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.

Content last modified 02/03/2017.

Report to the FOMC on Economic Conditions and Monetary Policy

Book A

Economic and Financial Conditions: Current Situation and Outlook

April 20, 2011

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

(This page is intentionally blank.)

Domestic Economic Developments and Outlook

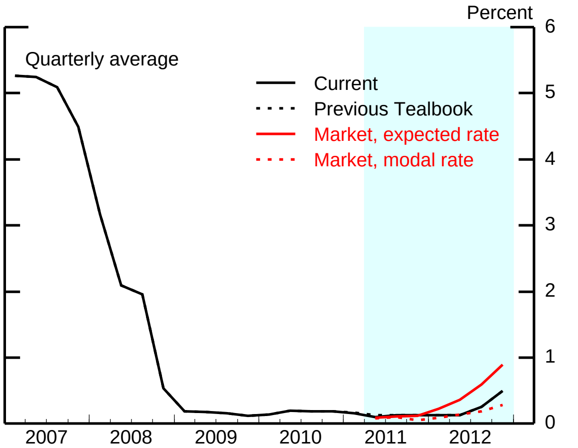
The information we have received in recent weeks suggests that the recovery in economic activity is proceeding at a somewhat slower pace than we had projected in the March Tealbook. In particular, both private and public construction spending fell in the first few months of the year by considerably more than we expected, and federal defense purchases dropped sharply in the first quarter, though a large part of that shortfall is probably transitory. Consumer spending in the first quarter appears to have proceeded about as expected, but weak readings on consumer sentiment have caused us to temper the acceleration in spending that we expect in coming months. In contrast, gains in business outlays on equipment and software (E&S) remain robust, and forward-looking indicators of business conditions continue to be upbeat. In addition, we remain encouraged by the ongoing improvements in the labor market and by factory output, which posted a robust gain in the first quarter. Taken together, the available information points to an increase in real GDP of roughly 2½ percent at an annual rate in the first half of 2011, about 1 percentage point below our forecast in the previous Tealbook.

Although the key background factors shaping our forecast—such as equity and house prices, oil prices, the exchange value of the dollar, and monetary and fiscal policy—are not much different, on balance, than in our previous projection, the weaker-than-expected data for spending have led us to trim our medium-term outlook for economic activity. Nevertheless, we project that real GDP will increase at an annual rate of 4 percent over the second half of 2011 and 4¼ percent in 2012. As in recent Tealbooks, the economic recovery is projected to be supported by accommodative monetary policy, increasing credit availability, the waning effects of earlier declines in wealth, and improving household and business confidence. We view the pace of the expansion as sufficient to reduce the unemployment rate to 7¾ percent by the end of 2012.

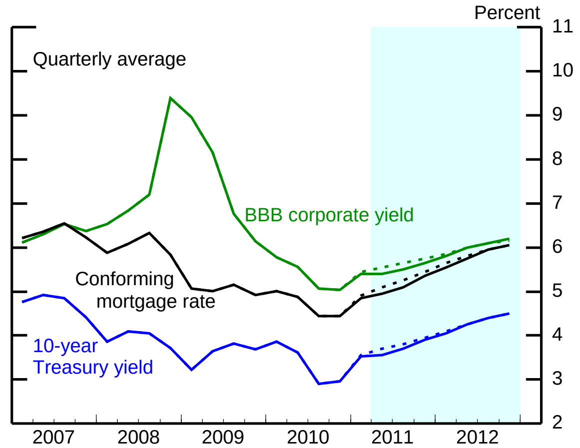
We have raised our forecast for inflation relative to the March Tealbook in response to higher-than-expected incoming data on consumer prices, along with small upward revisions to the projected paths of oil and other imported goods prices. In particular, we now expect core PCE price inflation to rise almost 1½ percent in both 2011 and 2012, about ¼ percentage point above our previous projection. Folding in our

Key Background Factors underlying the Baseline Staff Projection

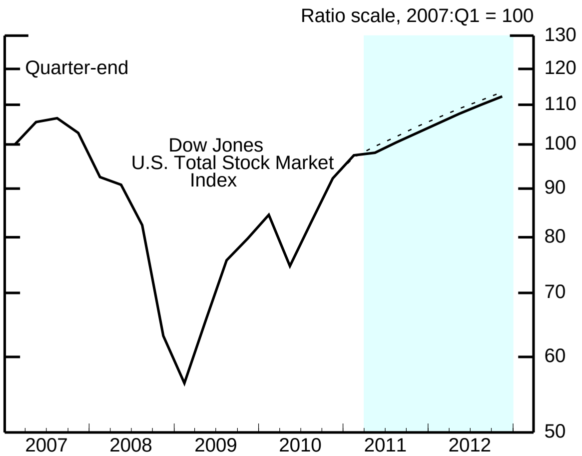
Federal Funds Rate



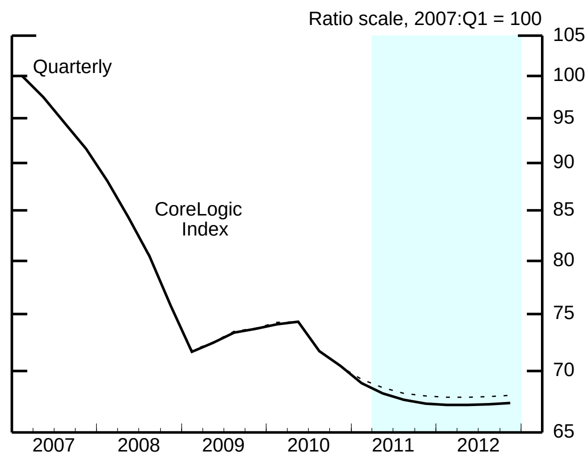
Long-Term Interest Rates



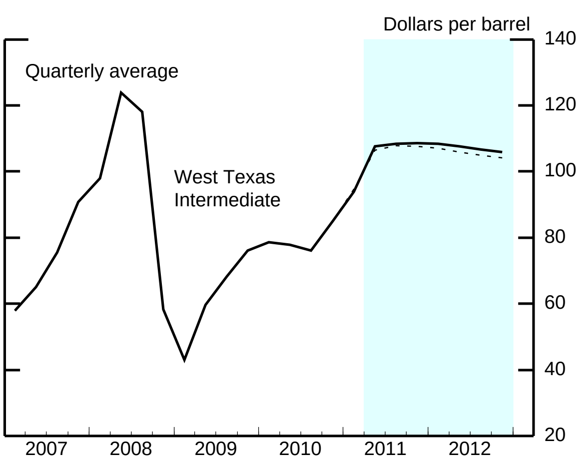
Equity Prices



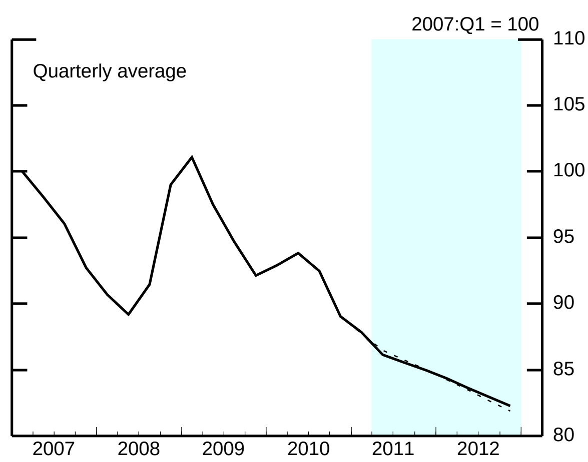
House Prices



Crude Oil Prices



Broad Real Dollar



Note: In the upper-left panel that reports the federal funds rate, the black dotted line is not apparent because the federal funds rate in the March and the current Tealbooks are the same.

forecast for a large jump in food and energy prices in 2011, we project that overall PCE prices will rise 2¼ percent this year and then decelerate to about 1¼ percent in 2012.

KEY BACKGROUND FACTORS

Monetary Policy

As in the March Tealbook, we assume that the FOMC will hold the target federal funds rate in the current range of 0 to ¼ percent until the third quarter of 2012 and begin raising the target rate at the September meeting. Regarding nontraditional monetary policy, we continue to assume that the Federal Reserve will expand its holding of longer-term Treasury securities through the end of the current quarter but will not undertake any additional expansion of the balance sheet over the rest of this year. We now assume that the FOMC will commence a gradual and transparent removal of policy accommodation by stopping the reinvestment of principal payments from its securities holdings in December 2011. This cessation of reinvestment is about half a year earlier than we assumed in the March Tealbook, resulting in a slightly smaller balance sheet in 2012 than we projected in the previous round.

Financial Conditions

The yield on 10-year Treasury securities has declined about 15 basis points, on net, since the March Tealbook, but we have carried forward only a portion of this decline into the next few quarters. We continue to expect the 10-year Treasury yield to increase about 1 percentage point by the end of 2012, primarily reflecting the movement of the valuation window through the projected period of near-zero short-term interest rates. Yields on investment-grade corporate bonds and interest rates on fixed-rate conforming home mortgages have been revised down about in line with the modest revisions to yields on longer-term Treasury securities over the next few quarters.

The level of the Dow Jones U.S. Total Stock Market Index is about 1.5 percent lower than we anticipated in the March Tealbook, and we have adjusted the projected path of equity prices down by nearly that amount throughout the medium term. The equity premium remains well above longer-run norms, and we expect it to decline gradually toward a more typical level. Thus, we expect stock prices to increase at an annual rate of about 9 percent over the projection period.

According to the latest data from CoreLogic, home prices decreased 1½ percent in February, a weaker reading than we had anticipated. In response, we have trimmed our forecast over the projection period and now expect home prices to decrease 4½ percent in 2011—1 percentage point weaker than in our March projection—and to be flat in 2012.

Fiscal Policy

Our fiscal policy assumptions are little changed in this projection.[1] We continue to expect federal fiscal policy actions to be a neutral influence on aggregate demand in 2011, as the impetus from the one-year cut in payroll taxes and the full expensing allowance for business investment is offset by a reduction in stimulus-related grants to state and local governments. In 2012, federal fiscal policy is anticipated to impose a drag of about 1 percent of GDP as the payroll tax cuts lapse, the Emergency Unemployment Compensation program is phased out, the stimulus grants for states and localities are essentially exhausted, real federal purchases are restrained, and the expensing provision for business investment is scaled back.

As in the March projection, we expect the budget deficit to reach $1.4 trillion (9 percent of GDP) in fiscal 2011 and then narrow to $1.1 trillion in fiscal 2012 (7 percent of GDP), primarily reflecting the further tapering off of stimulus-related policies and the higher revenues associated with a faster pace of economic activity. Correspondingly, federal debt is projected to rise to over 70 percent of GDP by the end of fiscal 2012.

Foreign Activity and the Dollar

Recent information on economic activity abroad has generally been stronger than we had expected, with foreign real GDP estimated to have increased at an annual rate of 4 percent in the first quarter, about ½ percentage point higher than in our previous forecast. Looking ahead, we expect the effects of the March 11 earthquake in Japan to shave about ½ percentage point from aggregate foreign growth in the current quarter, pushing the rate down to 2¾ percent. Most of the downward revision is in the forecast for Japan itself, but Japan's trading partners, particularly in emerging Asia, will likely see somewhat weaker output because of a decline in exports to Japan as well as some disruptions to supply chains. These effects are assumed to fade over the course of this

[1] Although the advertised size of the cuts to discretionary budget authority in the recent budget agreement is larger than what we had assumed in our previous forecast, we, like the CBO, expect that only a small portion of those reductions will show through to spending within the projection period. As a result, the anticipated effect of the budget deal on federal purchases is similar to what we had assumed in the March Tealbook.

year, and foreign GDP is projected to expand at an average annual rate of 3½ percent over the rest of the forecast period, little changed from the March Tealbook.

The foreign exchange value of the dollar in real terms is currently about ½ percent lower than we had projected at the time of the March forecast. From this lower starting point we assume that the dollar will depreciate at an annual rate of about 3 percent over the forecast period, a pace that is little changed from what we had written down in March. Most of the dollar's projected decline occurs against the currencies of the emerging market economies.

Oil and Other Commodity Prices

Amid considerable volatility, oil prices have moved up only slightly, on net, since the March Tealbook, with the spot price of West Texas Intermediate (WTI) crude oil closing on April 19 at $108 per barrel. The price of crude oil fell sharply following the March 11 earthquake in Japan but then recovered as initial fears of an even more serious impact on Japanese economic activity receded. Oil prices were also boosted in early April by news that the disruption of Libyan production is likely to be more prolonged than initially thought and by evidence that other members of OPEC, contrary to earlier reports, have not significantly increased production to offset the Libyan shortfall. Consistent with futures prices, we project that the spot price of WTI will remain near $108 per barrel through the end of 2011 and then ease to about $106 by the end of 2012; this projected path for oil prices is about $1.50 higher than in the previous Tealbook.

Nonfuel commodity prices, on average, are roughly unchanged since the March Tealbook, although many individual commodities have experienced sharp swings. As with oil, prices for many other commodities fell in the immediate aftermath of the earthquake in Japan but subsequently bounced back. Among individual commodities, corn prices have recorded particularly large gains in response to further news about tight inventories in the United States; nevertheless, given the reported intentions of U.S. farmers to substantially increase acreage devoted to corn and other crops, it would appear that futures markets expect this tightness in supply to ease later this year as stocks are replenished. Going forward, we project that commodity prices for both food and metals will remain near their current elevated levels, consistent with quotes from futures markets.

Recent Developments and the Near-Term Outlook

The incoming data have led us to mark down our outlook for economic activity in the first half of 2011. We now estimate that real GDP rose at an annual rate of 1¾ percent in the first quarter, 1½ percentage points below our previous projection. In large part, the downward revision reflects a combination of unexpectedly sharp declines in outlays for private and public construction and weaker-than-anticipated federal defense purchases. In the second quarter, we still expect real GDP to accelerate, though now only to a 3 percent pace, about ¾ percentage point below our previous projection. Part of this downward revision is attributable to the effects of the events in Japan on U.S. economic activity, mainly in the motor vehicle sector. However, we also marked down our forecast for consumer spending in response to the recent retrenchment in consumer sentiment, and we carried forward some of the first-quarter weakness in construction spending.

The Labor Market

Consistent with our expectations in the March Tealbook, the labor market has continued to improve gradually. Private nonfarm payrolls increased 230,000 in March and rose about 190,000 per month on average in the first quarter, up from 150,000 per month in the fourth quarter. In addition, the unemployment rate declined further in March to 8.8 percent. Other information, including initial claims for unemployment insurance and indicators of hiring plans, point to further job gains at a roughly similar pace in coming months. Accordingly, our projection calls for private payrolls to rise 220,000 per month, on average, in the second quarter (unchanged from our previous projection) and for the unemployment rate to remain near its current level through June.

The Industrial Sector

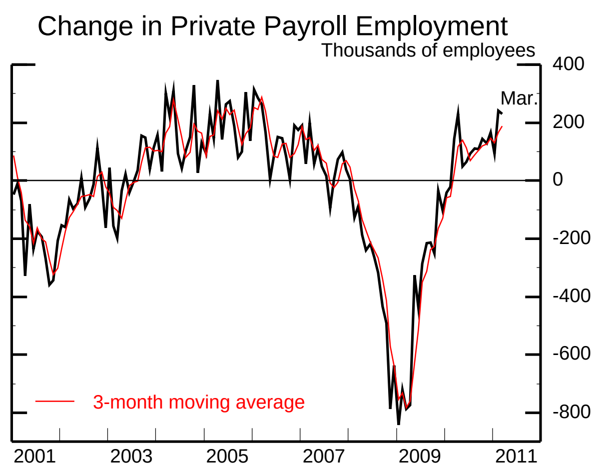
Indicators of industrial activity have remained quite positive. In the first quarter, total industrial production (IP) rose at a robust annual rate of 6 percent, led by a 9 percent jump in manufacturing output. Total motor vehicle assemblies increased 700,000 units to an annual rate of 8.5 million units in the first quarter, while production gains elsewhere in manufacturing were widespread across industries. With readings from the new-orders diffusion indexes in the national and regional surveys of purchasing managers still quite elevated, we project that total IP will rise at a solid 5½ percent pace in the second quarter.

The natural disaster in Japan is disrupting supply chains for the U.S. motor vehicle industry and is adding uncertainty to the outlook for the output of high-

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

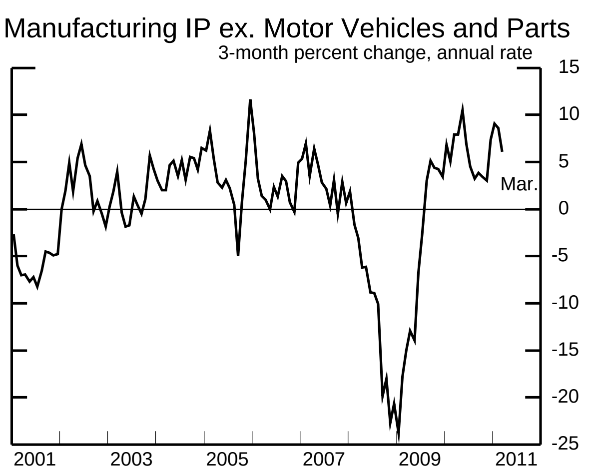
Measure	2011:Q1 Previous Tealbook	2011:Q1 Current Tealbook	2011:Q2 Previous Tealbook	2011:Q2 Current Tealbook	2011:Q3 Previous Tealbook	2011:Q3 Current Tealbook
Real GDP	**3.2**	**1.7**	**3.8**	**3.1**	**3.9**	**4.1**
Private domestic final purchases	3.0	2.3	4.2	3.6	4.4	3.8
Personal consumption expenditures	2.5	2.5	3.5	3.0	3.5	3.1
Residential investment	3.7	-1.8	7.3	.4	10.9	2.6
Nonres. structures	-10.4	-17.3	-.9	-1.4	-.9	-.7
Equipment and software	12.7	10.1	12.5	12.2	13.2	12.6
Federal purchases	-4.7	-11.5	4.6	8.0	2.0	3.9
State and local purchases	-2.1	-3.9	-.7	-1.2	-.2	-.4
	Contribution to change in real GDP (percentage points)					
Inventory investment	1.1	1.1	.1	-.3	.3	1.1
Net exports	.2	.1	-.1	-.1	-.1	-.4

Recent Nonfinancial Developments (1)

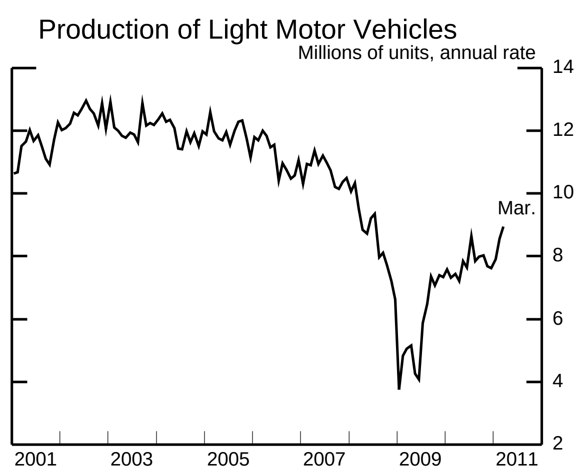


Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

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



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



Source: Ward's Auto Infobank.

technology products. Because of shortages of specialized components imported from Japan, the staff's assumption for total motor vehicle assemblies in the second quarter—an annual rate of 8.5 million units—is about 350,000 units lower than it would be otherwise; production will be further impeded if parts manufacturers are unable to achieve normal operations soon. In the high-technology sector, we expect the crisis in Japan to have little direct effect on near-term U.S. production, but the outlook beyond the current quarter is less certain. Inventories of electronic components were relatively high at the time of the disaster, mitigating the near-term disruption to U.S. production. However, if plants in Japan do not come fully on line soon, shortages of some of these components may develop as the manufacture of electronics using those components ramps up in the third quarter ahead of the holiday season.[2] Moreover, production of certain critical components, such as raw silicon wafers, is highly concentrated in the affected region of Japan. If production of these components is not restored by about midyear, serious chokepoints may develop. The supply chain disruptions already have led to upward pressure on prices for some components, but these effects have been damped somewhat by increased production activity elsewhere in the global supply network.

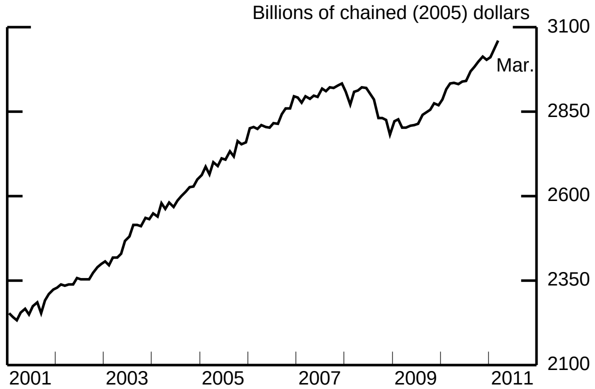
Household Spending

We continue to view the recovery in consumer spending as proceeding at a moderate pace. The data we have in hand suggest that real PCE rose at an annual rate of 2½ percent in the first quarter, the same as our projection in the March Tealbook. In addition, we continue to expect real PCE to pick up modestly over the next several months, as labor income strengthens, the sizable income boost from the payroll tax cut continues to feed through to spending, negative wealth effects wane further, and credit conditions continue to improve. However, sharp increases in food and energy prices are eroding a greater portion of the nominal gains in disposable income than we had expected previously, and they also appear to have weighed on consumer confidence, which dropped markedly in March and only edged up in April. As a result, we trimmed our forecast for real PCE growth in the second quarter to 3 percent, ½ percentage point below our projection in the previous Tealbook.

[2] There is still considerable uncertainty about when the plants in the affected region of Japan will return to full operation. Several facilities were in the course of ramping up production when a large aftershock on April 7 led them to shut down again. Maintaining a steady power supply, which is particularly critical for the production of semiconductors, has been a lingering problem.

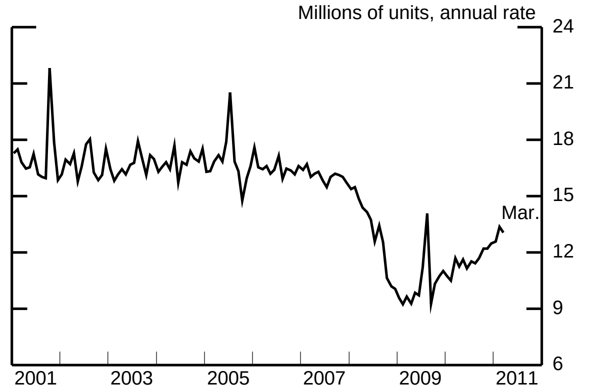
Recent Nonfinancial Developments (2)

Real PCE Goods ex. Motor Vehicles



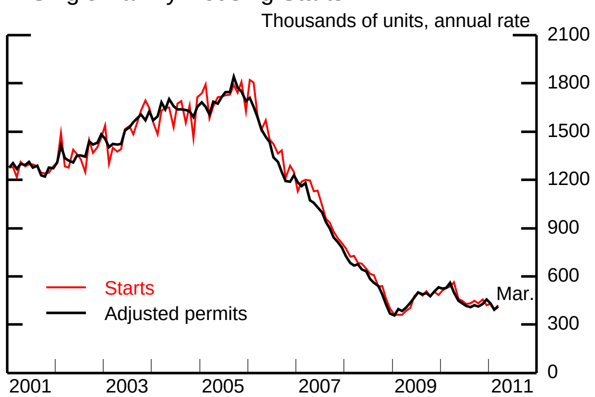
Note: Figures for January, February, and March are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Sales of Light Motor Vehicles



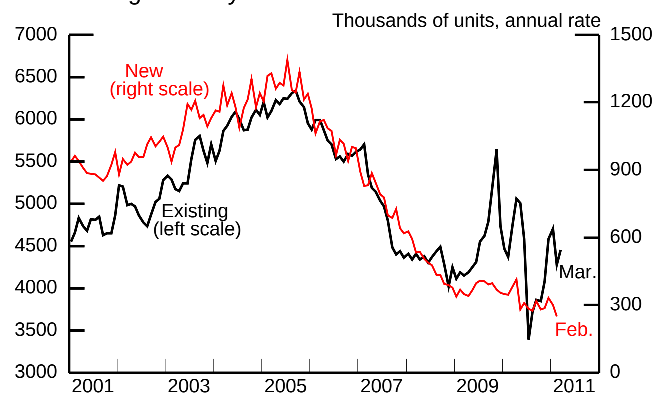
Source: Ward's Auto Infobank.

Single-Family Housing Starts



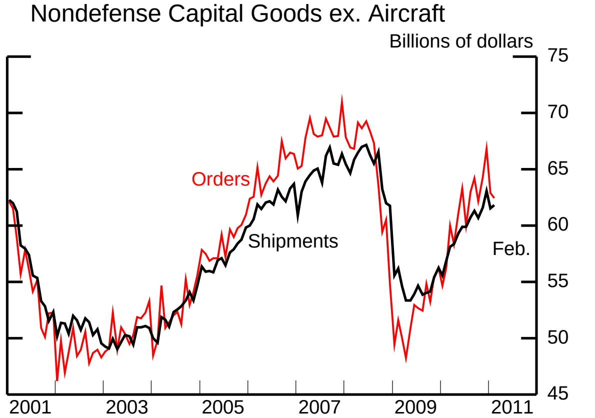
Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.
Source: U.S. Census Bureau.

Single-Family Home Sales



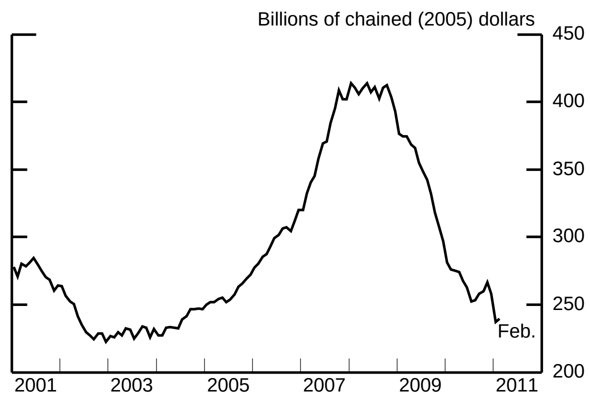
Source: For existing, National Association of Realtors; for new, U.S. Census Bureau.

Nondefense Capital Goods ex. Aircraft



Source: U.S. Census Bureau.

Nonresidential Construction Put in Place



Source: U.S. Census Bureau.

The recent data on home sales and construction suggest the housing market is on an even weaker trajectory than we were projecting in March. Sales of new single-family homes fell sharply in February, and resales declined, on net, in February and March. Single-family housing starts averaged 410,000 units in the first quarter and were down noticeably from the pace in the fourth quarter. With the considerable overhang of vacant homes evidently still weighing quite heavily on the sector, we marked down our forecast for starts in the second quarter to an average pace of 420,000, about 40,000 less than our forecast in the March Tealbook. Starts of multifamily units, which also dropped back in February, firmed only a little in March. However, rental demand for these units reportedly has picked up recently, and anecdotes from builders suggest that construction in this segment of the market is turning up; as a result, we left our near-term projection for this sector essentially unrevised. In all, we now estimate that residential investment declined at an annual rate of 2 percent in the first quarter, and we expect it to be about flat this quarter; in the March Tealbook we had projected gains averaging a 5½ percent pace during the first half of the year.

Business Investment

Real business investment in E&S is expected to rise at a robust annual rate of about 11 percent over the first half of the year. Spending on transportation equipment is on track to post a sizable rebound from the drop that occurred at the end of last year, and outlays for other types of equipment should register solid gains as firms continue to replace aging capital, resume investment projects that were postponed during the crisis, and expand capacity in response to rising sales. Available indicators support this projection. Recent gains in shipments have been widespread across industries, and while overall orders dropped back in February, they have continued to run ahead of shipments. In addition, survey measures of business sentiment and capital spending plans remain quite positive, borrowing costs are generally low, analysts' earnings expectations for producers of capital goods continue to predict solid growth, and anecdotal reports from equipment manufacturers remain upbeat.

By contrast, the near-term outlook for investment in nonresidential structures has grown even darker, as the recent data on construction expenditures suggest a steeper decline in real spending in the first quarter than we had previously projected. Outlays for power-generating structures appear to have plunged in the first quarter following the end-of-year expiration of a renewable-energy tax incentive, and spending on other types of buildings has continued to trend down. As a result, we have marked down our forecast for building construction in the second quarter as well. The outlook is more positive for drilling and mining structures, where elevated energy prices should sustain solid increases in expenditures in coming months. All told, we now project that spending for real nonresidential structures will decline at an annual rate of about 10 percent over the first half of the year, compared with a decline of about 5¾ percent in the previous Tealbook.

After slowing sharply in the fourth quarter, real nonfarm inventory investment appears to have picked up to a moderate pace in the first quarter. Motor vehicle inventories were drawn down more slowly last quarter than in the fourth quarter, while the available data suggest that the pace of stockbuilding outside of motor vehicles has moved up somewhat. Overall, both the Census Bureau's book-value data and the staff's flow-of-goods system suggest that inventories are well aligned with the pace of sales. One exception is motor vehicles, where inventories are quite lean and are likely to remain so through the second quarter given the disruptions to the supply chain from the disaster in Japan. Altogether, we think nonfarm inventory investment boosted real GDP growth about 1 percentage point in the first quarter and that it will subtract ¼ percentage point in the current quarter. Our estimate of the transitory effects of the disaster in Japan on U.S. motor vehicle production and inventories can more than account for the negative contribution from inventory investment in the current quarter.

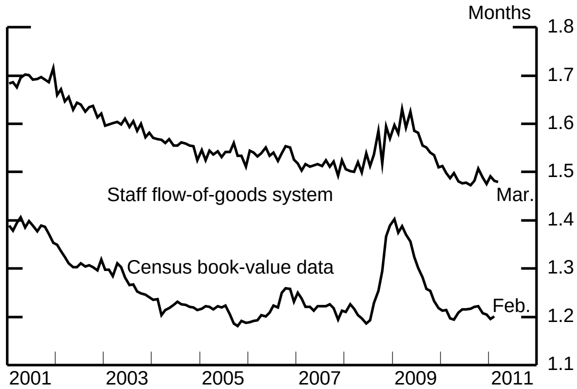
Government

Spending data from the *Monthly Treasury Statement*, which tend to be volatile, suggest that total real federal purchases fell at an annual rate of more than 11 percent in the first quarter, with the weakness concentrated in defense spending. However, we expect real federal purchases to rebound at an annual rate of 8 percent in the second quarter, as defense spending returns to a level more consistent with appropriations.

The incoming information on the state and local sector has been markedly weaker than expected. Real state and local purchases are currently estimated to have decreased at an annual rate of nearly 4 percent in the first quarter of this year—about twice the pace of decline projected in the March Tealbook. While this drop in total spending primarily reflects a sizable step-down in expenditures for construction, these governments also trimmed employment during the previous quarter by an average of 28,000 jobs per month. In the second quarter, we expect real state and local purchases to decrease at an

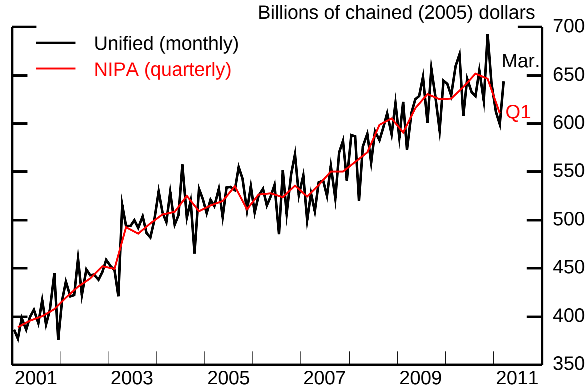
Recent Nonfinancial Developments (3)

Inventory Ratios ex. Motor Vehicles



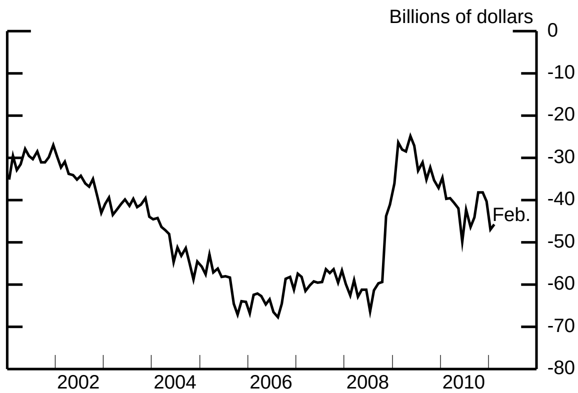
Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.
Source: U.S. Census Bureau; staff calculation.

Defense Spending



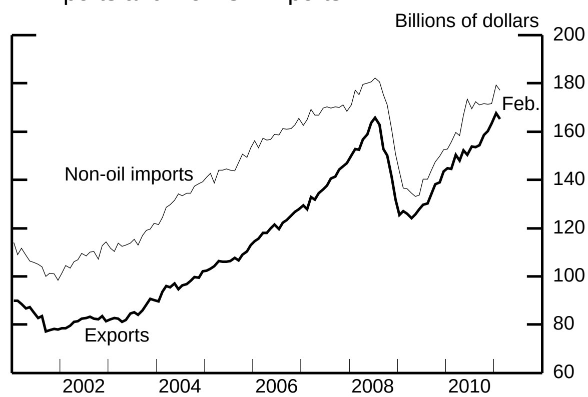
Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.
Source: *Monthly Treasury Statement*; U.S. Dept. of Commerce, Bureau of Economic Analysis.

Trade Balance



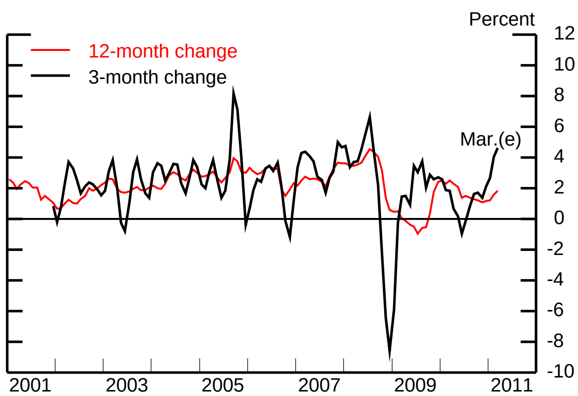
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Exports and Non-Oil Imports



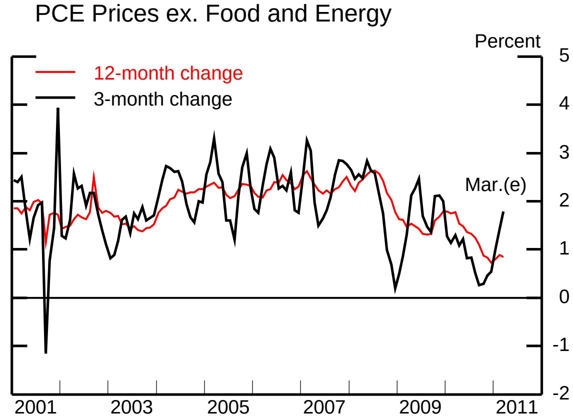
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.

Total PCE Prices



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

annual rate of about 1 percent, as states and localities make further cutbacks in construction spending and employment.

Foreign Trade

Exports in February came in weaker than we had expected across a broad range of categories. As a result, we now estimate that real exports of goods and services decelerated to an annual growth rate of 6½ percent in the first quarter, nearly 6 percentage points weaker than projected in the March Tealbook. We believe this slowdown is likely to have been temporary and project that exports will pick back up to an 8½ percent pace in the current quarter, supported by solid foreign real activity and dollar depreciation. We revised down a bit our forecast for export growth in the current quarter, reflecting the likely effect of economic disruptions from the earthquake in Japan on foreign demand for U.S. goods.

We estimate that real imports expanded at a moderate 4½ percent rate in the first quarter after falling sharply in the fourth; we expect real imports to accelerate to a 7½ percent rate of growth in the current quarter. We revised down our first quarter estimate by 3½ percentage points, largely reflecting soft incoming data on oil imports. We also revised down our projection for the current-quarter increase in imports primarily because of anticipated disruptions to automobile imports from Japan.

For the first half of the year, we expect the external sector's contribution to real GDP growth to be about neutral: Compared with the March Tealbook, our estimate of the contribution has been revised down slightly in the first quarter but is little changed in the current quarter.

Prices and Wages

We raised our near-term inflation forecast this round and now project that total PCE prices will increase at an annual rate of 3¾ percent in the first quarter and 2¾ percent in the second, about ½ percentage point higher in both cases than in our previous projection. In part, the upward revision to our near-term price forecast reflects higher-than-expected readings on consumer food and energy prices. However, the monthly data on core consumer prices have also been a little higher than we were anticipating, and we now estimate that core PCE price inflation moved up to an annual rate of almost 1½ percent last quarter—about ¼ percentage point higher than in our previous projection—from what we had judged to be a transitorily low rate of ½ percent in the fourth quarter of last year. With import and commodity prices rising further and with tight supplies likely putting some additional upward pressure on motor vehicle prices, we raised our projection for core inflation in the second quarter to 1½ percent as well.

Median year-ahead inflation expectations from the Michigan survey jumped to 4.6 percent in March and held at that elevated level in early April. Median 5-to-10-year-ahead inflation expectations, which popped up to 3.2 percent in March, fell back to 2.9 percent in early April. (See the box "Household Inflation Expectations and Food and Energy Prices" for further discussion.) Meanwhile, the TIPS-based measure of the five-year forward rate of inflation compensation has edged up since the March Tealbook.

We have received little information on labor compensation since the previous projection. Average hourly earnings for March came in somewhat below our expectations, and we lowered our projection for the increase in the Productivity and Cost measure of nonfarm hourly compensation in the first quarter of 2011 to an annual rate of 2¾ percent, about ¼ percentage point below the March Tealbook projection. As in previous Tealbook forecasts, we estimate that the first-quarter increase in hourly compensation was temporarily boosted by an increase in employer contributions to state unemployment insurance funds, and we project that the growth of hourly compensation will slow to about 1¾ percent in the second quarter.

THE MEDIUM-TERM OUTLOOK

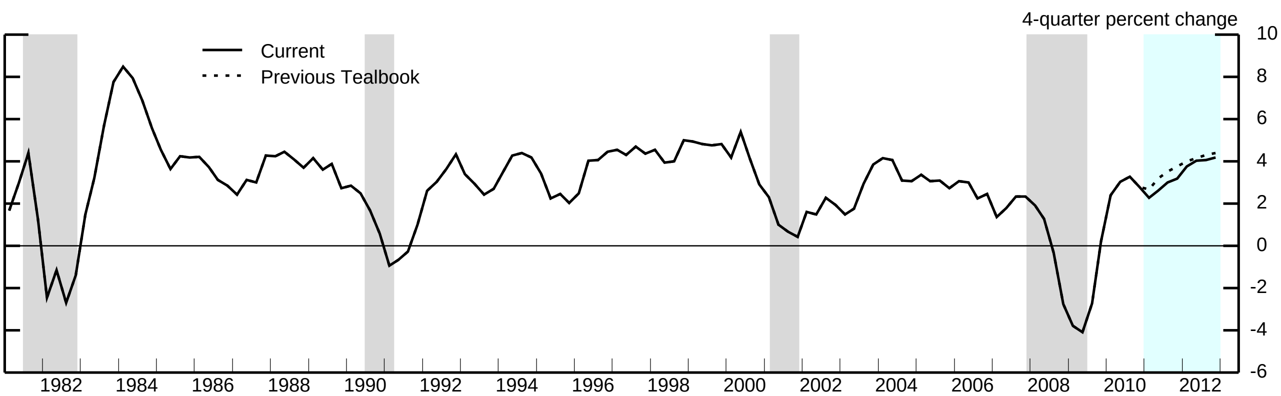
In our medium-term outlook, we carried forward the lower level of real GDP into the second half of this year and also marked down the rate of growth in 2012 by ¼ percentage point. Real GDP is now projected to increase at an annual rate of 4 percent over the second half of 2011 and 4¼ percent in 2012, leaving the level of real GDP at the end of 2012 about ¾ percent below the previous forecast. We have carried forward some of the near-term weakness in construction activity. In addition, over the medium term these negative influences are amplified by follow-on effects to aggregate income and output. However, we have been persuaded by the recent solid readings on labor market activity and on industrial production not to downgrade the outlook more substantially.

The broad factors shaping the contour of our forecast are much the same as in the March Tealbook and suggest a continued cyclical rebound in economic activity that is subpar relative to the depth of the recession. We still expect economic activity to

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

Measure	2010	2011 H1	2011 H2	2012
Real GDP	**2.8**	**2.4**	**4.0**	**4.2**
Previous Tealbook	2.8	3.5	4.0	4.4
Final sales	2.4	1.9	3.9	3.9
Previous Tealbook	2.4	2.9	4.3	4.1
Personal consumption expenditures	2.6	2.8	3.1	3.7
Previous Tealbook	2.6	3.0	3.5	3.9
Residential investment	-4.6	-.7	4.0	8.7
Previous Tealbook	-4.7	5.5	11.5	13.4
Nonresidential structures	-4.0	-9.7	.0	-.4
Previous Tealbook	-4.2	-5.7	-.2	-.1
Equipment and software	16.9	11.1	13.0	9.1
Previous Tealbook	16.6	12.6	13.4	9.6
Federal purchases	4.8	-2.2	1.7	-.8
Previous Tealbook	4.8	-.2	.8	-.8
State and local purchases	-1.3	-2.6	-.3	.4
Previous Tealbook	-1.3	-1.4	-.1	.5
Exports	9.0	7.6	9.4	9.0
Previous Tealbook	9.2	10.9	9.1	9.0
Imports	11.0	6.0	3.9	5.1
Previous Tealbook	11.0	8.0	3.8	5.5
	Contributions to change in real GDP (percentage points)			
Inventory change	.4	.4	.0	.3
Previous Tealbook	.4	.6	-.3	.3
Net exports	-.6	.0	.6	.4
Previous Tealbook	-.5	.1	.6	.3

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.

Household Inflation Expectations and Food and Energy Prices

The median year-ahead inflation expectations from the Michigan survey jumped noticeably in March and remained high in early April. The median 5-to-10-year-ahead expectations also moved up a little in March, though that rise was reversed in early April (see the top and middle figures on the facing page). Here we examine the extent to which these movements in household expectations have been driven by the sizable increases in consumer food and energy prices seen in recent months.

Simple regression models that key off of movements in consumer food, energy, and core prices can explain a significant proportion of the variation in Michigan survey measures, as demonstrated by simulated values from two such models (the red lines in the top and middle figures).[1] In these models, the consumer food and energy terms explain a large fraction of the variation in the expectations measures. For example, a model that includes only lags of food and energy price inflation can explain about two-thirds of the variation of the year-ahead measure since 1998, considerably more than a model that includes only lags of core price inflation. The 5-to-10-year-ahead measure has been quite stable in recent years, and less of its variation is explained by simple models; nevertheless, a model that includes only lags of consumer food and energy price inflation can still explain about 40 percent of the variation in the longer-run measure.

From time to time, the year-ahead expectations measure—and to a much lesser extent, the longer-run measure—jump noticeably. These jumps have often been associated with sharp increases in consumer food and energy prices (shown in the bottom figure on the facing page, with periods of especially large increases in food or energy prices highlighted in yellow).[2] Indeed, the model captures a substantial portion of the spikes in year-ahead expectations that occurred in 2005 (following Hurricane Katrina), in 2008, and in the current period. However, at other times the movements in expectations are more difficult to explain. For example, the expectation measures jumped in 2006 when the model did not expect them to, given the offsetting moves in consumer food and energy prices; conversely, expectations did not jump as the model expected them to in the first half of 2007, when both consumer food and energy prices rose appreciably.

Whether well explained or not, since the mid-1990s the previous large jumps in expectations have tended to be transitory, and given the staff's projected paths for food and energy prices, we expect that to be the case this time as well. Indeed, the early April reading on the longer-run expectations measure is encouraging in that regard.

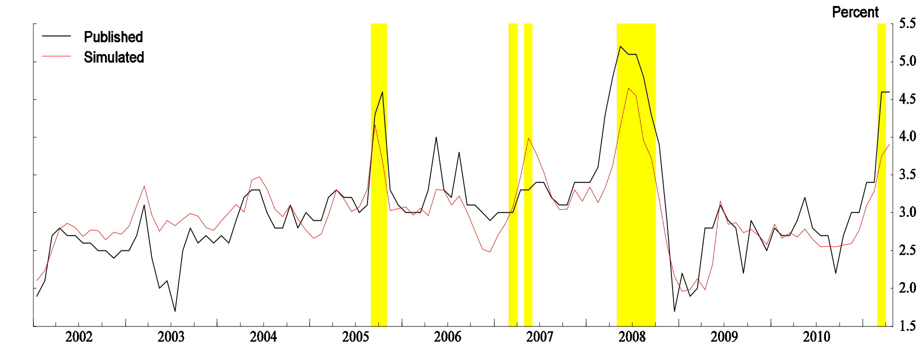
---

[1] In the models, the consumer food and energy price inflation terms are multiplied by their time-varying expenditure shares. Interestingly, household expectations are better correlated with movements in food and energy prices that are not seasonally adjusted, and these prices are used in the models. It may not be a coincidence that the temporary jumps in household expectations in recent years have often occurred in the spring, when there is a seasonal increase in gasoline prices.

[2] In particular, a large price increase is defined as a share-weighted three-month change that is 2 standard deviations above its mean over the period from 1998 to the present.

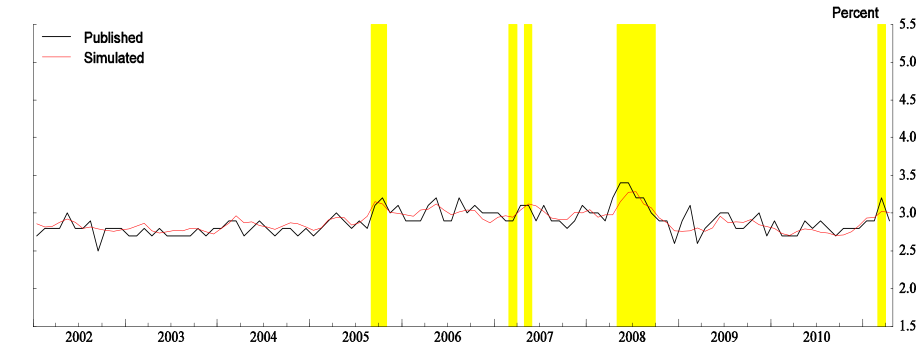
Domestic Econ Devel & Outlook

Michigan 12-Month Median Expectations



Source: Thomson Reuters/University of Michigan Surveys of Consumers; FRB staff.

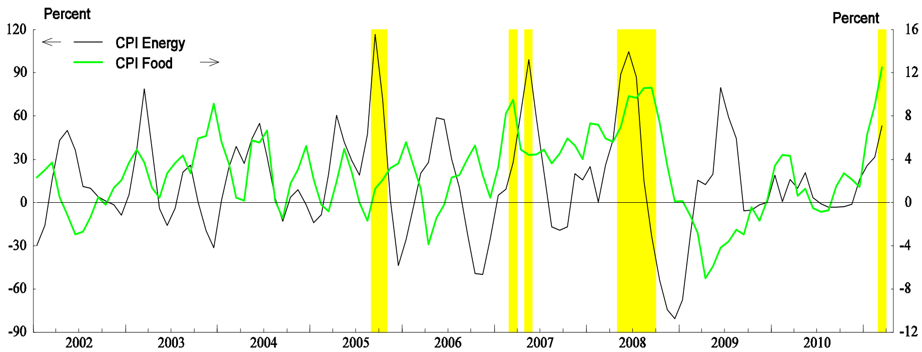
Michigan 5-to-10-Year Median Expectations



Source: Thomson Reuters/University of Michigan Surveys of Consumers; FRB staff.

Food and Energy Prices

(3-month changes, annual rate, not seasonally adjusted)



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

Note: The yellow bands represent months when the annualized three-month change multiplied by its expenditure weight was 2 standard deviations above its mean over the period from 1998 to the present.

accelerate this year and next as the drag from earlier declines in wealth diminishes, lending standards ease further, the labor market gradually recovers, and household and business confidence continues to recuperate. Partly offsetting these positive influences on our forecast, however, are a large overhang of vacant residential and nonresidential properties, the waning of federal fiscal stimulus, and budgetary pressures on state and local governments.

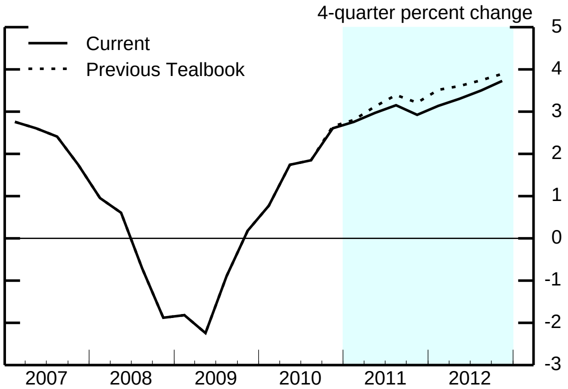
Consumer spending is expected to accelerate slowly over the projection period for the same reasons as described earlier for the overall forecast. We expect that real PCE will rise 3 percent over the second half of 2011, a somewhat slower pace than in the March Tealbook, reflecting our judgment that the rise in energy and food prices will continue to weigh on household purchasing power and consumer sentiment for a while longer. However, PCE growth is then projected to pick up to a 3¾ percent pace in 2012 as consumer confidence recovers and the drag from past declines in wealth continue to wane. As in the previous Tealbook, the payroll tax cut boosts disposable income this year; because household spending responds only gradually to the extra income, some of the tax cut shows through to the saving rate this year. After the tax cuts expire in 2012, the saving rate drops back to 5½ percent.

Business outlays for E&S are projected to rise at a solid pace over the medium term. In particular, we anticipate that real E&S spending will increase at an annual rate of 13 percent over the second half of 2011, primarily supported by the ongoing replacement of aging capital, the resumption of projects deferred during the recession, and the need to expand capacity amid improving sales prospects. In 2012, we expect growth to slow to about 9 percent, as pent-up demand for investment is worked off.

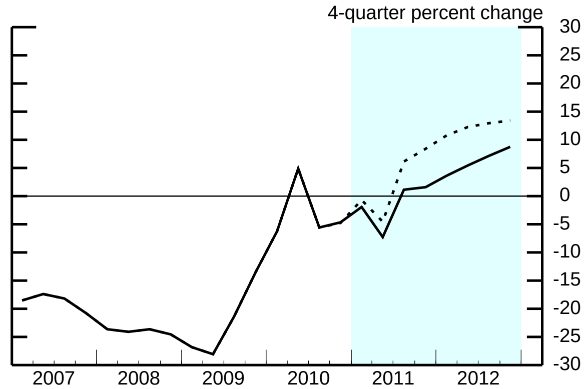
In contrast, we expect that weakness in the private construction sector will continue to restrain the economic recovery over the medium term; indeed, the latest information suggests that this restraint will be even greater than we had anticipated in the March Tealbook. In the residential sector, still-tight credit conditions and a voluminous inventory of vacant homes continue to weigh on house prices and new construction, and we now think that single-family housing starts will move up to an annual rate of only 560,000 units by the end of 2012—100,000 units less than in our previous projection—despite the noticeable improvements we expect to see in income and employment over the forecast period. In the nonresidential sector, we anticipate that a steep decline in structures investment in early 2011 will give way to a fairly flat investment profile later

Components of Final Demand

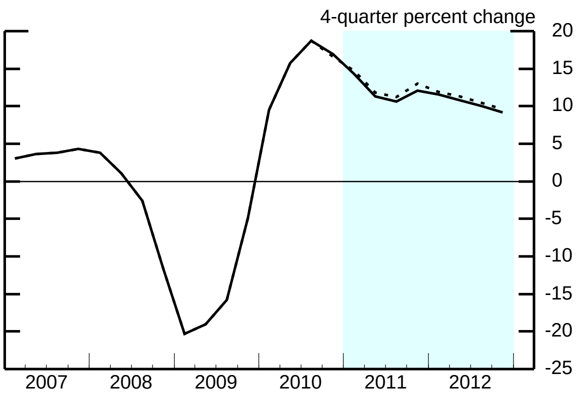
Personal Consumption Expenditures



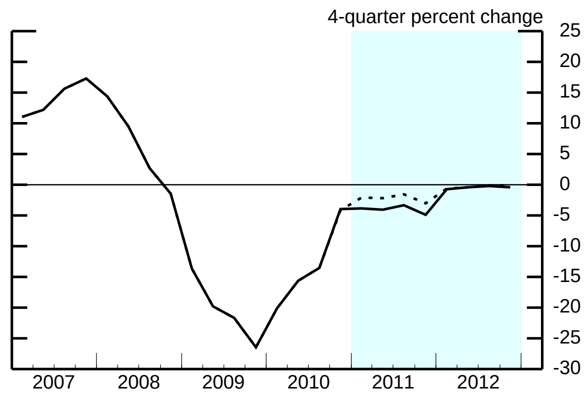
Residential Investment



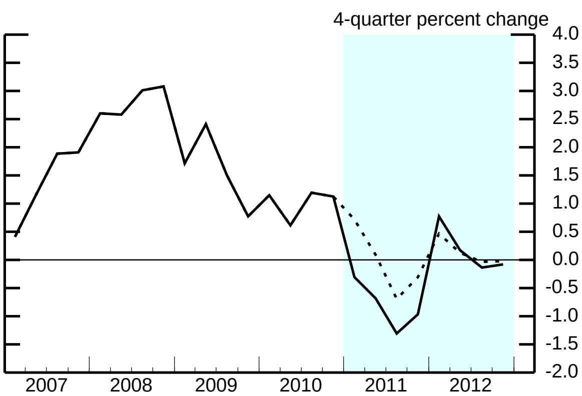
Equipment and Software



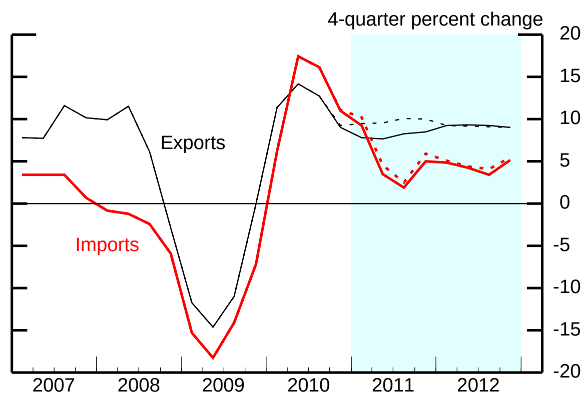
Nonresidential Structures



Government Consumption & Investment



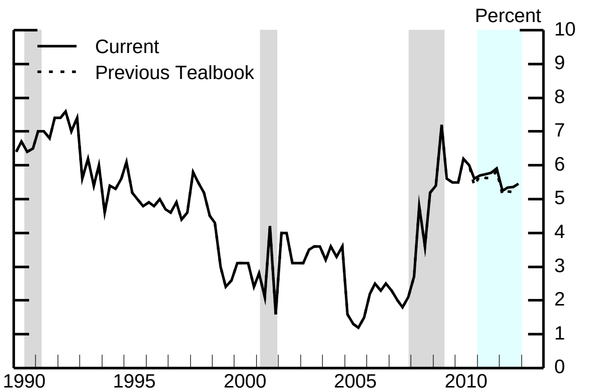
Exports and Imports



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

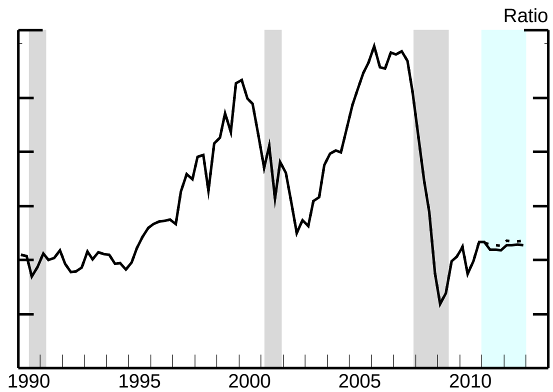
Aspects of the Medium-Term Projection

Personal Saving Rate



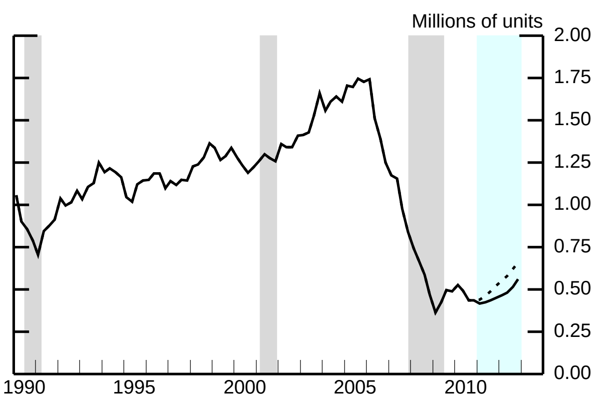
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



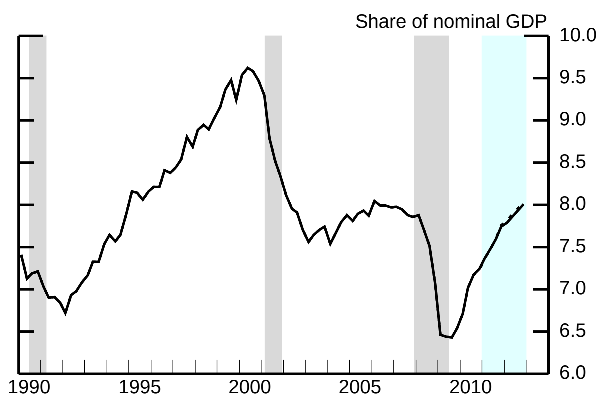
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



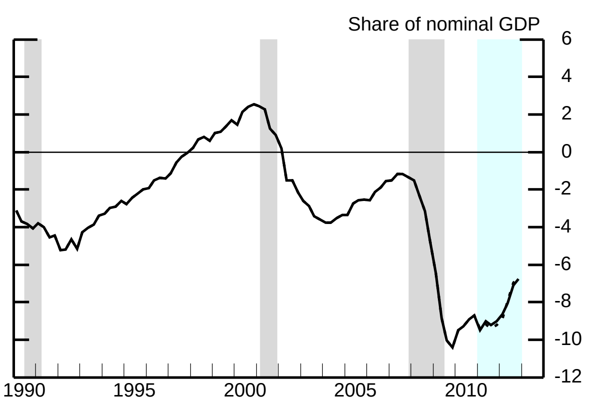
Source: U.S. Census Bureau.

Equipment and Software Spending



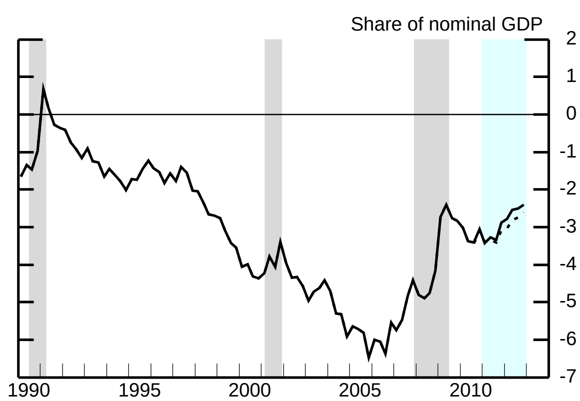
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Federal Surplus/Deficit



Note: Share of federal government surplus/deficit is shown as a 4-quarter moving average.
Source: *Monthly Treasury Statement*.

Current Account Surplus/Deficit



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

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

in the year. Elevated vacancy rates for office and commercial structures will likely continue to damp private nonresidential building activity in coming quarters, and although the market for commercial mortgage-backed securities has improved recently, financing for new projects, which largely comes from banks, remains tight. Meanwhile, high energy prices are expected to continue to boost investment in drilling and mining structures, but to a markedly lesser degree than was the case in 2010.

Real federal purchases are projected to decelerate from a 5 percent rise in 2010 to small declines in 2011 and 2012. The slowdown reflects anticipated reductions in spending related to military operations, the phasing out of stimulus-related nondefense spending, and the tightened environment for discretionary appropriations. In the state and local sector, we project that total real purchases by these governments will fall more than 1 percent in 2011—a somewhat steeper decline than previously projected in light of the weaker outlook for construction spending—and then only edge up in 2012. Although state and local budgets are expected to be bolstered by further gains in tax receipts over the projection period, the phase-out of federal stimulus grants will partially offset the anticipated increases in tax revenues.

Continued dollar depreciation and robust foreign economic activity should support real exports of goods and services in the medium term; in our forecast, exports expand at an average annual rate of about 9 percent in the second half of 2011 and in 2012. Real imports are projected to rise at a 4¾ percent pace, on average, over the same period, as the effect of expanding domestic real activity outweighs the drag from the depreciating dollar. In all, net exports are expected to contribute positively to real GDP growth over the projection period, adding about ½ percentage point to growth in the second half of 2011 and in 2012. This projection is slightly stronger than in the March Tealbook, as the lower value of the dollar boosts exports and lowers imports and as the weaker outlook for U.S. economic activity further restrains imports.

Aggregate Supply, the Labor Market, and Inflation

Potential GDP and the NAIRU

In this forecast, we reduced slightly our estimate of potential GDP growth from 2010 onward to reflect lower estimates of the growth in capital services based on new and revised data from the Bureau of Labor Statistics and the Bureau of Economic

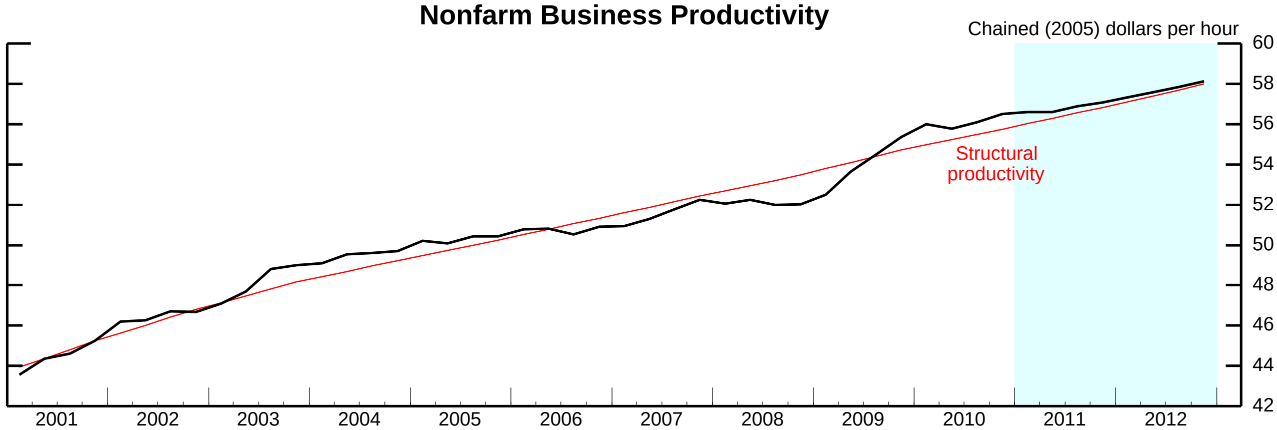
Domestic Econ Devel & Outlook

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

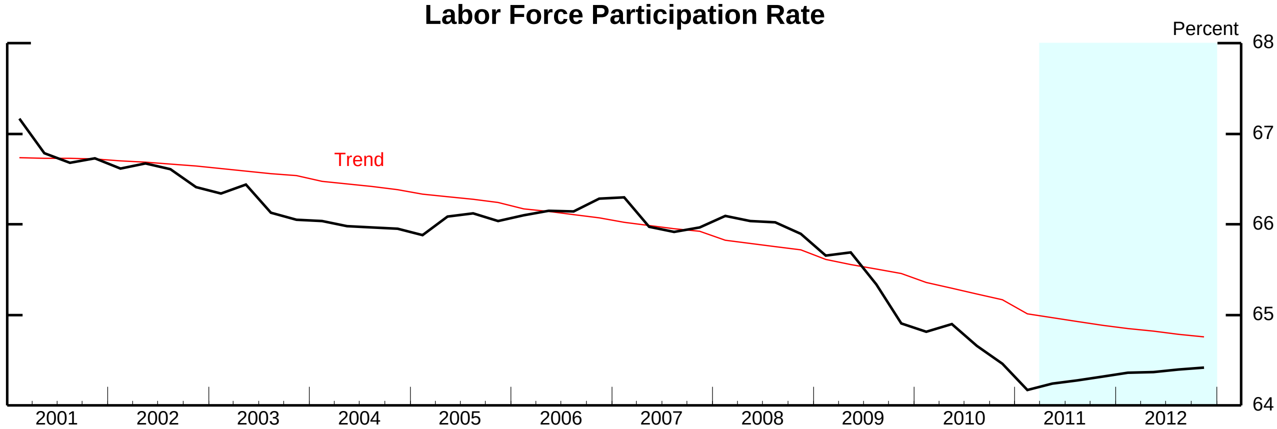
Measure	1974-1995	1996-2000	2001-2008	2009	2010	2011	2012
Potential GDP	3.0	3.5	2.7	2.0	2.0	2.3	2.5
Previous Tealbook	3.0	3.5	2.7	2.0	2.1	2.4	2.6
Selected contributions[1]							
Structural labor productivity	1.5	2.7	2.5	2.3	1.9	1.9	2.0
Previous Tealbook	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Capital deepening	.7	1.5	.7	.3	.4	.6	.8
Previous Tealbook	.7	1.5	.7	.4	.5	.7	.9
Multifactor productivity	.5	.9	1.6	1.9	1.3	1.2	1.2
Previous Tealbook	.5	.9	1.6	1.8	1.3	1.2	1.2
Trend hours	1.5	1.0	.8	-.1	.5	.6	.7
Previous Tealbook	1.5	1.1	.8	-.1	.5	.6	.7
Labor force participation	.4	.0	-.2	-.3	-.4	-.3	-.2
Previous Tealbook	.4	.0	-.2	-.3	-.4	-.3	-.2

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

Nonfarm Business Productivity



Labor Force Participation Rate



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

Analysis.[3] As a result, our assumptions for structural productivity growth and for potential GDP growth are 0.1 percentage point lower in each year from 2010 to 2012. We continue to assume that the NAIRU will remain at 6 percent though 2012.[4]

Productivity and the Labor Market

Given the available data on hours worked and our estimate of real GDP growth, we now estimate that labor productivity rose at an annual rate of only ¾ percent in the first quarter following a gain of about 3 percent in the fourth quarter. The relatively small first-quarter increase reduced, but did not eliminate, the estimated degree to which the actual level of productivity currently stands above its structural level. We expect the gap between the levels of actual and structural productivity to narrow further over the medium term as firms add workers both to meet rising production needs and to relieve pressures on their existing workforces. Our forecast therefore calls for payroll employment gains to pick up steadily over the projection period and for the growth of actual labor productivity to average 1¾ percent over the second half of 2011 and in 2012, a little below our estimate of its structural growth rate of about 2 percent.

Our forecast for the labor market is slightly softer than in the March Tealbook, in line with the softer profile of real GDP growth. In particular, we now project that private employment gains will step up from an average pace of 200,000 per month in the first half of 2011 to 250,000 per month in the second half of 2011 and 275,000 per month in 2012; the gains in the second half of 2011 and in 2012 are about 20,000 per month less than in our previous projection. Given the trimmed pace of job growth in this projection and the unrevised participation rate, the path for the unemployment rate in this forecast is a touch higher than in the March Tealbook, ending 2012 at 7¾ percent.

---

[3] We incorporated new and revised estimates covering 2009 and earlier years for multifactor productivity (MFP) and capital services from the Bureau of Labor Statistics, as well as new capital stock data from the Bureau of Economic Analysis for the same period. The new data led us to lower our estimate of the contribution of capital deepening to structural productivity growth from 2009 to 2012. In addition, the BLS data showed a slightly higher rate of actual MFP growth in 2009, which we passed through to structural MFP growth on the view that the improvements to efficiency that year were a little larger than we had previously assumed. Because we see the surge in structural MFP in 2009 as reflecting one-time influences rather than a higher trend rate of growth, we did not raise the assumed rate of growth in structural MFP for 2010 to 2012.

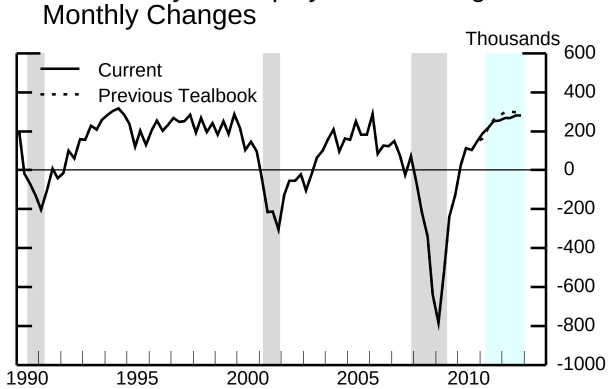
[4] Our estimate of the "effective" NAIRU, which includes the influence of extended and emergency unemployment benefits and is the level of the unemployment rate that we view as being consistent with no slack in resource utilization, is unrevised from the March projection and is now about 6½ percent. As before, we expect the effective NAIRU to decline to around 6 percent by the end of 2012 as the extended and emergency unemployment benefit programs expire.

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

Measure	2009	2010	2011	2012
Output per hour, nonfarm business	6.5	2.0	1.1	1.8
Previous Tealbook	6.5	2.0	1.4	1.7
Nonfarm private employment	-5.0	.9	2.5	2.9
Previous Tealbook	-5.0	.9	2.4	3.2
Labor force participation rate[1]	64.9	64.5	64.3	64.4
Previous Tealbook	64.9	64.5	64.3	64.4
Civilian unemployment rate[1]	10.0	9.6	8.7	7.7
Previous Tealbook	10.0	9.6	8.6	7.5
Memo:				
GDP gap[2]	-6.6	-5.9	-5.0	-3.5
Previous Tealbook	-6.6	-5.9	-4.7	-3.0

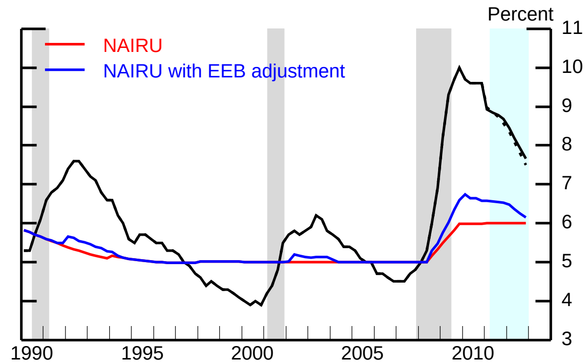
Note: A negative number indicates that the economy is operating below potential.
1. Percent, average for the fourth quarter.
2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated.
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

Private Payroll Employment, Average Monthly Changes



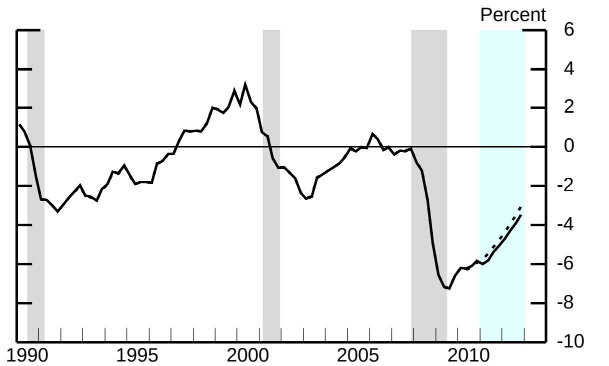
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Unemployment Rate



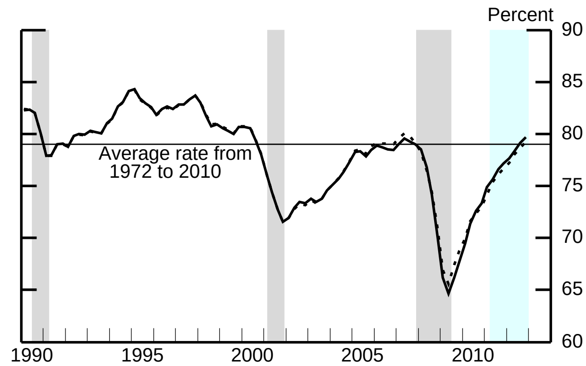
Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics; staff assumptions.

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, Bureau of Economic Analysis; 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.

Resource Utilization

Our estimates of economic slack in this projection are just a little wider than those in the March Tealbook. By our reckoning, the unemployment rate is about 2½ percentage points above the "effective" NAIRU in the current quarter, and at the end of next year, the unemployment gap—at 1¾ percentage points—is nearly ¼ percentage point larger than in the previous Tealbook. This extended period of labor market slack is likely to be associated with other features of a weak labor market, including below-trend labor force participation, a high percentage of workers who are involuntarily on part-time schedules, and an unusually large concentration of workers experiencing long-duration unemployment spells. Similarly, the downward revision we made to the path for potential output was smaller than the downward revision to real GDP over the 2011–12 period, leaving the output gap by the end of 2012 at 3½ percent, about ½ percentage point wider than in the previous forecast. In the manufacturing sector, capacity utilization rises appreciably over the projection period, and unlike the broader measures of economic slack, it tightens a bit faster than in the previous forecast. (See the box "Capacity Utilization in the Manufacturing Sector" for further discussion.)

Compensation and Prices

Despite the slightly greater amount of labor market slack in this projection, we nudged up our forecast of hourly labor compensation in response to our projection of higher headline inflation. We now project that the Productivity and Costs measure of nonfarm hourly compensation will increase 2¼ percent in 2011 and 2¾ percent in 2012, a touch more in each year than we projected in the March Tealbook. We have made a similar upward adjustment to our forecast for the employment cost index over this period. The projected increases in compensation, combined with the downward revision to productivity growth this year, imply a larger increase in unit labor costs over the medium term than in the March Tealbook, though at an annual rate of about 1 percent, that increase remains quite modest.

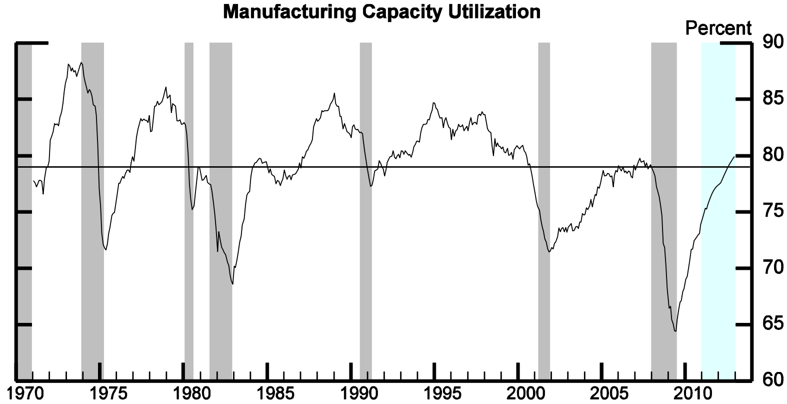
Prices for imported core goods (all goods excluding fuels, computers, and semiconductors) are estimated to have increased at an annual rate of 8¼ percent in the first quarter, reflecting the rise in commodity prices, elevated foreign inflation, and the depreciation of the dollar. We expect core import price inflation to slow to 5¾ percent in the current quarter and then to ease further to 1½ percent in 2012 as commodity prices level out, foreign inflation subsides, and dollar depreciation slows.

Capacity Utilization in the Manufacturing Sector

During the recovery, economic slack in the manufacturing sector has been narrowing more rapidly than it has for the economy as a whole, and this trend is expected to continue. Indeed, although the capacity utilization rate in manufacturing is currently well below its long-run average, it is projected to move a bit above that level by the end of the projection period (shown in the figure below). Capacity utilization is rising rapidly for two reasons: First, manufacturing production is rebounding more quickly than overall economic activity; second, manufacturing capacity is expanding only modestly—much more slowly, in particular, than our estimate of potential GDP.

Inferences about aggregate economic slack rely on a measure of potential, which typically is unobserved. In contrast, the Federal Reserve's measures of manufacturing capacity are principally derived from data on the reported productive capability of individual manufacturing plants.[1] Importantly, these data include information on the operating status of plants—active, idled, or closed—which enables the staff to remove from its estimates of aggregate capacity those plants that are permanently closed as well as idled plants that would be quite slow and costly to restart. For example, hot-idled steel furnaces are kept in capacity, while cold-idled furnaces are removed, reflecting the considerable time and expense associated with restarting them. Similarly, an auto assembly plant that is temporarily closed for a model-year changeover is kept in capacity while a plant that is closed for a lengthy period for major retooling is removed.

Manufacturing Capacity Utilization

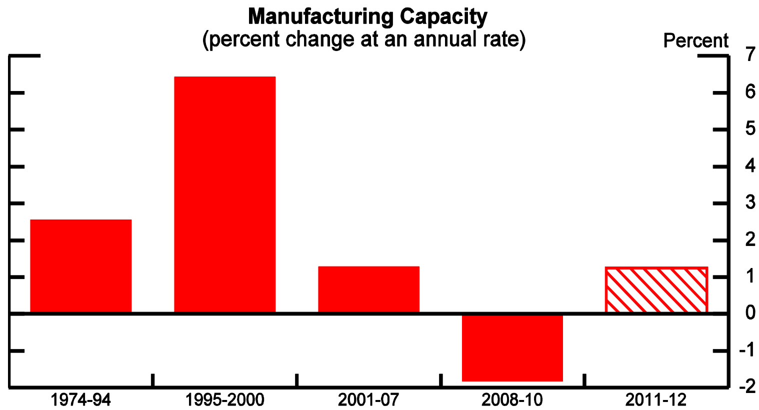


Note: Grey areas represent recessions defined by the National Bureau of Economic Research. The blue area represents the staff forecast. The horizontal line is the 1972-2010 average of 79.0 percent.
Source: Federal Reserve Board.

[1] The primary data source is the Census Bureau's Quarterly Survey of Plant Capacity, which is jointly funded by the Federal Reserve Board and the Department of Defense. In the survey, plant managers are explicitly asked about full, sustainable productive capability using only the equipment in place and ready to use, ignoring labor and material input constraints but considering normal downtime and shift patterns.

Following the 2001 recession, the recovery in the manufacturing sector was quite sluggish, as the rebound in domestic demand for manufactured goods was mainly satisfied by increases in imports. With output growth lethargic, producers expanded domestic capacity only slowly. Reflecting these trends, the factory operating rate had only just returned to its long-run average when the most recent recession began. When manufacturing production plunged a total of 20 percent during 2008 and the first half of 2009, utilization rates fell to postwar lows, prompting manufacturers to shutter unproductive capacity and sharply curtail already weak capital spending. Accordingly, manufacturing capacity contracted nearly 2 percent per year over the period from 2008 through 2010 (shown in the figure below); these large and sustained declines were unprecedented in the history of the series, which begins in 1948.

Looking ahead, indicators of future capital spending suggest that manufacturing capacity will expand at an annual rate of a little over 1 percent this year and next. However, these anticipated increases in capacity are smaller than the continued strong gains expected in manufacturing production. As a result, we project that economic slack in the manufacturing sector will continue to be taken up more quickly than in the rest of the economy. Rapidly tightening resource availability in the manufacturing sector could lead to production bottlenecks and shortages in some industries. While these developments could put upward pressure on the prices of some manufactured goods, we expect that these effects would be transitory and would not be widespread, in part because utilization is projected to be only a bit above its long-run average by the end of next year. Moreover, since manufacturing production accounts for only 11 percent of overall domestic value added and because significant labor market slack remains in the overall economy, we do not expect the projected rapid increases in capacity utilization to lead to appreciable upward pressure on aggregate inflation.



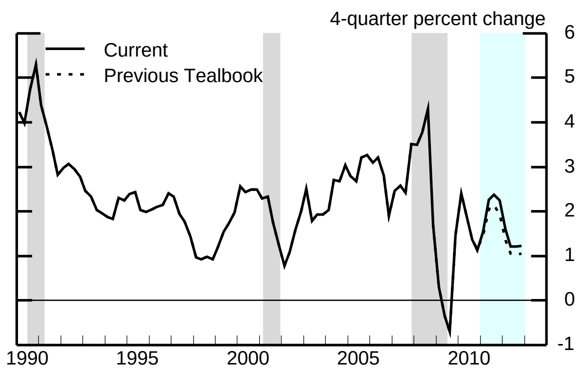
Note: Average annual percent changes over the four quarters of the years indicated. The change for 2011-12 is a staff forecast.
Source: Federal Reserve Board.

Inflation Projections
(Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.1	2.2	1.2
Previous Tealbook	1.5	1.2	1.9	1.1
Food and beverages	-1.6	1.3	4.3	1.4
Previous Tealbook	-1.6	1.3	3.4	1.3
Energy	2.7	5.9	12.9	-1.1
Previous Tealbook	2.7	5.9	11.0	-1.3
Excluding food and energy	1.7	.8	1.4	1.4
Previous Tealbook	1.7	.8	1.2	1.2
Prices of core goods imports[1]	-1.9	2.7	4.9	1.4
Previous Tealbook	-1.9	2.7	4.6	1.4

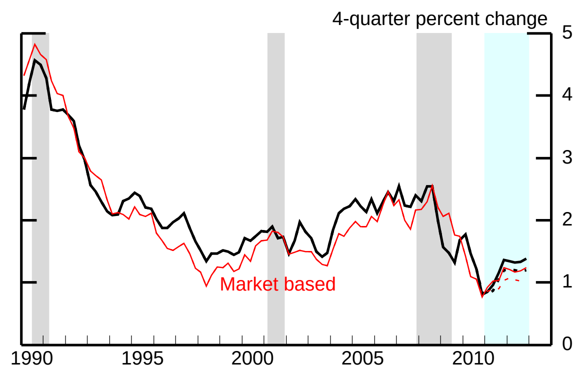
1. Core goods imports exclude computers, semiconductors, oil, and natural gas.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE Prices



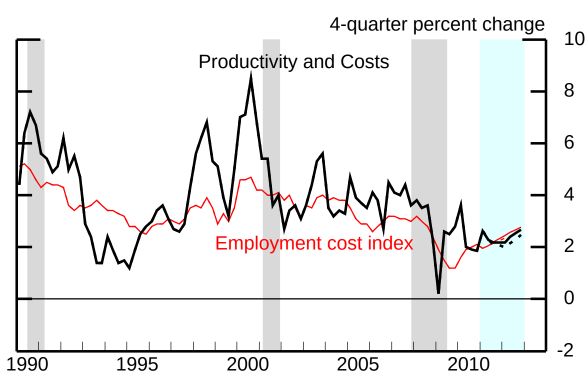
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



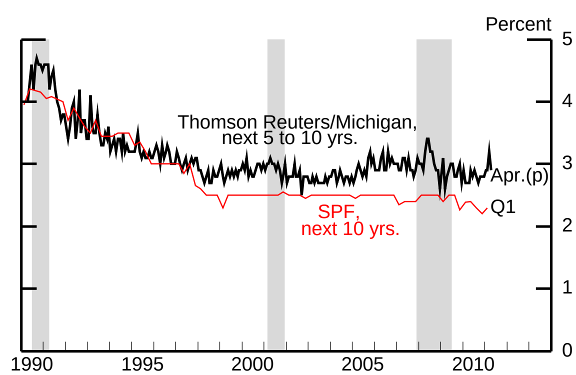
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Compensation per Hour



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

Long-Term Inflation Expectations



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

We project that core PCE prices will rise 1.4 percent both this year and next. This projection is 0.2 percentage point higher in both years than in the March Tealbook, reflecting incoming data on core inflation and import prices that have been a touch higher than we had anticipated as well as the indirect effect of some small upward surprises in energy prices; these influences outweigh the effects of slightly greater slack in resource utilization in this projection. As before, the flat contour of core inflation between this year and next reflects offsetting influences: With inflation expectations projected to remain stable, the anticipated narrowing of the unemployment gap implies a reduction in the downward pressure on inflation from resource slack, but we also expect the impetus to core inflation from higher import and energy prices to diminish as we move into next year. Meanwhile, headline PCE price inflation is projected to step down from 2¼ percent in 2011 to 1¼ percent in 2012, reflecting the assumed flattening of prices for crude oil and other raw commodities and the associated deceleration in energy and food prices at the consumer level.

THE LONG-TERM OUTLOOK

We have extended the staff forecast to 2015 using the FRB/US model and staff assessments of long-run supply-side conditions, fiscal policy, and other factors. The contour of the long-run outlook depends on the following key assumptions:

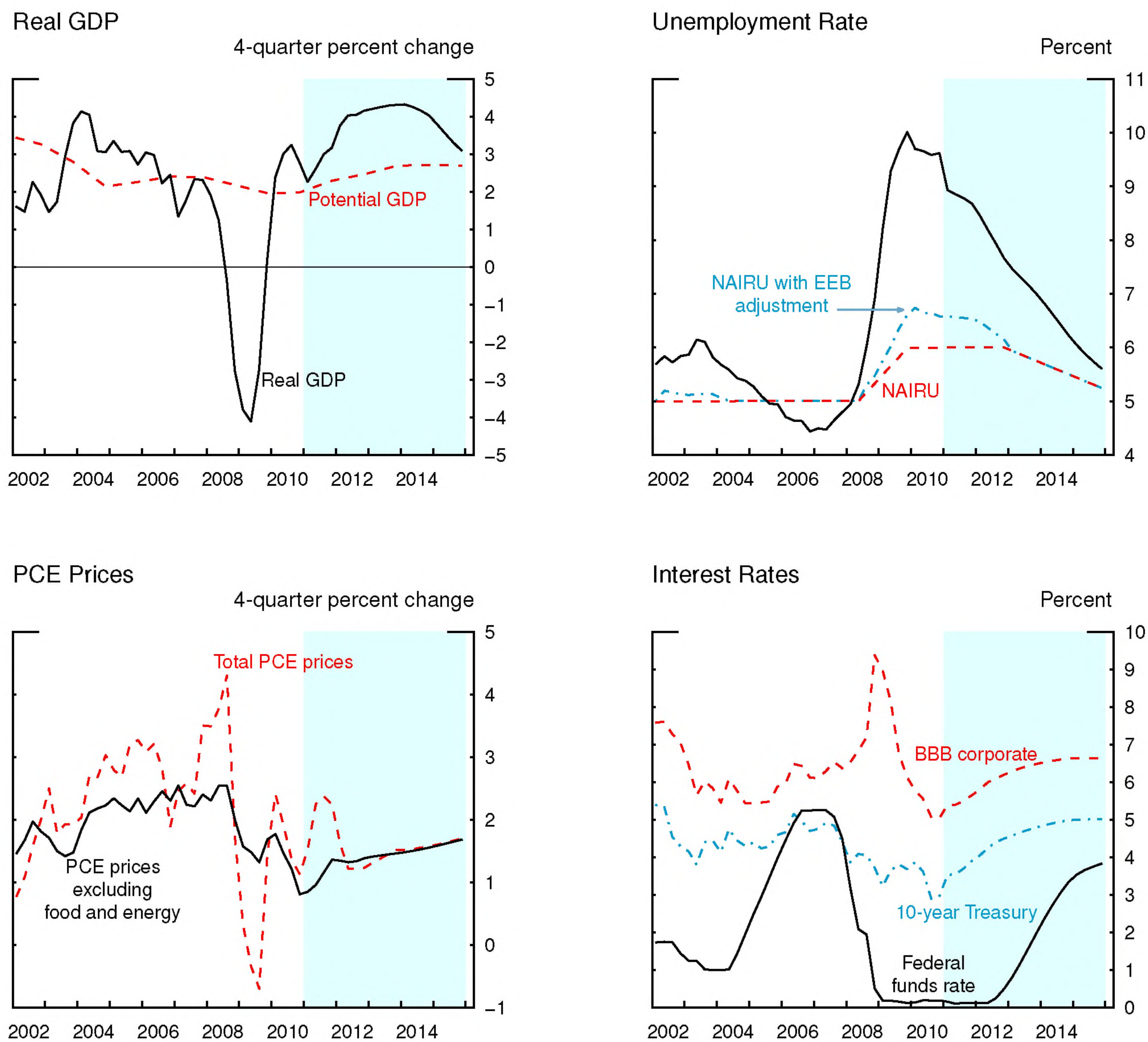
- Monetary policy aims to stabilize PCE inflation at 2 percent in the long run, consistent with the majority of longer-term inflation projections provided by FOMC participants at the January meeting.
- The Federal Reserve’s holdings of securities follow the baseline portfolio projections reported in Book B. The projected longer-run decline in the System’s holdings is forecast to contribute about 20 basis points to the rise in the 10-year Treasury yield over the period from 2013 to 2015.
- Beyond 2012, risk premiums on corporate equities decline gradually to normal levels and banks ease their lending standards somewhat further.
- The federal government budget deficit narrows to 4½ percent of GDP by the end of 2015. This improvement reflects the effects of the economic recovery on tax receipts and transfer payments as well as further policy actions after 2012 aimed at reducing the deficit.

The Long-Term Outlook

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

Item	2010	2011	2012	2013	2014	2015
Real GDP	2.8	3.2	4.2	4.3	4.0	3.1
Civilian unemployment rate[1]	9.6	8.7	7.7	7.0	6.2	5.6
PCE prices, total	1.1	2.2	1.2	1.5	1.6	1.7
Core PCE prices	.8	1.4	1.4	1.5	1.6	1.7
Federal funds rate[1]	.2	.1	.5	2.0	3.3	3.8
10-year Treasury yield[1]	3.0	3.9	4.5	4.8	5.0	5.0

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



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

- The real foreign exchange value of the dollar is assumed to depreciate ½ percent per year from 2013 through 2015. The price of WTI crude oil is roughly flat at about $105 per barrel during the extension period, consistent with futures prices. Foreign real GDP expands, on average, 3¼ percent per year from 2013 through 2015, a bit above its trend rate.

- The NAIRU declines from 6 percent in late 2012 to 5¼ percent by 2015 as the functioning of the labor market improves. Potential GDP expands 2¾ percent per year.

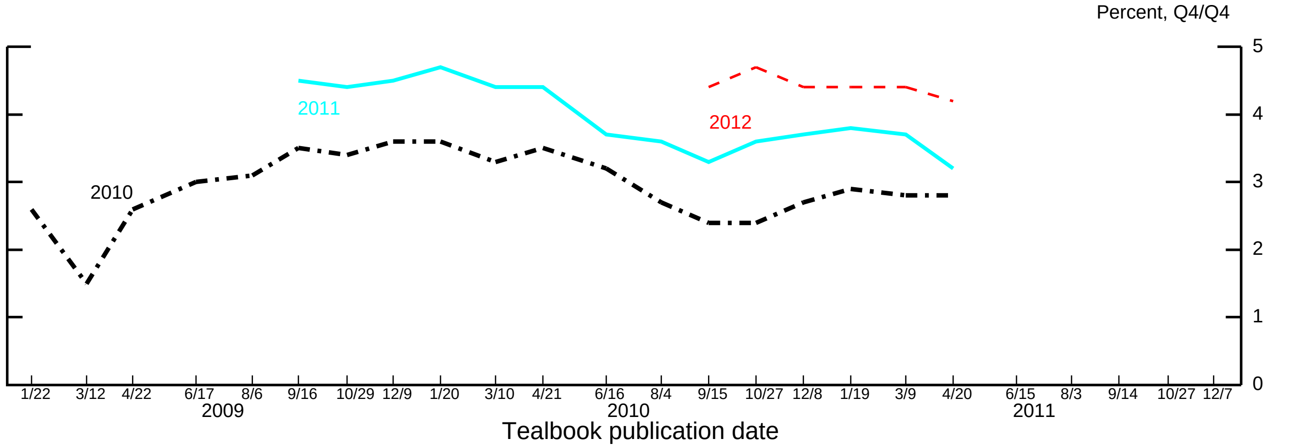
The economy enters 2013 with output still well below its potential, the unemployment rate well above the projected NAIRU, and inflation below its assumed objective. In the long-run forecast, improving confidence, diminishing uncertainty, and supportive financial conditions eventually enable the level of aggregate demand to catch up with aggregate supply. The real federal funds rate moves up only gradually until 2015, when it finally reaches its historical average value over the past 40 years of 2¼ percent.[5] In this environment, real GDP rises at an average annual rate of 4¼ percent in 2013 and 2014, considerably faster than its potential pace; as a result, unemployment declines appreciably and inflation edges up. By 2015, with improvements in confidence and financial conditions largely complete, and with the nominal federal funds rate climbing further to 3¾ percent, gains in real GDP are moderate. Nevertheless, overall economic growth remains robust enough relative to potential to bring the unemployment rate close to the NAIRU by late 2015 while core inflation rises to 1¾ percent.

[5] In the long-run outlook, the federal funds rate follows the prescriptions of the outcome-based rule, which is described in the appendix on policy rules in Book B.

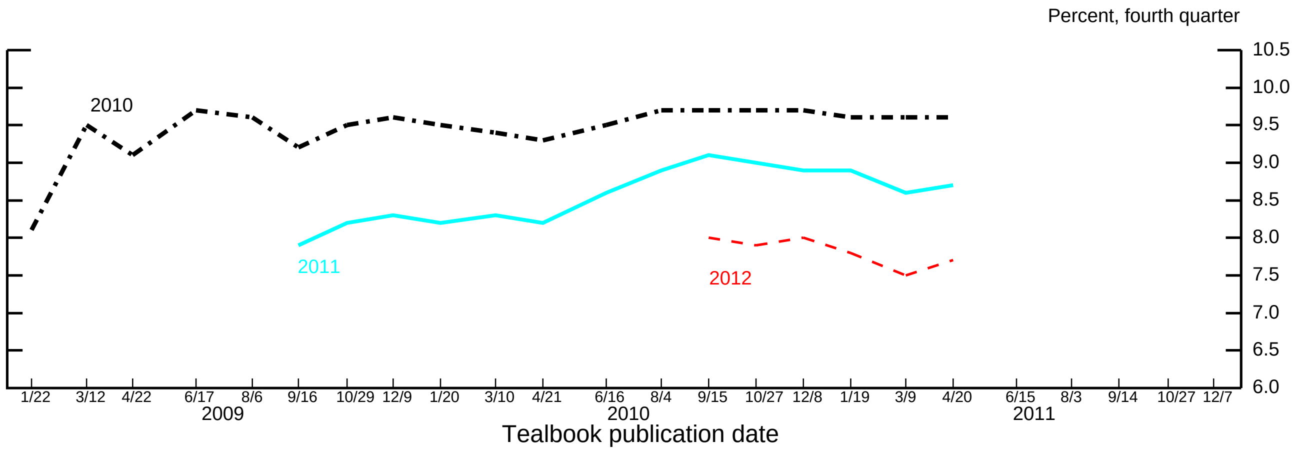
Domestic Econ Devel & Outlook

Evolution of the Staff Forecast

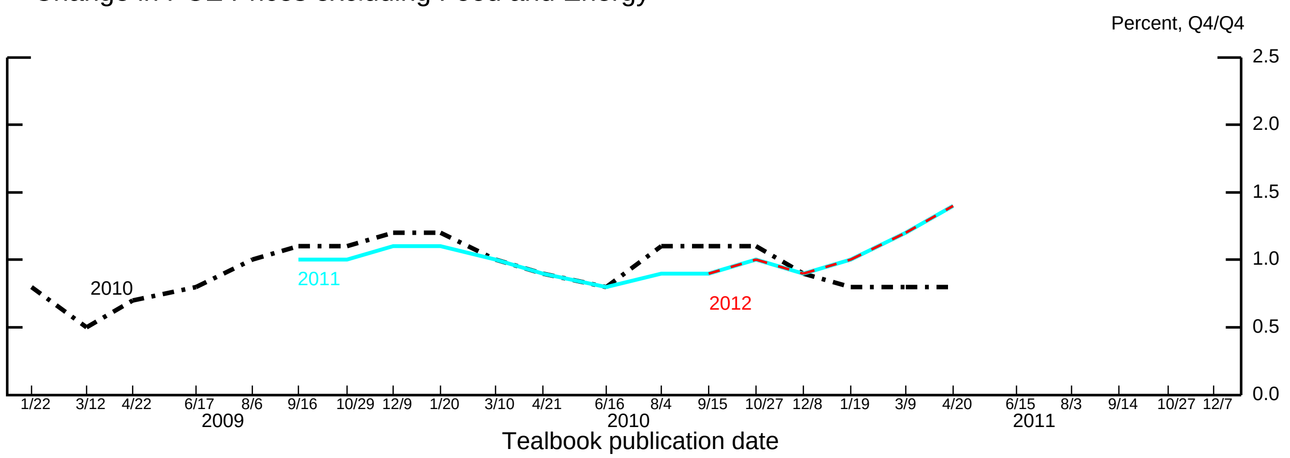
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy*



*Because the core PCE price index was redefined as part of the comprehensive revisions to the NIPA, projections prior to the August 2009 Tealbook are not strictly comparable with more recent projections.

International Economic Developments and Outlook

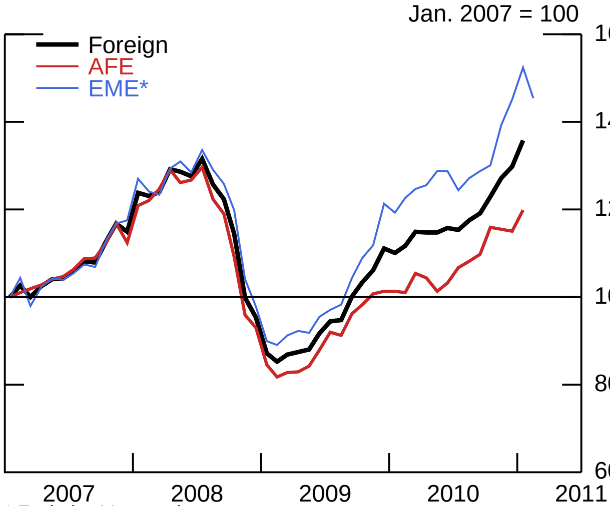
Indicators suggest that the recovery strengthened in the first quarter in both the advanced foreign economies (AFEs) and the emerging market economies (EMEs), but recent events have clouded the near-term outlook. We estimate that foreign economic growth averaged 4 percent in the first quarter, about ½ percentage point more than in our March forecast. However, the disaster in Japan has driven a downward revision to our current-quarter forecast of about ½ percentage point. This revision includes a substantial markdown to Japanese GDP, which is now expected to contract in the current quarter. We also have made small reductions to the forecast for Japan's trading partners, as their exports to Japan should weaken and some supply chains may be disrupted. As the Japanese economy recovers and production constraints ease, aggregate foreign growth should rebound in the second half of the year. (See the box "Economic Effects of the Earthquake in Japan.")

Foreign GDP is still expected to increase at an average rate of about 3½ percent over the rest of the forecast period, with growth of nearly 5 percent in the EMEs and almost 2½ percent in the AFEs. Downside risks to this outlook include a more prolonged effect of the Japanese disaster, higher oil prices due to intensified unrest in the Middle East and North Africa, and a more adverse effect of the softer U.S. economy. In addition, the recent rise in credit spreads for some peripheral European countries amid concerns about a restructuring of Greek debt suggests that associated risks have not dissipated. However, markets appear to be increasingly differentiating Spain and Italy from the more vulnerable economies, and strong recent indicators suggest that there may be some upside risk to our forecast for the euro area as a whole.

Foreign inflation is expected to ease in the current quarter to around 3¼ percent from about 4½ percent in the previous quarter, largely reflecting a recent slowing in food price inflation. Inflation is expected to average a little less than 2½ percent over the rest of the forecast period as commodity prices flatten out. China has continued to tighten monetary policy to contain inflation, and policy rates also have risen in a number of other EMEs. Although monetary policy remains generally accommodative in the AFEs, the European Central Bank (ECB) began what is expected to be a series of gradual rate increases on April 7, and the Bank of England (BOE) and the Bank of Canada (BOC) are both expected to raise rates later this year.

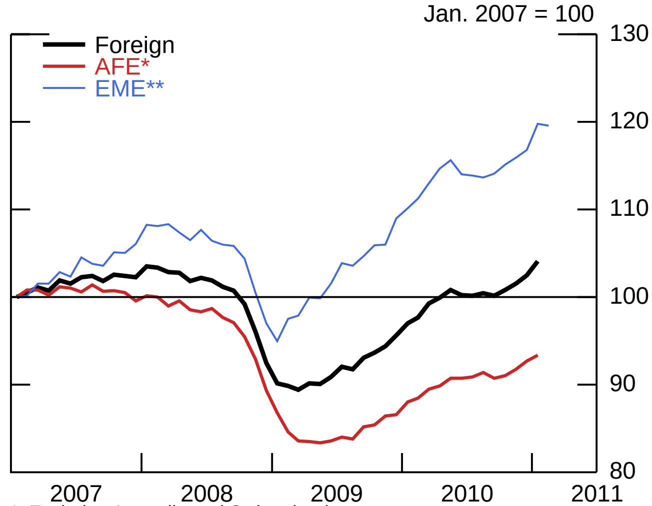
Recent Foreign Indicators

Nominal Exports



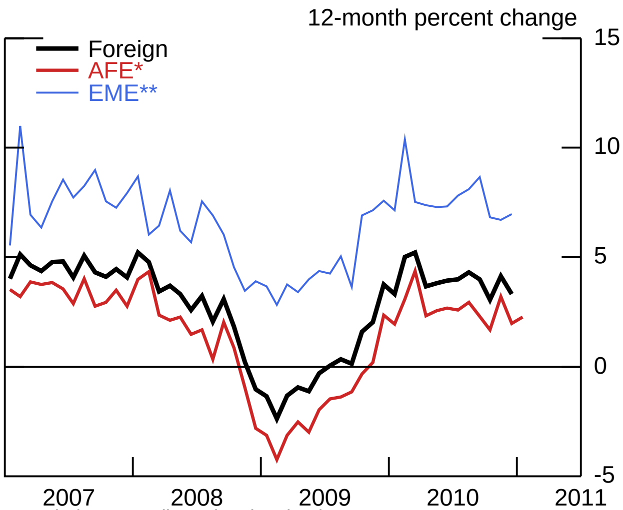
* Excludes Venezuela.

Industrial Production



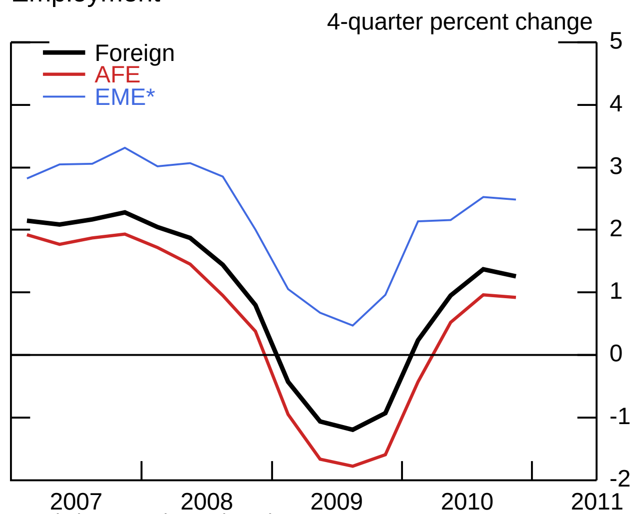
* Excludes Australia and Switzerland.
** Excludes Colombia, Hong Kong, Philippines, and Venezuela.

Retail Sales



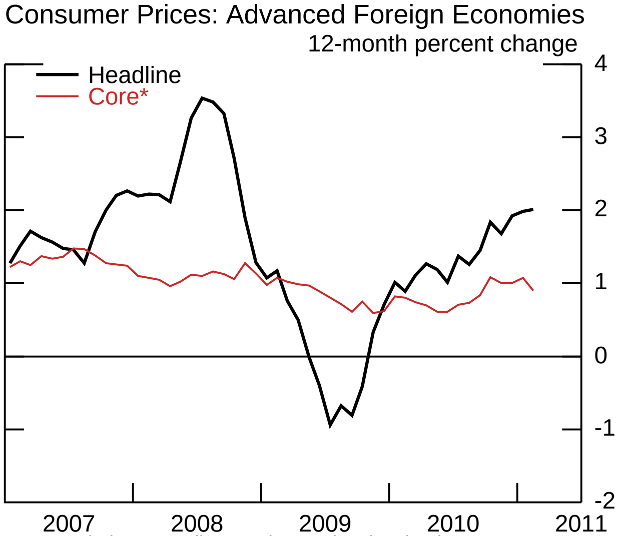
* Excludes Australia and Switzerland.
** Includes Brazil, China, Israel, Korea, Singapore, and Taiwan.

Employment



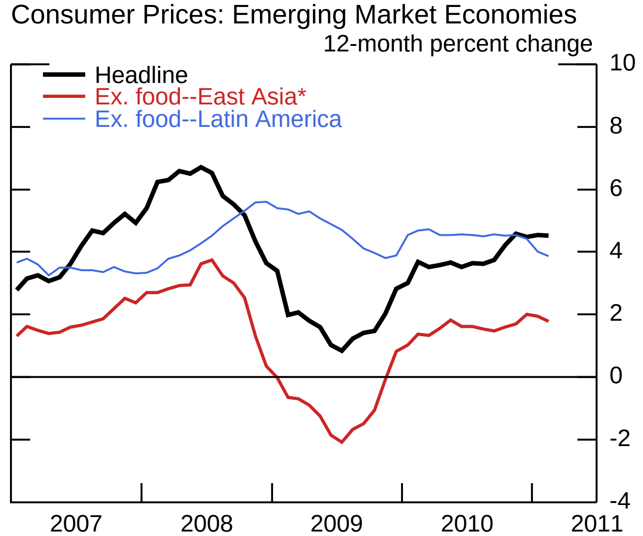
* Excludes Argentina and Mexico.

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



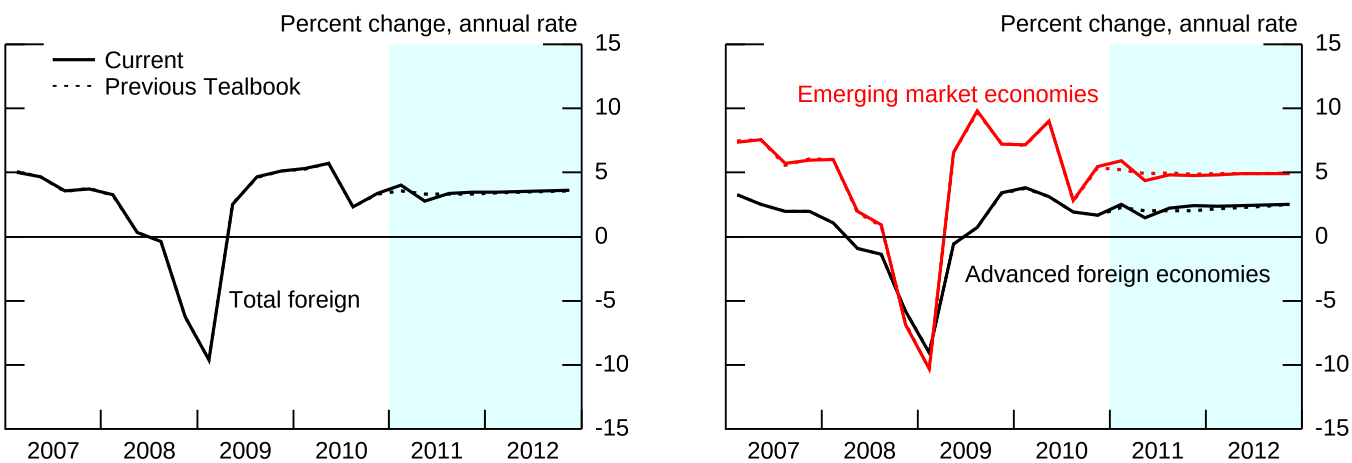
The Foreign Outlook

(Percent change, annual rate)

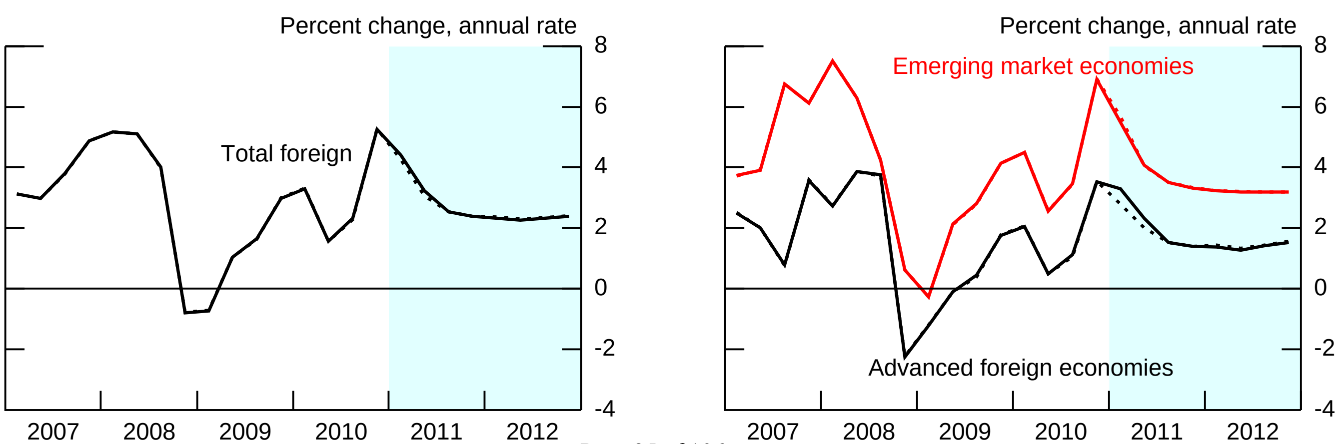
	2010 H1	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 H2	2012
Real GDP							
Total foreign	5.5	2.3	3.4	4.0	2.8	3.4	3.5
Previous Tealbook	5.5	2.3	3.3	3.6	3.3	3.3	3.5
Advanced foreign economies	3.5	1.9	1.7	2.5	1.5	2.3	2.4
Previous Tealbook	3.5	1.9	1.7	2.3	2.0	2.0	2.3
Emerging market economies	8.1	2.8	5.5	5.9	4.4	4.8	4.9
Previous Tealbook	8.1	2.8	5.4	5.2	4.9	4.9	4.9
Consumer Prices							
Total foreign	2.4	2.3	5.3	4.4	3.2	2.5	2.3
Previous Tealbook	2.4	2.3	5.3	4.3	3.1	2.5	2.3
Advanced foreign economies	1.3	1.1	3.5	3.3	2.3	1.5	1.4
Previous Tealbook	1.3	1.1	3.6	2.8	2.0	1.5	1.4
Emerging market economies	3.5	3.5	6.9	5.5	4.1	3.4	3.2
Previous Tealbook	3.5	3.4	6.9	5.7	4.0	3.4	3.2

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

Real GDP



Consumer Prices



Economic Effects of the Earthquake in Japan

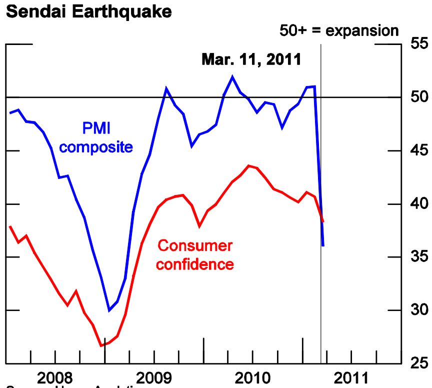
The earthquake and subsequent tsunami that hit Japan on March 11 are expected to have a large near-term effect on the Japanese economy and noticeable but smaller effects on other foreign economies, primarily in Asia. Here we discuss our estimates of the economic effect on Japan, review spillover channels to other economies, and identify key risks.

The disaster is reported to have left nearly 30,000 people dead or missing, and damage to physical capital is estimated at 3 to 5 percent of Japan's GDP. The areas directly hit by the earthquake and tsunami account for only 4 percent of Japanese output. However, damage to infrastructure and power plants goes well beyond the troubling nuclear accident at the Fukushima Daiichi plant. National electricity production capacity is currently down 10 to 15 percent, and the resulting power shortfall is importantly affecting the region around Tokyo, which is responsible for about 40 percent of the country's GDP. Rolling blackouts and damage to transportation and manufacturing facilities have kept plants offline and severed supply chains.

The limited data we have received since the earthquake suggest a significant near-term decline in Japanese output (see lower-left figure). The composite PMI for March posted the largest monthly decline in the survey's history, even greater than those immediately after the September 11 terrorist attacks and the 2008 collapse of Lehman Brothers. An early read on consumer confidence shows it also falling in March.

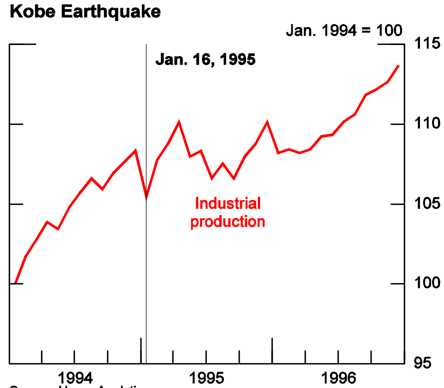
Our views have also been informed by Japan's experience following the last major earthquake, near Kobe in January 1995. In 1995, damage to the capital stock was substantial, but the decline in economic activity was limited and short-lived (see lower-right figure). We think that the March 11 earthquake will have a larger negative effect: The loss of capital is estimated to be roughly twice that of Kobe, and disruption to electricity generation capacity is expected to affect Tokyo through the summer.

Sendai Earthquake



Source: Haver Analytics.

Kobe Earthquake



Source: Haver Analytics.

Based on incoming data and the historical experience, we project flat GDP growth in the first quarter and a 3½ percent decline (annual rate) this quarter, down 1¾ percentage points and 5 percentage points, respectively, from the last Tealbook. The economy should start recovering rapidly in the third quarter, as the nuclear situation is assumed to stabilize, consumer and business confidence strengthen, rebuilding efforts begin, and macroeconomic policy is supportive. By the end of 2012, the level of GDP is just a touch lower than that for the March Tealbook. Overall, our projection is close to the consensus view among professional forecasters, although the range of forecasts is particularly wide.

Dislocations in Japan resulting from the earthquake are likely to affect foreign economies through three main channels: Diminished Japanese demand for other countries' exports, lower foreign direct investment and portfolio flows from Japan, and disruptions to cross-country supply chains. We expect the first two channels to be fairly minor, given that Japan accounts for a relatively small share of trade and investment inflows for most countries, especially outside of Asia. Disruptions to supply chains represent the main concern at present. Some Asian producers, particularly in the high-tech sector, are highly dependent on intermediate inputs imported from Japan. However, although production in certain firms and sectors is being disrupted, the aggregate results will likely be limited. Many of the Japanese plants that shut down in the aftermath of the earthquake are already back on line, though not yet at full capacity, and there is scope for resourcing to alternative suppliers. All told, we expect the earthquake to shave about ½ percentage point from GDP growth in emerging Asia in the second quarter, with this negative effect unwinding in the second half of 2011 as normalization in activity and Japanese reconstruction increase demand for industrial supplies and capital goods. The effect on GDP growth in the advanced economies is likely to be even smaller, with modest disruptions reported to production of motor vehicles in the United States, Europe, and Canada because of shortages of auto parts from Japan.[1]

That said, considerable risks surround our estimates of the earthquake's effects on Japan as well as its trading partners. In particular, the situation at the Fukushima Daiichi plant has yet to stabilize, and recent reports are worrisome. Moreover, the country continues to experience sizable aftershocks, slowing recovery efforts and raising the possibility of further damage. These concerns could weigh on consumer and business confidence, and hence economic activity, more heavily and for longer than we are currently anticipating. Finally, the disruption to supply chains, both within Japan and globally, could be larger and more sustained than in our baseline, especially if the bounceback in production is not as rapid as projected.

[1] The Domestic Economic Developments and Outlook section discusses the effects of the earthquake on the U.S. economy.

Advanced Foreign Economies

First-quarter data for the AFEs were generally stronger than we had expected, prompting us to revise up our GDP growth estimate by ¼ percentage point to 2½ percent. The economic effect of the massive earthquake and tsunami will be most apparent in the current quarter, most notably for the Japanese economy, although there should also be some spillover to the other AFEs. These effects are expected to be reversed in the second half of the year as Japanese production rebounds and the reconstruction effort gathers speed. For the AFEs as a whole, we expect real GDP growth of 1½ percent in the current quarter, followed by increases averaging nearly 2½ percent over the rest of the forecast period. Relative to the March Tealbook, our forecast for the AFEs is down ½ percentage point in the current quarter but is up ¼ percentage point in the second half of this year, largely reflecting the pattern of Japanese activity.

Inflation was 3¼ percent on average in the AFEs in the first quarter, ½ percentage point higher than projected in the March Tealbook. However, we continue to expect that inflation will drop back to about 1½ percent over the forecast period, as commodity prices stabilize and monetary policy outside Japan tightens. Core inflation remains contained, especially excluding hikes in value-added taxes and other duties. Subdued underlying inflation and continuing resource slack underpin our assumption that central banks will remove monetary stimulus only gradually.

Japan

Japan's economy appeared to be bouncing back from its fourth-quarter lull before being struck by the massive earthquake and tsunami on March 11. The disaster sharply curtailed economic activity by damaging production facilities, disrupting supply chains, and reducing electricity generation capacity. In the near term, we expect a rapid destocking of inventories and sharp declines in exports and private investment. In addition, loss of wealth and confidence is likely to weigh on household spending. Accordingly, we estimate that real GDP was flat in the first quarter and we project a 3½ percent decline in the second. Economic activity should rebound in the second half of the year as electricity is restored, plants resume normal operations, reconstruction efforts intensify, and exports and inventories bounce back. Over time, private investment also should pick up, but private consumption will likely remain cautious for an extended period. All told, we forecast real GDP to rise about ¾ percent in 2011, half the projected gain in the March Tealbook, and then to increase at a 2¾ percent pace in 2012. We continue to expect prices to decline at a ½ percent pace over this year and next.

We have assumed that the Japanese government's reconstruction efforts will boost real GDP growth ½ percentage point both this year and next. The disaster preempted Japan's plans to reduce its fiscal deficit, which we now expect to edge up to more than 8 percent of GDP by 2012. In addition, the Bank of Japan (BOJ) has taken a series of steps to support the financial system and economy. It quickly injected record levels of liquidity into money markets, doubled the size of its asset purchase program to ¥10 trillion (about $120 billion, or 2 percent of GDP), and, more recently, unveiled a ¥1 trillion program to foster lending in the disaster-hit areas. Going forward, we anticipate the BOJ to further increase its asset purchase program to ¥15 trillion.

Euro Area

Recent indicators for the euro area point to an upward shift in economic growth, to 2¼ percent, in the first quarter. Industrial production expanded through February, with solid gains recorded in France and Germany. Business sentiment has remained upbeat, and the composite purchasing managers index (PMI) stands substantially higher than its fourth-quarter average. However, private consumption indicators—retail sales, consumer confidence measures, and new car registrations—have been weak. Moreover, divergences in economic performance across euro-area countries remain large, with strong cyclical rebounds in Germany and, to a lesser extent, France, but a further deterioration in economic conditions in Greece and Portugal. We expect euro-area GDP growth to slow in the current quarter to about 1½ percent and to stay in that range for the remainder of the year, restrained by high energy prices, monetary and fiscal policy tightening, and a stronger euro. We anticipate that growth will pick up gradually to 2½ percent by the end of 2012 as financial stresses continue to moderate and household spending strengthens.

Euro-area consumer prices rose 2.7 percent in March from their year-earlier level, the fourth consecutive monthly figure exceeding the ECB's 2 percent inflation target ceiling. Inflation is expected to ease gradually to 1¾ percent in 2012 as commodity prices level out and slack persists. At its April 7 meeting, the ECB raised its benchmark policy rate by 25 basis points to 1¼ percent, the first rate hike since June 2008, and further stressed its concerns about upside risks to the inflation outlook. We now expect the ECB to raise its policy rate to 2¼ percent by the end of 2012, ¼ percentage point more than assumed in the March Tealbook.

At their meetings in March, European Union (EU) leaders made some progress toward establishing stronger crisis resolution frameworks to cope with the sovereign debt crisis. They pledged to increase the effective lending capacity of the European Financial Stability Facility to €440 billion and agreed upon the final terms of its permanent successor, the European Stability Mechanism, although both of these agreements will require approval by individual countries. In addition, they eased the terms of existing rescue loans to Greece and persuaded the Irish government to table its proposal to impose losses on bank creditors. In early April, the Portuguese government officially requested an EU–IMF assistance package, which is expected to be roughly €60 billion to €100 billion. Despite pressures on Portugal and increasing discussion about the possibility of a Greek debt restructuring, markets remained less concerned about the prospects for Spain and Italy. Thus, we continue to believe that, even if Greece eventually restructures its debt, there will not be significant spillovers to large euro-area countries.

Canada

We estimate that real GDP expanded 3¼ percent in the first quarter, up ¾ percentage point from the forecast in the March Tealbook. Production rose across a wide range of industries in January and manufacturing orders perked up, mainly reflecting strong domestic demand. Production at several automobile plants has been disrupted by a shortage of parts in the wake of the Japanese earthquake, but the effect on overall activity should be small. We look for GDP growth to step down to around 2½ percent over the remainder of the forecast period, as consumption growth is restrained by high household debt, although investment should remain strong, especially in commodity-related sectors. Headline inflation leaped to 3.3 percent in March on a 12-month basis, a noticeably higher figure than we had anticipated. However, we continue to expect that inflation will fall back close to the BOC's 2 percent target by early next year as the effects of tax hikes and sharp increases in energy prices drop out. We now expect the BOC to gradually raise its target for the overnight rate from 1 percent at present to 2¼ percent by the end of the forecast period, ¼ percentage point more than in the March Tealbook.

United Kingdom

We marked up our estimate of first-quarter U.K. GDP growth nearly ½ percentage point to about 3 percent in response to strong employment gains and a composite PMI consistent with continued solid expansion. We also expect some payback from the weather-related contraction in the fourth quarter. However, weakening consumer confidence and production disruptions from the Japanese earthquake led us to shave ¼ percentage point from GDP growth in the current quarter. Growth is expected to average a little less than 2½ percent over the rest of the forecast period, as strong foreign demand spurred by a weak sterling is offset by sharp fiscal consolidation. Headline inflation eased to 4 percent in March but should remain high for most of this year before dropping rapidly toward the 2 percent target at the beginning of 2012, as the effect of tax increases drops out and energy price hikes wane. We continue to project that the BOE will begin raising its policy rate in the third quarter of this year, and we expect the rate to reach 1.75 percent by the end of the forecast period.

EMERGING MARKET ECONOMIES

We estimate that aggregate real GDP growth in the EMEs remained robust in the first quarter, averaging nearly 6 percent, ¾ percentage point above our projection in the March Tealbook. On the whole, recent data on industrial production and exports remain upbeat. In the current quarter, we anticipate that growth will moderate to 4½ percent, ½ percentage point below our previous forecast, restrained by the slower growth projected for the United States as well as the adverse effects of the earthquake in Japan. GDP growth is expected to average a little less than 5 percent for the remainder of the forecast period, little changed from the previous projection.

Inflation in the EMEs appears to have eased to an annual rate of 5½ percent in the first quarter from nearly 7 percent in the fourth quarter, as pressures from food prices have lessened. With commodity prices projected to level out, inflation in the EMEs should moderate further, to about 3¼ percent by next year.

In response to the recent inflation readings as well as solid economic growth, a number of EME central banks have tightened monetary policy further. We expect that central banks will continue to tighten, albeit at a restrained pace amid continued concerns about capital inflows, while allowing some moderate currency appreciation. The latest data on flows to emerging market dedicated funds suggest that capital inflows into EMEs have picked up again in recent weeks after recording outflows earlier this year. Authorities in Brazil, Indonesia, and Korea have announced new capital control measures since the previous Tealbook. (See the box “Capital Controls in Emerging Market Economies.”)

China

Chinese real GDP increased at a rate of nearly 9 percent in the first quarter, supported by strong fixed asset investment, down a little from the double-digit pace in the second half of last year. Robust domestic demand and rising commodity prices substantially boosted first-quarter imports, contributing to a quarterly trade deficit on a nonseasonally adjusted basis, the first such deficit since 2004. We view this development as temporary, and we still expect China to show substantial trade and current account surpluses both this year and next. We marked down GDP growth in the second quarter nearly ½ percentage point, owing to disruptions to supply chains and, to a lesser extent, decreased demand from Japan for Chinese exports. However, the March PMI edged up after falling in the previous three months, and we continue to project that real GDP growth in China will be around 8½ percent through 2012.

Inflation came in at an annual rate of about 4½ percent in the first quarter, down sharply from 9 percent in the previous quarter, as prices of the housing component slowed, and authorities adjusted the weights of the consumption basket. (Effective January 2011, the new basket reflects a smaller weight on food and a larger weight on housing.) Chinese inflation is projected to moderate further to about 2¾ percent by the beginning of next year as food price inflation comes off the boil. Chinese authorities have continued their gradual tightening of monetary policy, raising the one-year lending and deposit rates ¼ percentage point and banks’ reserve requirement ratios 1 percentage point since the March Tealbook. Over this period, the authorities also have let the renminbi appreciate about ½ percent against the dollar. The renminbi has now appreciated about 4½ percent against the dollar since Chinese authorities announced greater flexibility of the exchange rate last June, although, on a real trade-weighted basis, it has depreciated only about 2½ percent. We continue to expect the renminbi to appreciate gradually both against the dollar and on a trade-weighted basis over the forecast period.

Other Emerging Asia

Elsewhere in emerging Asia, we estimate that economic activity accelerated in the first quarter to post a gain of about 7¼ percent, led by an outsized increase in GDP in Singapore. On the whole, industrial production and PMIs have remained upbeat in recent months, and exports were strong in a number of economies. We project that economic growth in the region will decline to about 3½ percent in the second quarter, before picking up again to about 4¾ percent for the remainder of the forecast period. We have revised down our projection for the current quarter on the negative effects of the crisis in Japan and the softness in the U.S. economy, with larger revisions for economies with greater reliance on supply chains and final demand from Japan (Hong Kong, Singapore, Taiwan, and Thailand). For the second half of 2011, the outlook is revised up a touch as the positive effects of a Japanese recovery more than offset the negative effect from a weaker U.S. outlook.

We estimate that quarterly inflation rose to an annual rate of about 7½ percent in the first quarter, mainly as a result of higher food prices. However, monthly data suggest that inflation already has begun to recede, as food price pressures have dissipated across most of the region. We expect inflation to moderate further to about 3 percent by the end of this year, partly in response to monetary policy tightening across the region, including in India, the Philippines, Singapore, Taiwan, and Thailand. We also continue to expect that central banks in the region will allow for some moderate currency appreciation in line with projected movements in the renminbi.

Latin America

We now estimate that real GDP growth in Mexico stepped down to 4¼ percent in the first quarter, about ¼ percentage point lower than in the March Tealbook, reflecting recent softer readings on industrial production. We expect Mexican growth to moderate further, to about 3½ percent, over the rest of the year, about ½ percentage point below the previous projection, in response to a weaker forecast for U.S. manufacturing activity. Real GDP growth in South America is estimated to have picked up to about 4¾ percent in the first quarter, a little above our previous projection, but is still expected to fall gradually to just under 4 percent by next year as monetary policy tightens across the region. In Brazil, strong recent data on industrial production suggest that real GDP accelerated in the first quarter. Brazilian consumer credit growth remained robust despite ongoing attempts by the central bank to curtail the expansion, and exports continued to

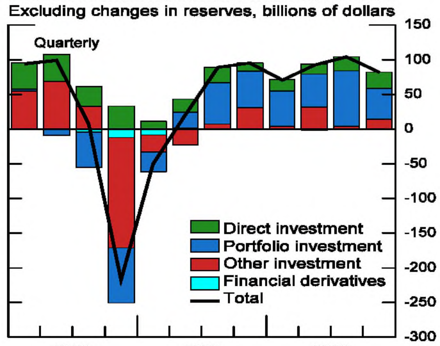
Capital Controls in Emerging Market Economies

Private capital inflows to the emerging market economies (EMEs) have surged since mid-2009 and have also been quite volatile (see figures below), putting upward pressure on currencies and asset prices in recipient countries. In response, a number of governments have implemented measures to limit capital inflows and affect their composition. Here we provide an overview of recent capital control measures and review the resurgent debate regarding their potential effectiveness.

The capital control measures adopted over the past few years are summarized in the table on the facing page. Some measures target the overall volume of portfolio and bank inflows to curtail currency appreciation and overheating pressures. Examples include Brazil's tax on foreign investments in local securities, and taxes in South Korea and Thailand on foreign investors' interest income and capital gains from holding local government bonds.[1] Other types of capital controls more specifically target the composition of capital inflows in an attempt to direct them toward longer-term investments. For example, Indonesia will require investors to hold their short-term central bank bills for at least six months starting in May. Similarly, Brazil has imposed a tax on the short-term external borrowing of banks and firms to lengthen the maturity profile of these liabilities. South Korea and Taiwan have set quantitative limits on banks' exposure to foreign exchange derivatives in the forward market, in part seeking to reduce the short-term external debt that banks would use to hedge these derivatives.

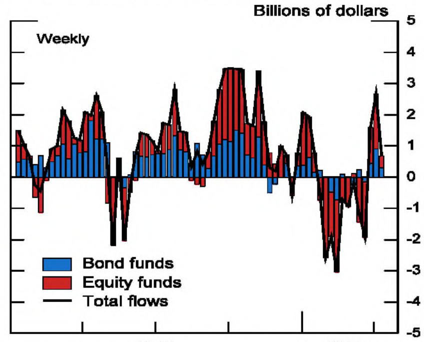
Some of the capital controls recently implemented likely will be more successful in achieving their objectives than others. Past studies do not find significant effects of capital controls on the aggregate volume of inflows or on exchange rates beyond the short run.[2] Possibly, these weak results are due to loopholes and evasion that erode the power of controls over time. However, it should also be recognized that gauging the

EME Net International Financial Flows*
Excluding changes in reserves, billions of dollars



*Countries included are Argentina, Brazil, Chile, Czech Republic, Hungary, Indonesia, India, South Korea, Malaysia, Mexico, Philippines, Poland, Russia, Singapore, Taiwan, Thailand, Turkey, and Ukraine.

Investment Flows to EME Dedicated Funds



Source: Emerging Portfolio Fund Research (EPFR).

---

[1] For Thailand, the measure removes the preferential treatment of foreign investors, since domestic investors were already subject to the tax.

[2] For a survey on the effectiveness of capital controls prior to 2009, see Johnathan Ostry, Atish R. Ghosh, Karl Habermeier, Marcos Chamon, Mahvash S. Qureshi, and Dennis B.S. Reinhardt (2010), "Capital Inflows: The Role of Controls," International Monetary Fund Staff Position Note 10/04 (Washington: IMF).

effect of controls on inflows is difficult, particularly as controls are more likely to be imposed when capital flows are stronger. There is greater evidence that capital controls alter the composition of inflows. Studies find that controls implemented by Chile and Colombia during the 1990s were successful in tilting the composition of inflows toward investments with longer maturities.[3] Systematic empirical studies on capital controls implemented since 2009 have not yet been conducted, and it is too early to judge the effectiveness of the recent measures.

Until recently, the weight of opinion in the international official community was against the use of capital controls, arguing that the longer-term costs of the distortions they create exceed any short-term benefits they might offer in stabilizing domestic financial conditions. However, the academic and policy literature has recently become more open to capital controls, partly reflecting a reassessment of the extent to which sudden surges in inflows can complicate macroeconomic management and create financial risks. Recent publications by the International Monetary Fund (IMF), for example, support the use of controls under certain circumstances. These include cases in which the currency is not undervalued, the level of reserves is already more than adequate, and the economy is in danger of overheating despite significant macroeconomic policy steps.[4] However, the IMF work does not encourage the indiscriminate use of controls, particularly given the difficulty in determining if these conditions are satisfied.

All told, capital controls may well be an appropriate part of a toolkit to address the policy challenges currently facing some EMEs. But at the same time, the longer-term benefits of free capital markets as well as the costs of capital controls—for example, distortions of market signals and incentives for evasion—should not be forgotten. In particular, capital controls should not be viewed as substitutes for needed policy adjustments. Some EMEs need greater exchange rate flexibility to address the challenges posed by capital inflows on a longer-term basis. Other EMEs could address the problems of overheating and currency appreciation by changing the mix of policy toward fiscal tightening before turning to capital controls.

Overview of Capital Controls Implemented in EMEs since 2009

Measures targeting the volume of flows		Measures targeting the composition of flows		
Tax on inflows	Required reserves on FX liabilities	Restrictions by asset type or maturity	Tax on short-term external borrowing	Quantitative limits on FX exposure
Brazil South Korea Thailand	Brazil Indonesia Taiwan	Indonesia Taiwan	Brazil South Korea	Indonesia South Korea Taiwan

Source: Government announcements.

[3] See José De Gregorio, Sebastian Edwards, and Rodrigo O. Valdés (2000), "Controls on Capital Inflows: Do They Work?" Journal of Development Economics, vol. 63 (1), pp. 59–83; and Mauricio Cárdenas and Felipe Barrea (1997), "On the Effectiveness of Capital Controls: The Experience of Colombia during the 1990s," Journal of Development Economics, vol. 54 (1), pp. 27–57.

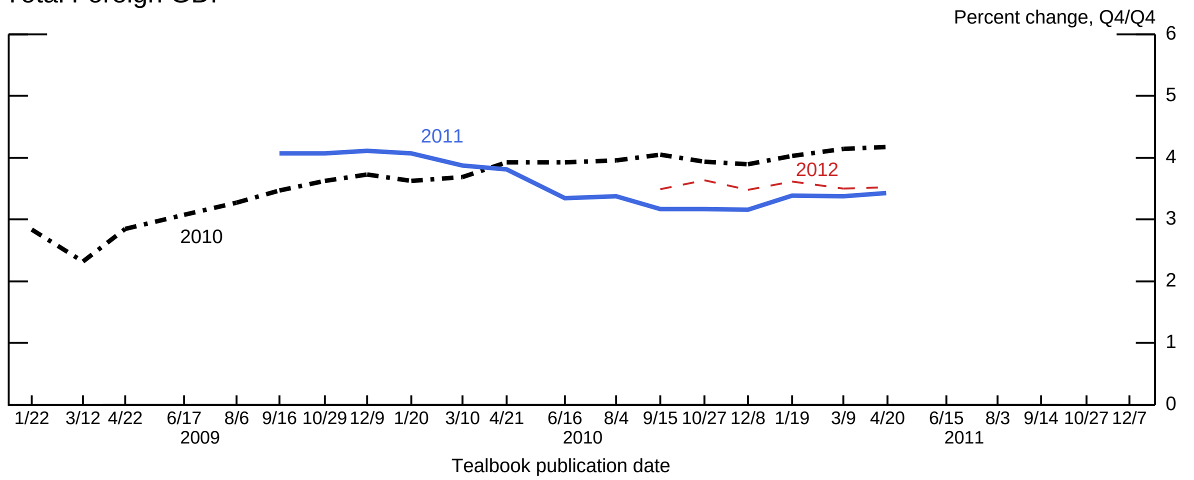
[4] International Monetary Fund (2011), "Recent Experiences in Managing Capital Inflows: Cross-Cutting Themes and Possible Guidelines," IMF Policy Paper (Washington: IMF, February).

benefit from the global demand for commodities. Latin American activity is not expected to be much affected by the earthquake in Japan.

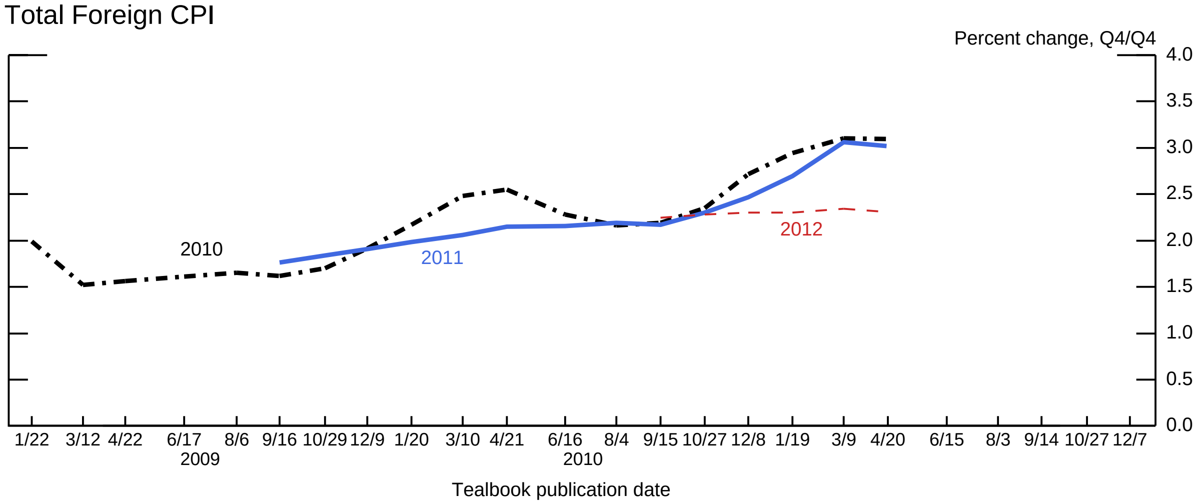
Inflation in Mexico fell to 3½ percent in the first quarter, 1 percentage point below our previous forecast, owing to appreciation of the peso as well as to increases in supply for some food products. For the remainder of the forecast period, we project Mexican inflation to come in just under the upper bound of the Bank of Mexico's 2 to 4 percent target range. Price pressures appear to have increased significantly in Brazil, with headline inflation rising to a near double-digit annual pace in the first quarter. While food price inflation has eased, core inflation has continued to rise in recent months, and house prices have risen in major cities. In response, the central bank raised its policy rate by an additional 50 basis points in March, and the government doubled a tax on consumer loans in early April. Brazilian authorities continue to be concerned about capital inflows, prompting them to introduce a 6 percent tax on newly issued external bonds and loans with maturity of less than two years.

Evolution of Staff's International Forecast

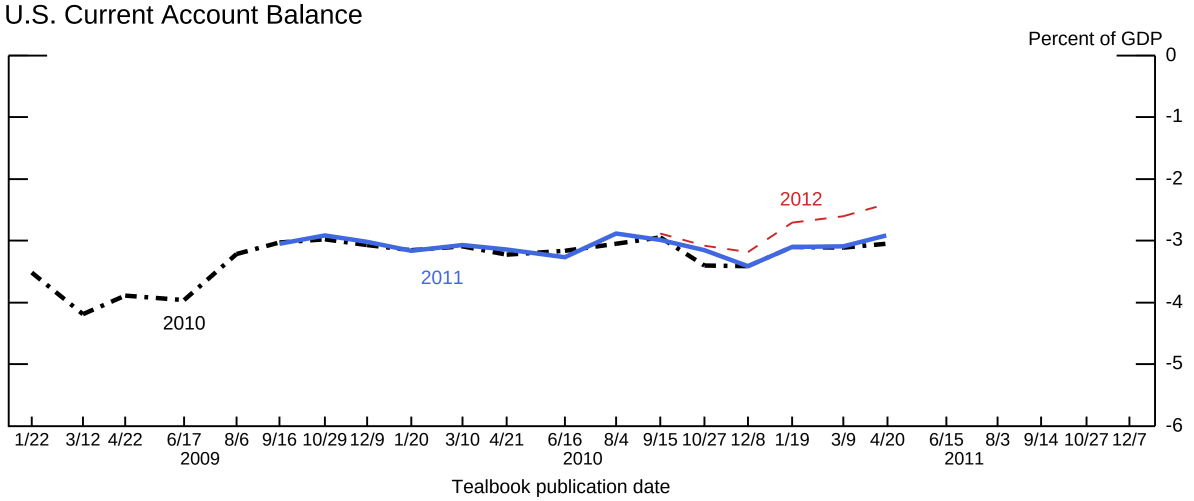
Total Foreign GDP



Total Foreign CPI



U.S. Current Account Balance



Int'l Econ Devel & Outlook

(This page is intentionally blank.)

Financial Developments

Market sentiment over the intermeeting period was buffeted by a number of unfolding global risks. Around the time of the March FOMC meeting, global bond yields and equity markets fell sharply in response to the Japanese earthquake and continuing political tensions in the Middle East and North Africa region. Markets subsequently recovered somewhat, but incoming economic data were weaker than investors had expected, on balance, and they appeared to pull back from risk-taking again in mid-April amid heightened attention to peripheral Europe and the U.S. fiscal outlook. On net over the period, yields on most nominal Treasury securities inched up, broad stock price indexes posted small gains, and risk spreads on corporate bonds narrowed a bit. Although concerns about the effects of the continuing rise in commodity prices garnered significant market attention, near-term TIPS-based inflation compensation rose only slightly on net; longer-term inflation compensation, however, increased more notably. The expected path of the federal funds rate implied by derivatives prices ended the period little changed, while measures of uncertainty around the path edged higher. Short-term funding rates, including the effective federal funds rate, shifted down several basis points in early April following a change in the FDIC's deposit insurance assessment system.

The broad nominal index of the foreign exchange value of the dollar declined about 1½ percent as several foreign central banks tightened monetary policy and as foreign economic data continued to improve relative to those for the United States. The dollar appreciated against the Japanese yen following official interventions to weaken the yen in the aftermath of the Tohoku earthquake.

Borrowing conditions for businesses and households eased further over the period. Borrowing by nonfinancial corporations remained robust in the first quarter of 2011, and indicators of business credit quality continued to recover. Commercial mortgage markets showed additional signs of stabilization. Consumer credit markets improved further, although home prices saw additional declines and residential mortgage lending remained tight.

Overall bank credit was roughly unchanged in March, as declines in real estate and consumer loans offset further increases in commercial and industrial (C&I) loans and securities holdings. The April Senior Loan Officer Opinion Survey on Bank Lending

Practices (SLOOS) indicated that banks' lending standards continued to ease in the first quarter for C&I and consumer loans, while demand for bank loans other than residential mortgages generally increased. The expansion of M2 slowed slightly in the first quarter, compared with the second half of 2010. A robust increase in liquid deposits outweighed a further sharp contraction in small time deposits and retail money market mutual funds.

POLICY EXPECTATIONS AND TREASURY YIELDS

Over the intermeeting period, money market futures rates were little changed on net, and Treasury note yields edged up, amid notable swings in risk sentiment in response to global events.[1] The March FOMC statement prompted a modest rise in nominal yields, as market participants perceived a somewhat more optimistic tone in the Committee's economic outlook and heightened concerns about inflation risks. The content of the March FOMC minutes was largely in line with expectations and prompted little price action; however, market participants noted the range of viewpoints within the Committee about the prospects for the policy outlook. Market participants appeared to read the incoming economic data as somewhat weaker than expected, on balance, and potentially suggestive of slower economic growth in the near term.

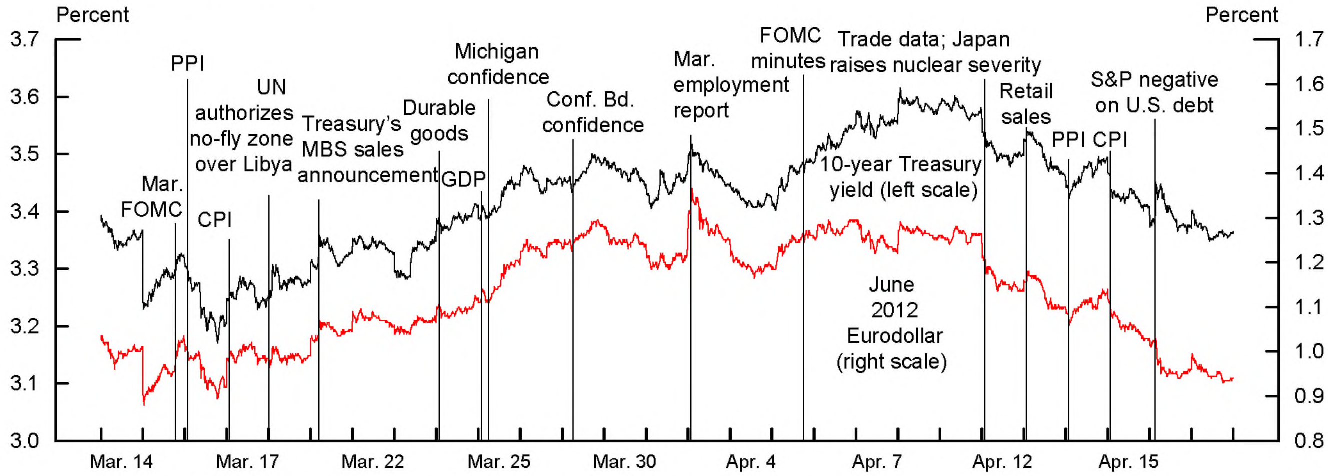
On net, both the mean and modal paths of the expected federal funds rate over the next two years were little changed over the intermeeting period. Futures quotes, combined with the staff's usual assumption about term premiums, indicate that market participants expect the federal funds rate to first rise above the current target range in the first quarter of 2012 and to reach about 1.4 percent by the second quarter of 2013, similar to indications at the time of the March FOMC meeting. The modal policy path derived from quotes on interest rate caps still rises above the current target range in late 2012. Comments by Federal Reserve officials during the intermeeting period highlighted divergent views on the possible course of future monetary policy tightening, contributing to somewhat higher market-based measures of policy uncertainty 12 months ahead.

Results from the Open Market Desk's latest survey of primary dealers also suggested little change since March in the anticipated path of policy. Average forecasts for the federal funds rate through the end of 2012 stayed essentially the same as in the previous survey, although the distribution of dealers' forecasts for the timing of the first policy-rate increase shifted marginally toward earlier tightening, with the first half of

[1] The effective federal funds rate averaged 12 basis points over the intermeeting period, with the intraday standard deviation averaging about 3 basis points.

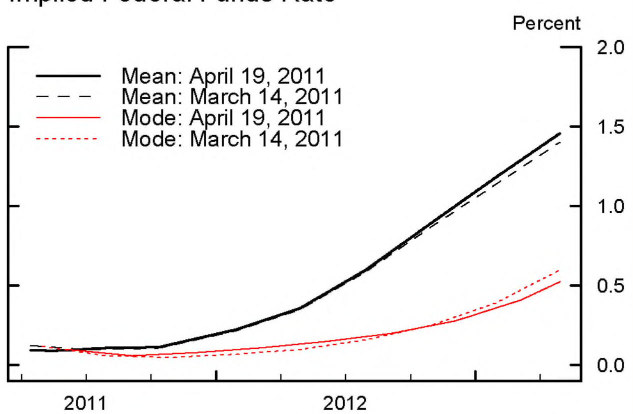
Policy Expectations and Treasury Yields

Selected Interest Rates



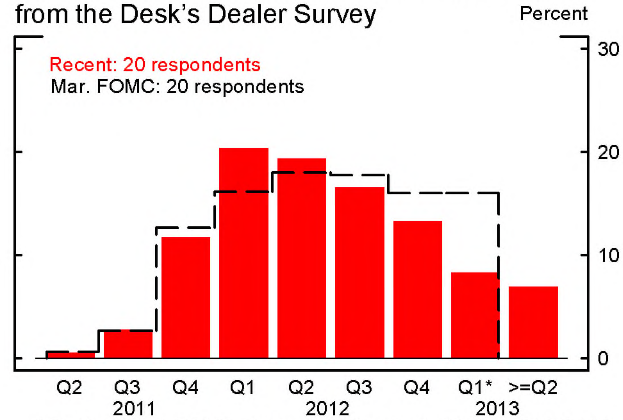
Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.
Source: Bloomberg.

Implied Federal Funds Rate



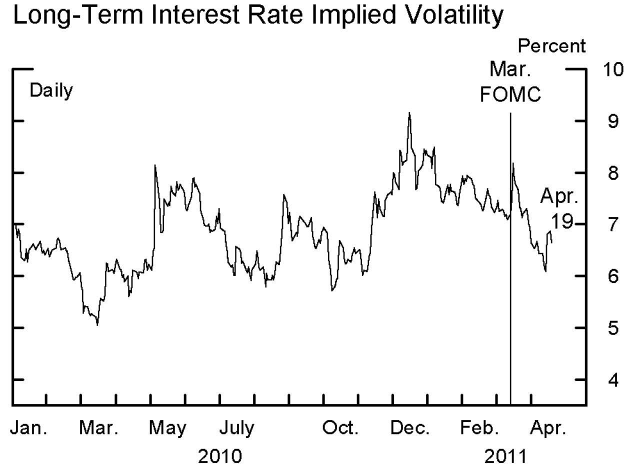
Note: Mean is estimated from federal funds and Eurodollar futures. Mode is estimated from distribution of federal funds rate implied by interest rate caps. Both include an allowance for term premiums and other adjustments.
Source: Bloomberg and CME Group.

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



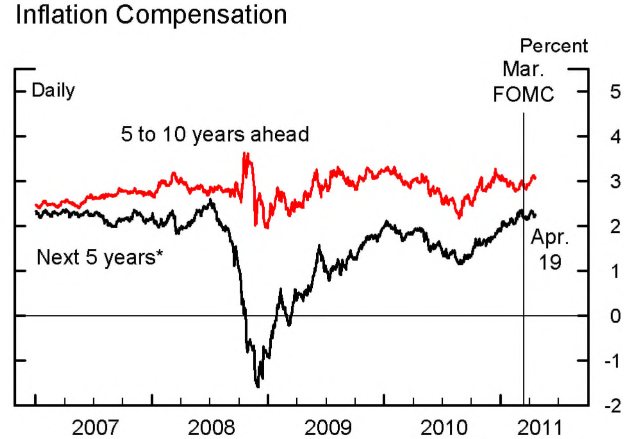
*For the March FOMC, the probability reported in the 2013:Q1 bin corresponds to the probability that the first policy rate hike will occur in 2013:Q1 or later.
Source: Desk's Dealer Survey from April 18, 2011.

Long-Term Interest Rate Implied Volatility



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

Inflation Compensation



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

Financial Developments

2012 seen as the most likely time for liftoff. Respondents did not anticipate major changes to the language of the statement at the upcoming FOMC meeting, and they unanimously expected the Federal Reserve's current Treasury purchase program to end in June with a total program size of $600 billion.[2] Dealers forecast near-term core PCE inflation to edge modestly higher, while forecasts for longer-term CPI inflation, and the reported uncertainty about those forecasts, were little changed. They downgraded their forecasts for GDP growth in 2011 to an average of 3.0 percent from 3.5 percent but maintained their forecasts for 2012 and 2013.

In response to questions about the sequence in which they expected various measures for the removal of policy accommodation to occur, dealers indicated that they anticipated a sequence involving the removal of the "extended period" language first, followed by the use of short-term reserve draining tools, followed by an increase in the interest rate paid on reserve balances, followed by asset sales. This sequence was the same as that reported in the survey conducted in January 2010, the last time dealers were specifically asked about this issue. However, dealers suggested that sales of Treasury securities, agency debt, and agency mortgage-backed securities (MBS) were likely to take place much sooner after liftoff than they had expected in January 2010. In addition, dealers now expect that, prior to an increase in policy rates or asset sales, the reinvestment of principal payments on Federal Reserve securities holdings will end, a possibility that was not included in the prior survey.

Yields on 2- to 10-year nominal Treasury securities increased 3 to 9 basis points, on balance, over the intermeeting period, likely reflecting in part some reversal of the safe-haven flows witnessed in mid-March. Market-based measures of near-term uncertainty about long-term Treasury yields declined a bit, on net. Late in the period, Standard & Poor's (S&P) revised its outlook for the long-term credit rating of the United States from stable to negative. Although the announcement, which also reaffirmed the United States' AAA rating, led investors to focus on risks related to fiscal imbalances and current budgetary challenges in the United States, market participants reportedly perceived little new information in the announcement itself, and, after some initial volatility, the net effect on Treasury yields appeared modest. Indicative quotes suggested that spreads on credit default swaps (CDS) on U.S. Treasury securities increased a few

[2] Since November 12, 2010, the Desk has purchased a total of $548 billion of Treasury securities, reflecting $417 billion of purchases under the new asset purchase program and $131 billion of purchases associated with the reinvestment of principal payments on Federal Reserve holdings of agency MBS and agency debt.

Financial Developments

basis points following the announcement but remained well below their levels of 2008 and early 2009.

TIPS-based inflation compensation over the next five years rose early in the period, in part because of the ongoing rise in commodity prices, but it fell sharply following the release of lower-than-expected core March CPI figures in mid-April and ended the period only slightly higher on net. Forward inflation compensation 5 to 10 years ahead rose 16 basis points, putting it close to the upper end of its historical range, with staff models suggesting that the rise was driven primarily by changes in liquidity and inflation-risk premiums rather than by increases in expected inflation. Inflation compensation measured from inflation swaps shifted up 15 to 20 basis points across the term structure. Short-term inflation expectations from the Michigan survey were unchanged in March after jumping notably in February; however, the survey's measures of long-term inflation expectations fell, reversing the increase registered in the previous month.

Asset Market Developments

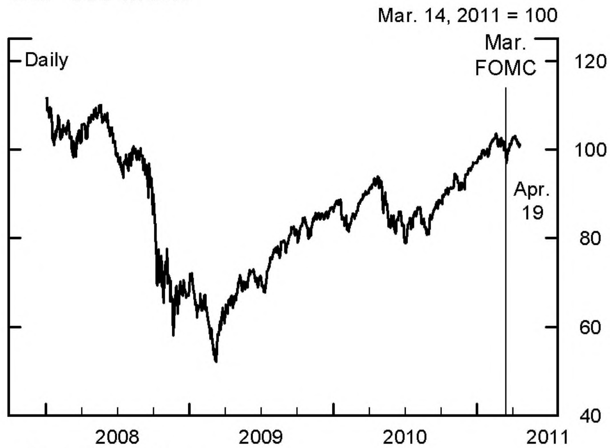
Broad stock price indexes rose about 1 percent, on net, over the intermeeting period, despite losses triggered by tensions associated with global events around the time of the March FOMC meeting and a noticeable drop following S&P's revision to the long-term rating outlook of the United States. Option-implied volatility on the S&P 500 index spiked briefly in mid-March but posted a moderate net drop, closing the intermeeting period at the low end of recent ranges. The staff's estimate of the spread between the expected real equity return for S&P 500 firms and the real 10-year Treasury yield—a rough gauge of the equity risk premium—was little changed, on net, over the period, remaining elevated by historical standards.

Based on first-quarter earnings reports from about 100 firms in the S&P 500 index and private-sector analysts' forecasts for firms that have yet to report, we estimate that operating earnings per share of firms in the index rose at a quarterly rate of about 3 percent relative to the fourth quarter. Over the four weeks ending in mid-April, analysts' forecasts of year-ahead earnings for S&P 500 firms were revised upward, owing mostly to revisions from the energy sector.

Earnings reports for banks generally met or exceeded analysts' expectations. Profits rose slightly in the first quarter at most of the largest and regional banks, again in

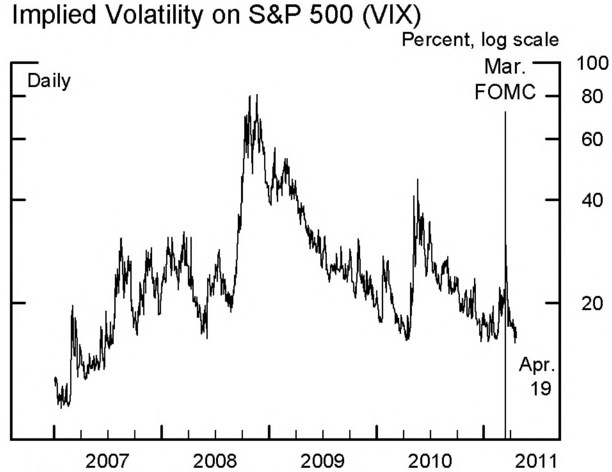
Asset Market Developments

S&P 500 Index



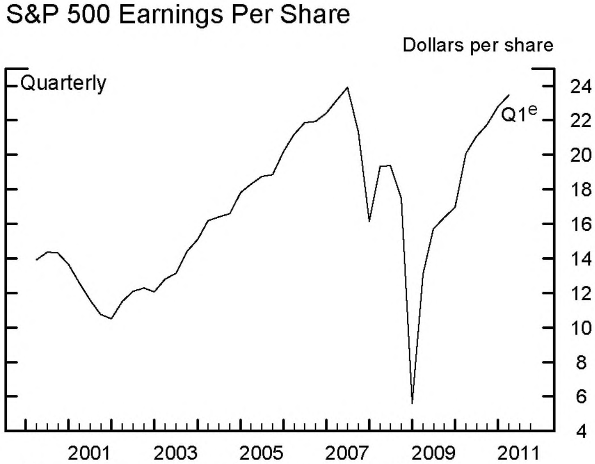
Source: Bloomberg.

Implied Volatility on S&P 500 (VIX)



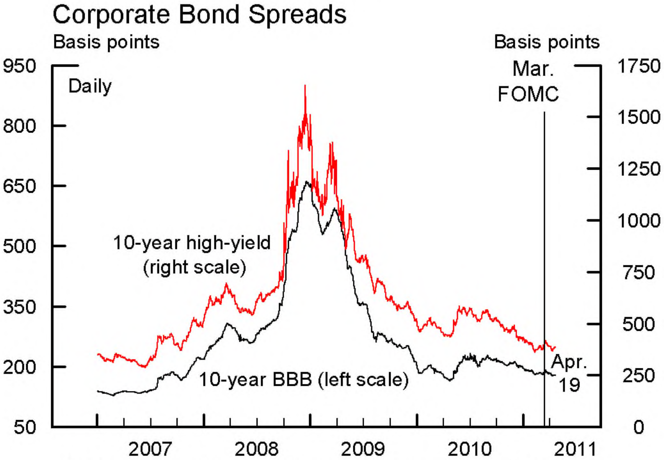
Source: Chicago Board Options Exchange.

S&P 500 Earnings Per Share



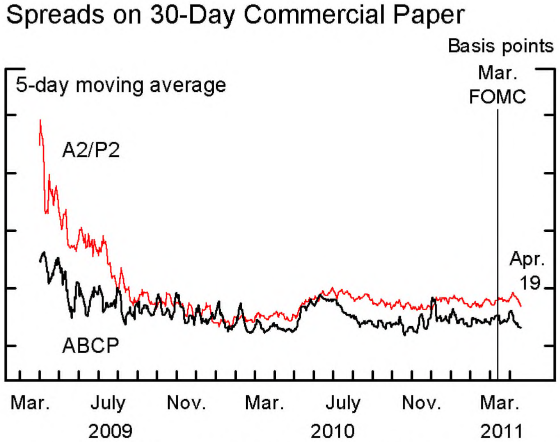
Note: Data are seasonally adjusted by staff.
e Staff estimate.
Source: Thomson Financial.

Corporate Bond Spreads



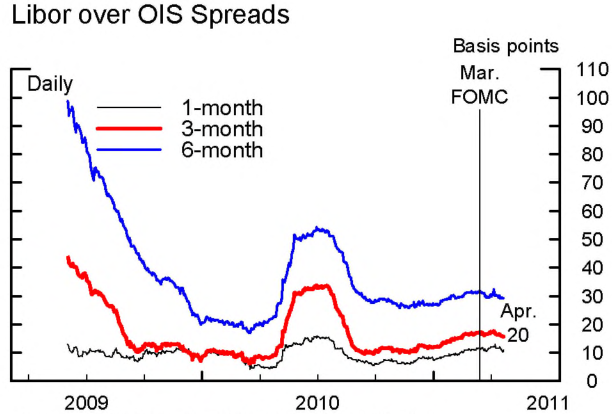
Note: Measured relative to a smoothed nominal off-the-run Treasury yield curve.
Source: Merrill Lynch and staff estimates.

Spreads on 30-Day Commercial Paper



Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.
Source: Depository Trust & Clearing Corporation.

Libor over OIS Spreads



Source: British Bankers' Association and Prebon.

Financial Developments

large part because of lower loan-loss provisions, while net interest income fell on a quarter-to-quarter and year-to-year basis at most of the largest banks. The results of the Comprehensive Capital Analysis and Review (CCAR) were generally in line with market expectations. On average, stock prices and CDS spreads for large banks were little changed around the time of the CCAR's release and subsequent announcements by several banks of plans for dividend increases or share repurchases. Over the period as a whole, large-bank stock prices fell about 3 percent, while CDS spreads edged lower.

Yields on corporate bonds were generally little changed, on net, over the intermeeting period; as a result, spreads of BBB-rated and speculative-grade corporate-bonds narrowed slightly. The average bid price in the secondary market for syndicated leveraged loans moved up further.

Hedge funds reportedly saw inflows during the first quarter, with the bulk of these flows directed toward funds with mandates that involve comparatively liquid assets. However, the appetite for leverage on the part of the hedge fund industry reportedly remained muted. Hedge funds posted modest returns over the intermeeting period; incoming information suggests that, although several large funds reported modest losses in March as a result of developments in Japan, those losses were not widespread, and there were no reports of significant deleveraging. Mutual funds also attracted robust inflows, on average, in March and early April, with the bulk of the net inflows going to taxable bond funds and flows into bank loan funds continuing apace. Equity funds had small net inflows, but tax-exempt bond funds continued to experience moderate net redemptions.

Rates in short-term funding markets shifted lower in the days immediately following the FDIC's April 1 implementation of a change in its deposit insurance assessment system. (See the box "Effects of the FDIC's New Deposit Insurance Assessment System on Short-Term Market Interest Rates.") The move to lower levels of the effective federal funds and general collateral repo rates pushed other short-term money market yields lower, including yields on Treasury bills, commercial paper, and Eurodollar deposits. Although these rates saw some volatility in early April, they were generally down a few basis points over the intermeeting period. The change reportedly had few immediate adverse effects on the operations of money market mutual funds or securities lenders. Haircuts in the repo market exhibited mixed changes across collateral types over the period. Spreads on both 30-day A2/P2-rated nonfinancial commercial

Effects of the FDIC's New Deposit Insurance Assessment System on Short-Term Market Interest Rates

On April 1, 2011, the Federal Deposit Insurance Corporation (FDIC) implemented changes to its deposit insurance assessment system that broadened the definition of the assessment base and altered assessment rates, especially for large banks. The new assessment system has resulted in downward pressure on overnight federal funds and repo rates, evidently as banks' demand for short-term funding declined in light of the higher all-in costs of borrowing in these markets. The lower levels of these rates, in turn, have led to a softening in other short-term interest rates, such as rates on Treasury bills, Eurodollar deposits, and commercial paper, as investors, particularly money market mutual funds, have reportedly reallocated their investments across alternative short-term investments.

Under the FDIC's new system, insurance premiums are assessed based on an insured depository institution's total assets less tangible capital—essentially all liabilities—rather than domestic deposits.[1] In addition, the FDIC implemented a new assessment rate schedule. The new schedule continues to assign higher assessment rates to banks that pose greater risks to the insurance system. The changes in the assessment system are intended to be revenue-neutral in the aggregate. While individual bank's actual assessment rates will not be known until the second quarter Call Reports become available in August, market participants have suggested that the assessment rates for some of the largest banks could range from 9 to 20 basis points.

Under the new assessment system, federal funds purchased and funds borrowed in repo markets are, for the first time, included in the FDIC's assessment base, raising banks' short-term marginal funding costs for these instruments, all else being equal. As a result, in the federal funds market, the costs associated with the arbitrage in which banks borrow at the federal funds rate and hold the proceeds as balances in their reserve accounts to earn the interest rate paid on excess reserves (the IOER rate) have risen. In response, the average federal funds rate has declined and the gap between the federal funds rate and the IOER rate has widened. As shown in the table below, the federal funds rate declined

Short-term interest rates	Average March 2011 basis points	Average April 1–7, 2011, basis points
Effective federal funds	14	10
Treasury GC repo	13	5
Effective overnight Eurodollar	15	11
Four-week Treasury bill	6	3
Overnight AA commercial paper	14	10

Source: Federal Reserve Bank of New York, Depository Trust and Clearing Corporation, and ICAP.

[1] See the FDIC's final rule at www.fdic.gov/deposit/insurance/reform.html.

from an average level of 14 basis points in March to an average level of 10 basis points in the first week after the new assessment system was implemented, about in line with market expectations. Judging from futures market quotes, federal funds are expected to trade close to 10 basis points for some time. The volume of trades in the brokered federal funds market decreased from an average level in March of about $50 billion to an average level of $45 billion in the first week after implementation.[2]

Repo rates for Treasury and agency collateral have also softened—Treasury general collateral (GC) repo traded at 5 basis points, on average, in the first week after the new assessment system was implemented compared with 13 basis points in March. The initial effect on the overnight Treasury GC repo rate was much greater than anticipated. Indeed, in the first few days after implementation, Treasury GC repo traded near zero basis points. Market contacts generally attributed this initial decline to some banks' withdrawal of collateral from the market in an effort to pare the size of their balance sheets, as well as to a host of other temporary factors.[3] Over the subsequent few days, however, the Treasury GC repo rate moved up to an average of 7 basis points.

Lower Treasury GC repo rates have reportedly raised money market investors' demand for other high-quality, short-term assets, such as Treasury bills, Eurodollar deposits, and commercial paper, putting downward pressure on the yields of these assets.[4] In particular, in the week after the new assessment system was implemented, the rates on four-week Treasury bills, overnight Eurodollar deposits, and overnight AA-rated nonfinancial commercial paper each moved down about 4 basis points relative to their average levels in March.

More recently, short-term market interest rates associated with federal funds, GC repo, and other money market instruments have generally remained near the levels seen in the first week of April, although the occurrence of several tax-related heavy payment days since then have complicated our ability to isolate the ongoing effects of the new FDIC assessment system on interest rates.

---

[2] The Open Market Desk at the Federal Reserve Bank of New York reports that in the market for federal funds, trading activity and rates bid by domestic banks have decreased, while trading activity of U.S. branches and agencies of foreign banks has declined only a bit.

[3] The effects in the repo market may initially have been amplified by constraints on the availability of collateral in the market reflecting quarter-end and Japanese fiscal year-end effects. In addition, the ongoing decline in Treasury collateral stemming from the Federal Reserve's large-scale asset purchases and the decline in the Treasury's Supplementary Financing Account balance may have exacerbated the collateral shortage. The shortage of collateral in the few days after the implementation of the new FDIC assessment may have also caused increased specialness of individual securities issues; the amount of securities borrowed in the Federal Reserve's overnight securities lending operations moved up relative to the average amount of securities borrowed through the facility in March.

[4] From March 29 to April 4, 2011, money market mutual funds reported declines in total assets in funds that hold primarily short-term Treasury assets and engage in repo, while assets in prime funds increased. This reallocation of assets is consistent with the significant decline in repo rates and consequent decline in short-term Treasury yields over this period.

paper and 30-day AA-rated ABCP over rates on AA-rated nonfinancial paper fell slightly, on net, while spreads between term Libor and OIS rates were little changed.

BUSINESS FINANCE

Overall, net debt financing by nonfinancial corporations remained robust in March, capping off a solid first quarter. Net issuance of both investment- and speculative-grade bonds by nonfinancial corporations remained strong, and outstanding amounts of C&I loans and nonfinancial commercial paper increased notably. Consistent with the growth in C&I loans, the SLOOS conducted in April indicated that, over the past three months, banks' lending standards and terms had eased while demand for C&I loans from large and middle-market firms had improved (see SLOOS appendix). Increases in loan demand from smaller firms were reportedly less widespread than for larger firms.

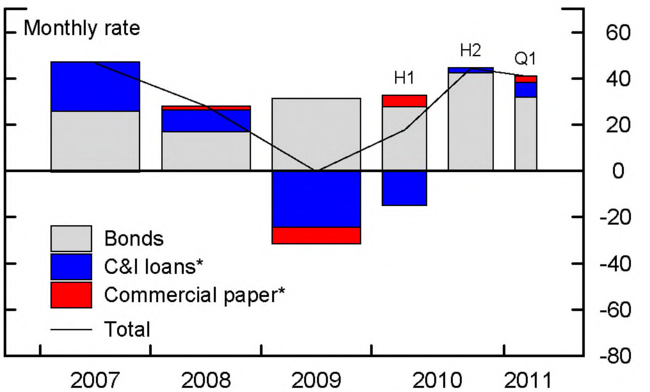
Gross issuance of syndicated leveraged loans continued to climb in the first quarter. Most of this issuance again consisted of opportunistic refinancing activity amid attractive financing conditions, supported by strong demand for leveraged loans from institutional investors, particularly those asset managers catering to retail investors seeking floating-rate exposures. The vigorous increase in issuance occurred despite the postponement of some refinancing deals in mid-March, when investors pushed back against pressures on pricing and terms that had been evident during the first two months of the year.

Gross public equity issuance by nonfinancial firms, including both primary and secondary offerings, was quite strong in March, even relative to pre-crisis levels. In the fourth quarter, share repurchases and cash-financed mergers continued to rebound, implying strongly negative net equity issuance. Heavy volumes of announcements of mergers and new share repurchase programs in the first quarter suggest that equity retirements will continue apace.

Indicators of the credit quality of nonfinancial firms continued to improve. Through the first quarter, the pace at which Moody's Investors Service upgraded nonfinancial corporate bonds exceeded the pace of downgrades, and the six-month trailing bond default rate for nonfinancial firms remained close to zero. The expected year-ahead default rate for nonfinancial firms from Moody's KMV, although still somewhat elevated, moved a bit lower in March and April. Moreover, a considerable net fraction of respondents to a special question in the SLOOS indicated that overall credit

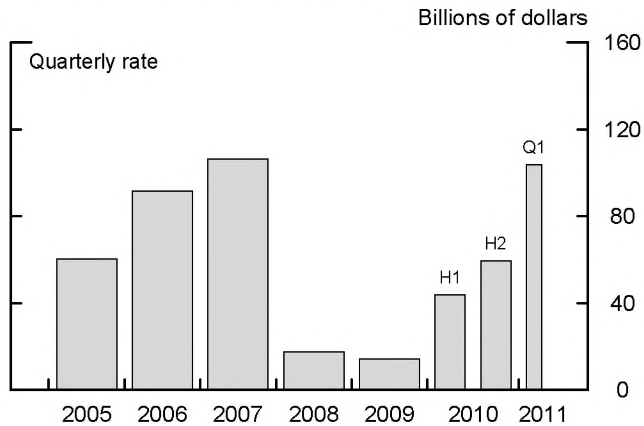
Business Finance

Selected Components of Net Debt Financing, Nonfinancial Firms



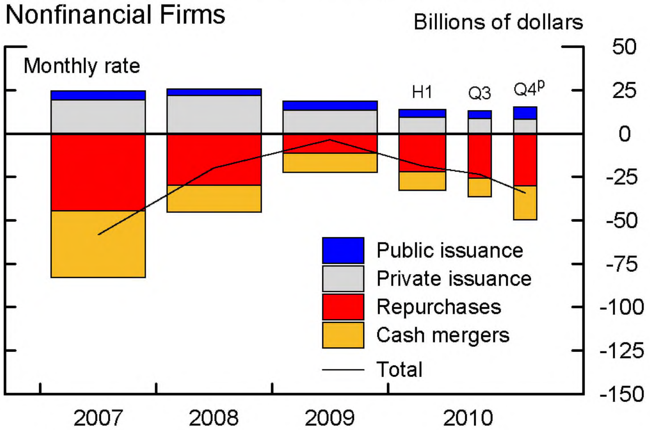
* Period-end basis, seasonally adjusted.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

Institutional Leveraged Loan Issuance



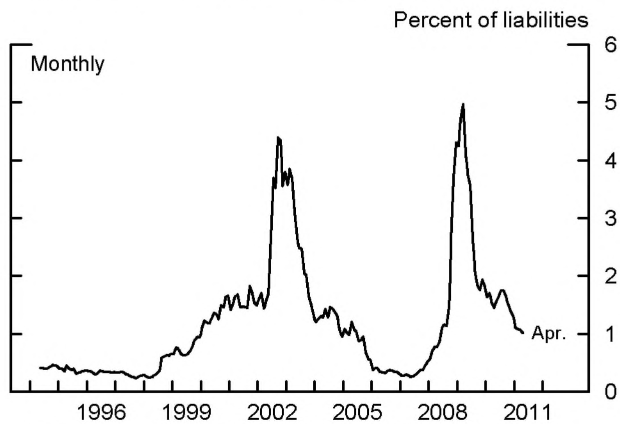
Source: Reuters Loan Pricing Corporation.

Selected Components of Net Equity Issuance, Nonfinancial Firms



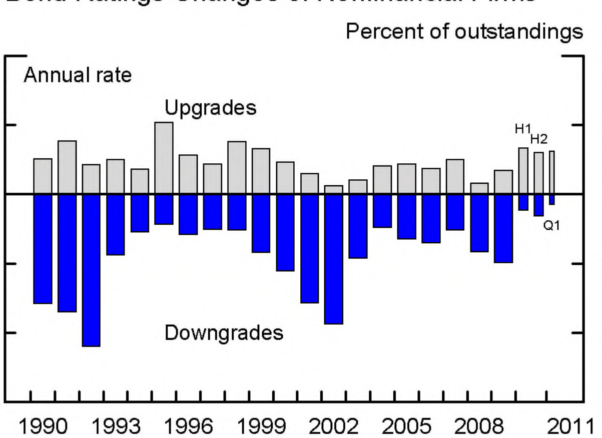
p Preliminary.
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

Expected Nonfinancial Year-Ahead Defaults



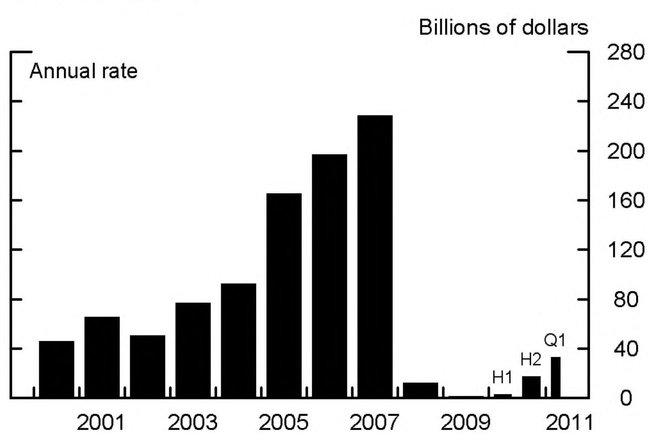
Note: Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms.
Source: Calculated using firm-level data from Moody's KMV.

Bond Ratings Changes of Nonfinancial Firms



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

CMBS Issuance



Source: Commercial Mortgage Alert.

Financial Developments

quality improved among large and middle-market firms that inquired about or applied for credit in the first quarter. Such improvements in the credit quality of smaller firms were reportedly less widespread.

Commercial mortgage markets showed some signs of continued stabilization despite an ongoing contraction in mortgage debt. Property sales increased but remained tepid, and prices, though still at depressed levels, increased a bit further. Delinquency rates for commercial real estate (CRE) loans appear to have leveled off in recent months, perhaps signaling a possible turn in the performance of these loans, although delinquency rates remained elevated relative to their historical averages. The April SLOOS found that standards on CRE loans were little changed, on net, last quarter, but that demand for such loans increased, particularly at larger banks, probably reflecting financing for buyers of distressed properties and some increase in construction in the multifamily sector. However, there remains little demand for new construction loans in other sectors. Issuance of commercial mortgage-backed securities picked up in the first quarter, reaching a volume that was close to total issuance in 2010.

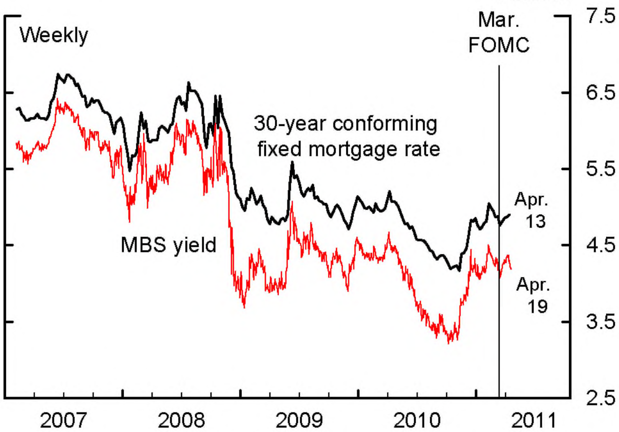
HOUSEHOLD FINANCE

Mortgage interest rates and yields on current-coupon agency MBS both rose modestly during the intermeeting period, and their spreads to longer-term Treasury securities narrowed slightly. Mortgage refinancing activity remained near its lowest level in more than two years, suggesting that many homeowners were unable to refinance their mortgages despite mortgage rates that are still favorable by historical standards. The Treasury Department announced on March 21 that it would begin to sell its $142 billion agency MBS portfolio at a pace of about $10 billion per month; yields on Treasury securities and agency MBS both edged higher immediately following the announcement, but there appears to have been little lasting effect on MBS spreads. In addition, Maiden Lane II LLC began competitive sales of its non-agency residential MBS holdings; in the wake of the success of its initial auctions, the prices of non-agency residential MBS securities more broadly were reportedly little changed, but some market participants noted that investor interest in this market has increased. (See the box "Balance Sheet Developments over the Intermeeting Period.")

Mortgage debt contracted further in the fourth quarter of 2010. House prices registered additional declines in recent months amid the large inventory of unsold properties and tight mortgage underwriting standards. According to the repeat-sales

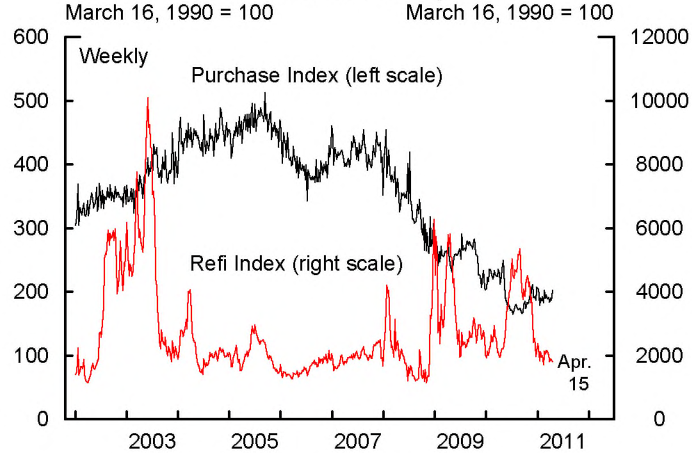
Household Finance

Mortgage Rate and MBS Yield



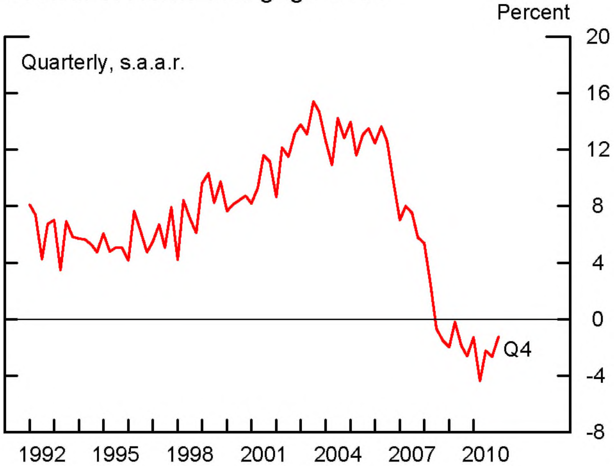
Note: For MBS yield, Fannie Mae 30-year current coupon rate.
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Purchase and Refinance Activity



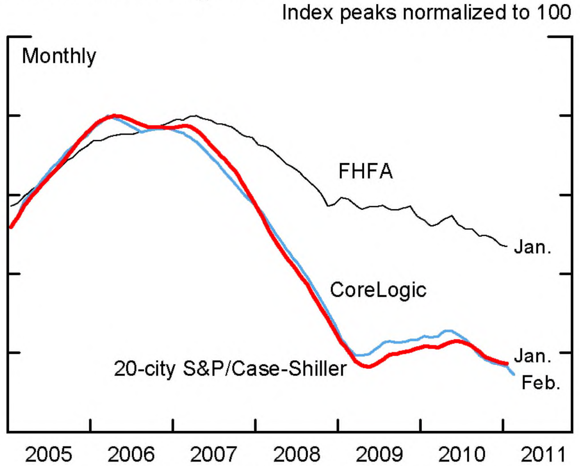
Note: Seasonally adjusted by FRB staff.
Source: Mortgage Bankers Association.

Growth of Home Mortgage Debt



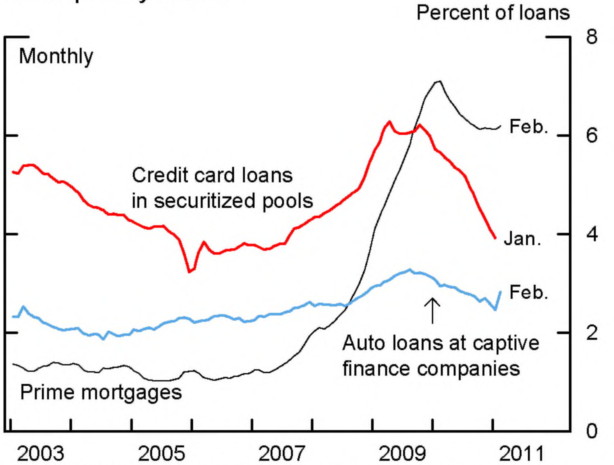
Source: Federal Reserve Board.

Prices of Existing Homes



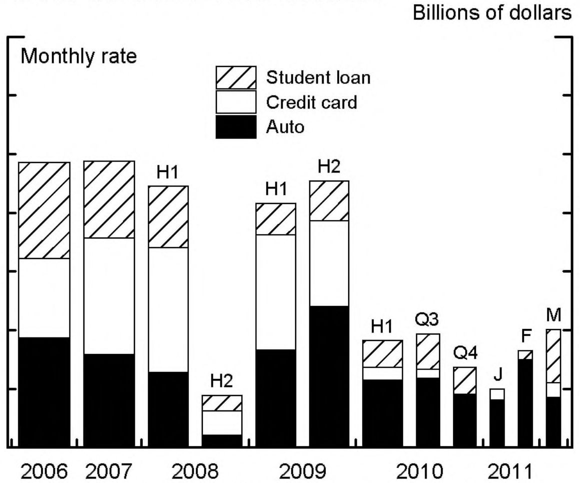
Source: For FHFA, Federal Housing Finance Agency; for CoreLogic, CoreLogic; for S&P/Case-Shiller, Standard & Poor's.

Delinquency Rates



Note: For mortgage delinquency rate, percent of loans 90 or more days past due or in foreclosure.
Source: For mortgage rate, LPS Applied Analytics; for credit card, Moody's; for auto loans, Federal Reserve Board.

Gross Consumer ABS Issuance



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

Financial Developments

Balance Sheet Developments over the Intermeeting Period

Total assets of the Federal Reserve increased $92 billion over the intermeeting period to reach a level of about $2.7 trillion (refer to table on the next page). Nearly all of this change was due to the Federal Reserve's ongoing asset purchase program, which boosted outright securities holdings $91 billion.

The Open Market Desk at the Federal Reserve Bank of New York (FRBNY) conducted 23 permanent operations to purchase longer-term Treasury securities since the March meeting. These operations, which covered a range of maturities for nominal securities as well as 2 operations in TIPS, totaled $129 billion.[1] To provide flexibility in conducting the asset purchase program, the Desk temporarily relaxed its per-issue limit on System Open Market Account (SOMA) holdings of individual Treasury issues late last year. SOMA holdings of 49 individual issues now exceed 35 percent of the total outstanding for each issue, and SOMA holdings of 11 issues exceed 50 percent of the total outstanding for each issue; the latter are all high-coupon 30-year bonds with remaining maturities between 4 and 10 years.

In other asset categories, loans outstanding under the Term Asset-Backed Securities Loan Facility (TALF) fell about $2 billion over the intermeeting period, reflecting additional prepayments of TALF loans. The FRBNY began selling securities in the Maiden Lane II portfolio through a competitive auction process; to date, a total of $2.5 billion in face amount of these securities has been sold. These transactions will reduce the loan from the FRBNY to Maiden Lane II on monthly loan paydown dates. Overall, the net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC were little changed. The Federal Reserve's participation in the G-7 foreign exchange intervention resulted in a modest decrease in foreign currency–denominated assets (not shown).[2] Finally, foreign central bank liquidity swaps remained at zero.

On the liability side of the Federal Reserve's balance sheet, Federal Reserve notes in circulation increased $9 billion over the period. The Treasury's General Account, which is volatile from month to month, rose $65 billion on net. The Treasury's Supplementary Financing Account fell $45 billion to about $5 billion; it will remain at this $5 billion level until the debt ceiling is raised. Term deposits increased to $5 billion as another small-value Term Deposit Facility offering settled on April 7; it will mature on May 5. Reflecting these factors and the effects of the asset purchase program, reserve balances of depository institutions rose $91 billion over the period; foreign depository institutions accounted for the bulk of the increase in these balances.

Financial Developments

[1] These operations include purchases conducted between March 14 and April 19, 2011. During this period, $123 billion in Treasury securities purchases settled on the balance sheet and agency debt and MBS holdings declined $31 billion.

[2] Foreign currency–denominated assets are included in "other assets" on the H.4.1 statistical release. For more information on the intervention, see William English, Brian Sack, and Nathan Sheets (2011), "Today's Foreign Exchange Intervention," memorandum to the Federal Open Market Committee, Board of Governors of the Federal Reserve System, Division of Monetary Affairs; Federal Reserve Bank of New York; and Board of Governors of the Federal Reserve System, Division of International Finance, respectively, March 18.

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (04/18/11)	Maximum level	Date of maximum level
Total assets	**92**	**2,680**	**2,680**	**04/18/11**
Selected assets:				
Liquidity programs for financial firms	-0	+0	677	11/06/08
Primary, secondary, and seasonal credit	-0	+0	114	10/28/08
Foreign central bank liquidity swaps	0	0	586	12/04/08
Term Asset-Backed Securities Loan Facility (TALF)	-2	18	49	03/11/10
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-1	63	75	12/30/08
Securities held outright*	91	2,456	2,456	04/18/11
U.S. Treasury securities	121	1,394	1,394	04/18/11
Agency debt securities	-15	128	169	03/11/10
Agency mortgage-backed securities	-16	933	1,129	06/14/10
Total liabilities	**92**	**2,628**	**2,628**	**04/18/11**
Selected liabilities:				
Federal Reserve notes in circulation	9	969	970	04/13/11
Reverse repurchase agreements	-1	56	110	10/14/08
Foreign official and international accounts	-1	56	92	12/22/08
Others	0	0	26	09/26/08
Reserve balances of depository institutions**	91	1,480	1,534	04/13/11
Term deposits held by depository institutions	5	5	5	11/03/10
U.S. Treasury, general account	65	89	187	12/31/09
U.S. Treasury, supplementary financing account	-45	5	559	10/22/08
Funds from AIG asset dispositions, held as agent	0	0	27	01/13/11
Other deposits	-32	+0	81	03/12/10
Total capital	**+0**	**53**	**60**	**08/03/10**

Note: +0 (-0) denotes positive (negative) value rounded to zero.
* Par value.
** Includes required clearing balances and overdrafts. Excludes as-of adjustments.

Financial Developments

index from CoreLogic, house prices tumbled at an annual rate of 16½ percent in February, the ninth consecutive monthly decline. The sustained downtrend in house prices and still-tight lending conditions continued to depress demand for housing. Rates of serious delinquency—defined as the percentage of mortgage loans that are 90 days past due or in foreclosure—for subprime and prime mortgages were little changed at elevated levels. However, the rate of new delinquencies on prime mortgages declined further.

Conditions in consumer credit markets continued their gradual improvement. Growth of consumer credit picked up in February because of another solid gain in nonrevolving credit. Revolving credit, in contrast, contracted further, albeit at a slower rate. Delinquency and charge-off rates for credit card debt have moved down in recent months toward their pre-crisis levels. The number of credit card offers mailed to households ticked up slightly in February, returning to levels seen in October 2008. The April SLOOS showed that several large banks eased lending policies on credit card and auto loans, and the net fraction of banks that reported having become more willing to make consumer installment loans registered its strongest reading since the first half of 1994. In addition, demand for auto loans reportedly strengthened last quarter, whereas demand was little changed for credit card and other consumer loans. Issuance of consumer ABS remained steady in the first three months of 2011, and investor appetite for securitizations collateralized by relatively riskier loans, such as sub-prime auto loans and private student loans, continued to increase.

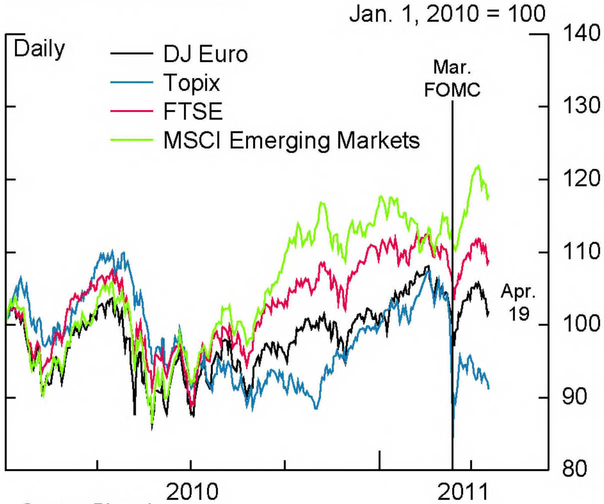
Foreign Developments

Foreign equity prices and sovereign bond yields fell sharply following the Japanese earthquake on March 11, but by the end of March they had generally recovered in markets outside of Japan as concerns about the extent of the resulting disruption diminished. On net, most foreign yields and equity prices have increased since the March 15 FOMC meeting, although they have changed little, on balance, since the March 8 data reported in the Tealbook for that meeting. Japanese equity prices remain about 10 percent below their pre-earthquake level, as concerns over the economic outlook persist.

The broad nominal index of the U.S. dollar declined about 1½ percent over the intermeeting period, as the dollar depreciated against all the major currencies except the Japanese yen. The yen strengthened to an all-time high against the dollar after the

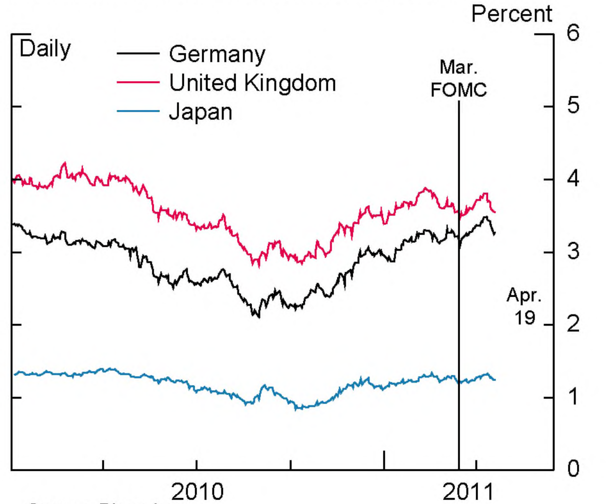
Foreign Developments

Stock Price Indexes



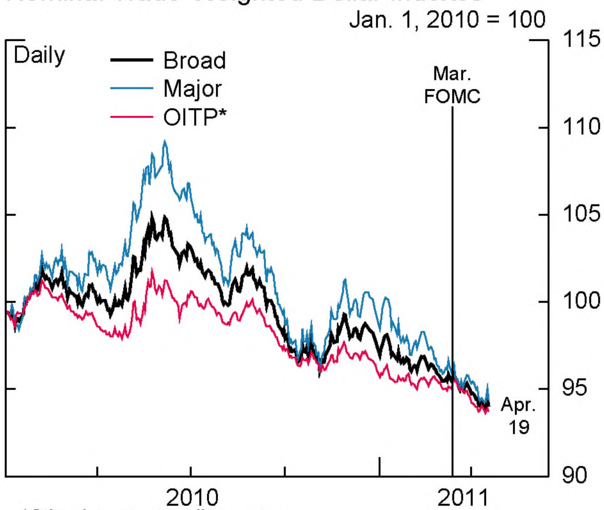
Source: Bloomberg.

Nominal 10-Year Government Bond Yields



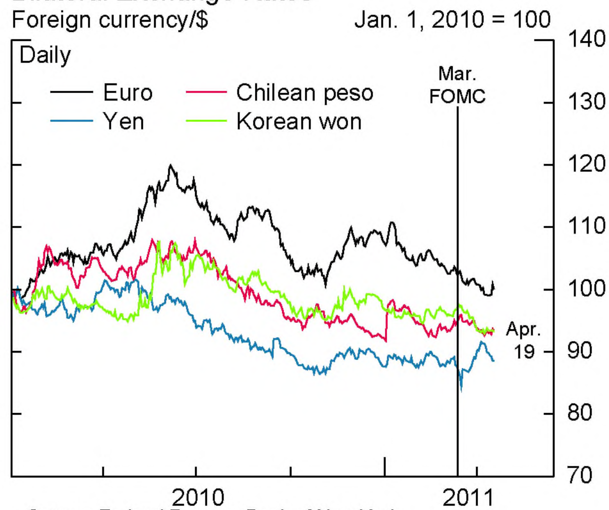
Source: Bloomberg.

Nominal Trade-Weighted Dollar Indexes



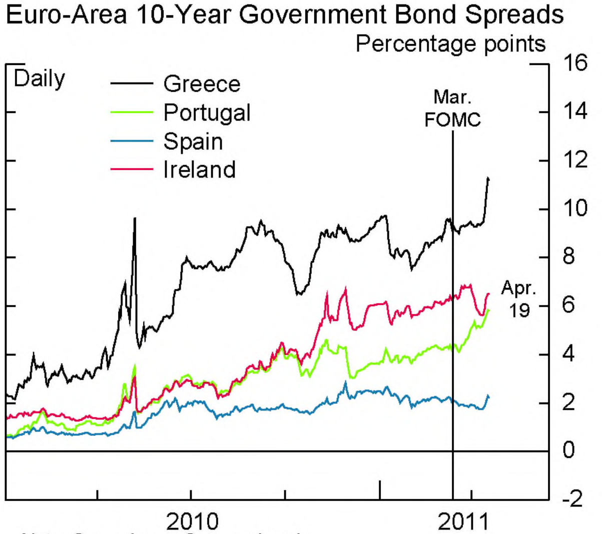
*Other important trading partners.
Source: Federal Reserve Board and Bloomberg.

Bilateral Exchange Rates



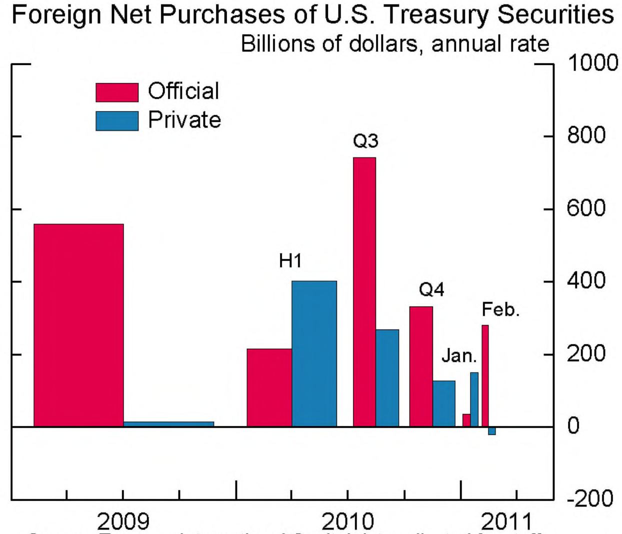
Source: Federal Reserve Bank of New York.

Euro-Area 10-Year Government Bond Spreads



Note: Spread over German bunds.
Source: Bloomberg.

Foreign Net Purchases of U.S. Treasury Securities



Source: Treasury International Capital data adjusted for staff estimates.

earthquake, as reduced risk appetite led to an unwinding of carry trades. In addition, investors bid up the yen in anticipation of large earthquake-related repatriation flows, similar to those following the 1995 earthquake in Kobe. In response, the G-7 conducted its first coordinated intervention since September 2000. The yen depreciated sharply immediately following the intervention announcement and continued to depreciate into early April.

To reassure financial markets, the Bank of Japan injected record amounts of liquidity immediately after the earthquake and expanded its asset purchase program. In contrast, as expected, the European Central Bank (ECB) increased its main policy rate 25 basis points to 1¼ percent on April 7, and markets are pricing in further rate increases by the ECB by the end of the year. The Bank of England and the Bank of Canada left policy rates unchanged, but expectations for the path of short-term interest rates in both countries continue to indicate one or two policy rate hikes later this year. Near-term inflation compensation measured from indexed debt moved up in the euro area and the United Kingdom over the intermeeting period, likely reflecting in part the recent rise in energy prices; long-term inflation compensation moved up more modestly.

In early April, the Portuguese government requested financial support from the European Union and the International Monetary Fund, but markets remain concerned over the capacity of the Portuguese government to reach agreement on an appropriate fiscal consolidation program. Later in the period, yields on Greek and other peripheral sovereign debt jumped following statements by German officials that highlighted an ongoing debate about the advisability of restructuring Greek sovereign debt. Over the intermeeting period as a whole, spreads of Greek sovereign debt relative to German bunds rose nearly 200 basis points, and Portuguese spreads increased 150 basis points. In contrast, Spanish, Italian, and Irish spreads were little changed. In addition, Libor–OIS spreads, along with indicators of dollar funding pressure in Europe, moved down, on net, indicating that funding conditions for core European banks continue to improve.

Monetary authorities in China increased banks’ lending and deposit rates 25 basis points, the fourth increase since October, and continued to tighten reserve requirements. In addition, monetary policy in a number of other emerging market economies—including Chile, India, Singapore, and Taiwan—was tightened over the period. Equity and bond flows into emerging market economies turned positive in early April following outflows earlier in the year. The dollar depreciated against almost all emerging market currencies, reportedly prompting foreign exchange intervention by several emerging market monetary authorities.

Foreign official investors made sizable purchases of U.S. Treasury securities in February, in part reflecting investments of proceeds from foreign exchange intervention. Partial and confidential data on custody accounts at the Federal Reserve Bank of New York show continued solid acquisitions of Treasury securities through mid-April. Foreign official investors continued to make moderate purchases of agency securities through March, while foreign private investors sold agency bonds in both January and February.

Government Finance

During the intermeeting period, the Treasury auctioned $165 billion of nominal coupon securities across the maturity spectrum and $11 billion of TIPS. Issuance sizes of nominal securities were unchanged, and the auctions were generally well received, with bid-to-cover ratios close to recent averages. Announced issuance sizes for 5- and 10-year TIPS were somewhat larger than those in the past. The reopening of the 10-year TIPS was very well received, with a higher-than-average bid-to-cover ratio and better-than-expected pricing, likely reflecting strong investor demand for protection against inflation amid rising commodity prices.

U.S. fiscal issues garnered market attention as the Congress grappled with passage of the 2011 budget, debated an increase in the statutory debt limit, and outlined proposals for longer-term fiscal consolidation. On April 4, Treasury Secretary Geithner wrote to the Congress to provide an update on the Treasury's projections regarding when the statutory debt limit would be reached and to make the case for a timely increase. The Treasury projected that the statutory debt limit of $14.29 trillion would be reached no later than May 16, after which extraordinary measures—including the disinvestment of two government retirement funds and the Exchange Stabilization Fund—would need to be taken to temporarily finance the government if the debt ceiling was not raised. The extra leeway for the United States to borrow within the limit provided by these measures is projected to be exhausted around July 8.[3] Yields on Treasury bills maturing after July 8 do not currently suggest widespread market concerns about the debt ceiling.

Financial Developments

[3] The Treasury's projection is consistent with the current staff projection. The box "Debt Subject to Limit" in the January 2011 Tealbook, Book A, outlined a variety of extraordinary measures used by the

Conditions in the municipal bond market remained somewhat strained. Yields on long-term general-obligation bonds rose moderately. The ratios of the yields on these bonds to those on comparable-maturity Treasury securities and AAA-rated corporate bonds—gauges of relative risks in the municipal bond market—changed little, on net, and remained high by historical standards. The spreads of CDS on the broad municipal market (as measured by the MCDX index) and state-specific CDS spreads for California and Illinois were also little changed at relatively high levels. Issuance of long-term municipal bonds continued to be weak in March, in part because issuance was unusually heavy in the fourth quarter of 2010 ahead of the expiration of the Build America Bond program, but the weakness likely also reflected weak investor demand. The pace of issuance of short-term municipal securities was slow in March, consistent with seasonal patterns.

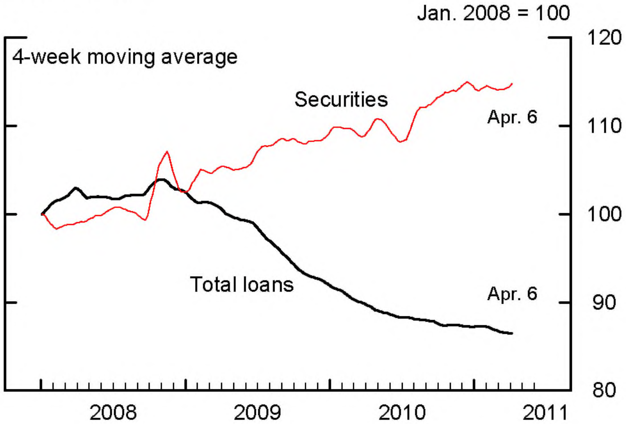
Commercial Banking and Money

Bank credit was about unchanged in March after having declined at an average annual rate of 3 percent over the first two months of the year. Core loans on banks' books fell at a 4½ percent rate for the month, a somewhat slower pace of decline than earlier in the year. Commercial and industrial loans, which have grown moderately, on average, since last fall, expanded briskly in March, though the recent increases have occurred mainly at large domestic banks and the U.S. branches and agencies of foreign banks. By contrast, commercial real estate loans continued to contract at roughly the same rate as in recent quarters. Closed-end residential real estate loans held on banks' books, after increasing over the second half of 2010, shrank during the first quarter. Though much of the decline can be attributed to substantial sales of loans to the GSEs by a few large banks, the decreases are also consistent with the weakening in demand for these loans reported in the SLOOS. Home equity loans also contracted further. Consumer loans declined modestly in March, as the pace of contraction in credit card loans slowed and other consumer loans, which continued to be damped by policy changes affecting refund anticipation and student loans, remained flat. Banks' securities holdings increased moderately in March, reflecting purchases of Treasury and agency securities, particularly by one large bank.

Treasury in past debt suspension periods to stay under the statutory debt ceiling. In addition, on June 30, if the Treasury has not exhausted the funds accessible through these measures, it has available to it a one-time measure by which it can suspend a further $67 billion of reinvestments of the Civil Service Retirement and Disability Fund, to avoid breaching the ceiling on this date.

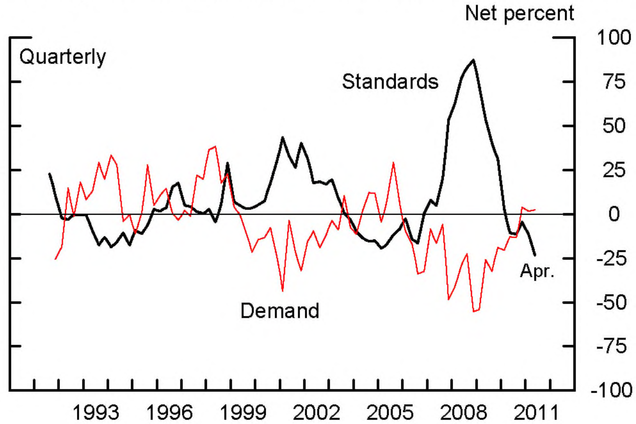
Commercial Banking and Money

Bank Credit



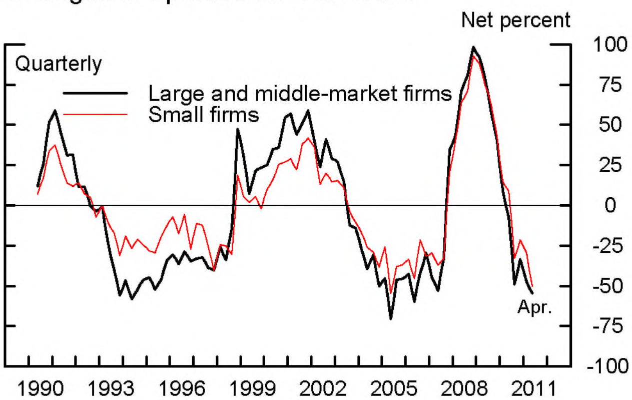
Note: The data have been adjusted to remove the estimated effects of marking certain securities to market (FAS 115); the initial consolidations of assets under FIN 46, FAS 166, and FAS 167; and nonbank structure activity of $5 billion or more.
Source: Federal Reserve Board.

Changes in Standards and Demand for Bank Loans



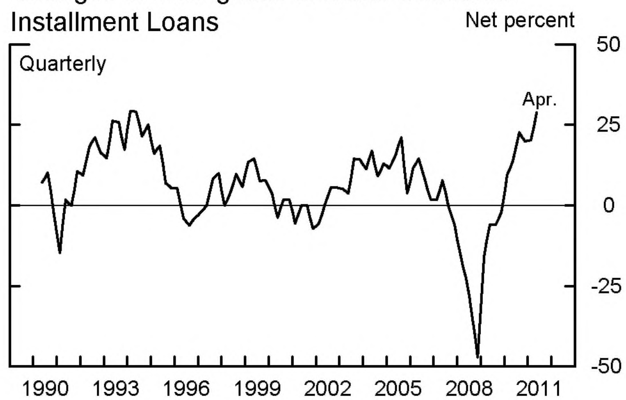
Note: A composite index of changes in standards or loan demand that represents the net percentage of loans on respondents' balance sheets that were in categories for which banks reported tighter lending standards or stronger loan demand over the past 3 months.
Source: Federal Reserve Board, Senior Loan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

Changes in Spreads on C&I Loans



Note: Net percent of respondents that widened spreads over the past three months.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Changes in Willingness to Make Consumer Installment Loans



Note: Net percent of respondents that reported increased willingness to make consumer installment loans over the past three months.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

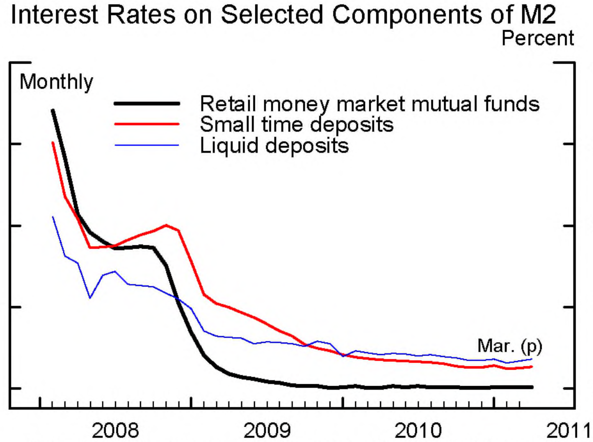
Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	RMMF	Curr.
2008	8.6	6.9	12.3	13.8	5.8
2009	5.0	17.1	-15.7	-22.1	6.9
2010					
H1	1.3	9.6	-22.4	-22.8	4.5
H2	5.1	11.9	-23.4	-9.4	7.0
2011					
Jan.	2.7	6.8	-24.1	-2.7	5.6
Feb.	7.4	12.8	-17.9	-13.6	11.3
Mar. (p)	3.0	6.4	-20.1	-11.5	12.5

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

Interest Rates on Selected Components of M2



Note: Interest rates on small time deposits and liquid deposits reflect the deposit-weighted average interest rate paid at banks and thrifts for each component.
p Preliminary.
Source: Federal Reserve Board.

Financial Developments

M2 expanded at an annual rate of 3 percent in March and at a 4½ percent pace over the first quarter of 2011, a slightly slower rate of increase than that observed over the second half of last year. Liquid deposits rose moderately in March, likely boosted in part by a shift from lower-yielding M2 components. Small time deposits and retail money market mutual funds contracted further last month and stand at levels not seen since 2005, as yields on these assets remained extremely low. Currency advanced significantly in March, supported mostly by robust demand for bank notes from abroad. The monetary base surged again last month as reserve balances increased, reflecting the Desk's ongoing purchases of Treasury coupon securities and a reduction in the Treasury's Supplementary Financing Account balance.

Appendix

Senior Loan Officer Opinion Survey on Bank Lending Practices

The April 2011 Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that, on net, bank lending standards and terms generally had eased somewhat further during the first quarter of this year, and that the demand for bank loans from businesses and households increased slightly on balance.[1] Banks continued to loosen standards and terms for commercial and industrial (C&I) loans and consumer loans, and standards were little changed for loans secured by real estate.[2] Demand for C&I loans and for commercial mortgages increased, while that for residential mortgages continued to decrease.

The majority of respondents that had eased standards and terms on C&I loans cited increased competition from other banks and nonbank lenders as the most important reason for the easing. Only a few pointed to an increased tolerance for risk, consistent with the small number that reported having reduced premiums on riskier loans. Banks that had eased standards and terms also pointed to a more favorable or less uncertain economic outlook, although the fraction that did so in this survey was smaller than in the previous one. Of the handful of banks that reported having tightened terms, all cited a reduced tolerance for risk as a factor driving the tightening in terms, and most also pointed to a less favorable or more uncertain economic outlook, decreased liquidity in the secondary market for C&I loans, and increased concerns about recent legislative changes, supervisory actions, or changes in accounting standards.

Regarding changes in standards and terms on loans to households, several large banks eased lending policies on credit card and auto loans, and the net fraction of banks that reported having become more willing to make consumer installment loans rose to its highest level since the first half of 1994.[3] Moderate net fractions of banks reported a net easing of the spreads of auto loan rates over their own cost of funds, and roughly similar fractions of large banks also eased several other terms on such loans.

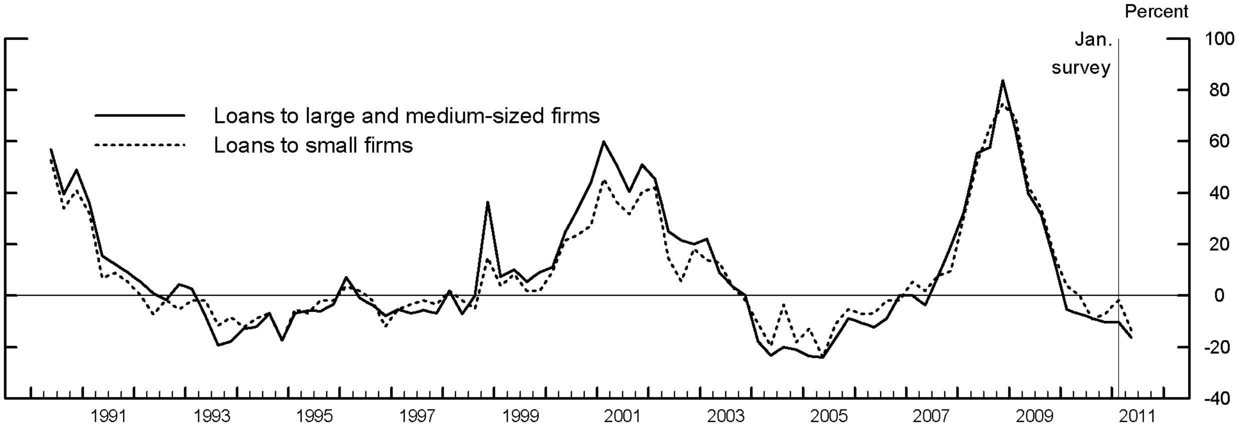
[1] The April 2011 survey addressed changes in the supply of, and demand for, loans to businesses and households over the past three months. The survey also included sets of special questions on changes in the overall credit quality of potential business borrowers and on changes in applications for new or increased credit card lines and in the quality of applicants. This appendix is based on responses from 55 domestic banks and 22 U.S. branches and agencies of foreign banks. Respondent banks received the survey on or after March 29, 2011, and responses were due by April 12, 2011.

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

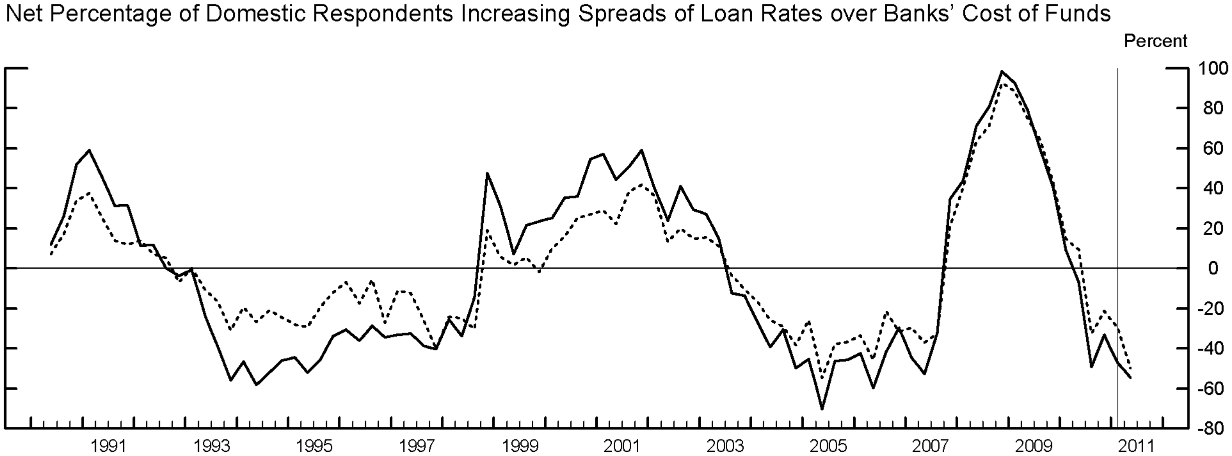
[3] Large banks are defined as banks with assets greater than or equal to $20 billion as of December 31, 2010, and other banks as those with assets of less than $20 billion.

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

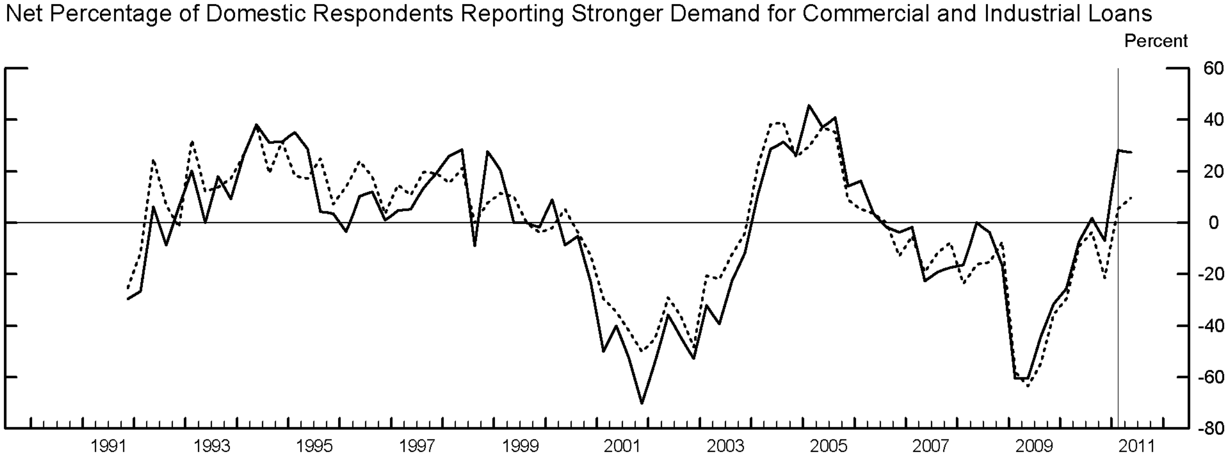
Net Percentage of Domestic Respondents Tightening Standards for Commercial and Industrial Loans



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



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



Financial Developments

Responses to the questions on loan demand were mixed. Demand for C&I loans from large and middle-market firms reportedly increased over the past three months.[4] Moreover, in response to a special question, a considerable net fraction of banks indicated that the overall credit quality of large and middle-market firms that had inquired about or applied for credit improved during the first quarter of this year. Increases in demand for C&I loans from smaller firms and improvements in the credit quality of those applicants were reportedly less widespread than for larger firms. Demand for commercial real estate (CRE) loans also reportedly increased, particularly at larger banks. In contrast, relatively large fractions noted that demand for each type of residential mortgage covered in the survey had declined. Demand for auto loans reportedly strengthened this quarter, while demand improved slightly for credit card loans and was little changed for other consumer loans.

LENDING TO BUSINESSES

Questions on Commercial and Industrial Lending

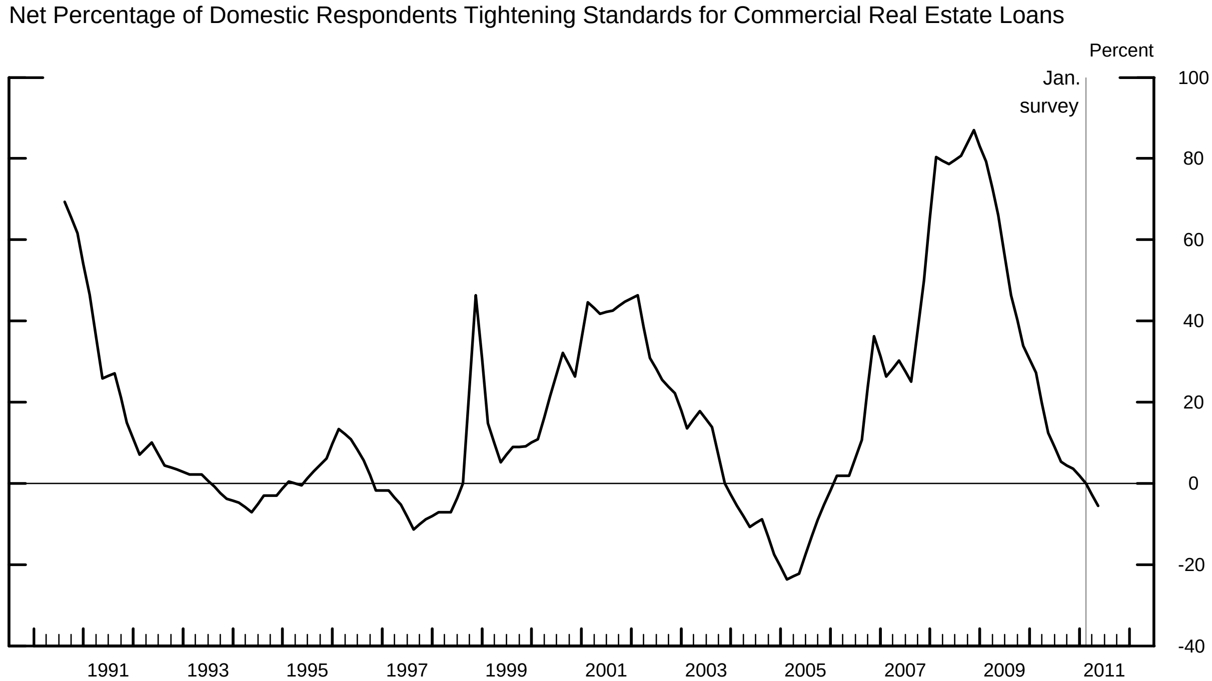
The survey showed that the market for C&I loans continued to recover in the first quarter of this year. About 15 percent of banks reported having eased standards on C&I loans to large and middle-market firms and to small firms, as did 20 percent of branches and agencies of foreign banks (foreign banks). No domestic or foreign banks tightened standards on C&I loans during this period, and the easing of standards among domestic banks was somewhat more widespread than in the previous survey.

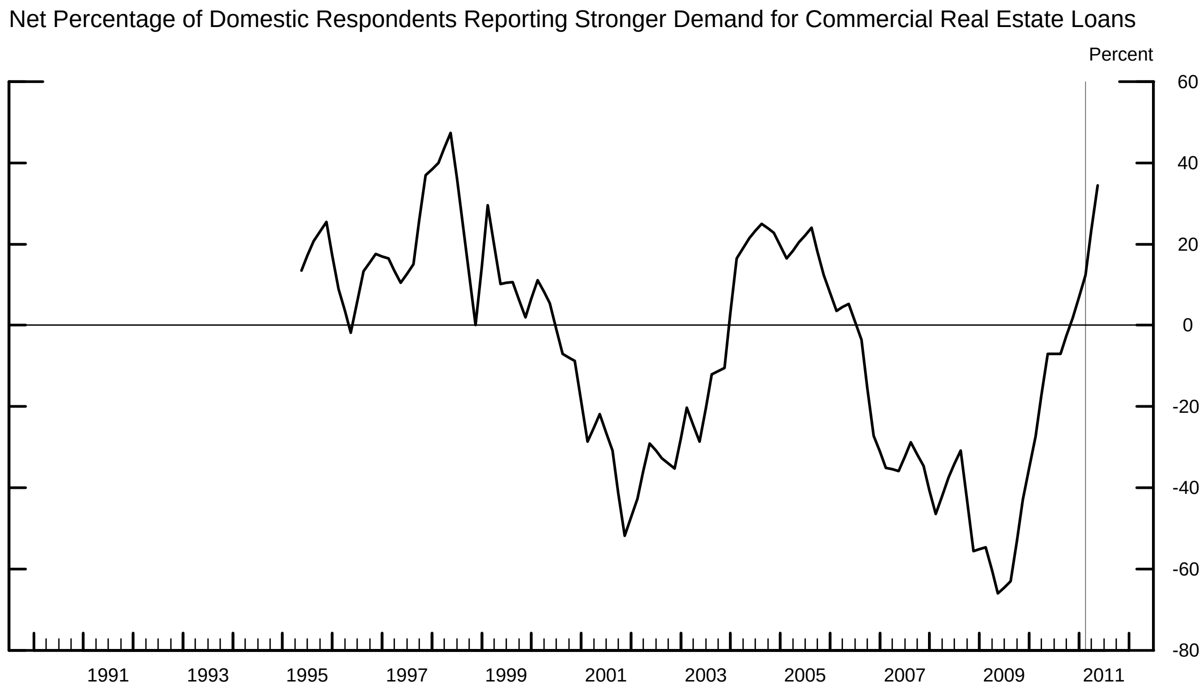
Positive net fractions of banks eased most loan terms on C&I loans for firms of all sizes. The easing of terms was notably more pronounced at larger domestic banks and at foreign banks. Loan spreads were eased by somewhat more respondents than in the previous quarter, with about 55 percent of domestic banks, on net, narrowing spreads over their cost of funds on loans to large and middle-market firms and 50 percent, on net, narrowing spreads on loans to small firms. Both of those net fractions are near the highest on record. Also, about 50 percent of foreign banks reported a net easing of the spreads of loan rates over their own cost of funds. Somewhat smaller net fractions of domestic banks lowered the cost of credit lines and reduced the use of interest rate floors (a new loan term added to this survey) in lending to firms of all sizes. On net, about 30 percent of foreign banks reduced the use of interest rate floors. Moderate net fractions of larger domestic banks and foreign banks eased loan covenants, with several banks adding comments noting the reemergence of syndicated loans with few or no loan covenants.

Most domestic respondents that had eased standards or terms on C&I loans cited increased competition from other banks and nonbank lenders. About 45 percent of respondents also cited a more favorable or less uncertain economic outlook—a smaller fraction than in the previous survey. About 30 percent noted increased liquidity in the secondary market for C&I loans, consistent with reports from participants in the syndicated loan market. Only about 20 percent pointed to an increased tolerance for risk at their institution as a reason for easing, and

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

Measures of Supply and Demand for Commercial Real Estate Loans





only a few banks reported having reduced interest rate premiums on riskier loans. Of the five banks that reported having tightened one or more loan terms, all cited a reduced tolerance for risk as a factor contributing to the tightening, and most pointed to a less favorable or more uncertain economic outlook, decreased liquidity in the secondary market for C&I loans, and increased concerns about legislative changes, supervisory actions, or changes in accounting standards.

A moderate net fraction of domestic respondents—about 25 percent—reported stronger demand for C&I loans from large and middle-market firms. However, as in the previous quarter, a much smaller net fraction of banks (about 10 percent) reported stronger demand from small firms. Of the banks reporting stronger demand for C&I loans by firms of any size, substantial fractions indicated that the greater demand was due to an increase in customers' financing needs for inventories, merger and acquisition activity, and accounts receivable, as well as to a reduction in borrowing from other banks and nonbank sources. The most often cited reason for stronger demand noted by larger banks was greater demand for financing merger and acquisition activity, whereas for other banks it was a rise in financing needs for inventories. On net, about 35 percent of banks reported a pickup in inquiries from business borrowers about new or increased credit lines. Foreign banks also reported a slight improvement in demand, on net, and a moderate increase in inquiries regarding lines of credit.

Special Question on Changes in the Overall Credit Quality of Potential Business Borrowers

In response to a special question regarding changes in the overall credit quality of potential business borrowers over the past three months, about 55 percent of domestic respondents reported improvements in the overall credit quality of large and middle-market loan applicants, whereas only about 35 percent of respondents reported improvements, on net, in the overall credit quality of small firms that applied for loans.[5] Large domestic banks were considerably more upbeat than their smaller and foreign counterparts regarding improvements in the overall credit quality of business loan applicants, with about 75 percent of the large bank respondents reporting that the overall credit quality of large and middle-market applicants improved over the past three months.

Questions on Commercial Real Estate Lending

In the April survey, most domestic banks reported no change in their standards for approving CRE loans; however, a few large banks and foreign banks reportedly eased such standards somewhat.

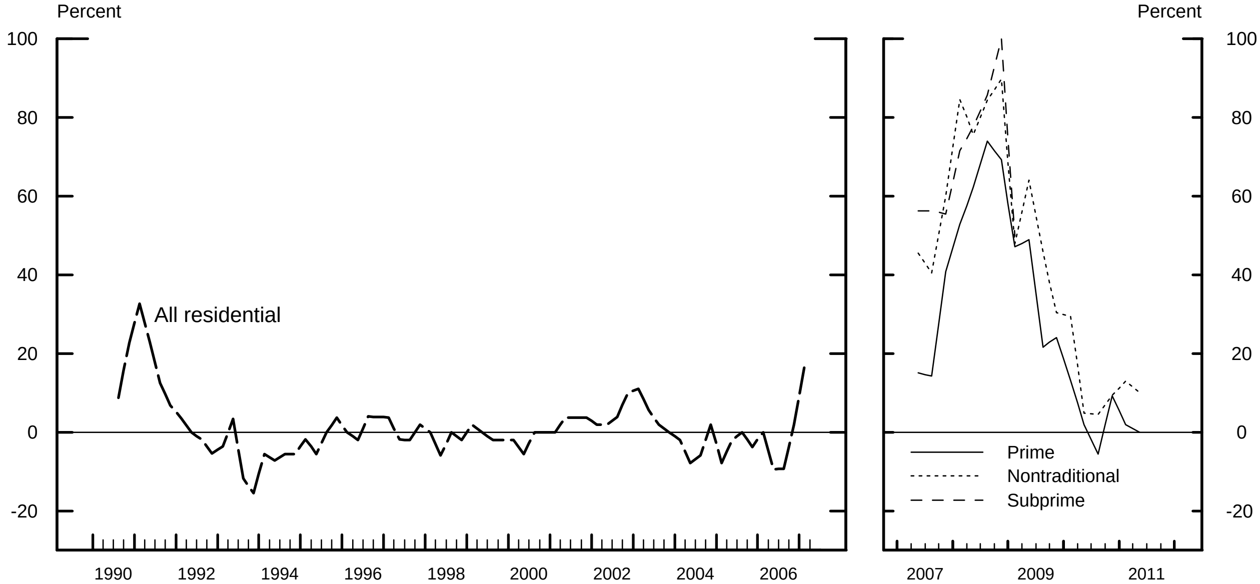
About 35 percent of domestic banks reported having seen increased demand for CRE loans—the strongest reading since the mid-1990s. Foreign banks reported little change in demand for CRE loans on net. The results for domestic banks are consistent with reports of increased demand for new mortgages to buy distressed properties, a pickup in multifamily

[5] This special question asked respondents to consider the average credit quality of applications that were denied as well as of those that were approved.

Financial Developments

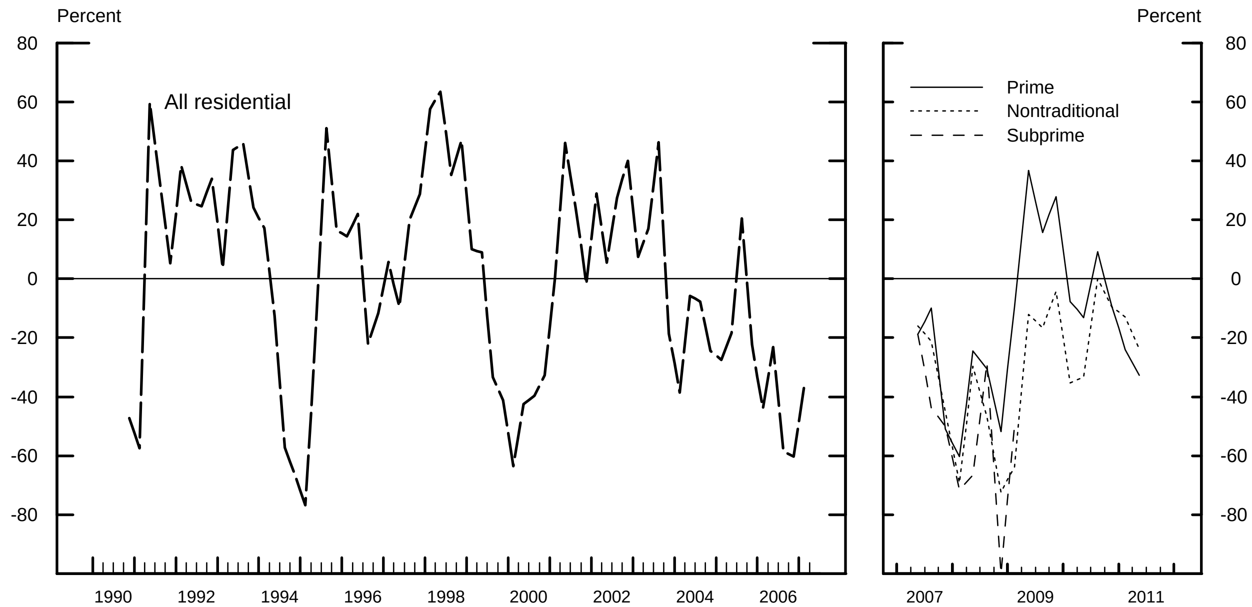
Measures of Supply and Demand for Residential Mortgage Loans

Net Percentage of Domestic Respondents Tightening Standards for Residential Mortgage Loans



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

Net Percentage of Domestic Respondents Reporting Stronger Demand for Residential Mortgage Loans



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

Financial Developments

construction due to an improvement in fundamentals for that sector, and demand for refinancing maturing CRE loans, although many such loans lack sufficient equity to be easily refinanced. Despite the reported pickup in demand for CRE loans, the volume of such loans on banks' books continues to decline because so many of the loans are being charged off.

LENDING TO HOUSEHOLDS

Questions on Residential Real Estate Lending

On net, standards on prime closed-end residential real estate loans and home equity lines of credit were about unchanged during the first quarter of 2011. As in the previous two surveys, about 10 percent of banks, on net, tightened standards on nontraditional mortgages. The tightening of standards on nontraditional mortgages primarily reflected changes at smaller banks; larger banks left those standards about unchanged.

Moderate net fractions of banks reported weakening demand for both prime and nontraditional closed-end loans as well as for home equity lines of credit. Demand for closed-end loans has now declined for three consecutive quarters, and the weekly bank credit data suggest a marked decline in mortgage originations in the first quarter.

Questions on Consumer Lending

In the April survey, for the first time, the questions about consumer loans were split into three separate categories: credit card, auto, and other consumer loans. On net, about 20 percent of banks reported having eased standards for approving credit card applications. But because this easing was concentrated at large banks, credit card standards were eased by respondents accounting for about 65 percent of such loans held by banks in the survey panel. Terms and demand for credit card loans were little changed, on balance, over the preceding three months. However, if the responses are weighted by the outstanding amount of credit card loans held by each respondent—as such loans are highly concentrated among larger banks—demand increased at banks accounting for about 15 percent of such loans, on net, during this period.

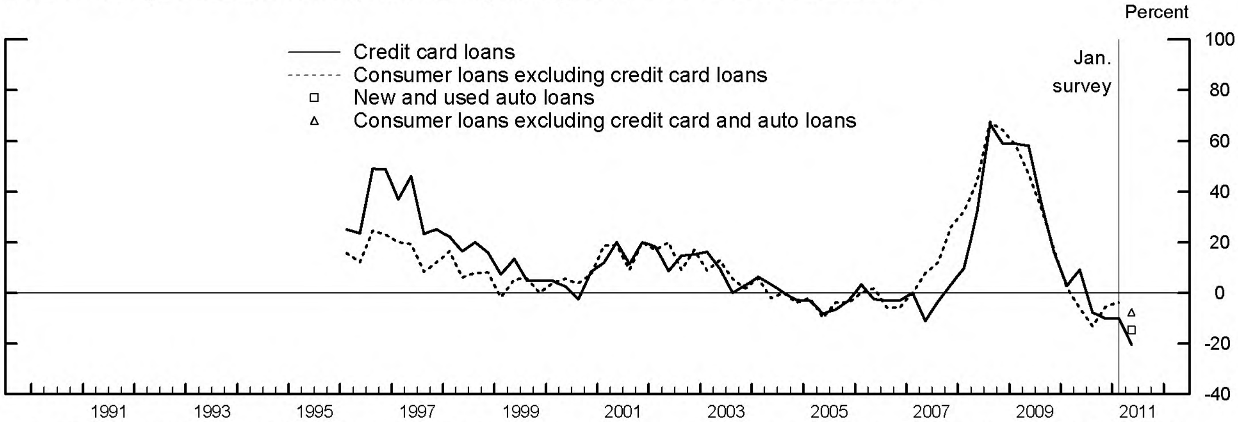
The net fraction of banks that reported having become more willing to make consumer installment loans registered its strongest reading since the first half of 1994. Those responses appeared to be reflected in some easing of standards and terms for auto loans, although standards and terms for other types of consumer loans were little changed over the past three months.

Standards for loans to purchase new and used autos were eased by about 15 percent of banks on net. As with credit card loans, only the larger banks in the sample reported having eased such standards. Moderate net fractions of large banks also eased spreads and other terms on these loans. Other banks eased loan spreads, but other loan terms and lending standards were about unchanged.

Demand for auto loans reportedly strengthened last quarter, consistent with reports citing an improvement in demand as well as easier credit at banks and auto finance companies as factors contributing to recent increases in auto sales.

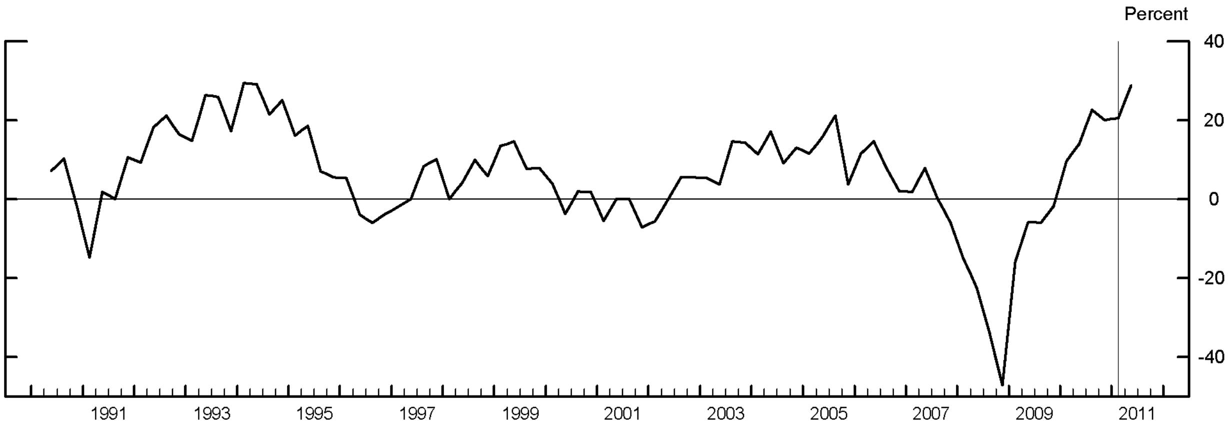
Measures of Supply and Demand for Consumer Loans

Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans

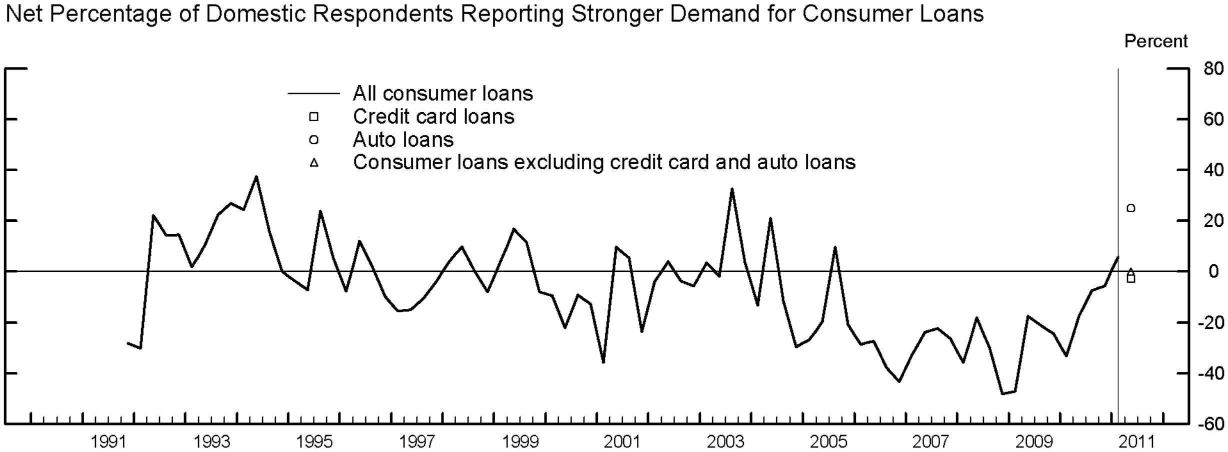


Note: For data starting in 2011:Q2, changes in standards for new auto loans, used auto loans, and consumer loans excluding credit card and auto loans are reported separately. For the 2011:Q2 survey only, banks were asked about standards for new and used auto loans separately, but because responses were identical across both categories for all banks, the series are combined into a single point.

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



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



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

Financial Developments

Special Questions on Changes in Credit Card Applications and in the Overall Credit Quality of Applicants

Banks' holdings of credit card loans continued to decline at a significant pace in the first quarter of 2011, even as the number of credit card offers mailed to households returned to levels seen before the escalation of the financial crisis in 2008. To better understand these trends, the survey included two special questions about changes in applications for new or increased credit card lines and in the overall credit quality of applicants over the preceding three months. Despite the increase in credit card solicitation volume and a significant net fraction of larger banks having eased standards, only a modest net fraction of banks reported an increase in the number of credit card applications over the past three months. Moreover, just a small net percentage of banks reported an improvement in the credit quality of individuals or households submitting credit card applications during the same period, as consumers likely continued to repair their balance sheets and more-creditworthy households remained less willing to borrow to fund consumption spending.

(This page is intentionally blank.)

Risks and Uncertainty

ASSESSMENT OF FORECAST UNCERTAINTY

We continue to see the risks around our projection for economic activity as elevated relative to the average experience of the past 20 years (the benchmark used by the Committee). As we have emphasized previously, the severe financial crisis and subsequent recession were both large and historically unusual. As a result, the relative influences of supply and demand in generating the contraction are difficult to gauge, implying unusual uncertainty with regard to the level of slack and strength of the recovery. Moreover, the pace at which households and financial institutions will continue to repair their balance sheets, and hence the rate at which the associated drag on spending and credit extension will ease, is difficult to assess. While lending conditions are gradually improving along the lines anticipated by the staff, the risks to the outlook for credit conditions remain sizable. We continue to judge the risks to our projection for real activity as roughly balanced: For example, while spending data have been disappointing of late, indications from the labor market, industrial production, and surveys of business confidence have remained solid.

We also continue to see the risks around our inflation projection as elevated relative to the experience of the past 20 years. The prospects for inflation expectations remain highly uncertain, given that the underlying pace of inflation remains at an unusually low level, even as commodity prices have moved sharply higher. The difficulties associated with gauging economic slack in the wake of an unusually deep recession imply larger risks, in both directions, to our assessment of the role that slack will play in influencing inflation going forward. Moreover, the federal funds rate is effectively at the zero lower bound and the Federal Reserve’s balance sheet is historically large. Prospects for the dollar and hence import prices also remain uncertain. Finally, under current law, the path for fiscal policy is unsustainable and, with the prospect for resolution murky, some observers worry that this situation could lead to higher inflation. Weighing these risks to both the upside and downside, we continue to see the risks around our inflation projection as roughly balanced.

ALTERNATIVE SCENARIOS

To illustrate some of the risks to the outlook, we consider several alternatives to the baseline projection using simulations of staff models. We begin with a simulation in which the level of potential output is assumed to be lower currently than in the baseline projection and policymakers are slow to recognize the less favorable supply-side conditions, setting the stage for higher inflation and weaker activity than in the baseline forecast. We then consider the possibility that we have underestimated the underlying strength of the recovery, and hence the inflation pressures that will emerge over time. The third scenario considers the opposite risk—that we have taken too little signal from the recent softness in the spending indicators, and that the recovery will be even more sluggish than we have projected in the baseline. The fourth scenario builds on this weakness by further assuming that, in an environment in which the unemployment rate remains persistently elevated, the underlying trend in inflation will continue to drift down noticeably. The final two scenarios consider the consequences of higher oil prices under different assumptions about the monetary policy response abroad. In all of these scenarios, monetary policy responds to movements in real activity and inflation as prescribed by a simple policy rule for the federal funds rate, while nontraditional policy is assumed to follow the baseline path.[1]

Lower Potential

Estimates of resource utilization are inherently imprecise and we could be significantly overstating the amount of slack in the economy. If so, inflationary pressures would be stronger than we anticipate, particularly if the public recognizes that monetary policymakers are too optimistic about supply-side conditions. At the same time, the outlook for aggregate spending would be weaker because lower potential output would imply lower long-run household and business income. In this scenario, the actual output gap is currently about 60 percent as wide as the staff estimates, reflecting a lower level of

[1] The first scenario is simulated using the staff's domestic DSGE model, EDO, whose structure allows us to model consistently the impact of gradual learning by the monetary authority on private-sector expectations. The following three scenarios are run in FRB/US, while the final pair is run in the multicountry SIGMA model.

The three models employ somewhat different monetary policy rules. In the FRB/US simulations, the federal funds rate follows the outcome-based rule described in the appendix on policy rules in Book B. The policy rule in SIGMA 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. Finally, monetary policy in EDO is set using an estimated rule in which the federal funds rate depends on both core PCE inflation and the deviation of output from its trend.

Alternative Scenarios

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

Measure and scenario	2011 H1	2011 H2	2012	2013	2014-15
Real GDP					
Extended Greenbook baseline	2.4	4.0	4.2	4.3	3.6
Lower potential	1.8	2.8	2.8	3.7	3.4
Stronger recovery	2.6	4.6	5.2	4.6	2.8
Weaker recovery	2.2	3.3	2.8	3.4	4.6
With further disinflation	2.1	3.2	2.8	3.3	4.7
Higher oil prices	2.3	3.5	3.7	4.1	3.6
With weaker dollar	2.3	3.5	3.9	4.1	3.5
Unemployment rate[1]					
Extended Greenbook baseline	8.9	8.7	7.7	7.0	5.6
Lower potential	9.1	8.7	8.0	7.4	5.9
Stronger recovery	8.9	8.6	7.1	6.0	5.3
Weaker recovery	8.9	8.8	8.4	8.4	6.3
With further disinflation	8.9	8.9	8.5	8.5	6.4
Higher oil prices	8.9	8.8	8.0	7.4	5.9
With weaker dollar	8.9	8.8	7.9	7.2	5.8
Core PCE inflation					
Extended Greenbook baseline	1.4	1.3	1.4	1.5	1.6
Lower potential	1.5	2.2	2.5	2.6	2.4
Stronger recovery	1.4	1.3	1.4	1.6	2.0
Weaker recovery	1.4	1.3	1.3	1.3	1.1
With further disinflation	1.4	1.1	.8	.4	.4
Higher oil prices	1.5	1.7	1.6	1.5	1.6
With weaker dollar	1.5	1.9	1.8	1.6	1.6
Federal funds rate[1]					
Extended Greenbook baseline	.1	.1	.5	2.0	3.8
Lower potential	.1	.6	1.5	2.8	4.4
Stronger recovery	.2	.4	1.7	3.4	4.0
Weaker recovery	.1	.1	.1	.2	3.2
With further disinflation	.1	.1	.1	.1	2.1
Higher oil prices	.1	.1	.5	1.8	3.5
With weaker dollar	.1	.1	.7	1.9	3.7

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

Risks & Uncertainty

structural productivity. Policymakers initially share the baseline view of economic slack, but revise their estimates gradually over the next few years in response to unexpectedly high inflation and weak real activity. In contrast, firms and households have a better understanding of the true state of supply-side conditions; as a result, they see that monetary policy is persistently too accommodative and thus raise their expectations for inflation. In response to a narrower output gap and higher inflation expectations, core inflation climbs to 2½ percent by the middle of next year and remains near that level thereafter. Through 2013, real GDP expands 1 percentage point more slowly per year, on average, than in the baseline as consumption and investment adjust to the lower level of trend output and income; the unemployment rate is also somewhat higher. Faced with both higher inflation and the growing recognition that there is less slack than previously thought, monetary policy tightens appreciably faster than in the baseline projection, with the federal funds rate reaching ½ percent by the end of this year and 1½ percent by the end of 2012.

Stronger Recovery

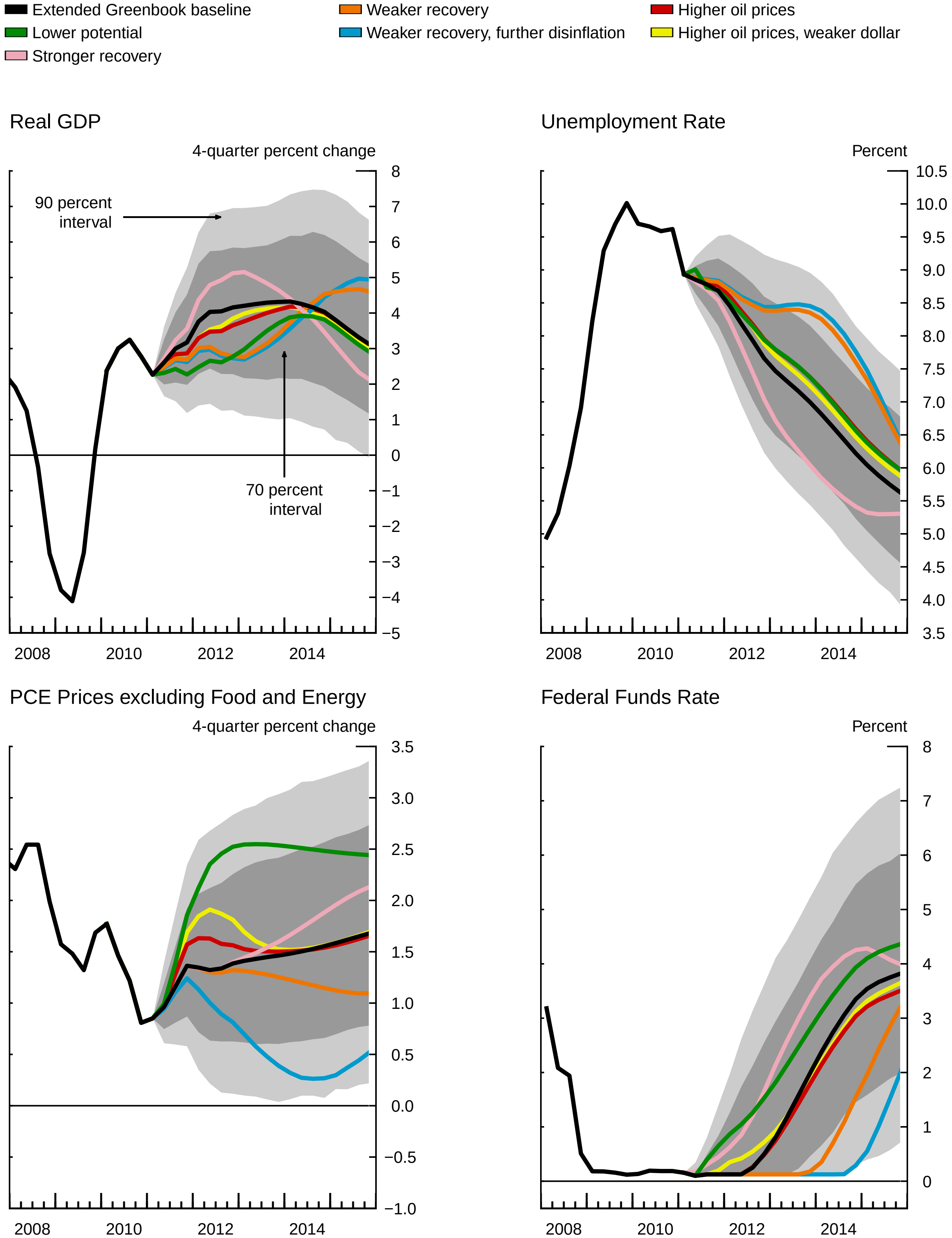
In putting together the baseline projection, we have balanced the disappointing news on spending against encouraging readings on the labor market, industrial production, and business sentiment. In this scenario, the latter indicators turn out to be correctly signaling that a more robust expansion is under way than we anticipate, spurred by a mutually reinforcing dynamic of improved optimism, higher spending, greater hiring, and increasing credit availability. As a result, real GDP rises at an annualized pace of 4½ percent in the second half of this year and 5 percent in 2012, boosting the demand for labor enough to push the unemployment rate down to 7 percent by late next year. Initially, the stronger pace of the recovery has little effect on inflation, both because higher investment increases labor productivity and therefore holds down unit labor costs, and because long-run inflation expectations are well anchored. In time, however, tighter labor and product markets cause inflation to move up noticeably more than in the baseline. In response to stronger near-term real activity, the federal funds rate lifts off from zero late this year.

Weaker Recovery

Although recent spending indicators have been unexpectedly soft, we have interpreted that weakness as likely to be largely transitory. In this scenario, however, the incoming data signal a more sluggish recovery in which anticipated improvements in credit availability, consumer confidence, and the willingness of firms to hire are slower to

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations



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

Measure	2011	2012	2013	2014	2015
Real GDP					
(percent change, Q4 to Q4)					
Projection	3.2	4.2	4.3	4.0	3.1
Confidence interval					
Tealbook forecast errors	1.9–4.5	2.4–5.9	. . .	. . .	. . .
FRB/US stochastic simulations	2.0–4.5	2.3–5.8	2.2–6.0	1.9–6.2	1.1–5.4
Civilian unemployment rate					
(percent, Q4)					
Projection	8.7	7.7	7.0	6.2	5.6
Confidence interval					
Tealbook forecast errors	8.2–9.2	6.9–8.5	. . .	. . .	. . .
FRB/US stochastic simulations	8.2–9.2	6.7–8.6	6.0–8.2	5.2–7.4	4.5–6.8
PCE prices, total					
(percent change, Q4 to Q4)					
Projection	2.2	1.2	1.5	1.6	1.7
Confidence interval					
Tealbook forecast errors	1.5–3.0	.0–2.5	. . .	. . .	. . .
FRB/US stochastic simulations	1.4–3.2	.1–2.5	.3–2.9	.3–3.0	.5–3.1
PCE prices excluding food and energy					
(percent change, Q4 to Q4)					
Projection	1.4	1.4	1.5	1.6	1.7
Confidence interval					
Tealbook forecast errors	.9–1.8	.7–2.1	. . .	. . .	. . .
FRB/US stochastic simulations	.9–1.9	.6–2.3	.6–2.4	.7–2.6	.8–2.7
Federal funds rate					
(percent, Q4)					
Projection	.1	.5	2.0	3.3	3.8
Confidence interval					
FRB/US stochastic simulations	.1–.8	.1–2.6	.5–4.1	1.5–5.5	2.0–6.1

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.

Risks & Uncertainty

materialize than in the baseline. Corporate equity prices decline rather than rise, reflecting a reduced appetite for risk as well as poorer economic outcomes, with the result that stock market wealth is more than 15 percent below the baseline by the middle of next year. Lower consumer confidence and wealth lead households to limit their spending by enough to keep the personal saving rate close to 6 percent. All told, real GDP advances less than 3 percent in both 2011 and 2012 and the unemployment rate edges down only to 8½ percent by the end of 2013. With greater slack, core inflation declines to about 1 percent by 2015, rather than rising to 1½ percent as in the baseline. Liftoff of the federal funds rate from its effective lower bound is delayed until early 2014.

Weaker Recovery with Further Disinflation

In the previous scenario, despite persistent economic slack, core inflation declines only slightly because of well-anchored long-run inflation expectations. But the relative stability of various measures of expected inflation over the past several years may be misleading us about the potential for further disinflation, particularly if the unemployment rate were to remain very elevated. This scenario builds on the previous one by assuming inflation dynamics similar to those in some of the staff's reduced-form price equations. Accordingly, core inflation falls to around ½ percent by the middle of the decade. Outcomes for real GDP and unemployment are similar to those in the preceding scenario, largely because long-term nominal interest rates decline with actual and expected inflation, implying little effective change in financial conditions. In the face of continued disinflation and high unemployment, the federal funds rate remains near zero until late 2014.

Higher Oil Prices

Although we project that oil prices will remain near their current level, there is a high degree of uncertainty around this projection. An upside risk is that unrest in the Middle East and North Africa could intensify further, reducing global oil supplies. This scenario assumes that oil prices rise $30 per barrel above baseline by the end of 2011 before gradually receding. Real activity in the United States is weaker than baseline, notwithstanding some improvement in real net exports arising from a slight endogenous depreciation of the dollar, because higher oil prices restrain consumer spending and business investment. All told, U.S. real GDP rises only around 3½ percent at an annual rate in the second half of this year and 3¾ percent in 2012. Because firms eventually pass on some of their higher production costs to households, core inflation runs above 1½ percent through 2012, ¼ percentage point higher than in our baseline. Headline inflation runs at nearly 2¼ percent in the second half of this year and then falls to around 1½ percent next year. Monetary policy is little changed from baseline because the upward pressure on the federal funds rate from higher inflation roughly offsets the downward pressure from weaker real activity.

Higher Oil Prices with Weaker Dollar

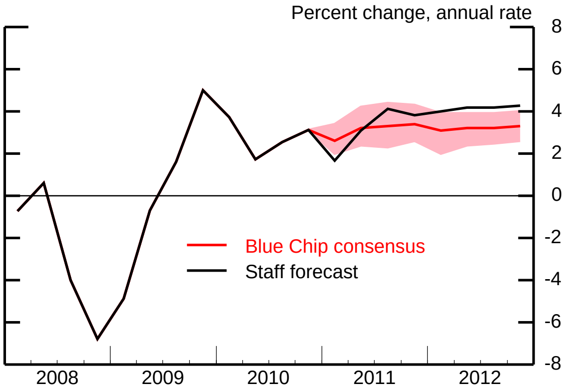
Given that headline inflation is already running at an elevated level in many foreign economies, their central banks might tighten aggressively in response to a further run-up in oil prices. In addition, in this environment, sentiment toward the dollar could weaken as well. This scenario builds on the previous one by assuming that foreign central banks boost policy rates 50 to 75 basis points more than in the previous scenario. In addition, the dollar falls about 8 percent below baseline by the end of 2011; about half of this decline reflects an endogenous reaction to higher oil prices and higher interest rates abroad, while the remainder reflects the exogenous shift in sentiment away from dollar-denominated assets. This depreciation of the dollar mitigates the adverse effect of the oil price rise on U.S. activity but contributes to greater near-term pressure on inflation. Consequently, the unemployment rate in late 2012 is about 8 percent, ¼ percentage point above baseline. Core inflation exceeds 1¾ percent through 2012, about ½ percentage point above baseline, while headline inflation runs above 2½ percent in the second half of this year before falling to about 1¾ percent next year. The rise in core inflation pulls the liftoff date for the federal funds rate to early 2012.

OUTSIDE FORECASTS

In its April iteration, the Blue Chip consensus forecast for this year's increase in real GDP edged down since its March release and is now at 3.1 percent, similar to the staff projection of 3.2 percent; the downward revision was concentrated in the first quarter, reportedly reflecting the weaker incoming spending data. The consensus projection anticipates a 3.2 percent rise in real GDP over the course of 2012, 1 percentage point below the staff projection. The Blue Chip forecast for the unemployment rate at the end of 2012 is 7.9 percent, 0.2 percentage point higher than the staff's projection. Regarding inflation, the Blue Chip anticipates the overall CPI increasing 2.9 percent over the four quarters of 2011, about the same as projected by the staff. In contrast, the consensus projection for CPI inflation in 2012 equals 2.2 percent, 1 percentage point above the staff projection.

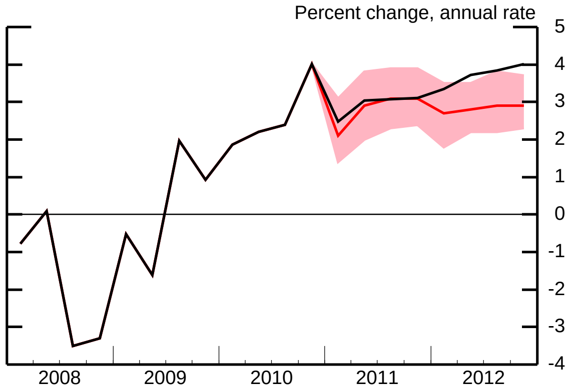
Tealbook Forecast Compared with Blue Chip
(Blue Chip survey released April 10, 2011)

Real GDP

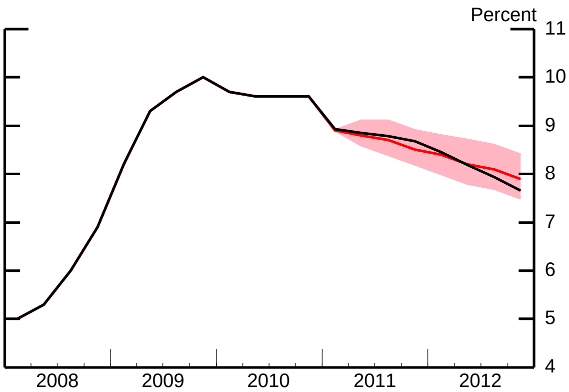


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

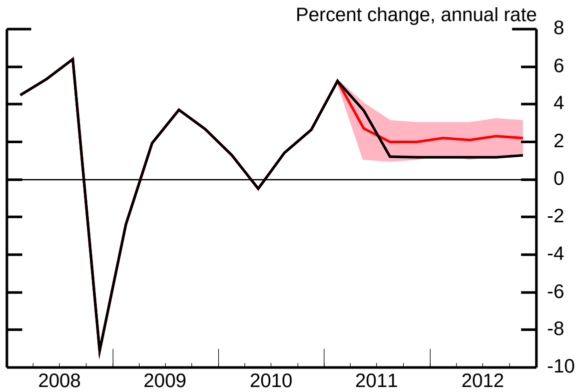
Real PCE



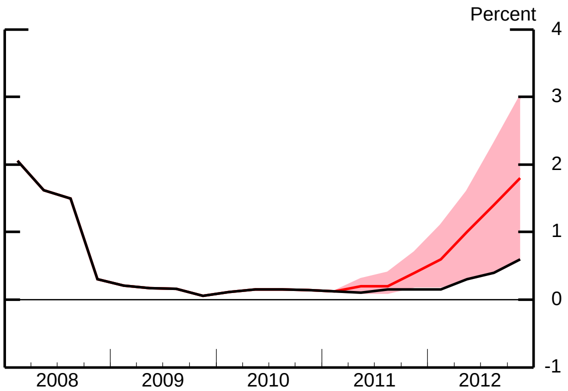
Unemployment Rate



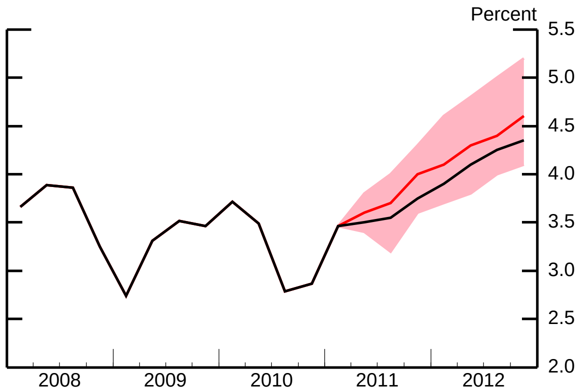
Consumer Price Index



Treasury Bill Rate



10-Year Treasury Yield



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

Risks & Uncertainty

(This page is intentionally blank.)

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

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate[1]	
	03/09/11	04/20/11	03/09/11	04/20/11	03/09/11	04/20/11	03/09/11	04/20/11	03/09/11	04/20/11
Quarterly										
2010:Q1	4.8	4.8	3.7	3.7	2.1	2.1	1.2	1.2	9.7	9.7
Q2	3.7	3.7	1.7	1.7	.0	.0	1.0	1.0	9.6	9.6
Q3	4.6	4.6	2.6	2.6	.8	.8	.5	.5	9.6	9.6
Q4	3.6	3.5	3.2	3.1	1.8	1.7	.5	.4	9.6	9.6
2011:Q1	4.8	3.6	3.2	1.7	3.3	3.8	1.1	1.4	9.0	8.9
Q2	6.2	6.1	3.8	3.1	2.3	2.8	1.2	1.5	8.9	8.9
Q3	4.9	5.4	3.9	4.1	1.2	1.2	1.3	1.3	8.7	8.8
Q4	5.0	5.1	4.0	3.8	1.0	1.2	1.1	1.2	8.6	8.7
2012:Q1	5.6	5.5	4.2	4.0	1.0	1.2	1.2	1.3	8.4	8.5
Q2	5.8	5.6	4.4	4.2	1.0	1.2	1.2	1.4	8.1	8.2
Q3	5.8	5.6	4.4	4.2	1.1	1.2	1.2	1.4	7.8	7.9
Q4	5.8	5.7	4.5	4.3	1.1	1.3	1.2	1.4	7.5	7.7
Two-quarter[2]										
2010:Q2	4.3	4.3	2.7	2.7	1.0	1.0	1.1	1.1	-.4	-.4
Q4	4.1	4.1	2.9	2.8	1.3	1.2	.5	.5	.0	.0
2011:Q2	5.5	4.8	3.5	2.4	2.8	3.3	1.2	1.4	-.7	-.7
Q4	5.0	5.3	4.0	4.0	1.1	1.2	1.2	1.3	-.3	-.2
2012:Q2	5.7	5.6	4.3	4.1	1.0	1.2	1.2	1.4	-.5	-.5
Q4	5.8	5.7	4.5	4.2	1.1	1.2	1.2	1.4	-.6	-.5
Four-quarter[3]										
2009:Q4	.6	.6	.2	.2	1.5	1.5	1.7	1.7	3.1	3.1
2010:Q4	4.2	4.2	2.8	2.8	1.2	1.1	.8	.8	-.4	-.4
2011:Q4	5.2	5.0	3.7	3.2	1.9	2.2	1.2	1.4	-1.0	-.9
2012:Q4	5.8	5.6	4.4	4.2	1.1	1.2	1.2	1.4	-1.1	-1.0
Annual										
2009	-1.7	-1.7	-2.6	-2.6	.2	.2	1.5	1.5	9.3	9.3
2010	3.8	3.8	2.9	2.9	1.7	1.7	1.3	1.3	9.6	9.6
2011	4.8	4.5	3.3	2.8	1.9	2.1	1.0	1.1	8.8	8.8
2012	5.5	5.5	4.2	4.0	1.1	1.3	1.2	1.3	7.9	8.1

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

Greensheets

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

Item	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2010[1]	2011[1]	2012[1]
Real GDP	3.7	1.7	2.6	3.1	1.7	3.1	4.1	3.8	4.0	4.2	4.2	4.3	2.8	3.2	4.2
Previous Tealbook	3.7	1.7	2.6	3.2	3.2	3.8	3.9	4.0	4.2	4.4	4.4	4.5	2.8	3.7	4.4
Final sales	1.1	.9	.9	6.7	.5	3.4	3.0	4.9	3.6	3.9	3.8	4.2	2.4	2.9	3.9
Previous Tealbook	1.1	.9	.9	6.8	2.0	3.7	3.6	5.0	4.0	4.1	4.0	4.3	2.4	3.6	4.1
Priv. dom. final purch.	2.1	4.4	2.3	4.2	2.3	3.6	3.8	4.0	3.7	4.2	4.4	4.6	3.2	3.4	4.2
Previous Tealbook	2.1	4.4	2.3	4.4	3.0	4.2	4.4	4.5	4.3	4.5	4.7	4.8	3.3	4.0	4.6
Personal cons. expend.	1.9	2.2	2.4	4.0	2.5	3.0	3.1	3.1	3.3	3.7	3.9	4.0	2.6	2.9	3.7
Previous Tealbook	1.9	2.2	2.4	4.1	2.5	3.5	3.5	3.5	3.7	3.8	4.0	4.1	2.6	3.2	3.9
Durables	8.8	6.8	7.6	21.1	10.4	5.3	7.9	7.8	10.6	12.2	12.9	11.8	10.9	7.8	11.9
Nondurables	4.2	1.9	2.5	4.1	2.2	2.8	2.6	1.9	1.7	1.5	1.4	1.5	3.2	2.4	1.5
Services	.1	1.6	1.6	1.5	1.3	2.7	2.5	2.8	2.8	3.1	3.2	3.6	1.2	2.3	3.2
Residential investment	-12.3	25.7	-27.3	3.3	-1.8	.4	2.6	5.3	6.1	7.8	9.3	11.8	-4.6	1.6	8.7
Previous Tealbook	-12.3	25.7	-27.3	2.8	3.7	7.3	10.9	12.0	13.1	13.2	13.4	13.8	-4.7	8.4	13.4
Business fixed invest.	7.8	17.2	10.0	7.7	2.2	8.6	9.2	10.2	5.7	7.0	7.3	7.3	10.6	7.5	6.8
Previous Tealbook	7.8	17.2	10.0	6.7	6.2	8.9	9.5	10.2	6.1	7.5	7.4	7.8	10.3	8.7	7.2
Equipment & software	20.4	24.8	15.4	7.7	10.1	12.2	12.6	13.4	8.0	9.3	9.6	9.7	16.9	12.1	9.1
Previous Tealbook	20.4	24.8	15.4	6.6	12.7	12.5	13.2	13.6	8.5	10.0	9.7	10.1	16.6	13.0	9.6
Nonres. structures	-17.8	-.5	-3.5	7.6	-17.3	-1.4	-.7	.8	-1.4	-.3	.1	.1	-4.0	-5.0	-.4
Previous Tealbook	-17.8	-.5	-3.5	6.7	-10.4	-.9	-.9	.4	-1.1	.0	.3	.3	-4.2	-3.0	-.1
Net exports[2]	-338	-449	-505	-398	-393	-396	-407	-357	-336	-321	-316	-302	-422	-388	-319
Previous Tealbook[2]	-338	-449	-505	-395	-386	-387	-390	-348	-331	-318	-313	-301	-422	-378	-316
Exports	11.4	9.1	6.8	8.6	6.5	8.6	9.3	9.5	9.5	9.1	8.8	8.8	9.0	8.5	9.0
Imports	11.2	33.5	16.8	-12.6	4.4	7.5	9.7	-1.6	4.1	4.8	6.5	5.1	11.0	4.9	5.1
Gov't. cons. & invest.	-1.6	3.9	3.9	-1.7	-7.0	2.4	1.3	-.3	-.3	.0	.1	-.1	1.1	-1.0	-.1
Previous Tealbook	-1.6	3.9	3.9	-1.7	-3.1	1.4	.7	-.1	-.1	.0	.1	-.1	1.1	-.3	.0
Federal	1.8	9.1	8.8	-.3	-11.5	8.0	3.9	-.4	-.7	-.7	-.7	-1.1	4.8	-.3	-.8
Defense	.4	7.4	8.5	-2.2	-18.4	11.3	6.0	-.1	.0	.0	.0	.0	3.4	-1.0	.0
Nondefense	5.0	12.8	9.5	3.7	4.0	1.8	-.2	-1.2	-2.2	-2.2	-2.2	-3.3	7.7	1.1	-2.5
State & local	-3.8	.6	.7	-2.6	-3.9	-1.2	-.4	-.2	.0	.5	.7	.7	-1.3	-1.4	.4
Change in bus. inventories[2]	44	69	121	16	51	44	79	46	58	66	78	80	63	55	70
Previous Tealbook[2]	44	69	121	15	51	55	63	34	41	50	65	71	62	51	57
Nonfarm[2]	37	61	117	15	47	40	75	43	55	62	75	76	57	51	67
Farm[2]	8	8	5	1	4	4	4	4	4	4	4	4	5	4	4

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

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real GDP	3.1	2.7	2.4	2.3	-2.8	.2	2.8	3.2	4.2
Previous Tealbook	3.1	2.7	2.4	2.3	-2.8	.2	2.8	3.7	4.4
Final sales	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	2.9	3.9
Previous Tealbook	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	3.6	4.1
Priv. dom. final purch.	4.2	3.1	2.5	1.3	-3.8	-2.0	3.2	3.4	4.2
Previous Tealbook	4.2	3.1	2.5	1.3	-3.8	-2.0	3.3	4.0	4.6
Personal cons. expend.	3.5	2.7	3.3	1.7	-1.9	.2	2.6	2.9	3.7
Previous Tealbook	3.5	2.7	3.3	1.7	-1.9	.2	2.6	3.2	3.9
Durables	5.5	2.1	6.3	3.9	-12.3	4.8	10.9	7.8	11.9
Nondurables	3.0	3.3	3.2	.8	-2.9	1.1	3.2	2.4	1.5
Services	3.4	2.6	2.8	1.7	.3	-.8	1.2	2.3	3.2
Residential investment	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-4.6	1.6	8.7
Previous Tealbook	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-4.7	8.4	13.4
Business fixed invest.	7.0	4.4	7.8	8.2	-8.3	-12.7	10.6	7.5	6.8
Previous Tealbook	7.0	4.4	7.8	8.2	-8.3	-12.7	10.3	8.7	7.2
Equipment & software	8.8	6.1	6.0	4.3	-11.8	-4.9	16.9	12.1	9.1
Previous Tealbook	8.8	6.1	6.0	4.3	-11.8	-4.9	16.6	13.0	9.6
Nonres. structures	1.7	-.1	13.0	17.3	-1.5	-26.5	-4.0	-5.0	-.4
Previous Tealbook	1.7	-.1	13.0	17.3	-1.5	-26.5	-4.2	-3.0	-.1
Net exports[1]	-688	-723	-729	-655	-504	-363	-422	-388	-319
Previous Tealbook[1]	-688	-723	-729	-655	-504	-363	-422	-378	-316
Exports	7.1	6.7	10.2	10.1	-2.9	-.1	9.0	8.5	9.0
Imports	10.9	5.2	4.1	.7	-6.0	-7.2	11.0	4.9	5.1
Gov't. cons. & invest.	.6	.7	1.5	1.9	3.1	.8	1.1	-1.0	-.1
Previous Tealbook	.6	.7	1.5	1.9	3.1	.8	1.1	-.3	.0
Federal	2.3	1.2	2.2	3.1	9.2	3.6	4.8	-.3	-.8
Defense	2.4	.4	4.4	2.6	9.5	3.3	3.4	-1.0	.0
Nondefense	2.3	2.6	-2.3	4.2	8.5	4.5	7.7	1.1	-2.5
State & local	-.4	.4	1.2	1.2	-.4	-1.0	-1.3	-1.4	.4
Change in bus. inventories[1]	66	50	59	28	-38	-113	63	55	70
Previous Tealbook[1]	66	50	59	28	-38	-113	62	51	57
Nonfarm[1]	58	50	63	29	-39	-117	57	51	67
Farm[1]	8	0	-4	-1	1	3	5	4	4

1. Billions of chained (2005) dollars.

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

Item	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2010[1]	2011[1]	2012[1]
Real GDP	3.7	1.7	2.6	3.1	1.7	3.1	4.1	3.8	4.0	4.2	4.2	4.3	2.8	3.2	4.2
Previous Tealbook	3.7	1.7	2.6	3.2	3.2	3.8	3.9	4.0	4.2	4.4	4.4	4.5	2.8	3.7	4.4
Final sales	1.1	.9	.9	6.5	.5	3.3	3.0	4.8	3.6	3.9	3.8	4.2	2.4	2.9	3.9
Previous Tealbook	1.1	.9	.9	6.6	2.1	3.7	3.6	4.9	4.0	4.1	4.0	4.3	2.4	3.6	4.1
Priv. dom. final purch.	1.7	3.6	1.9	3.5	1.9	3.0	3.2	3.3	3.1	3.5	3.7	3.8	2.7	2.8	3.5
Previous Tealbook	1.7	3.6	1.9	3.6	2.5	3.5	3.6	3.7	3.6	3.8	3.9	4.0	2.7	3.3	3.8
Personal cons. expend.	1.3	1.5	1.7	2.8	1.7	2.2	2.2	2.2	2.4	2.6	2.7	2.8	1.9	2.1	2.6
Previous Tealbook	1.3	1.5	1.7	2.9	1.8	2.5	2.5	2.5	2.7	2.7	2.8	2.9	1.9	2.3	2.8
Durables	.6	.5	.5	1.5	.8	.4	.6	.6	.8	.9	1.0	.9	.8	.6	.9
Nondurables	.7	.3	.4	.7	.4	.5	.4	.3	.3	.3	.2	.2	.5	.4	.2
Services	.0	.8	.7	.7	.6	1.3	1.2	1.3	1.3	1.5	1.5	1.7	.6	1.1	1.5
Residential investment	-.3	.6	-.8	.1	.0	.0	.1	.1	.1	.2	.2	.3	-.1	.0	.2
Previous Tealbook	-.3	.6	-.8	.1	.1	.2	.2	.3	.3	.3	.3	.3	-.1	.2	.3
Business fixed invest.	.7	1.5	.9	.7	.2	.8	.9	1.0	.6	.7	.7	.7	1.0	.7	.7
Previous Tealbook	.7	1.5	.9	.6	.6	.9	.9	1.0	.6	.8	.8	.8	1.0	.9	.7
Equipment & software	1.2	1.5	1.0	.5	.7	.9	.9	1.0	.6	.7	.7	.7	1.1	.9	.7
Previous Tealbook	1.2	1.5	1.0	.5	.9	.9	.9	1.0	.6	.8	.7	.8	1.1	.9	.7
Nonres. structures	-.5	.0	-.1	.2	-.5	.0	.0	.0	.0	.0	.0	.0	-.1	-.1	.0
Previous Tealbook	-.5	.0	-.1	.2	-.3	.0	.0	.0	.0	.0	.0	.0	-.1	-.1	.0
Net exports	-.3	-3.5	-1.7	3.3	.1	-.1	-.4	1.6	.6	.4	.1	.4	-.6	.3	.4
Previous Tealbook	-.3	-3.5	-1.7	3.3	.2	-.1	-.1	1.3	.5	.4	.1	.3	-.5	.3	.3
Exports	1.3	1.1	.8	1.1	.8	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.3
Imports	-1.6	-4.6	-2.5	2.2	-.7	-1.3	-1.6	.3	-.7	-.8	-1.1	-.9	-1.6	-.8	-.9
Gov't. cons. & invest.	-.3	.8	.8	-.3	-1.5	.5	.3	-.1	-.1	.0	.0	.0	.2	-.2	.0
Previous Tealbook	-.3	.8	.8	-.3	-.6	.3	.1	.0	.0	.0	.0	.0	.2	-.1	.0
Federal	.2	.7	.7	.0	-1.0	.6	.3	.0	-.1	-.1	-.1	-.1	.4	.0	-.1
Defense	.0	.4	.5	-.1	-1.1	.6	.3	.0	.0	.0	.0	.0	.2	-.1	.0
Nondefense	.1	.3	.3	.1	.1	.0	.0	.0	-.1	-.1	-.1	-.1	.2	.0	-.1
State & local	-.5	.1	.1	-.3	-.5	-.1	.0	.0	.0	.1	.1	.1	-.2	-.2	.1
Change in bus. inventories	2.6	.8	1.6	-3.4	1.1	-.3	1.1	-1.0	.4	.2	.4	.1	.4	.2	.3
Previous Tealbook	2.6	.8	1.6	-3.5	1.1	.1	.3	-.9	.2	.3	.5	.2	.4	.2	.3
Nonfarm	2.6	.8	1.7	-3.3	1.0	-.2	1.1	-1.0	.4	.2	.4	.1	.5	.2	.3
Farm	.1	.0	-.1	-.2	.1	.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	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2010[1]	2011[1]	2012[1]
GDP chain-wt. price index	1.0	1.9	2.1	.4	1.9	2.9	1.2	1.2	1.5	1.4	1.4	1.4	1.3	1.8	1.4
Previous Tealbook	1.0	1.9	2.1	.4	1.6	2.4	1.0	1.0	1.3	1.3	1.3	1.3	1.4	1.5	1.3
PCE chain-wt. price index	2.1	.0	.8	1.7	3.8	2.8	1.2	1.2	1.2	1.2	1.2	1.3	1.1	2.2	1.2
Previous Tealbook	2.1	.0	.8	1.8	3.3	2.3	1.2	1.0	1.0	1.0	1.1	1.1	1.2	1.9	1.1
Energy	16.4	-17.5	5.4	24.3	40.6	18.8	-2.1	-.5	-.7	-1.0	-1.4	-1.1	5.9	12.9	-1.1
Previous Tealbook	16.4	-17.5	5.4	24.3	37.9	14.7	-2.2	-1.7	-1.4	-1.6	-1.4	-.8	5.9	11.0	-1.3
Food	1.8	1.6	.3	1.4	6.4	5.5	2.9	2.2	1.4	1.3	1.4	1.4	1.3	4.3	1.4
Previous Tealbook	1.8	1.6	.3	1.4	4.9	4.5	2.5	1.5	1.3	1.3	1.4	1.4	1.3	3.4	1.3
Ex. food & energy	1.2	1.0	.5	.4	1.4	1.5	1.3	1.2	1.3	1.4	1.4	1.4	.8	1.4	1.4
Previous Tealbook	1.2	1.0	.5	.5	1.1	1.2	1.3	1.1	1.2	1.2	1.2	1.2	.8	1.2	1.2
Ex. food & energy, market based	.7	1.0	1.1	.3	1.3	1.4	1.2	1.1	1.2	1.2	1.3	1.3	.8	1.2	1.2
Previous Tealbook	.7	1.0	1.1	.4	.9	1.2	1.2	.9	1.0	1.1	1.1	1.1	.8	1.0	1.1
CPI	1.3	-.5	1.4	2.6	5.2	3.7	1.2	1.2	1.2	1.2	1.2	1.3	1.2	2.8	1.2
Previous Tealbook	1.3	-.5	1.4	2.6	4.6	2.8	.9	.9	.9	.9	1.0	1.1	1.2	2.3	1.0
Ex. food & energy	.0	.8	1.1	.6	1.7	1.8	1.3	1.2	1.4	1.4	1.5	1.5	.6	1.5	1.5
Previous Tealbook	.0	.8	1.1	.6	1.5	1.3	1.0	1.0	1.1	1.2	1.2	1.3	.6	1.2	1.2
ECI, hourly compensation[2]	2.6	1.8	1.8	1.8	2.5	2.2	2.3	2.3	3.0	2.7	2.7	2.7	2.1	2.3	2.8
Previous Tealbook[2]	2.6	1.8	1.8	1.8	2.5	2.2	2.2	2.2	2.8	2.5	2.5	2.5	2.1	2.3	2.6
Nonfarm business sector															
Output per hour	4.6	-1.7	2.3	2.9	.8	.0	2.0	1.5	1.7	1.8	1.8	1.9	2.0	1.1	1.8
Previous Tealbook	4.6	-1.7	2.3	3.0	2.7	.4	1.2	1.4	1.4	1.8	1.8	2.0	2.0	1.4	1.7
Compensation per hour	-.2	3.1	2.5	2.1	2.8	1.7	2.1	2.2	2.8	2.6	2.6	2.7	1.9	2.2	2.7
Previous Tealbook	-.2	3.1	2.5	2.0	3.0	1.7	1.8	1.9	2.6	2.4	2.4	2.5	1.8	2.1	2.5
Unit labor costs	-4.6	4.9	.1	-.8	2.0	1.7	.1	.7	1.1	.8	.8	.8	-.2	1.1	.9
Previous Tealbook	-4.6	4.9	.1	-1.0	.2	1.2	.6	.4	1.2	.5	.6	.5	-.2	.6	.7
Core goods imports chain-wt. price index[3]	4.2	3.1	-.8	4.3	8.2	5.7	3.6	2.0	1.5	1.4	1.4	1.4	2.7	4.9	1.4
Previous Tealbook[3]	4.2	3.1	-.8	4.3	7.5	5.5	3.3	2.0	1.4	1.4	1.4	1.4	2.7	4.6	1.4

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
2. Private-industry workers.
3. Core goods imports exclude computers, semiconductors, oil, and natural gas.

Greensheets

Changes in Prices and Costs
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP chain-wt. price index	3.2	3.5	2.9	2.6	2.1	.5	1.3	1.8	1.4
Previous Tealbook	3.2	3.5	2.9	2.6	2.1	.5	1.4	1.5	1.3
PCE chain-wt. price index	3.0	3.3	1.9	3.5	1.7	1.5	1.1	2.2	1.2
Previous Tealbook	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.9	1.1
Energy	18.6	21.5	-3.7	19.4	-9.0	2.7	5.9	12.9	-1.1
Previous Tealbook	18.6	21.5	-3.7	19.4	-9.0	2.7	5.9	11.0	-1.3
Food	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	4.3	1.4
Previous Tealbook	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	3.4	1.3
Ex. food & energy	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.4	1.4
Previous Tealbook	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.2	1.2
Ex. food & energy, market based	1.9	2.1	2.2	2.2	2.2	1.7	.8	1.2	1.2
Previous Tealbook	1.9	2.1	2.2	2.2	2.2	1.7	.8	1.0	1.1
CPI	3.4	3.7	2.0	4.0	1.6	1.5	1.2	2.8	1.2
Previous Tealbook	3.4	3.7	2.0	4.0	1.6	1.5	1.2	2.3	1.0
Ex. food & energy	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.5	1.5
Previous Tealbook	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.2	1.2
ECI, hourly compensation[1]	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.3	2.8
Previous Tealbook[1]	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.3	2.6
Nonfarm business sector									
Output per hour	1.5	1.4	.9	2.6	-.4	6.5	2.0	1.1	1.8
Previous Tealbook	1.5	1.4	.9	2.6	-.4	6.5	2.0	1.4	1.7
Compensation per hour	3.3	3.5	4.5	3.6	2.3	2.8	1.9	2.2	2.7
Previous Tealbook	3.3	3.5	4.5	3.6	2.3	2.8	1.8	2.1	2.5
Unit labor costs	1.9	2.0	3.5	.9	2.7	-3.5	-.2	1.1	.9
Previous Tealbook	1.9	2.0	3.5	.9	2.7	-3.5	-.2	.6	.7
Core goods imports chain-wt. price index[2]	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	4.9	1.4
Previous Tealbook[2]	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	4.6	1.4

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

Other Macroeconomic Indicators

Item	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2010[1]	2011[1]	2012[1]
Employment and production															
Nonfarm payroll employment[2]	-.1	.6	-.1	.2	.4	.6	.7	.7	.8	.8	.8	.8	.7	2.4	3.2
Unemployment rate[3]	9.7	9.6	9.6	9.6	8.9	8.9	8.8	8.7	8.5	8.2	7.9	7.7	9.6	8.7	7.7
Previous Tealbook[3]	9.7	9.6	9.6	9.6	9.0	8.9	8.7	8.6	8.4	8.1	7.8	7.5	9.6	8.6	7.5
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]	-6.2	-6.2	-6.1	-5.9	-6.0	-5.8	-5.4	-5.0	-4.7	-4.3	-3.9	-3.5	-5.9	-5.0	-3.5
Previous Tealbook[4]	-6.2	-6.3	-6.2	-5.9	-5.8	-5.5	-5.1	-4.7	-4.4	-3.9	-3.5	-3.0	-5.9	-4.7	-3.0
Industrial production[5]	8.1	7.1	6.7	3.2	6.0	5.4	5.7	3.6	3.1	4.7	5.1	4.3	6.3	5.2	4.3
Previous Tealbook[5]	7.1	7.2	6.2	3.2	4.7	7.2	4.4	3.3	3.6	4.6	4.7	3.9	5.9	4.9	4.2
Manufacturing industr. prod.[5]	7.1	8.7	5.1	3.5	9.1	5.0	6.3	4.2	4.0	5.6	5.6	4.8	6.1	6.1	5.0
Previous Tealbook[5]	6.2	9.4	4.3	4.0	6.8	7.5	4.7	3.8	4.6	5.6	5.0	4.5	6.0	5.7	4.9
Capacity utilization rate - mfg.[3]	69.4	71.4	72.6	73.3	74.9	75.6	76.6	77.2	77.6	78.4	79.1	79.7	73.3	77.2	79.7
Previous Tealbook[3]	70.0	71.6	72.4	73.0	74.1	75.4	76.1	76.7	77.2	78.0	78.7	79.2	73.0	76.7	79.2
Housing starts[6]	.6	.6	.6	.5	.6	.6	.6	.6	.7	.7	.8	.9	.6	.6	.8
Light motor vehicle sales[6]	11.0	11.3	11.6	12.3	13.0	13.0	13.2	13.4	13.9	14.5	15.1	15.5	11.5	13.1	14.7
Income and saving															
Nominal GDP[5]	4.8	3.7	4.6	3.5	3.6	6.1	5.4	5.1	5.5	5.6	5.6	5.7	4.2	5.0	5.6
Real disposable pers. income[5]	1.3	5.6	1.0	1.9	2.7	3.2	3.3	3.7	.5	4.2	4.0	4.5	2.4	3.2	3.3
Previous Tealbook[5]	1.3	5.6	1.0	1.2	3.7	3.0	3.5	4.4	.8	4.3	4.0	4.1	2.3	3.7	3.3
Personal saving rate[3]	5.5	6.2	6.0	5.6	5.7	5.7	5.8	5.9	5.3	5.3	5.4	5.5	5.6	5.9	5.5
Previous Tealbook[3]	5.5	6.2	6.0	5.4	5.7	5.6	5.6	5.8	5.1	5.2	5.2	5.2	5.4	5.8	5.2
Corporate profits[7]	48.9	12.7	6.6	9.7	12.8	12.2	12.6	13.0	5.4	4.2	3.8	3.8	18.3	12.6	4.3
Profit share of GNP[3]	10.7	10.9	11.0	11.2	11.4	11.5	11.7	11.9	11.9	11.9	11.9	11.8	11.2	11.9	11.8
Net federal saving[8]	-1,314	-1,337	-1,343	-1,334	-1,356	-1,367	-1,336	-1,309	-1,155	-1,110	-1,088	-1,061	-1,332	-1,342	-1,104
Net state & local saving[8]	29	16	48	40	47	40	36	34	42	52	64	70	33	39	57
Gross national saving rate[3]	11.1	11.7	11.6	11.6	11.8	11.9	12.3	12.8	13.1	13.5	13.6	13.9	11.6	12.8	13.9
Net national saving rate[3]	-1.8	-1.1	-1.1	-1.1	-.7	-.5	.1	.7	1.0	1.5	1.7	1.9	-1.1	.7	1.9

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

Other Macroeconomic Indicators

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Employment and production									
Nonfarm payroll employment[1]	2.0	2.4	2.1	1.2	-2.8	-5.6	.7	2.4	3.2
Unemployment rate[2]	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.7	7.7
Previous Tealbook[2]	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.6	7.5
NAIRU[2]	5.0	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0
Previous Tealbook[2]	5.0	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0
GDP gap[3]	-.5	-.1	.0	-.1	-4.9	-6.6	-5.9	-5.0	-3.5
Previous Tealbook[3]	-.5	.0	.0	-.1	-4.9	-6.6	-5.9	-4.7	-3.0
Industrial production[4]	3.1	2.3	2.3	2.5	-9.1	-5.5	6.3	5.2	4.3
Previous Tealbook[4]	2.9	2.3	2.5	2.3	-7.6	-3.8	5.9	4.9	4.2
Manufacturing industr. prod.[4]	3.7	3.4	2.0	2.8	-11.8	-6.1	6.1	6.1	5.0
Previous Tealbook[4]	3.5	3.5	2.0	2.6	-10.0	-4.1	6.0	5.7	4.9
Capacity utilization rate - mfg.[2]	77.3	78.5	78.4	79.0	70.1	67.7	73.3	77.2	79.7
Previous Tealbook[2]	77.4	78.8	79.0	79.1	70.9	68.8	73.0	76.7	79.2
Housing starts[5]	2.0	2.1	1.8	1.4	.9	.6	.6	.6	.8
Light motor vehicle sales[5]	16.8	16.9	16.5	16.1	13.1	10.3	11.5	13.1	14.7
Income and saving									
Nominal GDP[4]	6.4	6.3	5.4	5.0	-.7	.6	4.2	5.0	5.6
Real disposable pers. income[4]	3.5	.6	4.6	1.5	1.0	.4	2.4	3.2	3.3
Previous Tealbook[4]	3.5	.6	4.6	1.5	1.0	.4	2.3	3.7	3.3
Personal saving rate[2]	3.6	1.5	2.5	2.1	5.2	5.5	5.6	5.9	5.5
Previous Tealbook[2]	3.6	1.5	2.5	2.1	5.2	5.5	5.4	5.8	5.2
Corporate profits[6]	21.9	19.6	3.7	-8.1	-31.9	42.5	18.3	12.6	4.3
Profit share of GNP[2]	10.5	11.8	11.6	10.1	6.9	9.8	11.2	11.9	11.8
Net federal saving[7]	-379	-283	-204	-245	-616	-1252	-1332	-1342	-1104
Net state & local saving[7]	-8	26	51	12	-47	-20	33	39	57
Gross national saving rate[2]	14.3	15.5	16.3	13.6	11.8	10.8	11.6	12.8	13.9
Net national saving rate[2]	2.7	3.5	4.2	1.3	-1.4	-2.3	-1.1	.7	1.9

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

Staff Projections of Federal Sector Accounts and Related Items
(Billions of dollars except as noted)

Item	Fiscal year				2010				2011				2012			
	2009[a]	2010[a]	2011	2012	Q1[a]	Q2[a]	Q3[a]	Q4[a]	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2105	2163	2280	2542	466	643	565	532	488	666	594	562	548	762	671	642
Outlays[1]	3518	3456	3673	3674	795	930	855	901	949	894	929	921	967	916	869	965
Surplus/deficit[1]	-1413	-1293	-1393	-1132	-329	-287	-290	-369	-460	-228	-335	-360	-419	-155	-199	-324
Previous Tealbook	*-1413*	*-1293*	*-1424*	*-1113*	*-329*	*-287*	*-290*	*-369*	*-448*	*-268*	*-339*	*-360*	*-413*	*-142*	*-198*	*-324*
On-budget	-1550	-1370	-1410	-1195	-359	-351	-267	-390	-451	-268	-301	-384	-411	-218	-182	-372
Off-budget	137	77	18	64	30	64	-23	21	-10	40	-34	24	-8	64	-17	48
Means of financing																
Borrowing	1743	1474	1389	1182	478	344	390	368	260	243	517	334	424	195	229	329
Cash decrease	96	-35	29	30	-25	-71	-20	-33	225	23	-185	45	15	-20	-10	15
Other[2]	-427	-146	-26	-80	-124	14	-80	34	-24	-38	3	-20	-20	-20	-20	-20
Cash operating balance, end of period	275	310	280	250	219	290	310	343	118	95	280	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2261	2334	2456	2721	2323	2365	2417	2441	2422	2461	2498	2542	2735	2781	2827	2875
Expenditures	3355	3660	3804	3887	3637	3701	3761	3776	3778	3828	3834	3851	3890	3890	3916	3936
Consumption expenditures	977	1030	1062	1092	1017	1038	1062	1056	1044	1068	1081	1084	1092	1094	1096	1097
Defense	659	691	701	725	684	695	711	703	683	703	714	717	724	727	730	733
Nondefense	318	339	362	367	333	343	350	354	361	365	367	367	368	367	366	364
Other spending	2378	2630	2742	2795	2620	2663	2699	2720	2734	2760	2753	2767	2798	2796	2819	2839
Current account surplus	-1094	-1326	-1348	-1165	-1314	-1337	-1343	-1334	-1356	-1367	-1336	-1309	-1155	-1110	-1088	-1061
Gross investment	151	165	178	182	161	168	172	182	171	178	182	182	182	182	182	182
Gross saving less gross investment[3]	-1122	-1363	-1392	-1205	-1348	-1376	-1385	-1384	-1393	-1409	-1380	-1351	-1196	-1148	-1125	-1096
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-838	-1030	-1089	-950	-1019	-1045	-1059	-1062	-1088	-1111	-1095	-1076	-924	-900	-899	-893
Change in HEB, percent of potential GDP	2.2	1.1	.1	-1.1	.1	.1	.0	.0	.1	.1	-.2	-.2	-1.0	-.2	-.1	-.1
Fiscal impetus (FI), percent of GDP	1.2	0.6	-0.0	-1.1	1.0	1.0	0.6	-0.2	-0.6	0.6	0.3	-0.3	-1.6	-0.9	-0.9	-0.8
Previous Tealbook	*1.2*	*0.6*	*0.0*	*-1.1*	*1.0*	*1.0*	*0.6*	*-0.2*	*-0.0*	*0.4*	*0.1*	*-0.3*	*-1.6*	*-1.0*	*-0.9*	*-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.

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								
2005	9.5	11.1	13.3	4.5	8.6	10.2	7.0	6.3
2006	9.0	10.1	11.2	4.1	10.5	8.3	3.9	5.4
2007	8.6	6.8	6.8	5.8	13.0	9.5	4.9	5.0
2008	6.0	-.1	-.5	1.5	5.8	2.3	24.2	-.7
2009	3.0	-1.7	-1.5	-4.4	-2.7	4.8	22.7	.6
2010	4.7	-1.8	-2.6	-1.8	1.5	4.4	20.2	4.2
2011	5.0	.5	-1.4	4.4	3.2	1.4	14.4	5.0
2012	5.5	2.2	-.1	8.2	4.5	4.1	10.9	5.6
Quarter								
2009:1	4.6	-.8	-.2	-3.7	-.2	5.6	24.4	-3.9
2	4.5	-1.9	-1.9	-4.8	-2.2	4.2	28.9	-.4
3	2.1	-2.2	-2.6	-3.9	-4.4	5.7	19.0	2.3
4	.8	-1.9	-1.3	-5.6	-4.0	3.6	11.9	4.7
2010:1	4.3	-2.1	-4.4	-4.1	.3	5.7	20.5	4.8
2	4.6	-2.4	-2.2	-3.1	-.1	-1.4	24.4	3.7
3	4.2	-2.0	-2.6	-1.9	2.2	5.4	16.0	4.6
4	5.1	-.6	-1.2	2.0	3.6	7.9	14.6	3.5
2011:1	2.7	-.1	-1.7	3.0	3.3	-3.8	7.8	3.6
2	5.3	.3	-1.5	3.9	2.7	-.4	16.7	6.1
3	6.4	.7	-1.2	4.9	3.1	1.4	19.1	5.4
4	5.1	1.0	-1.1	5.7	3.4	8.4	11.3	5.1
2012:1	5.7	1.7	-.4	6.7	4.0	4.1	12.9	5.5
2	5.9	2.1	-.2	7.7	4.3	4.0	12.6	5.6
3	4.4	2.5	.1	8.6	4.7	4.0	6.6	5.6
4	5.5	2.7	.2	8.9	4.8	4.0	10.0	5.7

Note: Quarterly data are at seasonally adjusted annual rates.
1. Data after 2010:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

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

Category	2009	2010	2011	2012	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	953.7	1327.3	1490.1	1776.7	1160.4	1449.7	708.0	1645.3	2041.9	1565.4	1869.9	1981.9	1396.2	1858.7
Net equity issuance	-64.6	-284.0	-311.0	-320.0	-337.6	-384.0	-283.9	-280.0	-340.0	-340.0	-300.0	-300.0	-340.0	-340.0
Net debt issuance	1018.3	1611.4	1801.1	2096.7	1498.1	1833.8	991.8	1925.3	2381.9	1905.4	2169.9	2281.9	1736.2	2198.7
Borrowing indicators														
Debt (percent of GDP)[1]	241.6	241.9	242.8	242.2	241.8	242.5	242.7	241.6	241.9	242.3	242.3	242.5	242.3	241.9
Borrowing (percent of GDP)	7.2	11.0	11.8	13.0	10.2	12.3	6.6	12.6	15.4	12.2	13.7	14.2	10.7	13.3
Households														
Net borrowing[2]	-234.5	-237.9	61.1	301.7	-272.2	-75.0	-10.9	34.8	93.0	127.6	227.4	278.5	338.4	362.6
Home mortgages	-155.7	-268.3	-137.8	-7.5	-268.3	-125.5	-171.2	-150.4	-119.9	-109.6	-39.7	-19.8	9.9	19.8
Consumer credit	-115.3	-44.0	107.7	208.8	-47.1	48.5	72.5	95.1	120.8	142.3	169.9	198.8	226.7	239.8
Debt/DPI (percent)[3]	124.0	118.3	112.2	108.9	117.5	116.1	114.1	112.5	111.4	110.3	110.1	109.2	108.4	107.6
Business														
Financing gap[4]	-44.7	66.9	82.5	169.0	156.4	47.2	85.3	80.5	104.2	59.8	114.2	148.3	191.0	222.4
Net equity issuance	-64.6	-284.0	-311.0	-320.0	-337.6	-384.0	-283.9	-280.0	-340.0	-340.0	-300.0	-300.0	-340.0	-340.0
Credit market borrowing	-300.3	164.1	350.9	517.3	245.2	397.4	362.7	303.3	350.4	387.0	452.1	499.4	545.6	572.2
State and local governments														
Net borrowing	109.1	104.9	34.1	101.8	129.1	191.2	-92.8	-10.2	33.8	205.8	101.8	101.8	101.8	101.8
Current surplus[5]	248.2	304.5	269.5	294.7	327.4	321.1	274.9	269.2	267.4	266.3	276.5	288.8	302.7	310.8
Federal government														
Net borrowing	1443.9	1580.2	1355.0	1175.8	1395.9	1320.2	732.8	1597.4	1904.8	1185.0	1388.6	1402.2	750.4	1162.1
Net borrowing (n.s.a.)	1443.9	1580.2	1355.0	1175.8	390.1	367.9	260.2	243.4	517.2	334.2	424.2	194.5	228.6	328.5
Unified deficit (n.s.a.)	1471.3	1275.1	1383.2	1095.8	290.2	369.0	460.4	228.4	334.8	359.6	419.2	154.5	198.6	323.5
Depository institutions														
Funds supplied	-639.6	-199.1	115.7	311.3	729.2	-522.2	-267.4	166.8	273.2	290.2	305.4	315.8	342.7	281.1

Note: Data after 2010:Q4 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)

					---------Projected---------							
	2010				2011				2012			
Measure and country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP [1]												
Total foreign	5.3	5.7	2.3	3.4	4.0	2.8	3.4	3.5	3.5	3.5	3.6	3.6
Previous Tealbook	*5.3*	*5.7*	*2.3*	*3.3*	*3.6*	*3.3*	*3.3*	*3.3*	*3.4*	*3.5*	*3.5*	*3.6*
Advanced foreign economies	3.8	3.1	1.9	1.7	2.5	1.5	2.2	2.4	2.4	2.4	2.5	2.5
Canada	5.5	2.2	1.8	3.3	3.3	2.4	2.6	2.6	2.6	2.6	2.6	2.6
Japan	6.1	2.1	3.3	-1.3	-.0	-3.5	2.5	4.5	3.3	2.9	2.6	2.4
United Kingdom	1.3	4.2	2.8	-2.3	3.1	1.7	2.2	2.3	2.4	2.4	2.5	2.5
Euro area	1.6	4.0	1.4	1.1	2.2	1.6	1.5	1.5	1.6	1.8	2.1	2.4
Germany	2.6	9.2	2.8	1.5	2.8	2.2	1.9	1.9	2.1	2.2	2.5	2.7
Emerging market economies	7.2	9.0	2.8	5.5	5.9	4.4	4.8	4.8	4.8	4.9	4.9	4.9
Asia	13.7	9.2	2.5	5.5	7.7	4.9	5.9	5.9	5.9	5.9	5.9	5.9
Korea	8.6	5.7	2.6	2.0	5.0	3.6	4.1	4.1	4.2	4.3	4.4	4.4
China	9.3	8.9	10.1	10.0	8.7	8.1	8.6	8.6	8.4	8.4	8.4	8.4
Latin America	1.3	9.6	2.8	4.7	4.4	3.9	3.8	3.7	3.8	3.9	4.0	4.0
Mexico	-.3	9.9	3.2	5.1	4.2	3.7	3.6	3.5	3.8	4.0	4.1	4.1
Brazil	9.0	6.5	1.6	3.0	3.8	3.6	3.7	3.7	3.7	3.8	3.8	3.8
Consumer prices [2]												
Total foreign	3.3	1.6	2.3	5.3	4.4	3.2	2.5	2.4	2.3	2.3	2.3	2.4
Previous Tealbook	*3.3*	*1.6*	*2.3*	*5.3*	*4.3*	*3.1*	*2.5*	*2.4*	*2.4*	*2.3*	*2.3*	*2.4*
Advanced foreign economies	2.0	.5	1.1	3.5	3.3	2.3	1.5	1.4	1.4	1.3	1.4	1.5
Canada	2.2	-.1	2.4	4.4	3.6	3.2	2.0	1.9	2.1	1.8	1.9	1.9
Japan	.7	-1.2	-1.3	2.3	.1	-.4	-.5	-.6	-.6	-.4	-.5	-.4
United Kingdom	4.9	2.7	1.7	4.3	7.8	2.4	1.9	1.7	1.7	1.7	1.9	3.3
Euro Area	2.0	1.7	1.2	3.3	3.8	2.9	2.1	1.8	1.6	1.5	1.9	1.8
Germany	1.5	.7	1.1	3.0	3.9	3.0	2.2	1.9	1.6	1.6	1.7	1.7
Emerging market economies	4.5	2.6	3.5	6.9	5.5	4.1	3.5	3.3	3.2	3.2	3.2	3.2
Asia	3.6	2.2	3.6	7.6	5.7	4.1	3.2	2.9	2.9	2.8	2.8	2.8
Korea	3.3	1.9	3.4	6.0	6.7	3.9	3.1	2.9	2.8	2.8	2.8	2.7
China	3.0	2.6	4.3	9.0	4.6	4.5	3.1	2.8	2.7	2.7	2.7	2.7
Latin America	7.0	3.4	3.0	5.1	4.6	4.1	4.3	4.3	4.2	4.1	4.1	4.1
Mexico	6.9	2.5	2.9	4.8	3.6	3.4	3.9	3.9	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.1	7.4	9.6	6.5	4.9	4.9	4.9	4.9	4.9	4.9

[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	2004	2005	2006	2007	2008	2009	2010	-----Projected----- 2011	2012
Real GDP [1]									
Total foreign	3.9	4.0	4.1	4.3	-.8	.5	4.2	3.4	3.5
Previous Tealbook	*3.9*	*4.0*	*4.1*	*4.3*	*-.8*	*.5*	*4.1*	*3.4*	*3.5*
Advanced foreign economies	2.6	2.8	2.6	2.4	-1.8	-1.5	2.6	2.2	2.4
Canada	3.7	3.1	1.9	2.5	-.9	-1.1	3.2	2.7	2.6
Japan	1.1	2.9	2.1	1.8	-4.6	-1.8	2.5	.8	2.8
United Kingdom	2.4	2.4	2.7	2.4	-2.7	-2.8	1.5	2.3	2.4
Euro area	1.7	2.1	3.6	2.2	-2.1	-2.1	2.0	1.7	2.0
Germany	.2	1.6	4.5	1.8	-2.0	-2.0	4.0	2.2	2.4
Emerging market economies	5.6	5.8	6.2	6.7	.4	3.0	6.1	5.0	4.9
Asia	5.9	7.7	7.8	8.8	.8	7.4	7.6	6.1	5.9
Korea	2.7	5.2	4.6	5.8	-3.2	6.3	4.7	4.2	4.3
China	9.9	10.3	12.8	13.7	7.7	11.4	9.6	8.5	8.4
Latin America	5.2	3.9	4.8	4.5	-.2	-.8	4.6	3.9	3.9
Mexico	4.6	3.6	4.1	3.7	-.9	-2.2	4.4	3.7	4.0
Brazil	6.1	2.1	4.9	6.6	.8	5.0	5.0	3.7	3.8
Consumer prices [2]									
Total foreign	2.8	2.3	2.2	3.7	3.3	1.2	3.1	3.1	2.3
Previous Tealbook	*2.8*	*2.3*	*2.2*	*3.7*	*3.3*	*1.2*	*3.1*	*3.1*	*2.3*
Advanced foreign economies	1.8	1.6	1.4	2.2	2.0	.2	1.8	2.1	1.4
Canada	2.3	2.3	1.4	2.5	1.8	.8	2.2	2.7	1.9
Japan	.5	-1.0	.3	.5	1.0	-1.9	.1	-.4	-.5
United Kingdom	1.4	2.1	2.7	2.1	3.9	2.1	3.4	3.4	2.1
Euro Area	2.3	2.3	1.8	2.9	2.3	.4	2.0	2.7	1.7
Germany	2.1	2.2	1.3	3.1	1.7	.3	1.6	2.7	1.6
Emerging market economies	3.9	3.0	2.9	5.1	4.6	2.2	4.3	4.1	3.2
Asia	3.1	2.6	2.4	5.5	3.7	1.3	4.2	4.0	2.8
Korea	3.4	2.5	2.1	3.4	4.5	2.4	3.6	4.1	2.8
China	3.2	1.4	2.1	6.6	2.6	.6	4.7	3.7	2.7
Latin America	5.6	3.8	4.2	4.2	6.7	4.0	4.6	4.3	4.1
Mexico	5.3	3.1	4.1	3.8	6.2	4.0	4.3	3.7	3.7
Brazil	7.2	6.1	3.2	4.3	6.2	4.2	5.4	6.5	4.9

[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

	2010				Projected 2011				Projected 2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Billions of dollars, s.a.a.r.											
U.S. current account balance	**-434.7**	**-490.9**	**-502.0**	**-453.4**	**-515.1**	**-499.3**	**-515.5**	**-450.9**	**-439.7**	**-409.1**	**-408.4**	**-395.4**
Previous Tealbook	*-434.9*	*-491.2*	*-507.2*	*-462.5*	*-510.1*	*-509.6*	*-528.2*	*-483.8*	*-480.9*	*-451.4*	*-449.0*	*-430.5*
Current account as percent of GDP	-3.0	-3.4	-3.4	-3.0	-3.4	-3.3	-3.3	-2.9	-2.8	-2.5	-2.5	-2.4
Previous Tealbook	*-3.0*	*-3.4*	*-3.4*	*-3.1*	*-3.4*	*-3.3*	*-3.4*	*-3.1*	*-3.0*	*-2.8*	*-2.8*	*-2.6*
Net goods & services	-455.5	-530.0	-530.5	-466.9	-541.3	-549.0	-567.4	-506.9	-482.4	-463.1	-455.7	-440.1
Investment income, net	168.5	180.1	173.8	162.8	165.4	174.9	180.6	181.4	182.0	179.1	176.0	170.0
Direct, net	275.6	286.3	276.6	261.2	286.2	283.0	284.9	288.7	296.2	306.6	314.8	324.8
Portfolio, net	-107.1	-106.2	-102.8	-98.4	-120.8	-108.1	-104.3	-107.4	-114.2	-127.4	-138.8	-154.8
Other income and transfers, net	-147.7	-141.0	-145.3	-149.3	-139.2	-125.1	-128.7	-125.3	-139.2	-125.1	-128.7	-125.3

Annual Data

	2004	2005	2006	2007	2008	2009	Projected 2010	Projected 2011	Projected 2012
	Billions of dollars								
U.S. current account balance	**-630.5**	**-747.6**	**-802.6**	**-718.1**	**-668.9**	**-378.4**	**-470.2**	**-495.2**	**-413.2**
Previous Tealbook	*-630.5*	*-747.6*	*-802.6*	*-718.1*	*-668.9*	*-378.4*	*-473.9*	*-507.9*	*-453.0*
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.2	-2.6
Previous Tealbook	*-5.3*	*-5.9*	*-6.0*	*-5.1*	*-4.7*	*-2.7*	*-3.2*	*-3.3*	*-2.8*
Net goods & services	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-495.7	-541.2	-460.3
Investment income, net	73.4	78.8	54.7	106.6	159.3	129.2	171.3	175.6	176.8
Direct, net	150.9	173.2	174.0	241.6	287.7	252.1	274.9	285.7	310.6
Portfolio, net	-77.5	-94.4	-119.4	-134.9	-128.4	-122.8	-103.6	-110.2	-133.8
Other income and transfers, net	-94.5	-112.2	-98.1	-122.6	-129.3	-132.8	-145.8	-129.6	-129.6

Abbreviations

ABS	asset-backed securities
ABCP	asset-backed commercial paper
AFE	advanced foreign economy
BOC	Bank of Canada
BOE	Bank of England
BOJ	Bank of Japan
CCAR	Comprehensive Capital Analysis and Review
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CPI	consumer price index
CRE	commercial real estate
DSGE	dynamic stochastic general equilibrium
ECB	European Central Bank
EDO Model	Estimated Dynamic Optimization-Based Model
EME	emerging market economy
E&S	equipment and software
EU	European Union
FDIC	Federal Deposit Insurance Corporation
FOMC	Federal Open Market Committee; also, the Committee
FX	foreign exchange
G-7	Group of Seven (Canada, France, Germany, Italy, Japan, U.K., U.S.)
GC	general collateral
GDP	gross domestic product
GSE	government-sponsored enterprise
IMF	International Monetary Fund
IOER	interest on excess reserves

IP	industrial production
Libor	London interbank offered rate
LLC	limited liability company
MBS	mortgage-backed securities
MFP	multifactor productivity
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
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
PMI	purchasing managers index
repo	repurchase agreement
SFA	Supplementary Financing Account
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
TALF	Term Asset-Backed Securities Loan Facility
TIPS	Treasury inflation-protected securities
WTI	West Texas Intermediate