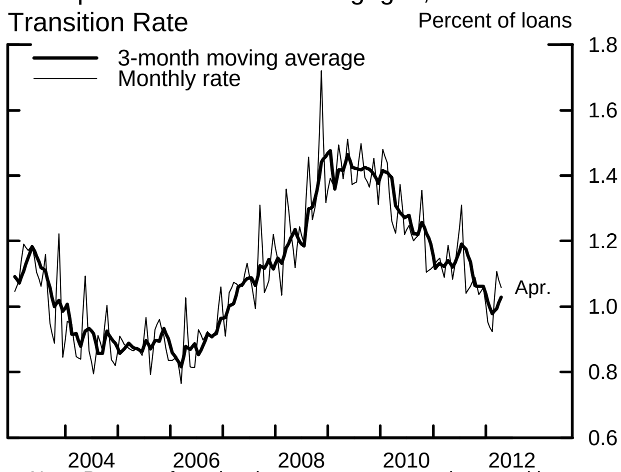
Note: Seasonally adjusted by FRB staff.
Source: Mortgage Bankers Association.

Prices of Existing Homes



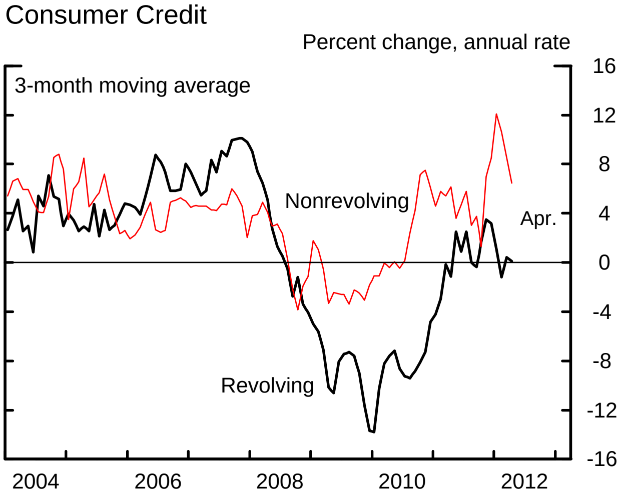
Source: CoreLogic.

Delinquencies on Prime Mortgages, Transition Rate



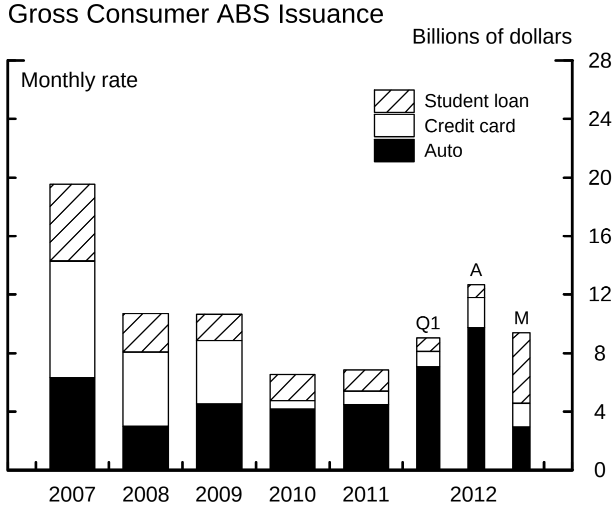
Note: Percent of previously current mortgages that transition to being at least 30 days delinquent each month.
Source: LPS Applied Analytics.

Consumer Credit



Source: Federal Reserve Board.

Gross Consumer ABS Issuance



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

Financial Developments

HOUSEHOLD FINANCE

Credit conditions in residential mortgage markets remained tight despite a further decline in mortgage rates to historically low levels. The drop in mortgage rates, while significant, was outpaced by the decline in yields on Treasury and mortgage-backed securities. The resulting increase in spreads likely reflects capacity constraints at mortgage originators. Refinancing activity rose in April and May but is still substantially limited by tight lending standards and low levels of home equity. Mortgage refinancing through HARP has also ticked up in recent months, suggesting that recent program enhancements have helped alleviate some of the constraints hindering the refinancing of underwater mortgages.

House prices ticked up further in March and April and are now about 1 percentage point above their year-earlier level. However, 23.7 percent of mortgages continue to have negative equity. Although the rate at which mortgages are entering into delinquency has declined, the fraction of existing mortgages that are seriously delinquent remains elevated relative to historical standards.

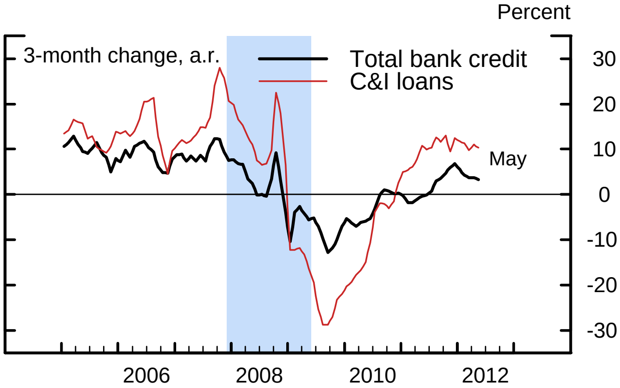
Overall consumer credit grew at a solid pace in recent months. Nonrevolving credit expanded notably in April, mainly because of continued growth in student loans, which are now almost entirely originated by the federal government. However, revolving credit was mostly unchanged, in part because nonprime borrowers continued to face tight underwriting standards for credit cards. Delinquency rates for consumer credit remained low, especially for revolving credit, likely reflecting a compositional shift toward borrowers with higher credit scores. The rate of issuance of consumer ABS picked up in the second quarter, owing to particularly strong issuance of auto loan ABS in April and student loan ABS in May.

GOVERNMENT FINANCE

Since the April FOMC meeting, the Treasury has auctioned $267 billion in nominal securities and $13 billion in 10-year TIPS. The auctions were generally well received, with bid-to-cover ratios slightly above—and indirect bidding ratios close to—their recent averages. Market participants were reportedly surprised by the Treasury's announcement to postpone its decision about the introduction of a floating-rate note program, as such a program had been expected to be introduced in the May quarterly refunding statement; however, the announcement had a limited effect on asset prices.

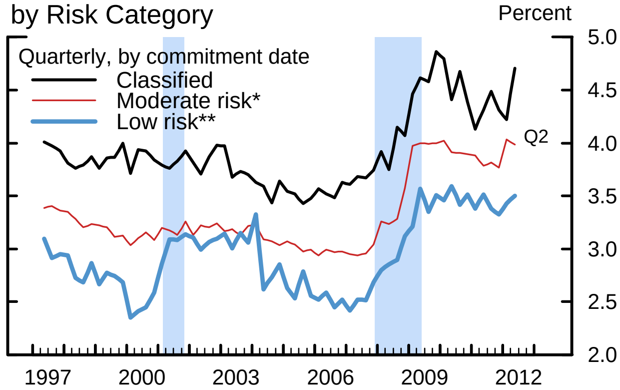
Commercial Banking and Money

Changes in Bank Credit



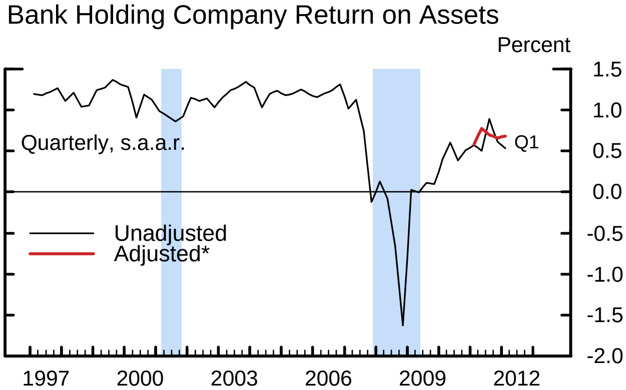
Source: Federal Reserve Board.

Weighted-Average Small Business Loan Spreads, by Risk Category



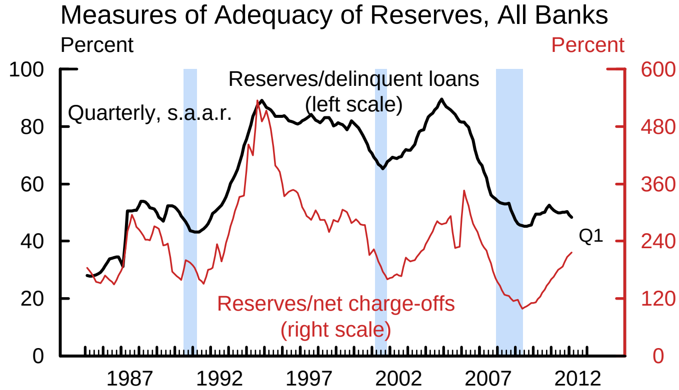
Note: The rate on C&I loans at domestic banks drawn on commitments of less than $1 million over a market interest rate on an instrument of comparable maturity.
*Moderate-risk loans are loans in the risk categories "acceptable" and "moderate" and loans without a risk rating.
**Low-risk loans are loans in the risk categories "minimal" and "low."
Source: Federal Reserve Board, Survey of Terms of Business Lending.

Bank Holding Company Return on Assets



*Adjusted return on assets removes mortgage-related charges by Bank of America in 2011:Q2, debt valuation adjustment income effects between 2011:Q3 and 2012:Q1, and litigation provisions in 2011 and 2012. These adjustments assume a marginal tax rate of 35 percent and are not seasonally adjusted.
Source: Federal Reserve Board.

Measures of Adequacy of Reserves, All Banks



Source: Call Report.

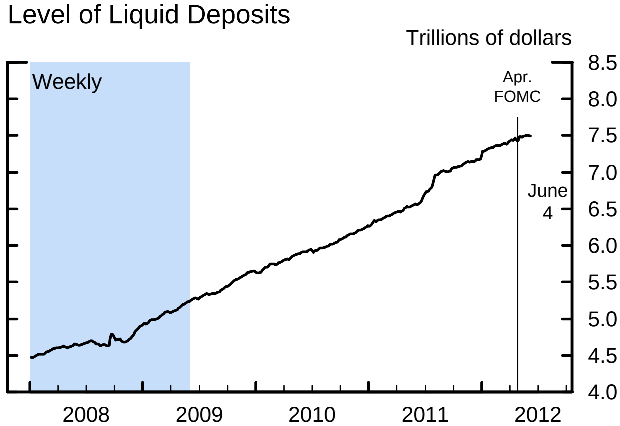
Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMFs	Curr.
2011	9.7	15.4	-18.5	-2.1	8.8
2011:H2	12.1	17.9	-19.7	1.8	7.8
2012:Q1	8.4	12.4	-15.3	-11.1	10.5
Mar.	3.6	6.8	-23.4	-12.9	10.9
Apr.	5.3	8.5	-21.4	-2.8	6.8
May(p)	4.1	6.8	-20.1	-3.0	5.2

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.

Gross long-term issuance of municipal bonds picked up in April and May, with net bond issuance turning positive for the first time since the beginning of 2011, indicating that municipalities may, in aggregate, be returning to capital markets. However, ratings downgrades of municipal bonds by Moody's continued to substantially outpace upgrades in the first quarter, and incoming data suggest that this trend will likely continue in the second quarter. CDS spreads for states moved higher, on net, over the intermeeting period, and spreads on long-term general obligation municipal bonds rose.

Commercial Banking and Money

Bank credit continued to expand in April and May. Banks' securities holdings rose further, though at a more moderate pace than earlier in the year. Core loans—the sum of C&I loans, real estate loans, and consumer loans—also increased modestly. Robust growth of C&I loans at domestic banks and U.S. branches and agencies of non-European banks was only partially offset by a broad decline in such loans at U.S. branches and agencies of European banks. CRE loans continued, on balance, to contract over the two-month period. Consumer loans rose modestly in April and May, as did closed-end residential mortgages. Home equity loans declined further. Noncore loans, in contrast, increased briskly, on average, importantly reflecting loans to nonbank financial institutions.

According to the May Survey of Terms of Business Lending, spreads on C&I loans over banks' cost of funds continued to trend down since February but remained elevated. Changes in some nonprice terms, such as loan maturity, also suggested a modest further easing of lending conditions. However, the average spread on C&I loans with original amounts less than $1 million (a proxy for loans to small businesses) changed little and remained quite high, even on loans with the strongest risk ratings.

Call Report data indicated that aggregate profitability of BHCs in the first quarter remained below pre-crisis levels and, excluding debt valuation adjustments and litigation provisions, was little changed from the previous quarter. Net interest margins, which have been pressured by the low interest rate environment, continued to remain near their historical lows. Amid ongoing improvement in asset quality for most loan categories, the ratio of loan loss reserves to net charge-offs has increased steadily over the past two years and, while still a bit low, has reached a value typical for this point in the economic cycle. Overall, regulatory capital ratios improved further, supported by retained earnings and reductions in risk-weighted assets, especially at the largest banks.

The growth rate of the M2 monetary aggregate slowed somewhat in April and May compared with the first quarter of 2012. However, the level of M2 and its largest component, liquid deposits, remains elevated relative to what would be expected based on historical relationships with nominal income and opportunity costs. This elevated level likely reflects investors' continued desire to hold safe and liquid assets amid increasing concerns about developments in Europe. At least some of the demand for M2 balances probably reflects the temporary unlimited insurance on noninterest-bearing deposits under the Dodd–Frank Act.[5]

Currency grew in line with historical averages in April and May, while retail money market fund balances and small time deposits continued to decline. In spite of the growth in currency, the monetary base contracted at a 9½ percent average annual rate over the two months, as the expansion in currency was offset by a drop in reserve balances, driven in part by the decrease in foreign central bank liquidity swaps in early April (see the box "Balance Sheet Developments over the Intermeeting Period").[6]

[5] The Dodd–Frank Act provides temporary, unlimited deposit insurance coverage for noninterest-bearing transaction accounts in excess of $250,000 from December 31, 2010, through December 31, 2012. These deposits are estimated to have grown nearly 50 percent from December 31, 2010, and currently make up about 15 percent of M2.

[6] The growth rates of reserves and the monetary base are calculated on a monthly average basis for April and May, while the box discusses net changes over the intermeeting period.

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Balance Sheet Developments over the Intermeeting Period

Since the April FOMC meeting, the Open Market Desk conducted 32 operations as part of the maturity extension program (MEP): The Desk purchased about $63 billion in Treasury securities with remaining maturities of 6 to 30 years and sold $71 billion in Treasury securities with maturities of 3 months to 3 years.[1] MEP-related operations are expected to be completed by the end of June 2012. In addition, the Desk purchased $42 billion in agency MBS securities as part of the policy of reinvesting principal payments from agency debt and agency MBS.[2]

Foreign central bank liquidity swaps decreased $9 billion to $23 billion, with a continuation of the decline in draws by the European Central Bank and the Bank of Japan. The net portfolio holdings of Maiden Lane III LLC declined $2 billion, reflecting the settlement of roughly half of the asset sales completed during the period. The payment date for the remainder of the asset sales is June 14, 2012. Loans outstanding under the Term Asset-Backed Securities Loan Facility fell slightly.

On the liability side of the Federal Reserve's balance sheet, other deposits decreased $73 billion, reflecting a decline in balances of government-sponsored enterprises (GSEs) after the monthly payment of principal and interest on agency MBS in May. The U.S. Treasury's General Account decreased $64 billion, largely reflecting the drawdown of April tax receipts. Balances flowing out of GSE and Treasury accounts boosted reserve balances in the banking system; reserve balances of depository institutions increased $100 billion over the period. Federal Reserve notes in circulation increased $9 billion. Term deposits held by depository institutions increased $3 billion, as a small-value operation of the Term Deposit Facility was conducted on May 14, 2012.

[1] A sale of $1 billion conducted on June 11, 2012, and a purchase of $2 billion conducted on June 12, 2012, are reflected in the text but not in the table. A purchase of $5 billion conducted before the April FOMC meeting settled on April 25, 2012, and is reflected in the table but not in the text.

[2] Settlements of agency MBS transactions can occur well after the trade is executed.

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (06/11/12)
Total assets	**-26**	**2,853**
Selected assets:		
Liquidity programs for financial firms	-9	23
Primary, secondary, and seasonal credit	+0	+0
Foreign central bank liquidity swaps	-9	23
Term Asset-Backed Securities Loan Facility (TALF)	-1	5
Net portfolio holdings of Maiden Lane LLCs	-2	19
Maiden Lane	-0	4
Maiden Lane II*	-0	+0
Maiden Lane III	-2	15
Securities held outright**	-16	2,605
U.S. Treasury securities	-3	1,660
Agency debt securities	-1	93
Agency mortgage-backed securities	-11	852
Total liabilities	**-26**	**2,798**
Selected liabilities:		
Federal Reserve notes in circulation	9	1,066
Reverse repurchase agreements	-2	85
Foreign official and international accounts	-2	85
Others	0	0
Reserve balances of depository institutions***	100	1,552
Term deposits held by depository institutions	3	3
U.S. Treasury, General Account	-64	44
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	-73	24
Total capital	**+0**	**55**

Note: +0 (-0) denotes positive (negative) value rounded to zero.
* In March 2012, proceeds from asset sales from the Maiden Lane II portfolio enabled the repayment of the remaining outstanding balances of loans from the Federal Reserve Bank of New York and American International Group to Maiden Lane II. A small cash balance will remain in Maiden Lane II for at least one year in order to accommodate any possible claims on the LLC and to meet trailing expenses and other obligations.
** Par value.
*** Includes required clearing balances and overdrafts. Excludes as-of adjustments.

Financial Developments

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Appendix

Senior Credit Officer Opinion Survey on Dealer Financing Terms

Responses to the June 2012 Senior Credit Officer Opinion Survey on Dealer Financing Terms indicated little change, on balance, in credit terms applicable to important classes of counterparties over the past three months. Viewed in conjunction with similar responses to the March survey, the results suggest that these terms have been generally stable since the beginning of the year.[1] However, about one-half of firms, on net, reported an increase in the amount of resources and attention devoted to the management of concentrated exposures to dealers and other financial intermediaries, and about two-thirds of respondents noted such an increase with respect to central counterparties and other financial utilities. Several respondents cited strains in Europe as a factor in explaining the increased focus on exposures both to dealers and other financial intermediaries and to central counterparties and other financial utilities. About one-fourth of respondents indicated that the use of financial leverage by hedge funds had decreased somewhat during the past three months. The use of financial leverage by trading real estate investment trusts (REITs), mutual funds, exchange-traded funds (ETFs), pension funds and endowments, and insurance companies remained basically unchanged.[2] Notable net fractions of dealers reported that the provision of differential terms to most-favored hedge funds and trading REITs had increased over the past three months.

As in the March survey, respondents indicated that nonprice terms incorporated in new or renegotiated over-the-counter (OTC) derivatives master agreements were broadly unchanged during the past three months. Dealers also reported that initial margin requirements, which fall outside the scope of the master agreements, were little changed over the same period. However, almost one-fifth of respondents indicated that the posting of nonstandard collateral (that is, other than cash and U.S. Treasury securities) permitted under relevant agreements had increased somewhat.

With regard to securities financing, survey respondents indicated that the credit terms applicable to the securities types included in the survey were generally little changed, on balance, over the past three months. Modest net fractions of dealers noted that the demand for funding of high-grade and high-yield corporate bonds as well as non-agency residential mortgage-backed

Financial Developments

[1] The June survey collected qualitative information on changes over the previous three months in credit terms and conditions in securities financing and over-the-counter (OTC) derivatives markets. In addition to the core set of questions, this survey included a set of special questions about derivatives prime brokerage, a second set of special questions focused on bilateral repurchase agreements, and a final set of special questions regarding the appetite of institutional investors for credit and duration risk. The 22 institutions participating in the survey account for almost all of the dealer financing of dollar-denominated securities for nondealers and are the most active intermediaries in OTC derivatives markets. The survey was conducted during the period from May 22, 2012, to June 4, 2012. The core questions ask about changes between March 2012 and May 2012.

[2] Trading REITs invest in assets backed by real estate rather than directly in real estate.

securities (RMBS) had increased over the past three months. Dealers reported a much more pronounced increase in demand for funding of agency RMBS with almost one-half of respondents pointing to an increase. Modest net fractions of respondents also reported an increase in demand for term funding with a maturity greater than 30 days for both agency and non-agency RMBS. In contrast to the improvement reported in the March survey, responses to the June survey suggested that liquidity and functioning in the underlying asset markets for most collateral types covered by the survey had remained basically unchanged over the past three months.

In response to special questions on derivatives prime brokerage, about one-third of survey respondents indicated that the fraction of new client OTC derivatives trades cleared through derivatives prime brokerage arrangements had increased over the past year.[3] Nonetheless, most respondents indicated that at present the fraction of new client OTC derivatives trades cleared through derivatives prime brokerage arrangements was 10 percent or less. With regard to clients using derivatives prime brokerage arrangements, about one-third of respondents indicated that the fraction of clients with such agreements in place had increased somewhat over the past year. However, nearly four-fifths of dealers noted that at present less than 10 percent of clients had such agreements in place.

A second set of special questions asked about bilateral repurchase agreements (repos). A majority of respondents reported that the volume of financing that is provided to clients through bilateral repo agreements for almost all types of collateral considered in the survey was little changed over the past year. Of note, however, about one-third of respondents, on net, indicated an increase in the volume of such funding provided for non-agency RMBS, and one-fifth pointed to an increase in funding for agency RMBS and U.S. Treasury collateral. The fraction of bilateral repo funding currently provided to clients, rather than to other dealers or financial intermediaries, varied significantly across firms.

A final set of special questions queried dealers about changes in the appetite of institutional investors for credit risk and duration risk over the past year. With respect to credit risk, nearly one-fifth of dealers, on net, indicated an increase in appetite to take on such risk on the part of mutual funds, pension plans, endowments, and insurance companies. With respect to duration risk, about one-fourth and one-fifth of dealers, on net, pointed to increased appetite to take on such risk on the part of insurance companies and pension funds, respectively.

[3] "Derivatives prime brokerage" refers to arrangements where a hedge fund or another client negotiates derivatives trades with multiple dealers that are subsequently "given up" for clearance to one (or more) dealers. As a result, the client faces a smaller number of dealers as its OTC derivatives counterparty but retains the flexibility to trade with the entire population of dealers. These arrangements may allow more-efficient use of collateral, for example, because a dealer offering derivatives prime brokerage computes requirements based on portfolio risk measures that recognize risk-reduction benefits from offsetting trades as well as offering certain operational advantages.

COUNTERPARTY TYPES

Dealers and Other Financial Intermediaries

In the June survey, about one-half of respondents indicated that the amount of resources and attention devoted to management of concentrated credit exposure to dealers and other financial intermediaries had increased over the past three months. In the March survey, about one-third of respondents, on net, had reported such an increase. This pattern of responses may suggest some recent resurgence of concerns about the condition of financial institutions after these concerns had apparently somewhat eased earlier in the year. Of note, all but one of the nine "broad-scope" dealers, which are active across a range of products and markets, indicated that the amount of resources and attention devoted to dealers and other financial intermediaries had remained basically unchanged, and that smaller dealers were disproportionately likely to report an increase.

Central Counterparties and Other Financial Utilities

About two-thirds of dealers indicated that the amount of resources and attention devoted to management of concentrated exposures to central counterparties and other financial utilities had increased over the past three months. This fraction is somewhat higher than that in the previous survey but similar to that in the December survey. Of note, seven of the nine broad-scope dealers indicated that the amount of resources and attention devoted to management of this concentrated credit exposure had increased.

Hedge Funds

As in March, the responses to the June survey indicated that price and nonprice terms applicable to hedge funds across the spectrum of securities financing and OTC derivatives transactions were little changed over the past three months. Only a small number of dealers reported having changed somewhat price terms (such as financing rates) or nonprice terms (including haircuts, maximum maturity, covenants, cure periods, cross-default provisions, or other documentation features) offered to hedge funds, with some dealers reporting a tightening and others reporting an easing of credit terms. The few institutions that reported an easing of credit terms most frequently pointed to more-aggressive competition from other institutions, and the most important reason cited by the few respondents that reported a tightening was a worsening in general market liquidity and functioning. Only about one-fourth of dealers, a significantly smaller fraction than in the March survey, noted an increase in the intensity of efforts by hedge funds to negotiate more-favorable price and nonprice terms over the past three months. Despite credit terms that were said to be little changed, about one-fourth of respondents—a slightly larger fraction than in March—suggested that the use of financial leverage by hedge funds had decreased somewhat over the past three months. A vast majority of dealers noted that the availability of additional financial leverage under agreements currently in place with hedge funds had remained basically unchanged. About one-fifth of respondents, on net, indicated that the provision of differential terms to most-favored hedge funds had increased somewhat over the past three months.

Trading Real Estate Investment Trusts

Although a large majority of respondents reported that price and nonprice terms offered to trading REITs had remained basically unchanged over the past three months, a modest net fraction of dealers noted a tightening of price terms offered to these counterparties. One-third of respondents reported that the intensity of efforts by trading REITs to negotiate more-favorable price and nonprice terms had increased over the same period, and about one-fourth of dealers indicated an increase in the provision of differential terms to most-favored clients of this type. Finally, the reported use of financial leverage by trading REITs remained basically unchanged.

Mutual Funds, Exchange-Traded Funds, Pension Plans, and Endowments

As in March, the responses to the June survey suggested that, on balance, there had been little change in the price and nonprice terms offered to mutual funds, ETFs, pension plans, and endowments during the past three months. Of note, about one-fourth of respondents stated that the intensity of efforts by clients in this category to negotiate more-favorable credit terms had increased somewhat over the same period. Both the provision of differential terms to most-favored mutual funds, ETFs, pension plans, and endowments as well as the use of financial leverage by clients of this type remained basically unchanged.

Insurance Companies

Dealers reported in the June survey, as they had in March, that price and nonprice terms applicable to insurance companies had remained basically unchanged over the past three months despite an apparent continued increase in the intensity of efforts by such clients to negotiate more-favorable credit terms. The use of financial leverage by clients of this type also remained basically unchanged.

Separately Managed Accounts Established with Investment Advisers

Nearly all dealers indicated that nonprice terms negotiated by investment advisers on behalf of separately managed accounts were basically unchanged over the past three months. A few respondents suggested that the price terms had eased, with the most important reason cited for such changes being more-aggressive competition from other institutions. The reported intensity of efforts by such clients to negotiate more-favorable credit terms and the use of financial leverage were little changed.

Nonfinancial Corporations

Survey respondents reported that, on balance, price and nonprice terms offered to nonfinancial corporations had remained basically unchanged, on net, over the past three months. About one-fifth of respondents, however, indicated that the intensity of efforts by nonfinancial corporations to negotiate more-favorable terms had increased somewhat.

Mark and Collateral Disputes

Most respondents indicated that the volume, persistence, and duration of mark and collateral disputes with each counterparty type included in the survey were little changed over the past three months.

OVER-THE-COUNTER DERIVATIVES

As in the March survey, dealers reported that nonprice terms incorporated in new or renegotiated OTC derivatives master agreements were broadly unchanged over the past three months.[4] A few respondents, on net, indicated that they had tightened requirements, timelines, and thresholds for posting additional margin, and a few noted that they had eased with respect to other documentation features, such as cure periods and cross-default provisions as well as acceptable collateral requirements. Nearly all survey respondents noted that initial margins (which fall outside the scope of master agreements) on contracts referencing most underlying collateral types were basically unchanged over the past three months. About one-fifth of respondents, on net, indicated that the posting of nonstandard collateral (that is, other than cash and U.S. Treasury securities) permitted under relevant agreements had increased somewhat. For most contract types included in the survey, almost all dealers reported that the volume, duration, and persistence of mark and collateral disputes remained basically unchanged over the past three months. However, a few respondents, on net, indicated that the volume of disputes with regard to contracts referencing FX and equities had decreased.

SECURITIES FINANCING

Respondents indicated that credit terms under which most types of securities included in the survey are financed were little changed, on balance, over the past three months.

Almost one-half of dealers reported an increase in demand for funding of agency RMBS over the past three months, and almost one-third of respondents noted greater demand for term funding of this collateral type—that is, funding with a maturity of 30 days or greater. In addition, nearly one-fifth of dealers, on net, noted that overall demand for funding had increased for high-grade and high-yield corporate bonds, and that both overall demand and demand for term funding had increased for non-agency RMBS over the same period.

In contrast to the March survey, which pointed to an improvement in liquidity and functioning in the underlying markets in which the various specified collateral types are traded, dealers reported in June that conditions in these markets had remained basically unchanged.[5] As

[4] The survey asks specifically about requirements for posting additional margin, acceptable collateral, recognition of portfolio or diversification benefits, triggers and covenants, and other documentation features, including cure periods and cross-default provisions.

[5] Note that survey respondents are instructed to report changes in liquidity and functioning in the market for the underlying collateral to be funded through repos and similar secured financing transactions, not changes in the funding market itself. This question is not asked with respect to equity markets in the core questions.

in the March survey, nearly all respondents reported that the volume, duration, and persistence of mark and collateral disputes were basically unchanged for all collateral types.

SPECIAL QUESTIONS ON DERIVATIVES PRIME BROKERAGE

Derivatives prime brokerage arrangements have been cited as potentially reducing the total notional value of outstanding OTC derivatives transactions, including those types that would likely not be centrally cleared in the foreseeable future, with consequent benefits that include efficiencies in collateral management and reduction of operational risks.[6] A special question asked about changes over the past year in the fraction of new client OTC derivatives trades cleared through derivatives prime brokerage arrangements. About one-third of survey respondents indicated that the fraction of such trades cleared through derivatives prime brokerage arrangements had increased over the past year, and the remainder suggested that the fraction had remained basically unchanged. A vast majority of respondents reported that at present the fraction of new client trades cleared through derivatives prime brokerage arrangements was about 10 percent or less. The remaining special questions on derivatives prime brokerage focused on the number of clients with derivatives prime brokerage arrangements in place rather than the volume of trades cleared through such arrangements. About one-third of respondents indicated that the fraction of such clients had increased over the past year, and the remainder of dealers reported that the fraction had remained basically unchanged. About three-fourths of dealers indicated that at present the fraction of clients using derivatives prime brokerage agreements was about 10 percent or less.

SPECIAL QUESTIONS ON BILATERAL REPURCHASE AGREEMENTS

Repos that are settled bilaterally (and not through the triparty mechanism involving a clearing bank) reportedly represent an important share of the secured funding provided by dealers to hedge funds and similar types of clients. The first special question asked about changes over the past year in the volume of financing provided through bilateral repos for a number of collateral types. About two-thirds of dealers indicated that the volume of bilateral repo funding they provided over this horizon had remained basically unchanged for high-grade corporate bonds, high-yield corporate bonds, commercial mortgage-backed securities, and sovereigns other than U.S. Treasury securities. For agency RMBS, non-agency RMBS, municipal securities, and U.S. Treasury securities, net fractions ranging between 20 and 35 percent reported an increase. When asked about the fraction of bilateral repo funding currently provided to clients rather than to other dealers and financial intermediaries, responses varied widely. About 20 percent of respondents indicated that the fraction was below 20 percent, about 60 percent of dealers

[6] Derivatives prime brokerage arrangements can significantly reduce the number of outstanding OTC contracts insofar as the client, typically a hedge fund, effectively is left, after the novation of trades, facing only the dealer functioning as its derivatives prime broker. The derivatives prime broker, in turn, faces all of the other dealers with whom the client entered trades. However, because the derivatives prime broker typically has many trades in place with other dealers, there are significant opportunities to compress these down to a single net exposure. Several service providers now offer dealers tools to aid in the efficient compression of OTC derivatives exposures, including those stemming from serving as a derivatives prime broker.

indicated that the fraction was between 20 and 80 percent, and 20 percent of respondents placed it between 80 and 96 percent.

Special Questions on Appetite of Institutional Investors for Credit and Duration Risk

The current environment of very low interest rates has reportedly posed particular challenges to investors who, because of their investment mandates or liability structure, effectively have nominal return targets. Some commentators have suggested that these investors might respond, at least in part, by taking on additional credit risk (for example, by purchasing securities that entail greater expected default risk) or duration risk (for example, by purchasing securities with greater duration). The last set of special questions queried dealers about the appetite of institutional investors to take on credit and duration risk over the past year. Nearly one-fifth of dealers, on net, reported an increase in appetite to assume credit risk on the part of all specified types of clients—that is, mutual funds, pension plans, endowments, and insurance companies. With respect to duration risk, about one-fourth and one-fifth of dealers, on net, pointed to increased appetite to take on such risk on the part of insurance companies and pension plans, respectively. Respondents, by contrast, noted little change in appetite on the part of other specified types of institutional investors.

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Risks and Uncertainty

ASSESSMENT OF FORECAST UNCERTAINTY

We continue to see the uncertainty around our projection for economic activity as elevated relative to the average experience of the past 20 years (the benchmark used by the FOMC). In part, this assessment reflects the aftereffects of the U.S. financial crisis and the unusual depth and persistence of the recession, which have created considerable uncertainty about the resilience of the financial system, the magnitude of slack in labor and product markets, and the pace at which the recovery is likely to proceed. Beyond these factors, however, we see heightened risks associated with the deterioration in the European fiscal and financial situation. The staff's baseline forecast envisions financial stress in Europe becoming noticeably worse through much of this year before gradually improving, as European policymakers eventually take additional steps to contain the crisis in Europe. Of course, euro-area policymakers could move more quickly to resolve the crisis than we expect. However, we see a greater risk that European financial stress could intensify by more than projected, resulting in a much more severe economic downturn in Europe than in the baseline, with notable disruptions to global financial markets, including our own. As illustrated by the European crisis scenario discussed shortly, such an outcome would have an appreciable detrimental effect on the U.S. economy and could even push it into recession, particularly in light of the uncertain capacity of U.S. fiscal and monetary policy to counteract any material further weakening in real activity. The risks to the outlook are also boosted by the "fiscal cliff" looming at the turn of the year; U.S. fiscal policymakers, by choice or by gridlock, could impose considerably more restraint on the recovery than we have assumed in the baseline. These considerations also lead us to view the risks to economic activity as skewed to the downside.

With regard to inflation, although we see substantial uncertainty about the outlook, we do not view the risks as unusually high. Long-run inflation expectations and actual inflation have remained remarkably stable in recent years despite historically large fluctuations in unemployment, oil prices, and other relevant factors. Moreover, we continue to see the risks surrounding our baseline forecast for inflation as balanced. On the downside, low levels of resource utilization, subdued increases in unit labor costs, and the possibility that economic conditions might be less favorable than in the baseline could

Alternative Scenarios

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

Measure and scenario	2012 H1	2012 H2	2013	2014	2015	2016-17
Real GDP						
Extended Tealbook baseline	1.8	1.9	2.2	3.1	3.5	3.3
European crisis with severe spillovers	1.7	-2.7	-3.6	1.9	4.5	4.7
Hard landing in China	1.7	1.1	1.1	2.8	4.0	3.9
Fiscal cliff	1.8	1.9	1.0	2.3	3.8	4.1
Faster recovery	1.8	2.7	3.9	3.4	2.8	2.6
Damaged labor market	1.8	1.7	2.0	2.6	2.9	2.4
Future labor market damage	1.8	1.9	2.0	2.7	2.9	2.6
Unemployment rate[1]						
Extended Tealbook baseline	8.2	8.2	8.0	7.7	7.1	5.9
European crisis with severe spillovers	8.2	8.8	10.9	11.4	10.4	7.9
Hard landing in China	8.2	8.3	8.6	8.5	7.9	6.3
Fiscal cliff	8.2	8.2	8.5	8.6	8.1	6.1
Faster recovery	8.2	8.1	7.2	6.5	6.2	5.8
Damaged labor market	8.2	8.2	8.2	8.0	7.8	7.5
Future labor market damage	8.2	8.3	8.3	8.2	7.9	7.4
Total PCE prices						
Extended Tealbook baseline	1.5	.8	1.5	1.5	1.6	1.8
European crisis with severe spillovers	1.4	-1.3	-.8	.7	1.8	2.2
Hard landing in China	1.4	.0	.4	.8	1.4	2.1
Fiscal cliff	1.5	.8	1.5	1.3	1.3	1.4
Faster recovery	1.5	.8	1.5	1.7	1.9	2.2
Damaged labor market	1.5	.9	1.8	2.1	2.4	2.5
Future labor market damage	1.5	.8	1.5	1.6	1.9	2.1
Core PCE prices						
Extended Tealbook baseline	1.9	1.5	1.6	1.6	1.7	1.8
European crisis with severe spillovers	1.9	.6	.2	.8	1.5	2.0
Hard landing in China	1.9	1.3	1.1	1.2	1.5	1.8
Fiscal cliff	1.9	1.5	1.6	1.4	1.4	1.4
Faster recovery	1.9	1.5	1.6	1.8	2.0	2.2
Damaged labor market	1.9	1.6	1.9	2.2	2.5	2.5
Future labor market damage	1.9	1.5	1.6	1.7	1.9	2.1
Federal funds rate[1]						
Extended Tealbook baseline	.2	.1	.1	.5	1.6	3.4
European crisis with severe spillovers	.1	.1	.1	.1	.1	.8
Hard landing in China	.1	.1	.1	.1	.4	2.2
Fiscal cliff	.2	.1	.1	.1	.3	3.0
Faster recovery	.2	.4	1.5	2.6	3.0	3.7
Damaged labor market	.2	.2	.6	1.9	3.4	4.7
Future labor market damage	.2	.1	.1	1.0	2.7	4.0

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

cause inflation to drift down over time. On the upside, a larger amount of damage to the supply side of the economy might cause inflation to rise, as could concerns related to the size of the Federal Reserve's balance sheet and the ability to execute a timely exit from the current stance of policy; a stronger recovery might also generate somewhat higher inflation.

ALTERNATIVE SCENARIOS

To illustrate some of the risks to the outlook, we construct a number of alternatives to the baseline projection using simulations of staff models. The first two scenarios consider risks to the U.S. economic outlook associated with developments abroad. In the first, a much more severe fiscal and financial crisis in Europe spills over to the United States and the rest of the global economy; in the second, we analyze the effects on the U.S. economy of a marked slowdown in the pace of economic growth in China and other Asian countries. We then consider two scenarios that illustrate opposing risks to domestic demand—the downside risk associated with a fiscal cliff at the beginning of 2013, and the upside risk that the underlying pace of the recovery is more robust than the recent economic news would seem to suggest. The last two scenarios focus on the supply side of the economy. In one, we consider the possibility that we have underestimated the extent of labor market damage that has *already* occurred and thus have overestimated the amount of slack in resource utilization. In the other, we consider the possibility that we have instead underestimated how much the long-run productive capacity of the economy will be reduced *in the future* if the level and duration of unemployment remain elevated.

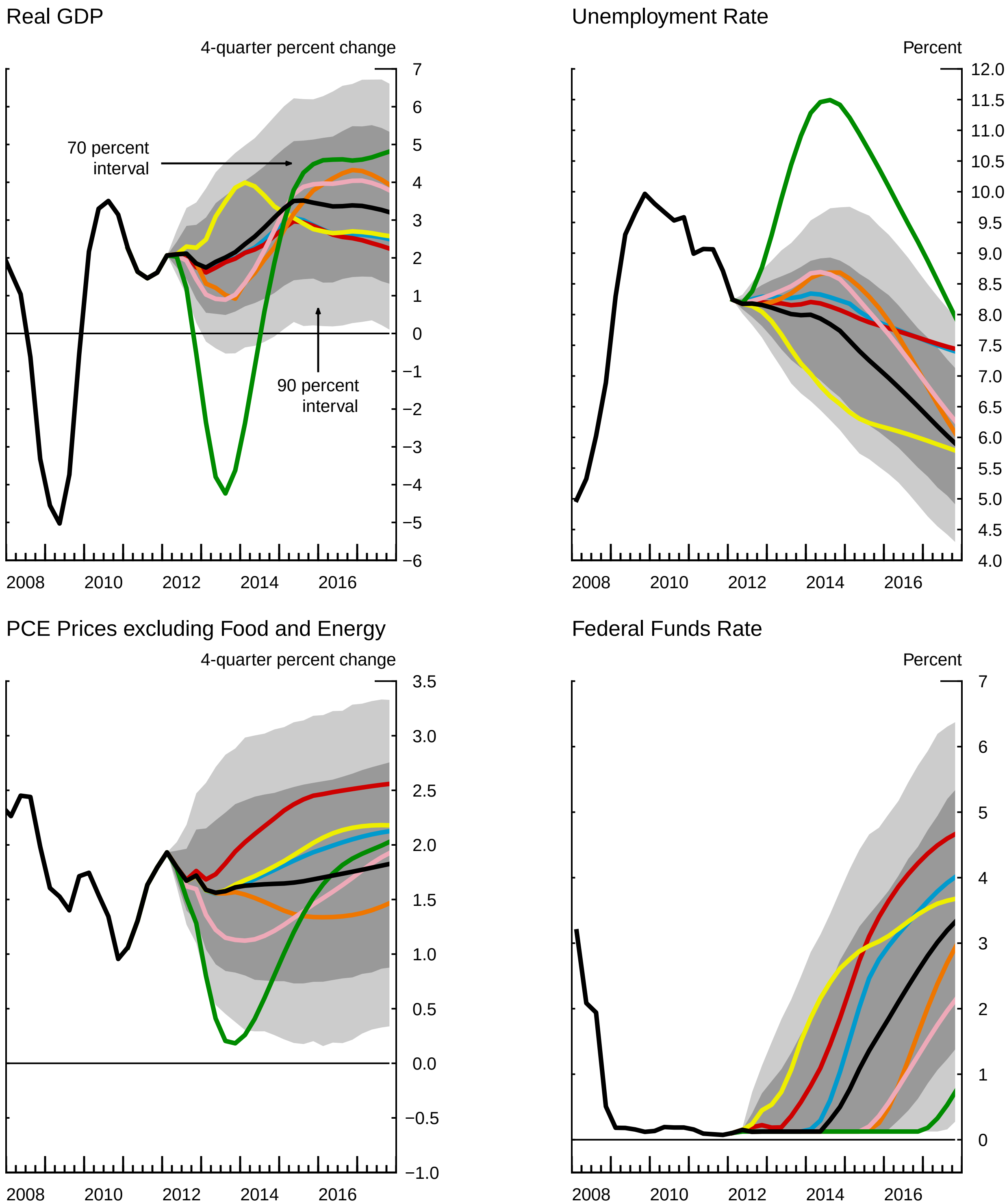
We generate the first two scenarios using the multicountry SIGMA model and build the last four scenarios using the FRB/US model. For the simulations with the FRB/US model, we use the same estimated policy rule that governs the path of the federal funds rate in the baseline. For the simulations with the SIGMA model, we use a different policy rule that employs an alternative concept of resource utilization.[1] In all of the scenarios, the size and composition of the SOMA portfolio are assumed to follow their baseline paths.

[1] In particular, in the simulations using the FRB/US model, the federal funds rate follows the outcome-based rule described in the appendix on policy rules in Book B. In the simulations using SIGMA, 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 a slow adjustment in wages and prices.

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Tealbook baseline
- European crisis with severe spillovers
- Hard landing in China
- Fiscal cliff
- Faster recovery
- Damaged labor market
- Future labor market damage



European Crisis with Severe Spillovers

In this scenario, the current stress in European financial market conditions intensifies even further and causes Europe to plunge into a severe financial crisis and a deep recession. This outcome could result from the exit of Greece from the euro area or widespread deposit runs, highlighted as risks in the International Economic Outlook and Development section of this Tealbook, but it could also reflect other triggers such as a disorderly sovereign default or the failure of a large European bank.[2] Reflecting this intensified stress, both sovereign and private borrowing costs in Europe soar—with corporate bond spreads rising 400 basis points above baseline—and the confidence of European households and businesses plummets. Real GDP in Europe declines about 9 percent relative to baseline by the end of 2013, notwithstanding a 25 percent depreciation in the real effective foreign exchange value of the euro. Europe's difficulties are assumed to have important financial and economic spillovers to other parts of the world, including the United States. U.S. economic activity contracts sharply in response to a widening of U.S. corporate bond spreads of more than 300 basis points, a much weaker stock market, reduced availability of credit, and an erosion in household and business confidence. In addition, weaker foreign economic activity and the stronger exchange value of the dollar depress U.S. net exports. All told, U.S. real GDP declines at an annual rate of 2¾ percent in the second half of this year and falls 3½ percent in 2013. The unemployment rate climbs to 11½ percent in 2014 before gradually receding. With substantially greater resource slack and lower import prices, overall U.S. consumer prices fall in the second half of 2012 and in 2013; inflation turns positive in 2014 as an economic recovery begins to take hold.[3] Under these conditions, the federal funds rate remains at its effective lower bound until early 2017.

[2] European policymakers could take more-sizable steps toward resolving the crisis than assumed in the baseline, thereby substantially easing financial and fiscal stresses and prompting a faster European recovery. This possibility was analyzed in one of the alternative scenarios presented in the March 2012 Tealbook.

[3] The rebound in consumer price inflation after 2013 in the simulation reflects the forward-looking nature of inflation determination in SIGMA and a modest degree of structural inflation persistence. In particular, long-run inflation expectations remain firmly anchored at 2 percent, producer 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 dollar's initial appreciation is gradually reversed. Under alternative specifications of SIGMA that, for instance, allow for more structural persistence in the inflation process or a less-firm anchoring of inflation expectations, inflation would remain low for a longer period.

Hard Landing in China

Although real GDP growth in China has slowed substantially in recent quarters, in our baseline forecast, we expect that China's economy will continue to expand at close to an 8 percent rate. Nevertheless, important downside risks attend this outlook, including a real estate collapse or a sharp deceleration in the supply of credit if problems mount in China's banking sector. In this scenario, despite stimulative government policies, GDP growth in China falls to only a 5 percent pace over the next two years due to tighter credit conditions, lower investment, and reduced confidence. Moreover, we assume that China's slowdown has pronounced global spillovers, especially to other major U.S. trading partners in Asia. All told, this causes the trade-weighted exchange value of the dollar to appreciate about 5 percent relative to baseline. U.S. real net exports decline relative to baseline in response to weaker foreign growth and the dollar's appreciation. U.S. real GDP expands at an annual rate of only about 1 percent in the second half of this year and in 2013, and the unemployment rate rises above 8½ percent by the end of 2013, about ½ percentage point higher than in the baseline. Core PCE inflation declines to just above 1 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 late 2015.

Fiscal Cliff

Our baseline projection assumes that most expiring federal tax provisions—including the tax cuts initially enacted in 2001 and 2003, relief for most taxpayers from the alternative minimum tax, and a number of other non-stimulus-related tax reductions—will eventually be extended.[4] In contrast, this scenario assumes that all of these tax provisions are allowed to expire next year, thereby increasing household and business tax payments by more than 2 percent of GDP relative to baseline, and that the automatic spending cuts required by the sequestration associated with the Budget Control Act take full effect in 2013, thus restraining federal purchases by a further ¼ percent of

[4] As described in "Key Background Factors" of the Domestic Economic Developments and Outlook section, the staff's baseline forecast already assumes that the temporary payroll tax cut and the EUC program will expire at the beginning of next year, that federal discretionary spending will be restrained by the caps set in the Budget Control Act and by reductions in defense spending as overseas military operations draw down, and that more-gradual deficit-reduction policies will replace the automatic spending sequestration. These policies account for about half of the restraint that would result from completely driving off the fiscal cliff at the turn of the year.

GDP relative to baseline.[5] In addition, these fiscal policy developments are assumed to weigh on consumer and business confidence by more than in the baseline. As a result, real GDP expands only 1 percent in 2013 and 2¼ percent in 2014, on average 1 percentage point per year slower than in the baseline, and the unemployment rate is still 8½ percent at the end of 2014.[6] With a wider margin of slack in both labor and product markets, inflation edges down to 1¼ percent in 2014, and the federal funds rate does not begin to increase from its effective lower bound until late 2015.

Faster Recovery

This scenario assumes that both the staff and financial market participants have underestimated the future pace of the economic recovery, in part because seasonal-adjustment distortions and the unusually warm winter have obscured the underlying strength of the real economy in the past few months. In addition, the greater-than-expected increases in house prices since the beginning of the year turn out to signal that a significant headwind for the recovery is abating more rapidly than anticipated, with favorable implications for construction, household wealth, and the willingness of financial institutions to extend credit. The scenario also incorporates a greater spur to investor sentiment next year from the gradual improvement in the European situation than is assumed in the baseline, leading to a steeper decline in financial risk premiums. All of these factors contribute to stronger consumption and business fixed investment that, in turn, fuel a cycle of increased confidence, employment, credit availability, and spending that boosts the pace of the recovery further. Real GDP accelerates in the second half of this year and expands at an average annual rate of more than 3½ percent in 2013 and 2014, helping to bring the unemployment rate down to 6½ percent by the end of 2014. Upward pressure on inflation is initially tempered by the effects of stronger capital investment on labor productivity and unit labor costs, along with well-anchored long-run inflation expectations. Over time, however, tighter labor and product markets cause inflation to move noticeably above baseline. In response to

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[5] After 2014, both tax rates 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 stringency, the ratio of government debt to GDP is lower over the longer term in the alternative scenario.

[6] Although taxes increase by about 2 percent of GDP in 2013 in the alternative scenario relative to the baseline, the initial negative effect on real GDP next year is smaller as households in the FRB/US model adjust their spending gradually to the decline in their disposable income; accordingly, real GDP growth in 2014 is also restrained.

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	1.9	2.2	3.1	3.5	3.4	3.2
Confidence interval						
Tealbook forecast errors	.6–3.1	.4–3.9	. . .	. . .	. . .	. . .
FRB/US stochastic simulations	.9–2.9	.6–3.8	1.1–4.7	1.5–5.1	1.5–5.5	1.3–5.3
Civilian unemployment rate						
(percent, Q4)						
Projection	8.2	8.0	7.7	7.1	6.5	5.9
Confidence interval						
Tealbook forecast errors	7.7–8.7	7.2–8.8	. . .	. . .	. . .	. . .
FRB/US stochastic simulations	7.8–8.5	7.1–8.8	6.7–8.9	6.1–8.4	5.5–7.8	4.9–7.1
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	1.2	1.5	1.5	1.6	1.7	1.8
Confidence interval						
Tealbook forecast errors	.4–1.9	.3–2.8	. . .	. . .	. . .	. . .
FRB/US stochastic simulations	.5–1.8	.5–2.6	.4–2.6	.4–2.8	.5–2.8	.6–3.0
PCE prices excluding						
food and energy						
(percent change, Q4 to Q4)						
Projection	1.7	1.6	1.6	1.7	1.8	1.8
Confidence interval						
Tealbook forecast errors	1.3–2.2	.9–2.3	. . .	. . .	. . .	. . .
FRB/US stochastic simulations	1.3–2.1	.8–2.4	.8–2.5	.7–2.6	.8–2.7	.9–2.8
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.5	1.6	2.6	3.4
Confidence interval						
FRB/US stochastic simulations	.1–.7	.1–1.6	.1–2.7	.1–3.6	.6–4.5	1.4–5.4

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.

the stronger pace of real activity, the federal funds rate begins to rise from its effective lower bound in the second half of this year.

Damaged Labor Market

The unusual depth and breadth of the downturn may have impaired labor market efficiency, and thus boosted the NAIRU, by more than in the baseline. In this scenario, we assume that the NAIRU reached 7 percent in early 2011 (1 percentage point above baseline) and that it will remain at that level for the indefinite future. Furthermore, the trend labor force participation rate declines more rapidly and is 1 percentage point below baseline by 2015. These conditions imply lower long-run levels of household income and corporate earnings. As a result, aggregate demand expands more slowly from here forward than in the baseline, and the unemployment rate falls only gradually over time. Nonetheless, slack remains persistently narrower in this scenario because of the higher NAIRU. Less slack in labor markets in turn implies higher unit labor costs and greater upward pressure on consumer prices. This pressure is magnified by policymakers' initial failure to recognize the weaker supply-side conditions, which leads them to maintain a more accommodative stance of monetary policy than they would have chosen with a perfect understanding of the supply side. As a result, the public's long-run inflation expectations move up, and actual inflation follows suit. Specifically, core PCE inflation reaches 2½ percent in 2015 and stays near that level through 2017. In response to these more inflationary conditions, the federal funds rate begins to rise earlier and faster than in the baseline. Although the supply-side damage in this scenario is assumed to be already "baked in the cake" and thus cannot be reversed through monetary stimulus, policymakers could potentially achieve a better inflation outcome through a more aggressive policy tightening that keeps inflation expectations well-anchored.

Future Labor Market Damage

Unlike the previous scenario, in this scenario, the staff estimate of the NAIRU is assumed to be about right currently. Nonetheless, barring action by policymakers, the continued underutilization of labor resources is assumed to erode the skills and labor force attachment of workers by enough to cause significant further damage to the economy's productive potential in the future. Specifically, the NAIRU is assumed to rise from its current level of 6 percent to 7 percent by the end of 2014, and it remains at that level thereafter. In addition, as in the previous scenario, the trend labor force participation declines to about 1 percentage point below baseline by 2015. Under these conditions, real GDP expands about ½ percentage point less rapidly per year, on average, through 2017 than in the baseline, and the unemployment rate falls more slowly. As in the previous scenario, economic slack is tighter than in the baseline because of the more pronounced deterioration in the supply-side conditions of the economy, resulting in somewhat greater upward pressure on consumer prices. And policymakers are similarly assumed to recognize the weaker supply conditions only gradually, which delays the increase in the federal funds rate that would otherwise occur, and generates some upward pressure on the public's long-run inflation expectations. To the extent that the future damage to the supply side of the economy could be averted by stimulating the economy more aggressively in the near term, policymakers might be motivated to undertake a more accommodative monetary policy at the cost of higher inflation.

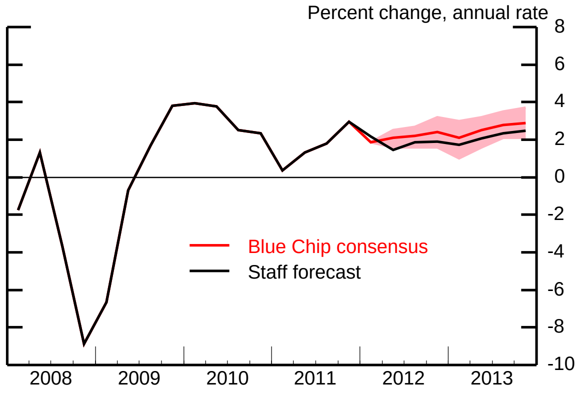
OUTSIDE FORECASTS

In the June 10 report, which was based on responses collected on June 4 and 5, the Blue Chip consensus projection showed real GDP rising 2.1 percent over the four quarters of 2012, ¼ percentage point above the staff forecast, and then increasing 2.6 percent in 2013, ½ percentage point above the staff projection. The Blue Chip consensus forecast for the unemployment rate was 8 percent at the end of 2012, ¼ percentage point below the staff projection, and 7½ percent at the end of 2013, ½ percentage point below the staff projection; the latter discrepancy would put the Blue Chip forecast at the 25th percentile of the probability distribution around the staff unemployment forecast, based on historical staff errors.[7] Regarding inflation, the consensus of Blue Chip panelists anticipated that the overall CPI will increase 2 percent in 2012, 1 percentage point above the staff projection, and 2.2 percent in 2013, ½ percentage point above the staff projection; that discrepancy would put the Blue Chip forecast at the 70th percentile of the probability distribution around the staff inflation forecast.

[7] The shaded area in the "Tealbook Forecast Compared with Blue Chip" exhibit represents the Blue Chip top 10 and bottom 10 averages, and not the probability distribution around the staff forecast referenced in the main text.

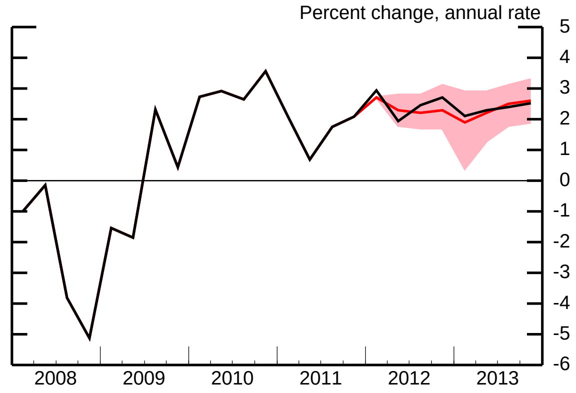
Tealbook Forecast Compared with Blue Chip
(Blue Chip survey released June 10, 2012)

Real GDP

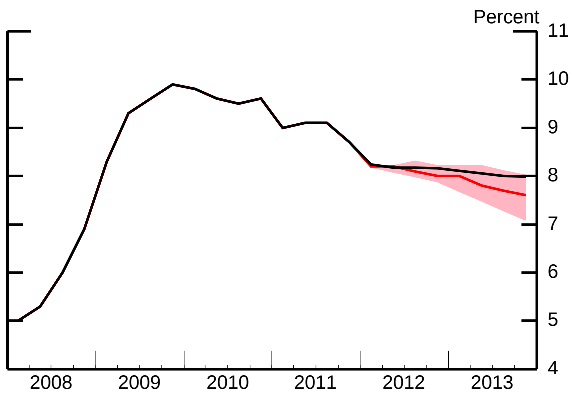


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

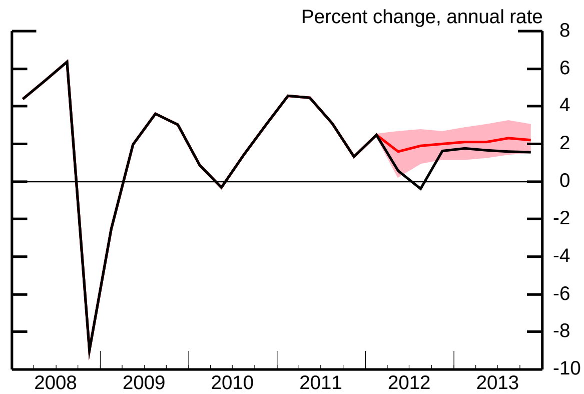
Real PCE



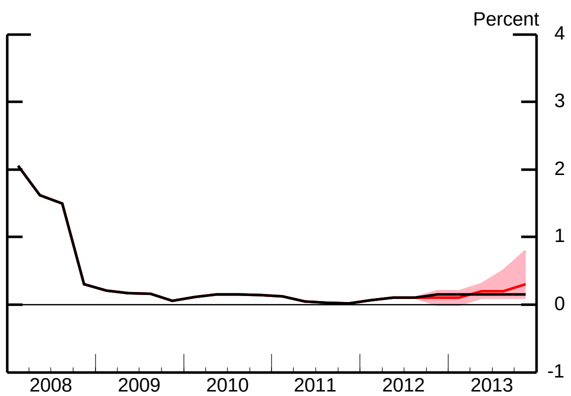
Unemployment Rate



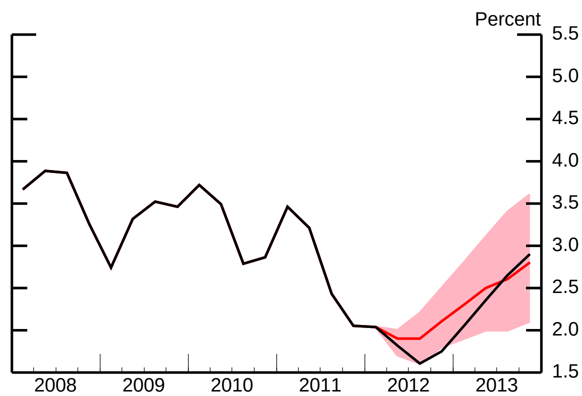
Consumer Price Index



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.

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

Interval	Nominal GDP 04/18/12	Nominal GDP 06/13/12	Real GDP 04/18/12	Real GDP 06/13/12	PCE price index 04/18/12	PCE price index 06/13/12	Core PCE price index 04/18/12	Core PCE price index 06/13/12	Unemployment rate[1] 04/18/12	Unemployment rate[1] 06/13/12
Quarterly										
2011:Q1	3.1	3.1	.4	.4	3.9	3.9	1.6	1.6	9.0	9.0
Q2	4.0	4.0	1.3	1.3	3.3	3.3	2.3	2.3	9.1	9.1
Q3	4.4	4.4	1.8	1.8	2.3	2.3	2.1	2.1	9.1	9.1
Q4	3.8	3.8	3.0	3.0	1.2	1.2	1.3	1.3	8.7	8.7
2012:Q1	4.6	3.9	2.5	2.2	2.5	2.4	2.2	2.1	8.2	8.2
Q2	3.5	2.8	2.1	1.5	1.6	.6	1.8	1.7	8.2	8.2
Q3	4.3	4.2	2.5	1.9	1.8	.1	1.7	1.6	8.1	8.2
Q4	4.5	3.5	2.9	1.9	1.7	1.5	1.7	1.5	8.0	8.2
2013:Q1	4.0	3.4	2.4	1.7	1.6	1.6	1.7	1.6	7.9	8.1
Q2	4.3	3.6	2.7	2.1	1.5	1.6	1.7	1.6	7.9	8.1
Q3	4.5	3.8	2.9	2.3	1.5	1.5	1.7	1.6	7.8	8.0
Q4	4.7	4.0	3.1	2.5	1.5	1.5	1.7	1.6	7.7	8.0
Two-quarter[2]										
2011:Q2	3.5	3.5	.8	.8	3.6	3.6	1.9	1.9	-.5	-.5
Q4	4.1	4.1	2.4	2.4	1.8	1.8	1.7	1.7	-.4	-.4
2012:Q2	4.1	3.3	2.3	1.8	2.0	1.5	2.0	1.9	-.5	-.5
Q4	4.4	3.8	2.7	1.9	1.7	.8	1.7	1.5	-.2	.0
2013:Q2	4.2	3.5	2.5	1.9	1.6	1.6	1.7	1.6	-.1	-.1
Q4	4.6	3.9	3.0	2.4	1.5	1.5	1.7	1.6	-.2	-.1
Four-quarter[3]										
2010:Q4	4.7	4.7	3.1	3.1	1.3	1.3	1.0	1.0	-.3	-.3
2011:Q4	3.8	3.8	1.6	1.6	2.7	2.7	1.8	1.8	-.9	-.9
2012:Q4	4.2	3.6	2.5	1.9	1.9	1.2	1.8	1.7	-.7	-.5
2013:Q4	4.4	3.7	2.8	2.2	1.5	1.5	1.7	1.6	-.3	-.2
2014:Q4	5.0	4.6	3.3	3.1	1.5	1.5	1.7	1.6	-.3	-.3
Annual										
2010	4.2	4.2	3.0	3.0	1.8	1.8	1.4	1.4	9.6	9.6
2011	3.9	3.9	1.7	1.7	2.5	2.5	1.4	1.4	8.9	8.9
2012	4.1	3.7	2.4	2.0	2.0	1.5	1.8	1.8	8.1	8.2
2013	4.3	3.6	2.6	2.0	1.6	1.3	1.7	1.6	7.8	8.0
2014	4.8	4.2	3.1	2.7	1.5	1.5	1.7	1.6	7.5	7.9

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	1.3	1.8	3.0	2.2	1.5	1.9	1.9	1.7	2.1	2.3	2.5	1.6	1.9	2.2	3.1
Previous Tealbook	1.3	1.8	3.0	2.5	2.1	2.5	2.9	2.4	2.7	2.9	3.1	1.6	2.5	2.8	3.3
Final sales	1.6	3.2	1.1	2.1	1.2	1.4	1.9	1.7	1.8	2.1	2.0	1.5	1.6	1.9	2.9
Previous Tealbook	1.6	3.2	1.1	2.3	2.5	2.3	2.5	2.3	2.6	2.6	2.5	1.5	2.4	2.5	3.2
Priv. dom. final purch.	1.9	3.3	2.7	3.3	2.3	2.7	2.9	2.4	2.8	3.0	3.1	2.5	2.8	2.8	3.6
Previous Tealbook	1.9	3.3	2.7	2.4	3.2	3.3	3.3	2.9	3.2	3.3	3.4	2.5	3.1	3.2	3.9
Personal cons. expend.	.7	1.7	2.1	2.9	1.9	2.5	2.7	2.1	2.3	2.4	2.5	1.6	2.5	2.3	3.2
Previous Tealbook	.7	1.7	2.1	2.2	2.5	2.9	3.0	2.4	2.6	2.8	3.0	1.6	2.7	2.7	3.2
Durables	-5.3	5.7	16.1	14.0	.8	7.0	6.2	4.8	5.9	6.4	6.5	6.8	6.9	5.9	7.3
Nondurables	.2	-.5	.8	2.1	1.1	1.9	2.6	1.6	1.8	1.8	1.9	.5	1.9	1.8	2.6
Services	1.9	1.9	.4	1.5	2.4	1.9	2.2	1.8	1.9	2.0	2.1	1.2	2.0	1.9	2.7
Residential investment	4.2	1.3	11.6	19.7	11.5	8.3	6.8	10.4	10.3	10.1	10.0	3.5	11.5	10.2	10.8
Previous Tealbook	4.2	1.3	11.6	17.8	11.6	9.7	6.7	9.0	9.3	9.4	9.6	3.5	11.3	9.3	13.0
Business fixed invest.	10.3	15.7	5.2	2.8	2.5	2.8	3.3	2.8	4.3	5.0	4.9	8.2	2.9	4.2	4.9
Previous Tealbook	10.3	15.7	5.2	.6	6.1	4.5	4.4	4.9	6.2	4.9	5.0	8.2	3.9	5.3	5.7
Equipment & software	6.2	16.2	7.5	3.7	3.4	4.6	5.1	3.7	5.6	6.6	6.4	9.6	4.2	5.6	5.9
Previous Tealbook	6.2	16.2	7.5	1.9	8.6	6.0	5.8	6.0	7.3	5.5	5.9	9.6	5.6	6.2	6.5
Nonres. structures	22.6	14.4	-.9	.3	-.2	-1.8	-1.5	.4	.7	.7	.8	4.4	-.8	.7	2.1
Previous Tealbook	22.6	14.4	-.9	-2.8	-.4	.2	.6	1.9	3.1	3.2	2.7	4.4	-.6	2.7	3.5
Net exports[2]	-416	-403	-411	-408	-415	-429	-440	-445	-454	-458	-467	-414	-423	-456	-473
Previous Tealbook[2]	-416	-403	-411	-402	-399	-406	-408	-404	-401	-396	-398	-414	-404	-400	-395
Exports	3.6	4.7	2.7	4.1	3.9	3.9	2.9	3.3	3.5	3.9	4.1	4.7	3.7	3.7	5.5
Imports	1.4	1.2	3.7	2.8	4.6	5.6	4.4	3.6	4.4	3.9	4.8	3.6	4.3	4.2	4.5
Gov't. cons. & invest.	-.9	-.1	-4.2	-4.0	-2.0	-1.9	-1.2	-1.0	-1.3	-1.6	-1.6	-2.8	-2.3	-1.4	-.9
Previous Tealbook	-.9	-.1	-4.2	.1	-.9	-1.0	-1.1	-1.1	-1.1	-1.3	-1.4	-2.8	-.7	-1.3	-.4
Federal	1.9	2.1	-6.9	-5.9	-2.8	-3.6	-2.6	-3.0	-3.8	-4.7	-4.8	-3.2	-3.7	-4.1	-4.2
Defense	7.0	5.0	-12.1	-8.3	-3.0	-4.2	-2.7	-3.3	-4.5	-5.8	-6.0	-3.6	-4.6	-4.9	-5.1
Nondefense	-7.6	-3.8	4.5	-.8	-2.4	-2.4	-2.5	-2.4	-2.5	-2.5	-2.5	-2.5	-2.0	-2.5	-2.7
State & local	-2.8	-1.6	-2.2	-2.7	-1.5	-.8	-.2	.3	.4	.5	.6	-2.5	-1.3	.5	1.3
Change in bus. inventories[2]	39	-2	52	58	65	79	81	83	91	100	115	35	71	98	133
Previous Tealbook[2]	39	-2	52	62	50	55	68	70	73	82	102	35	59	82	113
Nonfarm[2]	51	6	61	65	65	79	81	82	90	100	115	44	72	97	132
Farm[2]	-9	-6	-6	-7	0	1	1	1	1	1	1	-7	-1	1	1

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	-.5	3.1	1.6	1.9	2.2	3.1
Previous Tealbook	2.8	2.4	2.2	-3.3	-.5	3.1	1.6	2.5	2.8	3.3
Final sales	2.7	2.8	2.4	-2.6	-.8	2.4	1.5	1.6	1.9	2.9
Previous Tealbook	2.7	2.8	2.4	-2.6	-.8	2.4	1.5	2.4	2.5	3.2
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	2.8	2.8	3.6
Previous Tealbook	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	3.1	3.2	3.9
Personal cons. expend.	2.8	3.2	1.7	-2.5	-.2	3.0	1.6	2.5	2.3	3.2
Previous Tealbook	2.8	3.2	1.7	-2.5	-.2	3.0	1.6	2.7	2.7	3.2
Durables	2.8	7.0	4.6	-13.0	3.0	10.9	6.8	6.9	5.9	7.3
Nondurables	3.1	2.9	.8	-3.1	.6	3.5	.5	1.9	1.8	2.6
Services	2.7	2.6	1.4	-.5	-.9	1.6	1.2	2.0	1.9	2.7
Residential investment	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	11.5	10.2	10.8
Previous Tealbook	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	11.3	9.3	13.0
Business fixed invest.	4.5	7.8	7.9	-9.4	-14.4	11.1	8.2	2.9	4.2	4.9
Previous Tealbook	4.5	7.8	7.9	-9.4	-14.4	11.1	8.2	3.9	5.3	5.7
Equipment & software	6.2	6.0	3.9	-13.6	-5.8	16.6	9.6	4.2	5.6	5.9
Previous Tealbook	6.2	6.0	3.9	-13.6	-5.8	16.6	9.6	5.6	6.2	6.5
Nonres. structures	-.1	13.0	17.3	-1.2	-29.3	-1.8	4.4	-.8	.7	2.1
Previous Tealbook	-.1	13.0	17.3	-1.2	-29.3	-1.8	4.4	-.6	2.7	3.5
Net exports[1]	-723	-729	-649	-495	-359	-422	-414	-423	-456	-473
Previous Tealbook[1]	-723	-729	-649	-495	-359	-422	-414	-404	-400	-395
Exports	6.7	10.2	10.1	-2.5	-.1	8.8	4.7	3.7	3.7	5.5
Imports	5.2	4.1	.8	-5.9	-6.5	10.7	3.6	4.3	4.2	4.5
Gov't. cons. & invest.	.7	1.5	1.9	2.7	1.1	.1	-2.8	-2.3	-1.4	-.9
Previous Tealbook	.7	1.5	1.9	2.7	1.1	.1	-2.8	-.7	-1.3	-.4
Federal	1.2	2.2	3.1	8.8	4.6	2.9	-3.2	-3.7	-4.1	-4.2
Defense	.4	4.4	2.6	9.8	3.5	1.5	-3.6	-4.6	-4.9	-5.1
Nondefense	2.6	-2.3	4.2	6.8	6.9	5.7	-2.5	-2.0	-2.5	-2.7
State & local	.4	1.2	1.2	-.9	-1.1	-1.7	-2.5	-1.3	.5	1.3
Change in bus. inventories[1]	50	59	28	-36	-145	59	35	71	98	133
Previous Tealbook[1]	50	59	28	-36	-145	59	35	59	82	113
Nonfarm[1]	50	63	29	-38	-144	61	44	72	97	132
Farm[1]	0	-4	-1	1	-1	-1	-7	-1	1	1

1. Billions of chained (2005) dollars.

Greensheets

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	1.3	1.8	3.0	2.2	1.5	1.9	1.9	1.7	2.1	2.3	2.5	1.6	1.9	2.2	3.1
Previous Tealbook	1.3	1.8	3.0	2.5	2.1	2.5	2.9	2.4	2.7	2.9	3.1	1.6	2.5	2.8	3.3
Final sales	1.6	3.2	1.2	2.0	1.2	1.4	1.8	1.7	1.8	2.0	2.0	1.5	1.6	1.9	2.9
Previous Tealbook	1.6	3.2	1.2	2.3	2.5	2.3	2.5	2.3	2.6	2.6	2.5	1.5	2.4	2.5	3.2
Priv. dom. final purch.	1.6	2.8	2.3	2.8	1.9	2.2	2.4	2.0	2.3	2.5	2.6	2.0	2.3	2.4	3.1
Previous Tealbook	1.6	2.8	2.3	2.0	2.7	2.8	2.8	2.4	2.7	2.7	2.9	2.0	2.6	2.7	3.3
Personal cons. expend.	.5	1.2	1.5	2.1	1.4	1.7	1.9	1.5	1.6	1.7	1.8	1.2	1.8	1.7	2.3
Previous Tealbook	.5	1.2	1.5	1.6	1.8	2.1	2.2	1.7	1.9	2.0	2.1	1.2	1.9	1.9	2.3
Durables	-.4	.4	1.2	1.0	.1	.5	.5	.4	.5	.5	.5	.5	.5	.5	.6
Nondurables	.0	-.1	.1	.3	.2	.3	.4	.3	.3	.3	.3	.1	.3	.3	.4
Services	.9	.9	.2	.7	1.1	.9	1.0	.9	.9	.9	1.0	.6	.9	.9	1.3
Residential investment	.1	.0	.3	.4	.3	.2	.2	.2	.3	.3	.3	.1	.3	.3	.3
Previous Tealbook	.1	.0	.3	.4	.3	.2	.2	.2	.2	.2	.2	.1	.3	.2	.3
Business fixed invest.	1.0	1.5	.5	.3	.3	.3	.3	.3	.4	.5	.5	.8	.3	.4	.5
Previous Tealbook	1.0	1.5	.5	.1	.6	.5	.5	.5	.6	.5	.5	.8	.4	.6	.6
Equipment & software	.4	1.1	.6	.3	.3	.3	.4	.3	.4	.5	.5	.7	.3	.4	.5
Previous Tealbook	.4	1.1	.6	.1	.6	.5	.4	.5	.6	.4	.5	.7	.4	.5	.5
Nonres. structures	.5	.4	.0	.0	.0	-.1	.0	.0	.0	.0	.0	.1	.0	.0	.1
Previous Tealbook	.5	.4	.0	-.1	.0	.0	.0	.1	.1	.1	.1	.1	.0	.1	.1
Net exports	.2	.4	-.3	.1	-.3	-.4	-.3	-.2	-.3	-.1	-.3	.0	-.2	-.2	.0
Previous Tealbook	.2	.4	-.3	.3	.0	-.3	-.1	.1	.1	.1	-.1	.0	.0	.0	.0
Exports	.5	.6	.4	.6	.5	.5	.4	.4	.5	.5	.6	.6	.5	.5	.8
Imports	-.2	-.2	-.6	-.5	-.8	-1.0	-.7	-.6	-.8	-.7	-.8	-.6	-.7	-.7	-.8
Gov't. cons. & invest.	-.2	.0	-.8	-.8	-.4	-.4	-.2	-.2	-.2	-.3	-.3	-.6	-.5	-.3	-.2
Previous Tealbook	-.2	.0	-.8	.0	-.2	-.2	-.2	-.2	-.2	-.2	-.3	-.6	-.1	-.2	-.1
Federal	.2	.2	-.6	-.5	-.2	-.3	-.2	-.2	-.3	-.4	-.4	-.3	-.3	-.3	-.3
Defense	.4	.3	-.7	-.5	-.2	-.2	-.1	-.2	-.2	-.3	-.3	-.2	-.2	-.2	-.2
Nondefense	-.2	-.1	.1	.0	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1	-.1
State & local	-.3	-.2	-.3	-.3	-.2	-.1	.0	.0	.0	.1	.1	-.3	-.2	.1	.1
Change in bus. inventories	-.3	-1.4	1.8	.1	.2	.5	.1	.1	.2	.3	.5	.1	.2	.3	.2
Previous Tealbook	-.3	-1.4	1.8	.2	-.4	.2	.4	.0	.1	.3	.6	.1	.1	.3	.1
Nonfarm	-.3	-1.5	1.8	.1	.0	.4	.1	.1	.2	.3	.5	.1	.2	.3	.2
Farm	.0	.1	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0

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

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

Item	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	2.5	2.6	.9	1.7	1.3	2.2	1.6	1.6	1.5	1.5	1.5	2.1	1.7	1.5	1.5
Previous Tealbook	2.5	2.6	.9	2.0	1.4	1.8	1.5	1.6	1.6	1.6	1.6	2.1	1.7	1.6	1.6
PCE chain-wt. price index	3.3	2.3	1.2	2.4	.6	.1	1.5	1.6	1.6	1.5	1.5	2.7	1.2	1.5	1.5
Previous Tealbook	3.3	2.3	1.2	2.5	1.6	1.8	1.7	1.6	1.5	1.5	1.5	2.7	1.9	1.5	1.5
Energy	15.0	3.3	-3.2	7.9	-16.1	-21.0	2.4	2.3	.7	.0	-.2	12.8	-7.5	.7	-.4
Previous Tealbook	15.0	3.3	-3.2	7.8	-1.3	3.9	1.7	-.2	-.8	-1.7	-1.6	12.8	3.0	-1.1	-1.7
Food	6.4	4.7	3.3	1.3	1.5	1.7	1.5	1.5	1.5	1.4	1.4	5.2	1.5	1.5	1.4
Previous Tealbook	6.4	4.7	3.3	1.3	1.5	1.7	1.7	1.6	1.6	1.5	1.5	5.2	1.5	1.6	1.5
Ex. food & energy	2.3	2.1	1.3	2.1	1.7	1.6	1.5	1.6	1.6	1.6	1.6	1.8	1.7	1.6	1.6
Previous Tealbook	2.3	2.1	1.3	2.2	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7
Ex. food & energy, market based	2.4	2.3	1.4	2.0	1.6	1.4	1.4	1.5	1.5	1.5	1.5	1.8	1.6	1.5	1.5
Previous Tealbook	2.4	2.3	1.4	2.0	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.8	1.7	1.6	1.6
CPI	4.4	3.1	1.3	2.5	.6	-.4	1.6	1.8	1.7	1.6	1.6	3.3	1.1	1.6	1.5
Previous Tealbook	4.4	3.1	1.3	2.5	1.8	2.0	1.7	1.6	1.6	1.5	1.5	3.3	2.0	1.5	1.5
Ex. food & energy	2.4	2.5	1.9	2.1	2.5	1.8	1.5	1.7	1.7	1.7	1.7	2.2	1.9	1.7	1.7
Previous Tealbook	2.4	2.5	1.9	2.1	2.2	1.8	1.7	1.7	1.8	1.8	1.8	2.2	1.9	1.8	1.8
ECI, hourly compensation[2]	3.2	1.4	2.1	1.7	2.3	2.5	2.5	2.6	2.5	2.6	2.6	2.2	2.3	2.6	2.8
Previous Tealbook[2]	3.2	1.4	1.8	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.2	2.6	2.8	3.0
Nonfarm business sector															
Output per hour	-.3	1.8	1.2	-.4	.8	.4	1.1	1.4	1.4	1.5	1.7	.4	.5	1.5	1.8
Previous Tealbook	-.3	1.8	1.0	-.5	1.7	1.4	1.9	1.2	1.6	1.9	2.0	.3	1.1	1.7	1.9
Compensation per hour	-.5	5.7	-.4	.4	2.3	1.6	2.7	2.7	2.7	2.8	2.8	2.5	1.8	2.7	2.9
Previous Tealbook	-.5	5.7	3.7	1.8	2.5	2.8	2.8	2.8	2.8	2.9	3.0	3.5	2.5	2.9	3.2
Unit labor costs	-.1	3.9	-1.5	.9	1.5	1.2	1.7	1.3	1.3	1.2	1.1	2.1	1.3	1.2	1.1
Previous Tealbook	-.1	3.9	2.7	2.3	.8	1.4	.9	1.5	1.2	1.0	1.0	3.1	1.3	1.2	1.3
Core goods imports chain-wt. price index[3]	7.2	2.4	-.4	.4	2.0	-1.6	-.3	.9	1.4	1.6	1.6	4.3	.1	1.4	1.6
Previous Tealbook[3]	7.2	2.4	-.4	.3	1.1	.7	1.5	1.5	1.5	1.5	1.5	4.3	.9	1.5	1.5

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	.7	1.6	2.1	1.7	1.5	1.5
Previous Tealbook	3.5	2.9	2.6	2.1	.7	1.6	2.1	1.7	1.6	1.6
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.5	1.3	2.7	1.2	1.5	1.5
Previous Tealbook	3.2	1.9	3.5	1.7	1.5	1.3	2.7	1.9	1.5	1.5
Energy	21.5	-3.7	19.3	-8.8	2.6	6.2	12.8	-7.5	.7	-.4
Previous Tealbook	21.5	-3.7	19.3	-8.8	2.6	6.2	12.8	3.0	-1.1	-1.7
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.5	1.5	1.4
Previous Tealbook	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.5	1.6	1.5
Ex. food & energy	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.7	1.6	1.6
Previous Tealbook	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.8	1.7	1.7
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.6	1.5	1.5
Previous Tealbook	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.7	1.6	1.6
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	1.1	1.6	1.5
Previous Tealbook	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.5	1.5
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.9	1.7	1.7
Previous Tealbook	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.9	1.8	1.8
ECI, hourly compensation[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.3	2.6	2.8
Previous Tealbook[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.6	2.8	3.0
Nonfarm business sector										
Output per hour	1.6	.8	2.5	-1.1	5.3	2.3	.4	.5	1.5	1.8
Previous Tealbook	1.6	.8	2.5	-1.1	5.3	2.3	.3	1.1	1.7	1.9
Compensation per hour	3.5	4.5	3.6	2.5	1.8	1.4	2.5	1.8	2.7	2.9
Previous Tealbook	3.5	4.5	3.6	2.5	1.8	1.4	3.5	2.5	2.9	3.2
Unit labor costs	1.9	3.6	1.1	3.7	-3.3	-.9	2.1	1.3	1.2	1.1
Previous Tealbook	1.9	3.6	1.1	3.7	-3.3	-.9	3.1	1.3	1.2	1.3
Core goods imports chain-wt. price index[2]	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.1	1.4	1.6
Previous Tealbook[2]	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.9	1.5	1.5

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	.3	.3	.3	.4	.4	.4	1.8	1.7	1.5	2.3
Unemployment rate[3]	9.1	9.1	8.7	8.2	8.2	8.2	8.2	8.1	8.1	8.0	8.0	8.7	8.2	8.0	7.7
Previous Tealbook[3]	9.1	9.1	8.7	8.2	8.2	8.1	8.0	7.9	7.9	7.8	7.7	8.7	8.0	7.7	7.4
NAIRU[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]	-4.8	-4.8	-4.5	-4.4	-4.5	-4.5	-4.5	-4.5	-4.5	-4.4	-4.3	-4.5	-4.5	-4.3	-3.4
Previous Tealbook[4]	-5.1	-5.1	-4.8	-4.7	-4.7	-4.5	-4.3	-4.3	-4.1	-3.9	-3.7	-4.8	-4.3	-3.7	-2.7
Industrial production[5]	1.2	5.6	5.0	5.7	3.6	3.7	2.4	2.2	2.3	2.7	2.6	4.0	3.9	2.4	3.1
Previous Tealbook[5]	1.2	5.6	5.0	5.4	5.8	4.3	3.0	2.7	2.3	2.7	2.9	4.0	4.6	2.6	3.7
Manufacturing industr. prod.[5]	.2	5.1	5.6	9.8	1.7	2.7	2.5	2.1	2.3	2.9	2.8	4.2	4.1	2.5	3.4
Previous Tealbook[5]	.2	5.1	5.6	10.4	4.0	3.2	2.9	2.6	2.4	3.0	3.2	4.2	5.1	2.8	4.1
Capacity utilization rate - mfg.[3]	74.4	75.2	76.1	77.7	77.8	78.1	78.4	78.5	78.7	78.9	79.2	76.1	78.4	79.2	80.1
Previous Tealbook[3]	74.4	75.2	76.1	77.8	78.3	78.8	79.2	79.3	79.4	79.7	79.9	76.1	79.2	79.9	81.3
Housing starts[6]	.6	.6	.7	.7	.7	.7	.8	.8	.9	.9	1.0	.6	.7	.9	1.1
Light motor vehicle sales[6]	12.1	12.4	13.4	14.5	14.0	14.3	14.4	14.5	14.7	14.9	15.1	12.7	14.3	14.8	15.5
Income and saving															
Nominal GDP[5]	4.0	4.4	3.8	3.9	2.8	4.2	3.5	3.4	3.6	3.8	4.0	3.8	3.6	3.7	4.6
Real disposable pers. income[5]	-.5	.7	.2	.5	3.2	3.4	3.5	-1.3	2.8	2.9	3.2	.4	2.6	1.9	3.2
Previous Tealbook[5]	-.5	.7	1.7	.3	2.3	3.2	3.6	-.4	3.1	3.2	3.4	.8	2.4	2.3	3.4
Personal saving rate[3]	4.8	4.6	4.2	3.6	3.9	4.0	4.2	3.4	3.5	3.6	3.7	4.2	4.2	3.7	3.8
Previous Tealbook[3]	4.8	4.6	4.5	4.1	4.0	4.1	4.2	3.5	3.6	3.7	3.8	4.5	4.2	3.8	4.0
Corporate profits[7]	13.7	6.9	3.5	1.8	6.2	.9	.3	-.8	-2.5	-2.6	-2.6	7.0	2.3	-2.1	1.8
Profit share of GNP[3]	12.7	12.8	12.8	12.7	12.8	12.7	12.7	12.5	12.4	12.2	12.0	12.8	12.7	12.0	11.7
Net federal saving[8]	-1,275	-1,161	-1,114	-1,000	-1,011	-954	-954	-768	-747	-727	-714	-1,188	-980	-739	-689
Net state & local saving[8]	-40	-83	-81	-88	-61	-47	-38	-31	-14	-9	-4	-66	-58	-14	1
Gross national saving rate[3]	12.4	12.9	13.0	12.7	13.1	13.6	13.5	13.6	13.7	13.8	13.8	13.0	13.5	13.8	14.2
Net national saving rate[3]	-.4	.2	.3	.1	.5	1.1	1.0	1.1	1.1	1.2	1.2	.3	1.0	1.2	1.6

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	1.7	1.5	2.3
Unemployment rate[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.2	8.0	7.7
Previous Tealbook[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.0	7.7	7.4
NAIRU[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	.9	-4.5	-6.1	-4.4	-4.5	-4.5	-4.3	-3.4
Previous Tealbook[3]	.6	.8	.8	-4.5	-6.2	-4.7	-4.8	-4.3	-3.7	-2.7
Industrial production[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.0	3.9	2.4	3.1
Previous Tealbook[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.0	4.6	2.6	3.7
Manufacturing industr. prod.[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	4.1	2.5	3.4
Previous Tealbook[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	5.1	2.8	4.1
Capacity utilization rate - mfg.[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	78.4	79.2	80.1
Previous Tealbook[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	79.2	79.9	81.3
Housing starts[5]	2.1	1.8	1.4	.9	.6	.6	.6	.7	.9	1.1
Light motor vehicle sales[5]	16.9	16.5	16.1	13.1	10.3	11.5	12.7	14.3	14.8	15.5
Income and saving										
Nominal GDP[4]	6.4	5.3	4.9	-1.2	.0	4.7	3.8	3.6	3.7	4.6
Real disposable pers. income[4]	.6	4.6	1.6	1.0	-2.4	3.5	.4	2.6	1.9	3.2
Previous Tealbook[4]	.6	4.6	1.6	1.0	-2.4	3.5	.8	2.4	2.3	3.4
Personal saving rate[2]	1.6	2.8	2.5	6.2	4.3	5.2	4.2	4.2	3.7	3.8
Previous Tealbook[2]	1.6	2.8	2.5	6.2	4.3	5.2	4.5	4.2	3.8	4.0
Corporate profits[6]	19.6	3.7	-8.1	-33.5	61.8	18.2	7.0	2.3	-2.1	1.8
Profit share of GNP[2]	11.8	11.6	10.1	6.8	11.0	12.4	12.8	12.7	12.0	11.7
Net federal saving[7]	-283	-204	-245	-613	-1218	-1274	-1188	-980	-739	-689
Net state & local saving[7]	26	51	12	-72	-78	-25	-66	-58	-14	1
Gross national saving rate[2]	15.6	16.5	13.9	12.6	11.3	12.3	13.0	13.5	13.8	14.2
Net national saving rate[2]	3.6	4.4	1.7	-.6	-1.9	-.4	.3	1.0	1.2	1.6

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				2011				2012				2013			
	2011[a]	2012	2013	2014	Q1[a]	Q2[a]	Q3[a]	Q4[a]	Q1[a]	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2302	2429	2711	2904	488	714	568	555	509	752	612	596	566	843	705	664
Outlays[1]	3599	3564	3523	3588	949	855	895	877	966	892	828	916	898	872	836	915
Surplus/deficit[1]	-1297	-1134	-812	-684	-460	-141	-326	-322	-457	-140	-215	-320	-332	-29	-131	-251
Previous Tealbook	*-1297*	*-1112*	*-817*	*-704*	*-460*	*-141*	*-326*	*-322*	*-457*	*-116*	*-217*	*-307*	*-348*	*-29*	*-133*	*-260*
On-budget	-1364	-1165	-814	-689	-451	-202	-311	-346	-458	-192	-168	-327	-313	-75	-100	-273
Off-budget	67	30	3	5	-10	61	-15	24	1	52	-47	7	-19	46	-31	22
Means of financing																
Borrowing	1110	1173	856	764	260	93	389	326	398	198	251	324	332	49	151	271
Cash decrease	252	-12	0	0	225	-19	79	-28	42	-37	10	-19	20	0	0	0
Other[2]	-65	-26	-45	-80	-24	67	-142	23	17	-21	-45	15	-20	-20	-20	-20
Cash operating balance, end of period	58	70	70	70	118	137	58	86	43	80	70	90	70	70	70	70
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2534	2699	2957	3160	2528	2554	2583	2594	2711	2735	2755	2791	2982	3013	3043	3073
Expenditures	3765	3718	3756	3858	3729	3829	3744	3708	3710	3746	3709	3745	3750	3760	3771	3788
Consumption expenditures	1070	1063	1050	1024	1059	1078	1085	1067	1066	1063	1057	1054	1054	1049	1041	1034
Defense	715	706	696	674	701	723	733	710	708	706	701	699	700	695	689	682
Nondefense	355	357	354	350	358	354	352	357	358	357	356	355	355	353	352	351
Other spending	2695	2655	2707	2834	2670	2752	2659	2641	2644	2683	2652	2691	2696	2711	2729	2754
Current account surplus	-1231	-1019	-799	-698	-1201	-1275	-1161	-1114	-999	-1011	-954	-954	-768	-747	-727	-714
Gross investment	165	153	145	135	161	160	164	159	152	151	149	148	146	144	141	139
Gross saving less gross investment[3]	-1260	-1028	-790	-669	-1227	-1298	-1185	-1132	-1008	-1017	-954	-951	-761	-736	-711	-693
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-994	-779	-528	-436	-966	-1030	-917	-871	-761	-773	-711	-704	-494	-469	-445	-430
Change in HEB, percent of potential GDP	-.3	-1.5	-1.7	-.6	-.7	.3	-.8	-.3	-.7	.0	-.4	-.1	-1.3	-.2	-.2	-.1
Fiscal impetus (FI), percent of GDP	-0.3	-0.8	-1.2	-0.5	-0.6	0.4	-0.1	-1.0	-1.0	-0.8	-0.7	-0.5	-1.9	-1.0	-1.1	-0.8
Previous Tealbook	*-0.3*	*-0.6*	*-1.2*	*-0.6*	*-0.6*	*0.4*	*-0.1*	*-1.0*	*-0.4*	*-0.7*	*-0.6*	*-0.6*	*-2.0*	*-1.0*	*-1.1*	*-0.8*

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. 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			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
2007	8.4	6.6	6.8	5.9	13.6	5.4	4.9	4.9
2008	5.9	-.1	-.5	.8	6.1	.7	24.2	-1.2
2009	3.1	-1.7	-1.4	-4.5	-2.3	3.9	22.7	.0
2010	4.1	-2.2	-2.9	-1.3	.8	2.2	20.2	4.7
2011	3.6	-1.5	-2.3	4.0	4.5	-1.9	11.4	3.8
2012	4.8	.5	-1.3	6.3	4.9	-.0	11.2	3.6
2013	4.1	2.1	.7	7.1	4.3	.9	6.9	3.7
2014	4.0	2.2	.7	7.4	4.5	1.0	6.3	4.6
Quarter								
2010:1	3.7	-2.8	-4.4	-3.1	.1	2.4	20.6	5.5
2	3.7	-2.2	-2.6	-3.5	-2.0	-.5	22.5	5.4
3	4.0	-2.2	-3.0	-.6	2.7	2.1	16.0	3.9
4	4.6	-1.5	-1.7	2.2	2.3	4.8	16.4	4.2
2011:1	2.4	-1.6	-2.2	3.5	4.1	-3.3	7.9	3.1
2	2.4	-3.0	-3.1	3.4	5.0	-3.5	8.6	4.0
3	4.5	-1.1	-2.3	2.3	3.8	.0	14.1	4.4
4	4.9	-.2	-1.7	6.7	4.9	-1.0	13.1	3.8
2012:1	4.7	-.4	-2.9	5.8	5.2	-1.8	12.4	3.9
2	4.9	.1	-1.6	5.9	5.1	.6	11.6	2.8
3	3.9	.9	-.6	6.3	4.6	.6	7.5	4.2
4	5.2	1.5	.0	6.6	4.4	.6	11.6	3.5
2013:1	4.6	2.1	.7	6.8	4.2	.9	8.9	3.4
2	3.6	2.1	.7	6.9	4.1	.9	5.5	3.6
3	3.1	2.1	.6	7.0	4.2	.9	3.6	3.8
4	4.7	2.1	.6	7.0	4.3	.9	9.0	4.0

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	2011	2012	2013	2014	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	854.8	1447.6	1289.6	1323.4	1070.5	1391.0	1470.2	1461.5	1160.6	1698.2	1508.4	1129.3	915.2	1605.4
Net equity issuance	-473.4	-370.2	-340.0	-360.0	-617.7	-440.2	-340.8	-420.0	-360.0	-360.0	-340.0	-340.0	-340.0	-340.0
Net debt issuance	1328.2	1817.8	1629.6	1683.4	1688.2	1831.2	1811.0	1881.5	1520.6	2058.2	1848.4	1469.3	1255.2	1945.4
Borrowing indicators														
Debt (percent of GDP)[1]	248.6	249.7	251.7	251.2	247.3	247.8	248.4	249.7	249.8	250.5	251.5	251.9	251.6	251.6
Borrowing (percent of GDP)	8.8	11.6	10.0	10.0	11.1	12.0	11.7	12.1	9.7	13.0	11.6	9.1	7.7	11.8
Households														
Net borrowing[2]	-191.0	67.5	272.7	298.1	-136.4	-26.6	-52.9	10.3	121.4	191.0	267.9	274.7	271.9	276.2
Home mortgages	-232.6	-125.2	63.2	63.6	-230.0	-168.0	-286.7	-156.0	-58.3	0.0	67.9	68.0	58.4	58.5
Consumer credit	96.6	157.9	190.2	212.2	56.5	164.8	144.6	150.4	163.0	173.6	181.9	187.7	193.8	197.2
Debt/DPI (percent)[3]	112.3	108.6	106.5	103.8	111.2	110.7	109.8	108.8	108.0	107.0	107.4	106.8	106.2	105.5
Business														
Financing gap[4]	-196.8	-123.7	52.0	165.7	-252.9	-191.3	-165.6	-137.8	-114.2	-77.3	-11.4	27.9	71.4	120.1
Net equity issuance	-473.4	-370.2	-340.0	-360.0	-617.7	-440.2	-340.8	-420.0	-360.0	-360.0	-340.0	-340.0	-340.0	-340.0
Credit market borrowing	509.8	577.8	528.5	574.8	440.9	565.7	617.5	605.5	552.3	535.6	525.2	517.3	527.5	544.0
State and local governments														
Net borrowing	-58.6	-0.0	25.8	29.8	1.0	-29.1	-53.5	17.8	17.8	17.8	25.8	25.8	25.8	25.8
Current surplus[5]	224.9	186.0	239.0	262.9	212.1	215.3	149.7	183.9	199.9	210.3	219.8	238.4	245.0	252.7
Federal government														
Net borrowing	1067.9	1171.2	802.6	780.7	1382.6	1321.2	1300.0	1247.8	829.1	1313.8	1029.4	651.5	430.0	1099.4
Net borrowing (n.s.a.)	1067.9	1171.2	802.6	780.7	389.1	326.0	398.3	198.1	250.7	324.1	332.2	49.0	150.9	270.5
Unified deficit (n.s.a.)	1251.4	1132.6	742.2	700.7	328.1	321.7	457.3	140.1	215.4	319.9	331.8	29.0	130.9	250.5
Depository institutions														
Funds supplied	195.0	402.6	505.3	608.2	499.1	575.1	276.6	420.8	437.7	475.3	495.6	490.1	506.3	529.1

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.

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	Projected 2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4
Real GDP [1]												
Total foreign	3.5	2.3	3.9	1.6	3.4	2.5	2.5	2.3	2.5	2.6	2.8	2.9
Previous Tealbook	*3.6*	*2.4*	*3.9*	*1.4*	*3.2*	*2.9*	*2.8*	*2.9*	*3.0*	*3.1*	*3.2*	*3.3*
Advanced foreign economies	1.7	-.2	3.3	.4	1.5	1.0	.9	.5	.8	1.0	1.3	1.5
Canada	3.6	-1.0	4.5	1.9	1.9	2.2	2.0	1.9	1.8	1.9	2.0	2.2
Japan	-7.7	-1.7	7.8	.1	4.7	2.3	1.2	.6	.9	1.1	1.2	1.3
United Kingdom	1.0	-.2	2.3	-1.2	-1.3	-.3	3.0	.1	1.1	1.4	1.9	2.1
Euro area	3.0	.6	.5	-1.3	-.0	-1.2	-1.5	-1.6	-1.0	-.5	.0	.4
Germany	5.5	1.1	2.3	-.7	2.1	.5	-.3	-.6	-.3	.2	.6	1.2
Emerging market economies	5.6	5.0	4.6	2.8	5.5	4.1	4.2	4.2	4.3	4.3	4.4	4.4
Asia	7.7	5.0	5.1	2.6	6.3	5.2	5.4	5.3	5.5	5.5	5.6	5.6
Korea	5.3	3.4	3.4	1.3	3.5	3.2	3.3	3.3	3.4	3.5	3.7	3.9
China	9.1	9.5	10.0	7.8	7.4	7.4	7.8	7.8	7.9	7.9	8.0	8.0
Latin America	3.2	5.0	4.0	3.0	4.8	3.0	3.0	3.0	3.0	3.0	3.1	3.1
Mexico	2.0	5.7	4.8	2.9	5.3	3.0	2.9	2.9	2.9	2.9	2.9	2.9
Brazil	3.5	1.9	-.6	.6	.8	2.3	2.8	3.3	3.3	3.4	3.7	3.7
Consumer prices [2]												
Total foreign	4.2	3.5	3.0	2.8	2.6	2.3	2.0	2.2	2.2	2.2	2.3	2.3
Previous Tealbook	*4.1*	*3.4*	*3.1*	*2.9*	*2.5*	*2.1*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*
Advanced foreign economies	3.0	2.3	1.2	2.5	2.2	1.4	1.1	1.3	1.2	1.2	1.2	1.2
Canada	3.3	3.4	1.0	2.9	2.1	1.8	1.3	1.7	1.8	1.8	1.8	1.8
Japan	.0	-.7	.1	-.7	2.3	-.2	-.3	-.3	-.2	-.2	-.1	-.1
United Kingdom	6.8	3.7	4.0	4.2	2.0	1.4	1.2	3.4	1.7	1.5	1.5	1.9
Euro Area	3.6	2.8	1.5	4.0	2.6	1.9	1.6	1.5	1.3	1.3	1.2	1.2
Germany	3.4	2.3	2.0	2.8	2.5	2.4	2.1	2.0	1.8	1.7	1.5	1.6
Emerging market economies	5.1	4.5	4.5	3.0	3.0	3.0	2.8	2.9	3.0	3.1	3.1	3.1
Asia	5.5	5.2	4.9	2.2	2.4	3.4	2.5	2.6	2.8	2.9	2.9	2.9
Korea	5.5	3.4	4.4	2.6	1.6	2.0	2.2	2.5	2.7	2.8	2.8	2.8
China	5.1	6.1	5.7	1.4	2.0	2.7	2.1	2.4	2.6	2.8	2.8	2.8
Latin America	3.7	2.9	3.9	5.2	4.6	2.1	3.5	3.7	3.7	3.6	3.7	3.7
Mexico	3.2	2.4	3.5	4.9	4.5	1.8	3.5	3.6	3.5	3.4	3.4	3.4
Brazil	7.8	6.8	6.2	6.0	4.0	3.7	4.5	4.8	5.0	5.2	5.4	5.4

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

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

Measure and country	2006	2007	2008	2009	2010	2011	------------- Projected 2012	------------- 2013	------------- 2014
Real GDP [1]									
Total foreign	4.2	4.4	-.9	.9	4.4	2.8	2.7	2.7	3.2
Previous Tealbook	*4.2*	*4.4*	*-.9*	*.9*	*4.4*	*2.8*	*2.9*	*3.2*	*3.6*
Advanced foreign economies	2.6	2.6	-2.0	-1.4	2.8	1.3	1.0	1.2	1.9
Canada	1.9	2.5	-.7	-1.4	3.3	2.2	2.0	2.0	2.5
Japan	2.1	1.7	-4.8	-.6	3.3	-.5	2.2	1.1	1.4
United Kingdom	2.1	4.1	-5.4	-.8	1.7	.5	.4	1.6	2.5
Euro area	3.8	2.3	-2.2	-2.3	2.2	.7	-1.1	-.3	1.1
Germany	4.9	2.4	-1.9	-2.2	3.8	2.0	.4	.4	1.7
Emerging market economies	6.3	6.7	.4	3.6	6.2	4.5	4.5	4.3	4.6
Asia	7.8	8.8	.8	8.0	7.7	5.1	5.5	5.5	5.8
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	3.3	3.6	4.2
China	12.8	13.7	7.7	11.4	9.6	9.1	7.6	7.9	8.1
Latin America	4.8	4.4	-.2	-.7	4.6	3.8	3.4	3.1	3.2
Mexico	4.1	3.5	-1.1	-2.1	4.3	3.9	3.5	2.9	3.0
Brazil	4.9	6.6	.9	5.2	5.3	1.4	2.3	3.5	4.0
Consumer prices [2]									
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.3	2.2	2.5
Previous Tealbook	*2.2*	*3.7*	*3.3*	*1.3*	*3.2*	*3.4*	*2.4*	*2.4*	*2.5*
Advanced foreign economies	1.4	2.2	2.0	.2	1.7	2.2	1.5	1.2	1.5
Canada	1.4	2.5	1.8	.8	2.2	2.7	1.7	1.8	2.0
Japan	.3	.5	1.1	-2.0	-.3	-.3	.4	-.2	1.0
United Kingdom	2.7	2.1	3.9	2.2	3.4	4.7	2.0	1.6	1.6
Euro Area	1.8	2.9	2.3	.4	2.0	2.9	1.9	1.3	1.4
Germany	1.3	3.1	1.7	.3	1.6	2.6	2.2	1.6	1.7
Emerging market economies	2.9	5.1	4.6	2.1	4.3	4.3	2.9	3.1	3.2
Asia	2.4	5.5	3.6	1.3	4.3	4.4	2.7	2.9	3.1
Korea	2.1	3.4	4.5	2.4	3.2	4.0	2.1	2.8	3.0
China	2.1	6.7	2.5	.6	4.6	4.6	2.3	2.7	3.0
Latin America	4.1	4.2	6.7	3.9	4.4	3.9	3.5	3.7	3.7
Mexico	4.1	3.8	6.2	4.0	4.3	3.5	3.4	3.4	3.4
Brazil	3.1	4.3	6.3	4.3	5.6	6.7	4.2	5.3	5.4

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

U.S. Current Account

Quarterly Data

	2011 Q1	2011 Q2	2011 Q3	2011 Q4	Projected 2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4
	Billions of dollars, s.a.a.r.											
U.S. current account balance	**-466.2**	**-479.1**	**-431.0**	**-517.3**	**-545.7**	**-494.9**	**-466.6**	**-501.9**	**-535.3**	**-523.6**	**-551.6**	**-587.9**
Previous Tealbook	*-473.1*	*-493.7*	*-430.5*	*-496.4*	*-520.4*	*-478.3*	*-493.9*	*-522.0*	*-553.9*	*-521.0*	*-530.7*	*-554.2*
Current account as percent of GDP	-3.1	-3.2	-2.8	-3.4	-3.5	-3.2	-3.0	-3.2	-3.3	-3.2	-3.4	-3.6
Previous Tealbook	*-3.2*	*-3.3*	*-2.8*	*-3.2*	*-3.4*	*-3.1*	*-3.1*	*-3.3*	*-3.4*	*-3.2*	*-3.2*	*-3.3*
Net goods & services	-548.9	-566.2	-539.3	-585.1	-604.0	-556.7	-509.2	-535.0	-563.9	-542.9	-555.9	-582.3
Investment income, net	220.7	238.0	251.2	210.1	208.6	202.0	186.0	178.6	172.6	159.4	147.7	139.9
Direct, net	317.1	323.6	331.8	294.3	283.6	267.8	241.4	227.9	221.9	213.9	210.5	212.2
Portfolio, net	-96.4	-85.6	-80.6	-84.3	-75.0	-65.9	-55.3	-49.3	-49.3	-54.5	-62.8	-72.3
Other income and transfers, net	-138.0	-150.9	-142.9	-142.2	-150.2	-140.1	-143.4	-145.5	-144.0	-140.1	-143.4	-145.5

Annual Data

	2006	2007	2008	2009	2010	2011	Projected 2012	2013	2014
	Billions of dollars								
U.S. current account balance	**-800.6**	**-710.3**	**-677.1**	**-374.4**	**-465.6**	**-473.4**	**-502.3**	**-549.6**	**-621.1**
Previous Tealbook	*-800.6*	*-710.3*	*-677.1*	*-376.6*	*-470.9*	*-473.4*	*-503.6*	*-540.0*	*-574.7*
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.2	-3.1	-3.2	-3.4	-3.7
Previous Tealbook	*-6.0*	*-5.1*	*-4.7*	*-2.7*	*-3.2*	*-3.1*	*-3.2*	*-3.3*	*-3.3*
Net goods & services	-753.3	-696.7	-698.3	-379.2	-494.7	-559.9	-551.2	-561.2	-592.3
Investment income, net	54.7	111.1	157.8	137.1	174.5	230.0	193.8	154.9	114.5
Direct, net	174.0	244.6	284.3	262.2	280.6	316.7	255.2	214.6	213.1
Portfolio, net	-119.4	-133.5	-126.5	-125.1	-106.2	-86.7	-61.4	-59.7	-98.6
Other income and transfers, net	-102.0	-124.7	-136.6	-132.3	-145.3	-143.5	-144.8	-143.3	-143.3

Abbreviations

ABCP	asset-backed commercial paper
ABS	asset-backed securities
AFE	advanced foreign economy
BEA	Bureau of Economic Analysis, Department of Commerce
BHC	bank holding company
CDO	collateralized debt obligation
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CP	commercial paper
CPI	consumer price index
CRE	commercial real estate
DPI	disposable personal income
ECB	European Central Bank
ECI	employment cost index
EDO Model	Estimated Dynamic Optimization-Based Model
EME	emerging market economy
EPS	earnings per share
E&S	equipment and software
EU	European Union
EUC	Emergency Unemployment Compensation
FOMC	Federal Open Market Committee; also, the Committee
FRBNY	Federal Reserve Bank of New York
FX	foreign exchange
GDP	gross domestic product
HARP	Home Affordable Refinance Program
IMF	International Monetary Fund

IPO	initial public offering
LIBOR	London interbank offered rate
LLC	limited liability company
LSAP	large-scale asset purchase
MBS	mortgage-backed securities
MEP	maturity extension program
Michigan survey	Thomson Reuters/University of Michigan Surveys of Consumers
NAIRU	non-accelerating inflation rate of unemployment
NIPA	national income and product accounts
OIS	overnight index swap
PBOC	People's Bank of China
PCE	personal consumption expenditures
PMI	purchasing managers index
repo	repurchase agreement
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SOMA	System Open Market Account
S&P	Standard & Poor's
TALF	Term Asset-Backed Securities Loan Facility
TIC	Treasury International Capital
TIPS	Treasury inflation-protected securities
WTI	West Texas Intermediate