Prefatory Note

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

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

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Authorized for Public Release

Class II FOMC – Restricted (FR)

Report to the FOMC on Economic Conditions and Monetary Policy

Book A

Economic and Financial Conditions: Current Situation and Outlook

January 19, 2011

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

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Domestic Economic Developments and Outlook

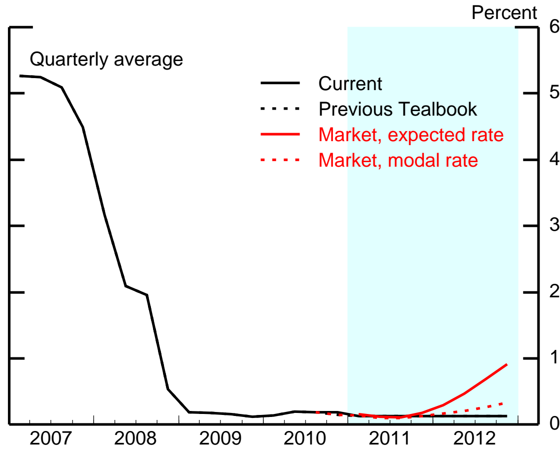
On balance, the incoming news on economic activity has taken on a stronger tenor since the December Tealbook. Consumer spending picked up sharply in the fourth quarter of 2010, and—apart from its volatile motor vehicle component—business investment in equipment and software has exhibited considerable vigor. Industrial production (IP) has also posted solid gains in recent months. By contrast, conditions in the labor market have improved only modestly, and the housing market remains moribund. After weighing the various indicators, we estimate that real GDP increased at an annual rate of 3¾ percent in the fourth quarter, 1¼ percentage points faster than we had projected in the most recent Tealbook.

Because the economy appears to have entered 2011 with a bit more momentum than we had anticipated in our previous forecast, we have nudged up our projections for growth over the next few quarters. However, we did not make any other material changes to the medium-term outlook, which had already featured an appreciable acceleration in real GDP this year and a further step-up in growth in 2012. The conditioning assumptions underlying the forecast are virtually the same as those in the December Tealbook, and given the limited improvement in the labor market to date and the financial constraints and other headwinds that continue to weigh on spending and production (as well as the usual noisiness of the high-frequency data), we were reluctant to extrapolate more than a little of the positive surprise going forward. As a result, our point estimates for real GDP growth, at 3.8 percent in 2011 and 4.4 percent in 2012, are nearly unchanged from our previous projection. Nevertheless, the level of real GDP is a little higher throughout the projection period. Furthermore, we see the incoming information as suggesting that the downside risks to the outlook have diminished and that the recovery is on a somewhat firmer footing than was apparent in December.

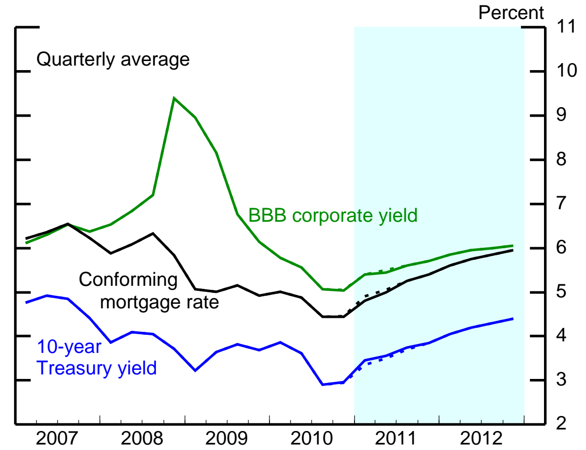
As for inflation, the incoming data on core consumer prices have been about in line with our expectations. But with the projected margin of slack a little smaller than in the December Tealbook, and with some additional upward pressure on domestic prices from the pass-through of higher energy and import prices, we have added 0.1 percentage point to our forecast for core inflation, which is now expected to be 1 percent in both 2011 and 2012. Given our projections for consumer food and energy prices, overall

Key Background Factors underlying the Baseline Staff Projection

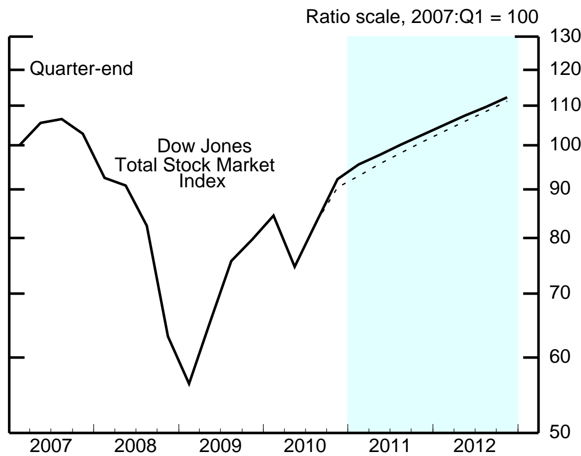
Federal Funds Rate



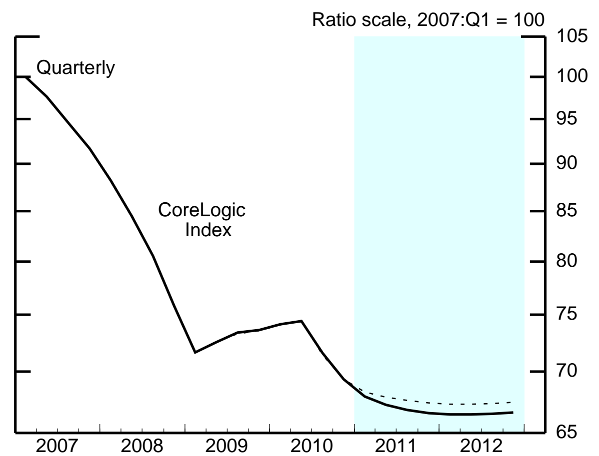
Long-Term Interest Rates



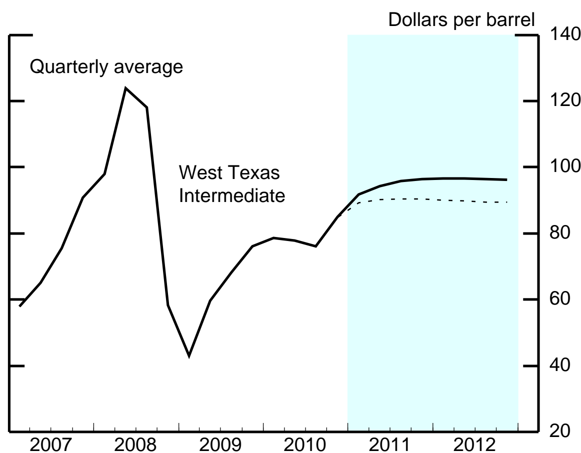
Equity Prices



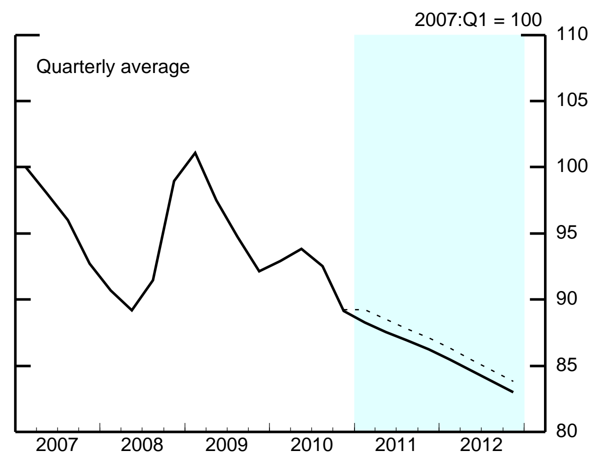
House Prices



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 December and the current Tealbooks are the same.

consumer prices are forecast to rise a bit faster than core prices in 2011 and at the same rate as core in 2012.

KEY BACKGROUND FACTORS

Monetary Policy

We have made only minor adjustments to our assumptions for monetary policy this round. As in the December Tealbook, we assume that the FOMC will hold the target federal funds rate in the current range of 0 to ¼ percent until the first quarter of 2013. We also assume that the Federal Reserve will expand its holdings of longer-term securities by about $80 billion per month through the second quarter of 2011, slightly quicker than in the December Tealbook. The faster pace of purchases was announced by the Open Market Desk on January 12 and is anticipated to still bring the securities holdings in the SOMA portfolio to about $2.6 trillion. In addition, we continue to assume that the Federal Reserve will reinvest principal payments from its securities holdings through early 2013.

Financial Conditions

Our projections of long-term interest rates are similar to those in the December Tealbook. The yield on 10-year Treasury securities has increased about 10 basis points more than we anticipated, and we have slightly raised the projected level of this yield in the near term. However, we had already been expecting Treasury yields to move up significantly over the medium term, and we have interpreted the recent rise as an earlier realization of that increase than we had anticipated. As a result, we did not revise the projected level of the 10-year Treasury yield in 2012. As has been true for some time, the main factor contributing to the projected rise in the 10-year Treasury yield over the medium term is the movement of the valuation window through the projected period of near-zero short-term interest rates. Since the December Tealbook, yields on investment-grade corporate bonds and interest rates on conforming fixed-rate mortgages have changed little, on net, and we have made only negligible revisions to the projections for those interest rates.

The Dow Jones U.S. Stock Market Index is about 3 percent above the level anticipated in the December Tealbook. Stock prices have reportedly been boosted by growing confidence among market participants in the strength of the economic recovery. Nevertheless, the equity premium remains well above longer-run norms. Therefore, we

expect stock prices to continue to increase at an elevated pace over the projection period, on the order of 11 percent per year, as the equity premium falls back to more typical levels.

Recent readings point to renewed weakness in house prices. Most notably, the CoreLogic repeat sales index fell 1½ percent in November, somewhat more than we had expected, and now stands below its previous trough in early 2009. These data have led us to mark down the level of home prices throughout the projection period about 1 percent.

Fiscal Policy

We have made only small changes to our fiscal policy assumptions.[1] As before, we assume that appropriations for discretionary spending in fiscal years 2011 and 2012 will be roughly constant in nominal terms and that current tax policies will remain in place. Thus, we continue to expect that federal fiscal policy actions will be a roughly neutral influence on aggregate demand in 2011 as the impetus from the one-year cut in social insurance taxes and from the business expensing provision is essentially offset by some reduction in stimulus-related grants to state and local governments. In 2012, fiscal actions are expected to impose a drag of about 1 percent of GDP as the payroll tax cuts lapse, the expensing provision is scaled back, the Emergency Unemployment Compensation (EUC) program is phased out, and the stimulus grants are essentially exhausted.

As in the December 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 (around 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 71 percent of GDP at the end of fiscal 2012.

[1] While the fiscal package enacted in December is close to what we had assumed in the previous Tealbook, it differs in two minor ways. First, it provides slightly higher emergency unemployment benefits in 2011 than we had anticipated. Second, it allows businesses to claim 50 percent bonus depreciation on most equipment and software acquired in 2012, in addition to the full expensing in 2011 assumed in our December forecast.

Foreign Activity and the Dollar

The incoming data on activity abroad have also been stronger than we had anticipated and suggest that foreign real GDP expanded at a 3 percent annual rate in the fourth quarter, beating its third-quarter showing by 1 percentage point. The acceleration was driven by faster growth in the emerging market economies (EMEs), while activity in the advanced foreign economies (AFEs) remained sluggish. Going forward, we project overall foreign growth to move up to more than 3½ percent in 2012—an outlook that is a little stronger than in the December Tealbook. Activity in the EMEs should remain robust over the forecast period, and growth in the AFEs is expected to pick up, although fiscal consolidation in some advanced countries and an uneven lifting of financial stresses in Europe will likely temper the recovery.

The real value of the dollar is currently about 1 percent lower than we had projected at the time of the December forecast, and the staff's expectations for foreign monetary policy rates over the forecast period have been revised up by an amount similar to the market's expectations. In light of these developments, the projected path for the broad real dollar starts at a lower level but follows the same contour as in the December forecast. This path has the dollar depreciating at an annual rate of about 3 percent over the rest of 2011 and at a somewhat faster pace in 2012, as the firming global recovery lessens official resistance in the emerging Asian economies to more-rapid currency appreciation against the dollar.

Oil and Other Commodity Prices

Oil prices have moved higher relative to the December Tealbook projection as favorable incoming data on economic activity both in the United States and abroad suggest a more robust outlook for global oil demand. The spot price of West Texas Intermediate (WTI) crude oil closed on January 18 at $91 per barrel, $3 higher than at the time of the December Tealbook, and prices of futures contracts through the end of 2012 have moved up more than twice that amount.[2] Based on these futures quotes, we project that the spot price of WTI will end 2012 at nearly $96 per barrel, more than $6 higher than in the previous Tealbook.

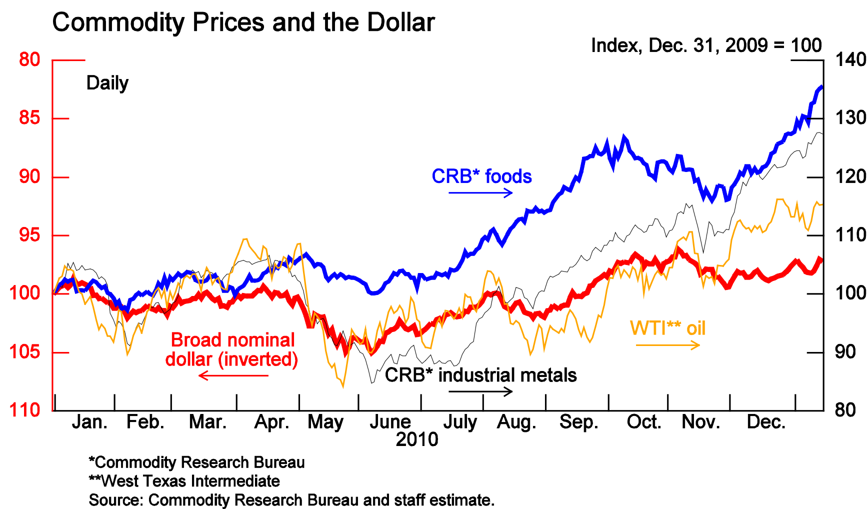
[2] Spot prices of other grades of crude oil have risen more than the WTI spot price, in large part because near-record high inventories in Cushing, Oklahoma, the delivery point for WTI, have held recent gains in spot WTI in check.

What Explains the Recent Increase in Commodity Prices?

After changing little, on net, during the first half of 2010, commodity prices started to move up in the late summer and have continued to increase at a brisk pace in recent months (see figure below). The price increases have been broad-based, with prices for metals, foods, and oil all recording sizable gains. As indicated in the left figure on the facing page, the prices of many industrial commodities now exceed their 2008 peaks, although oil is a notable exception.

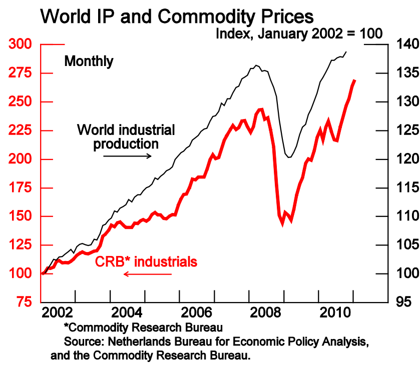
We interpret the recent rise in commodity prices as primarily reflecting developments in fundamentals, in particular the interaction of robust increases in global demand with a number of idiosyncratic supply constraints. A recovery in world industrial production (see left figure on the facing page), led by strong economic growth in the emerging market economies, pushed demand for oil and many metals above pre-crisis peaks. These increases in demand have generally exceeded the response of supply, such that reported inventories of oil and many metals have started to edge down from the elevated levels that had persisted since the onset of the financial crisis. Agricultural prices also have been pushed higher by a strong rise in demand. In addition, adverse weather conditions have reduced harvests and curtailed supplies of important products in a number of key exporting countries, including Russia and Ukraine (wheat) and the United States and South America (corn).

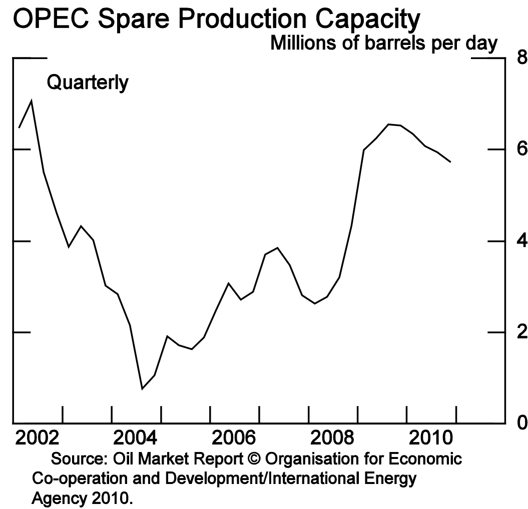
The exchange value of the dollar was an additional factor contributing to dollar-denominated commodity price movements through much of 2010. Movements in commodity prices generally tracked the dollar through November. Since late November, however, the increases in commodity prices seem mainly to have reflected increased optimism regarding prospects for global economic growth, as the dollar has leveled out but commodity prices have continued to climb.



*Commodity Research Bureau
**West Texas Intermediate
Source: Commodity Research Bureau and staff estimate.

Tracking futures prices, our forecast calls for commodity prices to flatten out at their current elevated level. This forecast is consistent with a scenario in which supply expands to meet increased demand. In the oil market we assume that the Organization of the Petroleum Exporting Countries (OPEC) will eventually increase production quotas, cutting into the 6 million barrel per day buffer of spare capacity that it has maintained over the past two years (see right figure below). In addition, agricultural output is expected to recover from recent weather-related disruptions, and metals supply should edge up, partly in response to higher prices. As usual, the uncertainty around this forecast is considerable and, although we have found no better framework for forecasting commodity prices, the track record of futures prices has been poor. At any rate, stronger-than-expected global growth or additional supply disruptions likely would push commodity prices still higher.





Since the December Tealbook, prices for a broad array of nonfuel commodities have continued to move up. The gains have been supported by sizable increases in demand, particularly in the EMEs, as well as shortfalls in supply in some cases (see the box "What Explains the Recent Increase in Commodity Prices?" for additional detail). Consistent with quotes from futures markets, we project that nonfuel commodity prices will rise more than 6 percent (not at an annual rate) in the current quarter but will then flatten out over the remainder of the forecast period.

RECENT DEVELOPMENTS AND THE NEAR-TERM OUTLOOK

As noted above, we now estimate that real GDP rose at an annual rate of 3¾ percent in the fourth quarter of 2010. Although residential construction remained weak, consumer spending rose sharply, and—leaving aside a plunge in its volatile motor vehicle component—business outlays for equipment posted another hefty gain. Net exports appear to have contributed a remarkable 3½ percentage points at an annual rate to growth last quarter, but this positive contribution was partially offset in our forecast by a marked slowing in the pace of inventory investment. We expect real GDP to increase 3½ percent in the first quarter as consumer spending and business fixed investment continue to rise briskly, while net exports and inventory investment flatten out.

Labor Markets

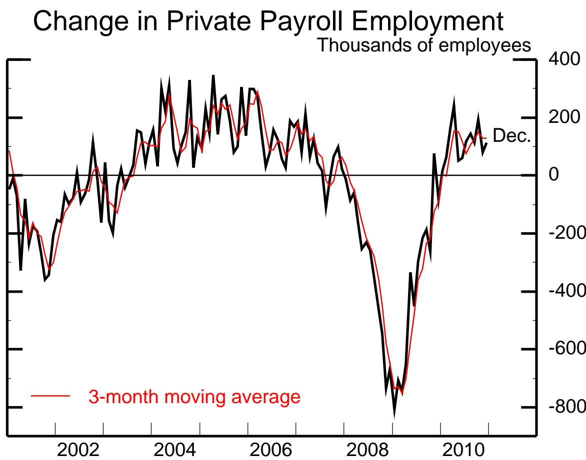
The incoming information indicates that labor demand has continued to increase at a gradual pace. In the payroll survey, private nonfarm employment rose 113,000 in December—close to the forecast in the previous Tealbook—and was up about 130,000 per month, on average, over the last three months of 2010, similar to the average pace over the first nine months of the year. In the household survey, the unemployment rate fell 0.4 percentage point in December to 9.4 percent; this decline—which in part was associated with a surprising drop in the participation rate—exceeded our expectations and more than reversed the run-up in the jobless rate that had occurred in October and November.

Other indicators also point to ongoing modest improvements in labor market conditions. The weekly data for initial claims for unemployment insurance have been erratic of late, but the four-week moving average has continued to move down and now stands near its lowest level since August 2008. The drop in recent job losers in the December labor market report also suggests that layoffs have continued to ease. Meanwhile, indicators of hiring appear mixed: Although data from JOLTS suggest that

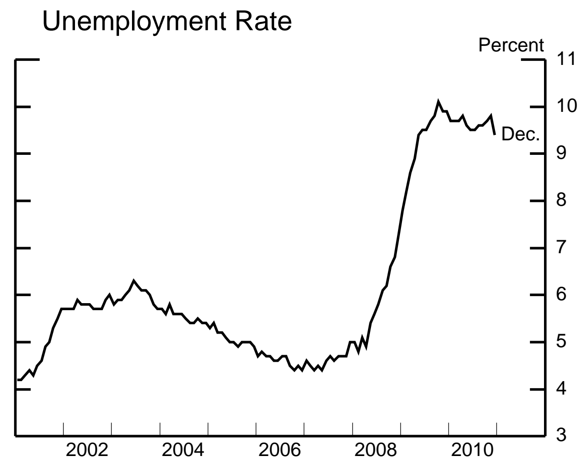
Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

Measure	2010:Q4		2011:Q1		2011:Q2	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	**2.5**	**3.8**	**3.4**	**3.6**	**3.5**	**3.7**
Private domestic final purchases	2.7	4.0	3.5	3.9	4.1	4.3
Personal consumption expenditures	2.7	4.1	3.2	3.1	3.3	3.5
Residential investment	-3.8	.7	2.9	3.2	8.0	9.2
Nonres. structures	-.9	3.7	-3.5	-.8	-.7	.0
Equipment and software	5.8	3.7	9.4	13.3	12.7	13.0
Federal purchases	2.1	1.1	1.1	2.1	1.0	.9
State and local purchases	.1	-.9	.1	-.1	.3	.2
	Contribution to change in real GDP (percentage points)					
Inventory investment	-1.6	-3.0	.1	.5	-.2	.3
Net exports	1.7	3.5	.3	-.2	.2	-.3

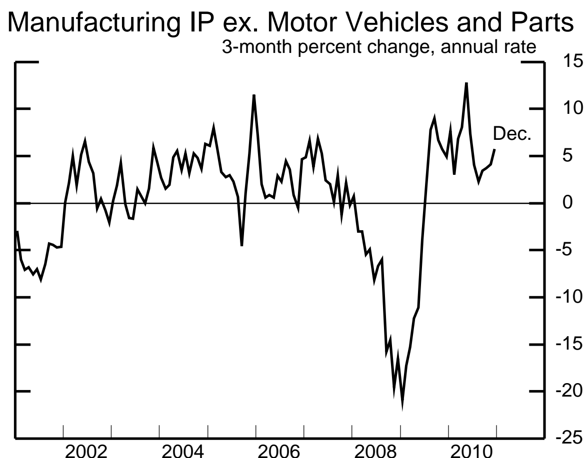
Recent Nonfinancial Developments (1)



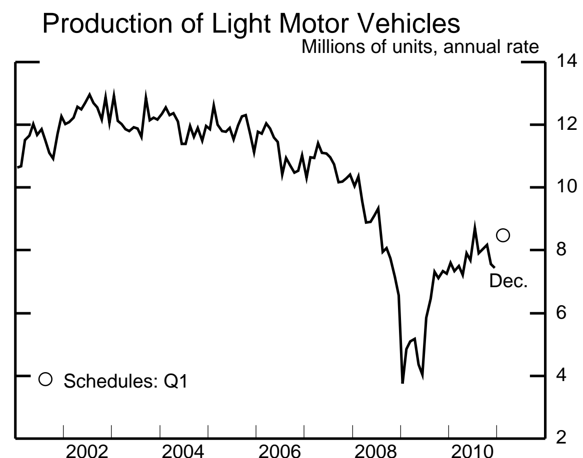
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.



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



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



Note: Schedules data are from Ward's Communications.
Source: Ward's Auto Infobank.

hiring is no better now than it was a few months ago, measures of job openings and employers' hiring plans have shown some noticeable improvement.

Putting this information together, we continue to expect the pace of employment growth to pick up in coming months, with private payroll increases projected to average 160,000 per month in the first quarter. The projected pickup in job growth is a bit less than in our previous forecast, largely because the trajectory of monthly payroll data heading into 2011 now looks a little shallower than before. In addition, we expect the unemployment rate to reverse some of its outsized December decline in January before edging back down.

The Industrial Sector

After a pause during the summer and early autumn, gains in manufacturing production seem to have picked up recently, and we expect this faster pace of output growth to continue in coming months. Outside of motor vehicles, factory output posted widespread gains in November and December, and the recent strength in new orders and in national and regional purchasing managers' reports points to further solid increases in production in early 2011. And, while total motor vehicle production stepped down to an annual rate of 7¾ million units in the fourth quarter, assemblies are scheduled to move up to an 8½ million unit pace in the current quarter as automakers seek to restock dealer inventories that had been drawn down by unexpectedly strong consumer demand late last year. All told, we project that manufacturing production will increase at an annual rate of nearly 7 percent in the current quarter after rising 3¼ percent in the fourth quarter. Excluding motor vehicles, manufacturing IP is expected to rise at a 5½ percent rate in the current quarter after posting a 4½ percent gain in the fourth quarter.

Household Spending

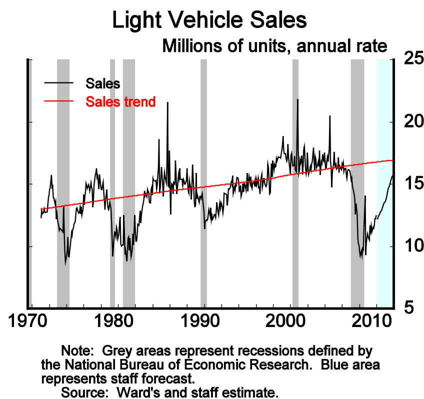
We estimate that real PCE rose at an annual rate of 4 percent in the fourth quarter, nearly 1½ percentage points faster than we anticipated in the previous Tealbook and roughly twice the average pace over the first three quarters of the year. Sales of light vehicles rose to an annual rate of 12¼ million units in the fourth quarter, ¾ million units higher than in the third quarter and the best quarterly reading since mid-2008 (see the box "Sales of Light Vehicles in the Downturn and Recovery" for additional detail). And although retail sales of non-auto goods were up only a little in December, that slowing

Sales of Light Vehicles in the Downturn and Recovery

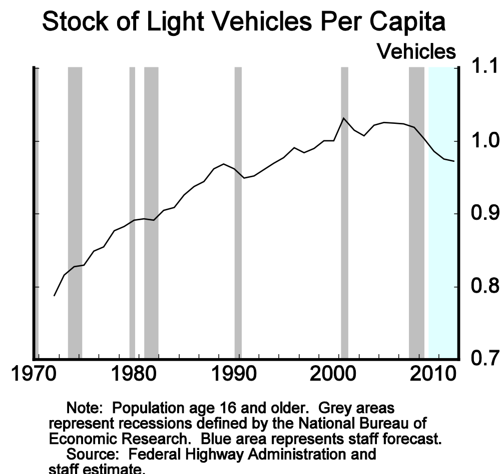
The plunge in sales of light motor vehicles in the recent recession was large by historical standards, exceeding the drops that followed the oil shocks and recessions of the 1970s and early 1980s. Vehicle sales, the black line in the left figure below, declined 40 percent between the end of 2007 and the first quarter of 2009, and the drop in vehicle spending accounted for about one-half of the decline in overall final sales over this period. While the rise in unemployment and the contraction in household wealth were key contributors to the decline in vehicle sales, the severity of the drop was exacerbated by a substantial disruption to auto lending, a steep run-up in gasoline prices through the summer of 2008, and a spate of bankruptcies in the motor vehicle industry that depressed the value of trade-in vehicles for some households.

Light vehicle sales began to recover in the second half of 2009, when the economy and financial markets began to stabilize and portions of the U.S. auto industry had been restructured. The federal government's vehicle scrappage incentive program ("Cash for Clunkers") provided a temporary boost to sales in the summer of 2009, but gains in sales otherwise remained modest through the summer of 2010. The recovery in vehicle demand picked up steam near the end of 2010, as consumer sentiment toward car-buying conditions edged up, the labor market improved a bit more, and automakers raised sales incentives. Sales were also supported by low interest rates, a greater willingness by lenders to extend credit to households with lower credit scores, and the continued recovery of securitization.

Despite the recent upturn in vehicle demand, sales remain well below the staff's underlying sales trend (the red line in the left figure below), which is estimated from population growth, long-run changes in income, and patterns of scrappage. Although we expect sales to rise more rapidly in 2011 and 2012, sales are still expected to fall short of their trend. As shown in the right figure below, the per capita stock of light vehicles declined in 2008 and 2009 after having been relatively flat, on net, over the past decade; the pace of sales we anticipate in the staff forecast would likely cause vehicle stocks to recede further over the next two years. This shortfall poses an upside risk to the forecast.

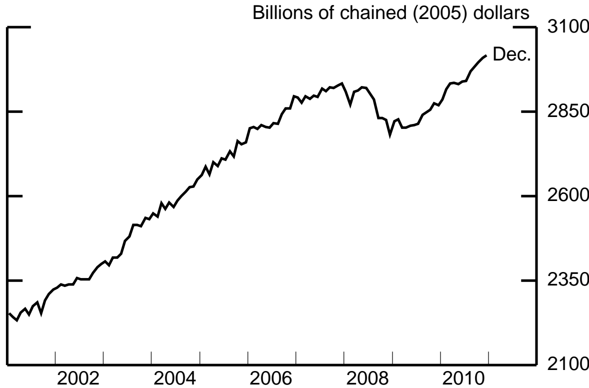


Note: Grey areas represent recessions defined by the National Bureau of Economic Research. Blue area represents staff forecast.
Source: Ward's and staff estimate.

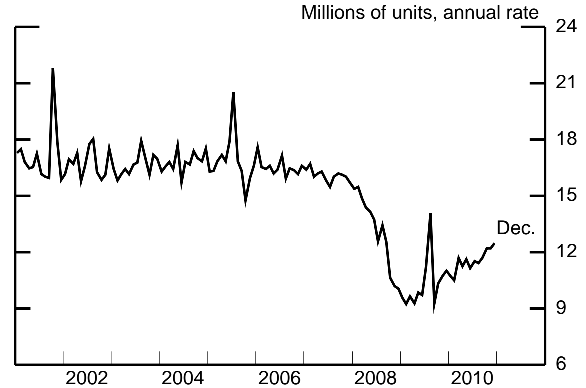


Note: Population age 16 and older. Grey areas represent recessions defined by the National Bureau of Economic Research. Blue area represents staff forecast.
Source: Federal Highway Administration and staff estimate.

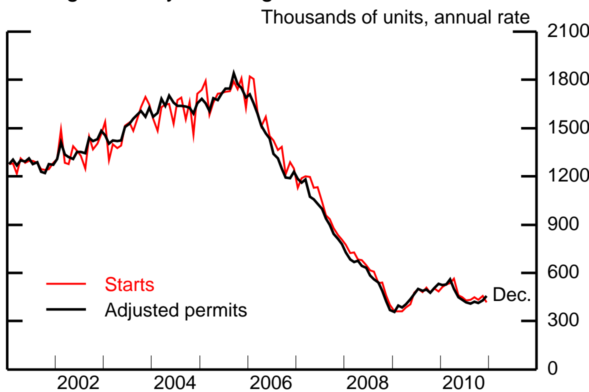
Recent Nonfinancial Developments (2)



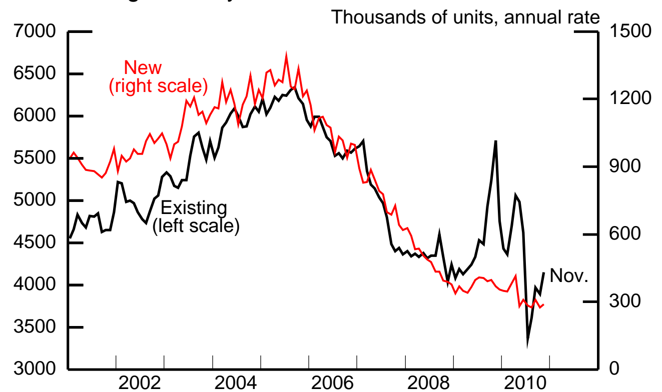
Note: Figures for October, November, and December are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.



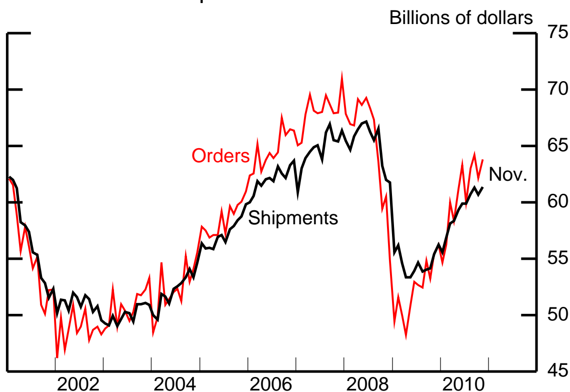
Source: Ward's Auto Infobank.



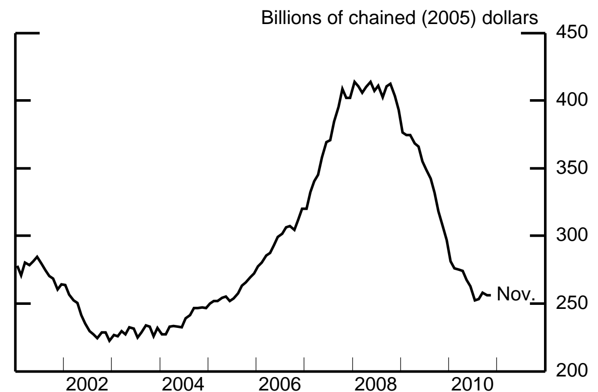
Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.
Source: U.S. Census Bureau.



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



Source: U.S. Census Bureau.



Source: U.S. Census Bureau.

followed appreciable gains in October and November.[3] Looking forward, consumer spending should get a boost in the current quarter from the start of the temporary payroll tax reduction, but we see little else to suggest that the sharp pickup in spending growth in late 2010 will be sustained. In particular, given relatively subdued gains projected for employment and wage income in coming months, along with the relatively low level of consumer sentiment through early January, we expect PCE growth to ease back to 3 percent this quarter—a pace more in line with the underlying fundamentals.

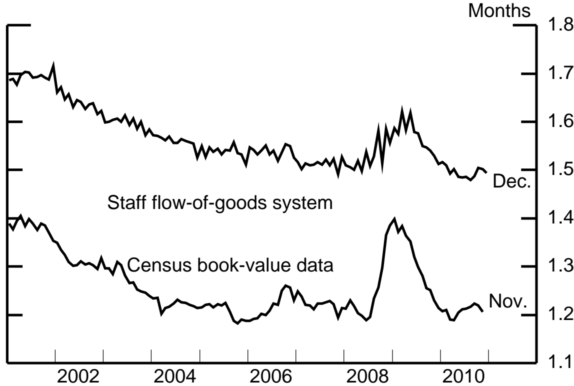
In an environment of soft demand and a large inventory of foreclosed or distressed properties on the market, homebuilding has stayed at a slow pace. In the single-family sector, new units were started at an average annual rate of only 436,000 units in the fourth quarter, and home sales—though up a little from the pace that prevailed just after the expiration of the homebuyer tax credit—remained near cyclical lows. Households' concerns about the prospects for jobs and incomes are likely continuing to weigh on housing demand, and although conventional mortgage rates are still low by historical norms, many households do not have the down payment or good credit history required to obtain such loans. Moreover, as noted, house prices have softened again and likely will remain under pressure in coming quarters from a continued high level of distress sales; thus, expectations of further declines in house prices may also be restraining demand. Given these factors, we expect little, if any, improvement in housing activity in early 2011.

Business Investment

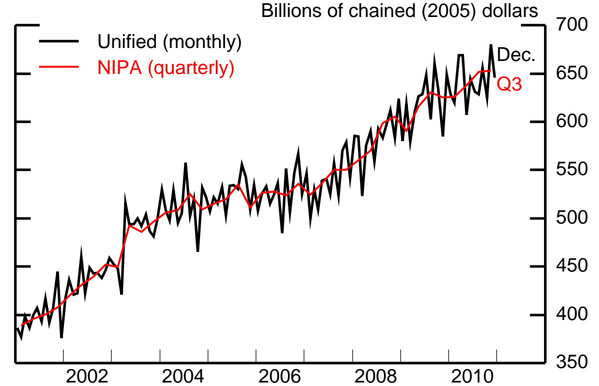
Real investment in equipment and software (E&S) appears to have posted a relatively meager gain in the fourth quarter after rising nearly 20 percent over the previous four quarters. The deceleration was due mainly to a sharp drop in net outlays on motor vehicles as fleet sales to businesses paused after several quarters of strong purchases by rental car companies and as business sales of used cars to consumers (which are treated as a negative for E&S in the NIPAs) surged. Apart from transportation equipment, outlays for E&S appear to have risen at an annual rate of about 11 percent last quarter, the same as the gain in the third quarter.

[3] Moreover, some holiday-related spending seems to have shifted over time from December to January and February—a phenomenon that is probably not fully captured in the seasonal adjustment factors.

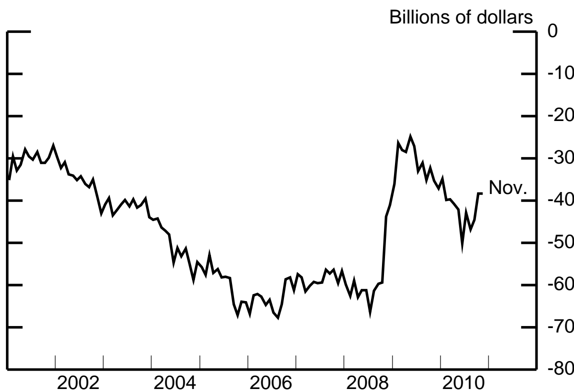
Recent Nonfinancial Developments (3)



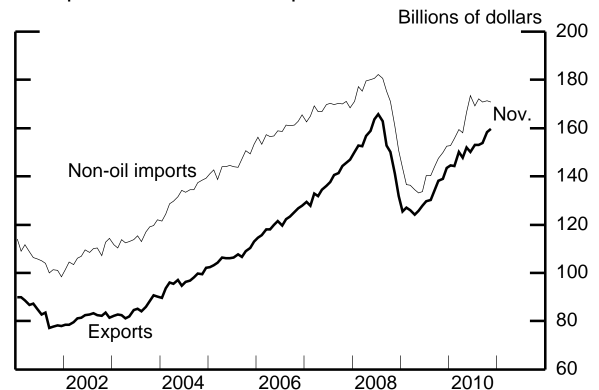
Note: Flow-of-goods system covers total industry ex. motor vehicles and parts, and inventories are relative to consumption. Census data cover manufacturing and trade ex. motor vehicles and parts, and inventories are relative to sales.
Source: U.S. Census Bureau; staff calculation.



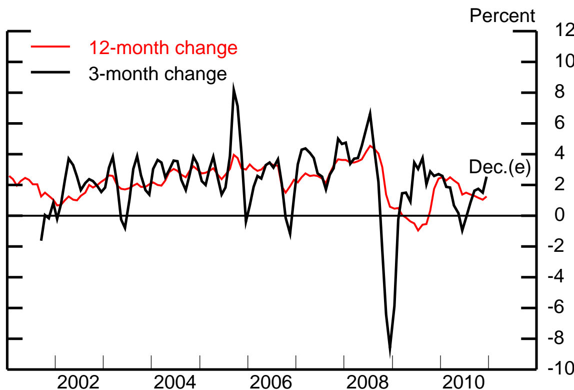
Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.
Source: Monthly Treasury Statement; U.S. Dept. of Commerce, Bureau of Economic Analysis.



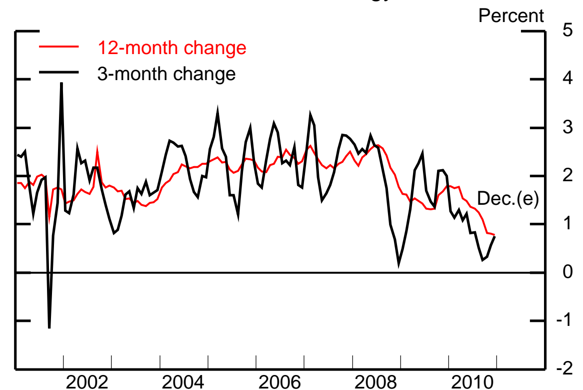
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.



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



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



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

Looking ahead, business outlays for motor vehicles should rebound in the current quarter as fleet sales rise and a step-up in purchases of heavy trucks follows the upturn in orders for these vehicles in late 2010. Meanwhile, new orders for nondefense capital goods excluding aircraft have been running above shipments for several months, pointing to further near-term increases in shipments. The fundamentals are also consistent with solid near-term gains in E&S outlays: Output growth has picked up; the latest readings on business conditions are relatively upbeat; and credit conditions, though probably still tight for small businesses, have generally continued to improve. Accordingly, our projection has real E&S outlays rising at an annual rate of 13½ percent in the current quarter after a gain of 4 percent in the fourth quarter.

Nonresidential construction continues to be constrained by high vacancy rates, low property values, and tight lending conditions. Based on monthly data through November, we estimate that real nonresidential construction outside of drilling and mining was little changed in the fourth quarter at a level about 40 percent below that of early 2008. Consistent with recent readings on architectural billings—which tend to be a useful indicator of building activity several months out—we expect nonresidential construction to remain near this level in early 2011. Given the high price of crude oil, investment in drilling and mining structures should continue to move up in the near term, but the increases in our forecast are considerably smaller than those realized over the first three quarters of 2010.

Real nonfarm inventory investment appears to have slowed substantially in the fourth quarter after having soared in the third quarter; this slowing is estimated to have subtracted 3 percentage points at an annual rate from GDP growth. Roughly one-half of the fourth-quarter downswing is associated with a drawdown of motor vehicle stocks after an accumulation in the third quarter. Stocks outside the motor vehicle sector also seem to have accumulated less rapidly in the fourth quarter than they did in the third quarter, judging from the relatively small increases in the book value of manufacturing and trade stocks in October and November. Overall, inventories appear well aligned with sales: Book-value inventory-sales ratios toward the end of 2010 were close to their pre-recession norms, and with the exception of construction materials, chemicals, and primary metals, most sectors represented in the staff's flow of goods system appear to have reasonably comfortable inventory positions. In our forecast for the current quarter, inventory investment moves up somewhat (mainly because of a rise in motor vehicle stocks) and thus should be a small plus for real GDP growth.

Government

After factoring in the information on defense expenditures from the *Monthly Treasury Statements* for November and December, we estimate that real federal purchases rose at an annual rate of 1 percent in the fourth quarter after two quarters of much larger gains; we expect purchases to rise modestly in the current quarter as well. In the state and local sector, ongoing fiscal pressures are being reflected in further job cuts while construction outlays—though erratic from quarter to quarter—continue to trend up after the steep declines of late 2009 and early 2010. In our forecast, real purchases by state and local governments post a small decline in the fourth quarter after two quarters of slight increases, and they are expected to be unchanged in the current quarter; these relatively small ups and downs largely reflect swings in construction outlays.

Foreign Trade

After taking on board the trade data for October and November, we estimate that real imports of goods and services fell at an annual rate of nearly 14 percent in the fourth quarter of 2010, 10 percentage points more than we anticipated in the December Tealbook. This dramatic drop in imports followed two quarters of rapid growth and was largely attributable to a steep decline in reported real oil imports, part of which owed to quirky seasonal adjustment factors. But it also reflected a contraction in non-oil imports, as the vigorous rebound of imports from their depressed levels during the financial crisis appears to have run its course. Given the solid pace of activity in the United States, as well as the likelihood that some of the weakness in imports in the fourth quarter was due to temporary factors, we expect real import growth to rebound at an annual rate of more than 9 percent in the first quarter, 4½ percentage points faster than in our previous forecast.

Supported by brisk foreign demand and some stimulus from the dollar, real exports of goods and services appear to have increased at an annual rate of 9 percent in the fourth quarter; we expect them to continue to rise at around this pace in the current quarter. This profile for exports is slightly stronger than in the December Tealbook, reflecting the information in the recent monthly trade reports and the stronger indicators lately for foreign real activity.

With imports falling and exports rising appreciably, we estimate that net exports added 3½ percentage points to GDP growth during the final quarter of 2010, a contribution 1¾ percentage points more positive than in the December Tealbook. For the

current quarter, we expect the pickup in imports to cause the external sector's contribution to GDP growth to turn slightly negative, compared with the small plus in the previous forecast.

Prices and Wages

Core inflation has remained low. The core PCE price index increased 0.1 percent in November after having been nearly unchanged over the preceding four months, and our translation of the CPI and PPI data for December suggests that core PCE prices were close to flat in that month as well. Based on these readings, we estimate that core PCE prices rose at an annual rate of just 0.6 percent for the fourth quarter as a whole, held down by a large decline in goods prices and softness in prices for a variety of market-based services. We continue to think that part of the low rate of core inflation in late 2010 was transitory, and we expect it to pick up to nearly 1 percent in the current quarter as higher import prices show through to goods prices and as prices of market-based services return to a more normal rate of increase. Total PCE prices are projected to rise at an annual rate of about 2 percent in both the fourth and first quarters, pushed up by large increases in consumer energy prices.

Measures of long-term inflation expectations have not changed significantly of late. Median 5-to-10-year-ahead inflation expectations from the Reuters/University of Michigan Surveys of Consumers for early January stood at 2.8 percent, the same as over the preceding three months. Since the time of the December Tealbook, the TIPS-based measure of five-year inflation compensation has risen 0.3 percentage point, likely pushed higher by rising prices for oil and other commodities and by the firming of the economic outlook, while the five-year forward measure has been about flat.

As we had expected, average hourly earnings rose at an annual rate of 2 percent in the fourth quarter, consistent with our forecast for a 2 percent increase in hourly compensation. Compensation growth is projected to move up to 2½ percent in the current quarter as employers are required to raise their contributions to state unemployment insurance funds. Given these compensation gains and our projections of productivity growth, unit labor costs are expected to be little changed on net over the fourth and first quarters.

THE MEDIUM-TERM OUTLOOK

Our medium-term forecast is very similar to that in the December Tealbook, with real GDP projected to increase 3¾ percent in 2011 and 4½ percent in 2012. Nonetheless, the incoming data suggest that the level of activity at the end of 2010 was ¼ percentage point higher than we had anticipated, and we have nudged up our forecast for growth in 2011 in response to the favorable recent news. As a result, the projected level of real GDP in the fourth quarter of 2012 is somewhat higher than in our previous forecast, and the unemployment rate—at 7¾ percent—is ¼ percentage point lower.

Our forecast continues to feature a steady acceleration of private demand that more than offsets the waning of the impetus from federal fiscal policy. The strengthening in private demand is expected to come about as the financial repair process proceeds, credit availability improves further, and the adverse effects of earlier declines in wealth lessen. A further recovery in the labor market should also help shore up household confidence. However, some significant negatives, including importantly the high vacancy rates for residential and commercial real estate and the budget problems of state and local governments, are still weighing on the outlook. As a result, we continue to project a recovery that is substantial, but less robust than those that have typically followed deep U.S. recessions.

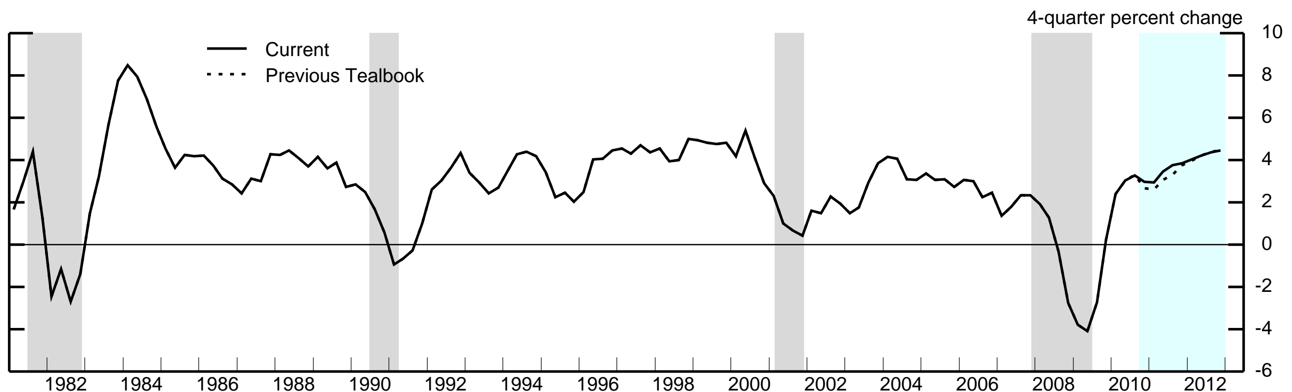
The projected gains in consumer spending reflect many of the same forces that we anticipate will drive the broader economic recovery. In addition, PCE growth receives a boost in 2011 from the one-year reduction in payroll taxes, though some of that boost is reversed in 2012 when the tax cut expires. In all, we expect real PCE to rise 3½ percent this year and 3¾ percent in 2012. Largely because spending is projected to respond gradually to the extra disposable income generated by the payroll tax cut, the personal saving rate is expected to move up to around 6 percent this year but then drop back to 5¼ percent in 2012, a shade below our current estimate for the fourth quarter of 2010.

Similarly, business outlays on equipment and software are projected to post solid gains over the next two years as rising sales, improved business confidence, and greater credit availability induce firms to replace aging capital and expand their capacity. In fact, we have revised up our forecast in response to the faster growth in business output in the near term and the additional tax incentive in 2012 that we brought into the forecast this round. In all, we now expect real E&S outlays to increase 13½ percent in 2011 and

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

Measure	2009	2010 H1	2010 H2	2011	2012
Real GDP	**.2**	**2.7**	**3.2**	**3.8**	**4.4**
Previous Tealbook	.2	2.7	2.6	3.7	4.4
Final sales	-.3	1.0	3.9	3.8	4.1
Previous Tealbook	-.3	1.0	2.7	3.9	4.1
Personal consumption expenditures	.2	2.0	3.3	3.5	3.8
Previous Tealbook	.2	2.0	2.8	3.5	4.0
Residential investment	-13.4	5.0	-14.4	9.1	13.5
Previous Tealbook	-13.4	5.0	-16.7	10.0	13.6
Nonresidential structures	-26.5	-9.5	.0	-.4	.0
Previous Tealbook	-26.5	-9.5	-3.0	-1.4	-.8
Equipment and software	-4.9	22.6	9.4	13.6	10.6
Previous Tealbook	-4.9	22.6	10.9	12.0	9.7
Federal purchases	3.6	5.4	4.9	1.0	.0
Previous Tealbook	3.6	5.4	5.4	1.0	.2
State and local purchases	-1.0	-1.6	-.1	.3	1.2
Previous Tealbook	-1.0	-1.6	.4	.4	1.3
Exports	-.1	10.2	7.8	9.2	8.6
Previous Tealbook	-.1	10.2	7.2	8.3	8.1
Imports	-7.2	21.8	.3	6.7	6.0
Previous Tealbook	-7.2	21.8	5.7	5.3	6.2
	Contributions to change in real GDP (percentage points)				
Inventory change	.5	1.7	-.7	.0	.3
Previous Tealbook	.5	1.7	-.1	-.1	.4
Net exports	1.2	-1.9	.9	.1	.2
Previous Tealbook	1.2	-1.9	.0	.2	.0

Real GDP



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

10½ percent in 2012, roughly 1 percentage point per year faster than in the December Tealbook.

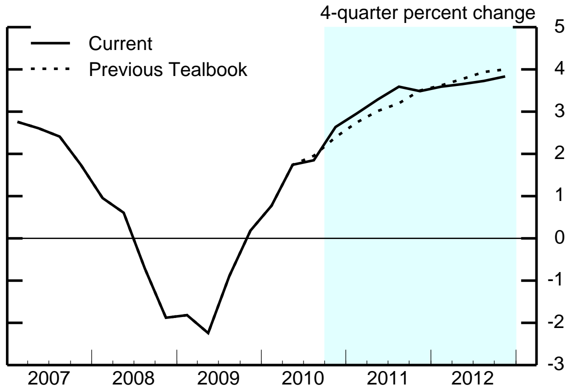
Given the ongoing strengthening of foreign activity and a depreciating dollar, real exports of goods and services should also contribute importantly to domestic production; in our forecast, exports expand at an average annual rate of nearly 9 percent in 2011 and 2012. At the same time, real imports are projected to rise 6¼ percent on average, as the pull of robust U.S. demand overcomes the drag from the depreciating dollar. In all, net exports are expected to be a small positive for GDP growth over the projection period.

The construction sector is unlikely to provide much impetus to growth over the next two years. In the December Tealbook, we significantly revised down our projection for housing construction, and we have largely maintained that forecast here. As before, we expect housing demand to firm a bit in coming quarters as the declines in house prices taper off and prospects for jobs and incomes improve. But many households will likely continue to find it difficult to finance home purchases, and the drag on homebuilding from the overhang of distressed and vacant homes will probably lessen only slowly. Thus, we project just a gradual resuscitation of new construction, with single-family housing starts reaching an annual rate of 660,000 units by the end of 2012—more than 200,000 units higher than in the fourth quarter of 2010 but still well below the pace we believe is consistent with the longer-run demand for housing. Nonresidential construction is likely to remain depressed as well, constrained by high vacancy rates, low prices for commercial real estate, and lending conditions that will likely be tight for some time.

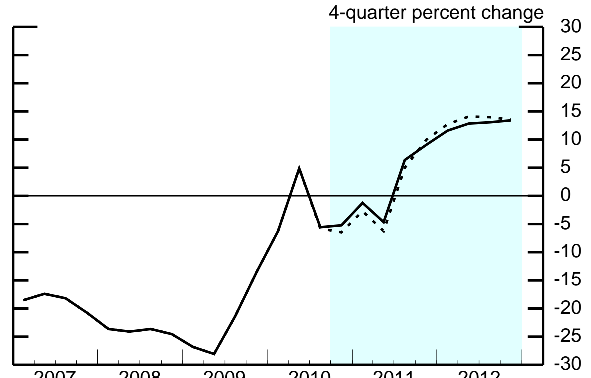
Government purchases are also projected to make only a very small contribution to real GDP growth over the medium term. Reductions in spending related to overseas military operations and the phasing out of stimulus-related nondefense spending are expected to hold the increase in real federal expenditures to 1 percent this year and to zero in 2012. In the state and local sector, tax collections seem to be picking up—albeit from a very low level—and our forecast for economic activity implies significant further increases in revenues over the next two years. But the cyclical increase in revenues will be offset by the ending of federal stimulus grants, and thus real spending by these jurisdictions is projected to rise just ¼ percent in 2011 and 1¼ percent in 2012.

Components of Final Demand

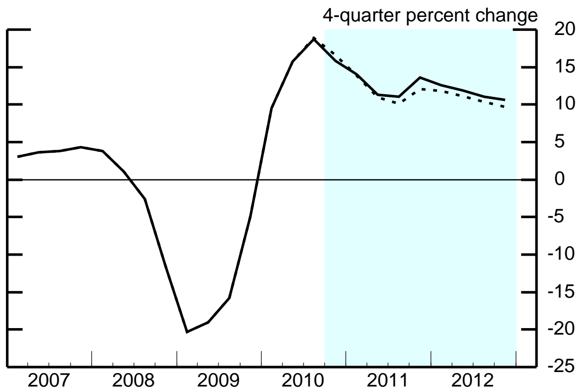
Personal Consumption Expenditures



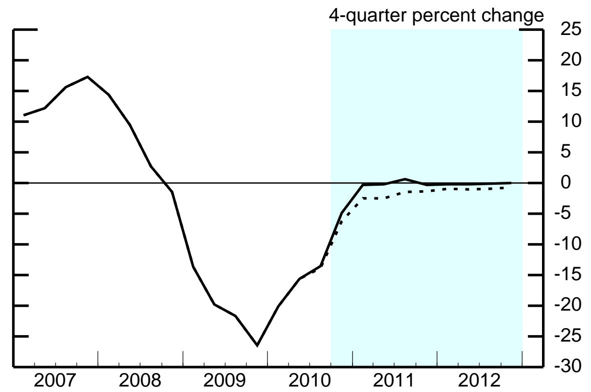
Residential Investment



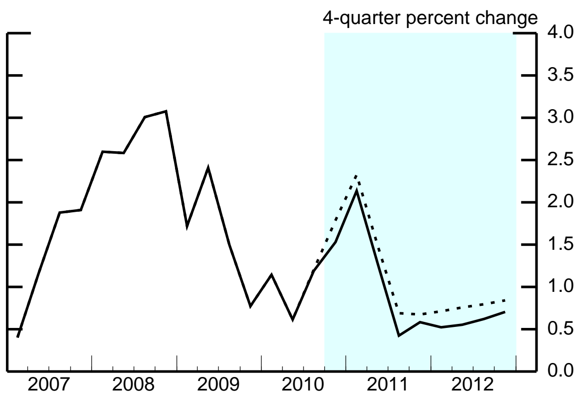
Equipment and Software



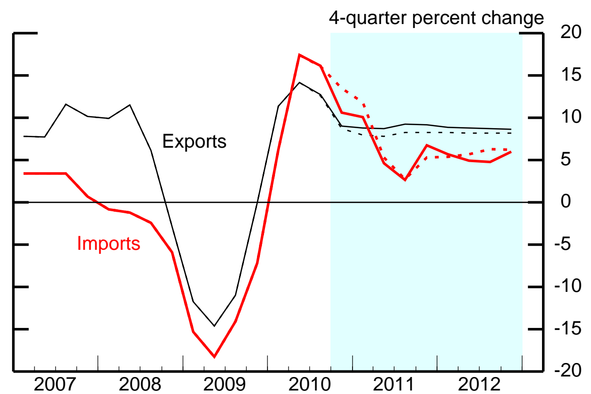
Nonresidential Structures



Government Consumption & Investment



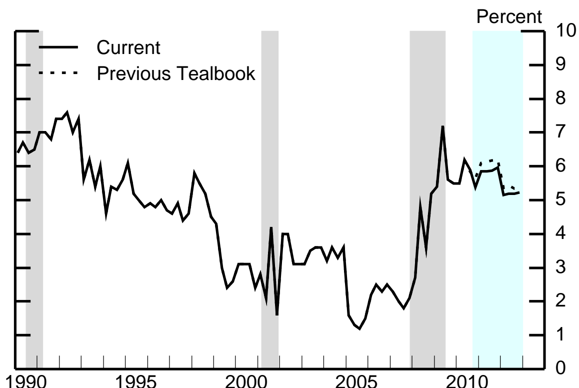
Exports and Imports



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

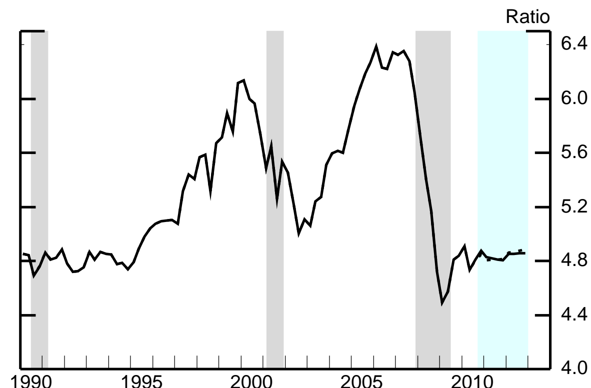
Aspects of the Medium-Term Projection

Personal Saving Rate



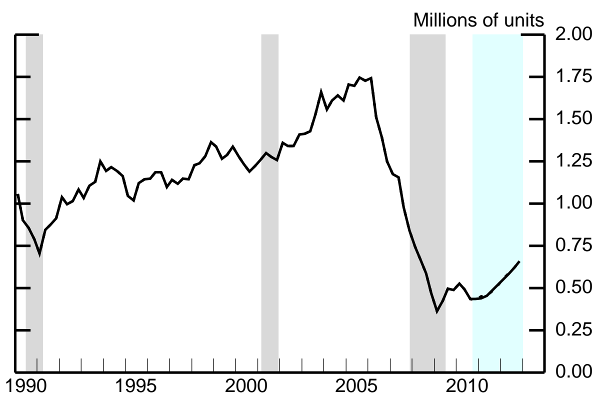
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Wealth-to-Income Ratio



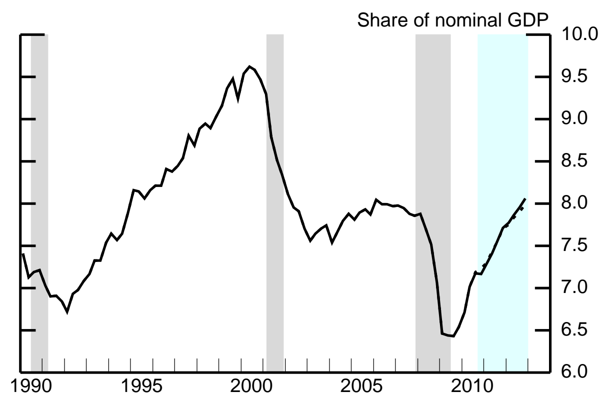
Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

Single-Family Housing Starts



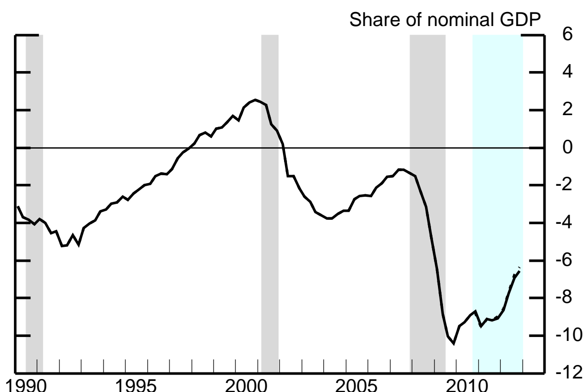
Source: U.S. Census Bureau.

Equipment and Software Spending



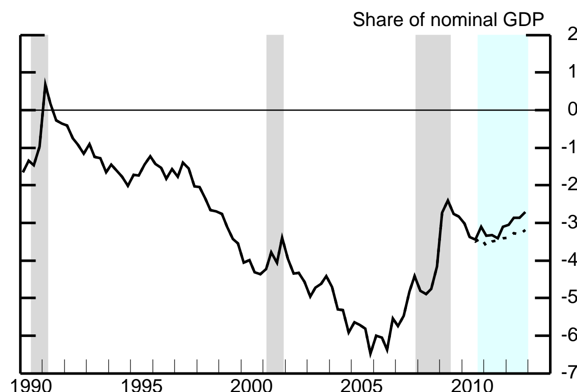
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.

AGGREGATE SUPPLY, THE LABOR MARKET, AND INFLATION

Potential GDP and the NAIRU

We have made no material changes in this Tealbook to our estimates of aggregate supply. We continue to assume that potential GDP will increase about 2½ percent per year over the projection period as a step-up in capital deepening is largely offset by a deceleration in structural multifactor productivity. We have also retained our assumption that the NAIRU will remain at 6 percent through 2012.[4]

Productivity and the Labor Market

As with our forecast of real activity, the forecast for the labor market is similar to that in the December Tealbook. As before, the gap we estimate between actual labor productivity and its structural level is projected to narrow over the medium term as firms add workers to meet rising production needs and to relieve pressures on their existing workforces. Thus, while we have trimmed our near-term forecast for private employment a bit, we continue to project that employment growth will pick up noticeably over the course of the projection period. In particular, we expect private job gains to average roughly 270,000 per month in the second half of 2011 and 300,000 per month in 2012. Consistent with this employment outlook, our forecast calls for actual labor productivity to rise 1½ percent in 2011 and 2 percent in 2012, a little less than our estimate of its structural growth rate.

The projected job gains in this forecast lead to a gradual reduction in the unemployment rate over the next two years. Our forecast for the unemployment rate at the end of 2011, at a little under 9 percent, is the same as in the previous Tealbook, as the effect of the slightly stronger output growth in this forecast is offset by our revised assumptions about the availability of benefits under the EUC program. The unemployment rate is projected to move down steadily over the course of 2012, largely because of the above-trend growth in GDP, but also reflecting the tapering off of extended and emergency unemployment benefits; our projection for the unemployment

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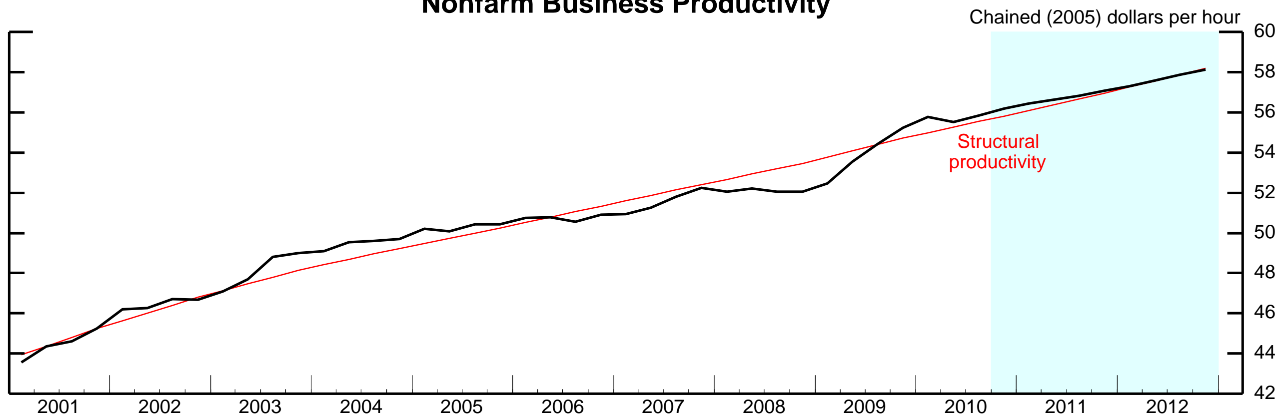
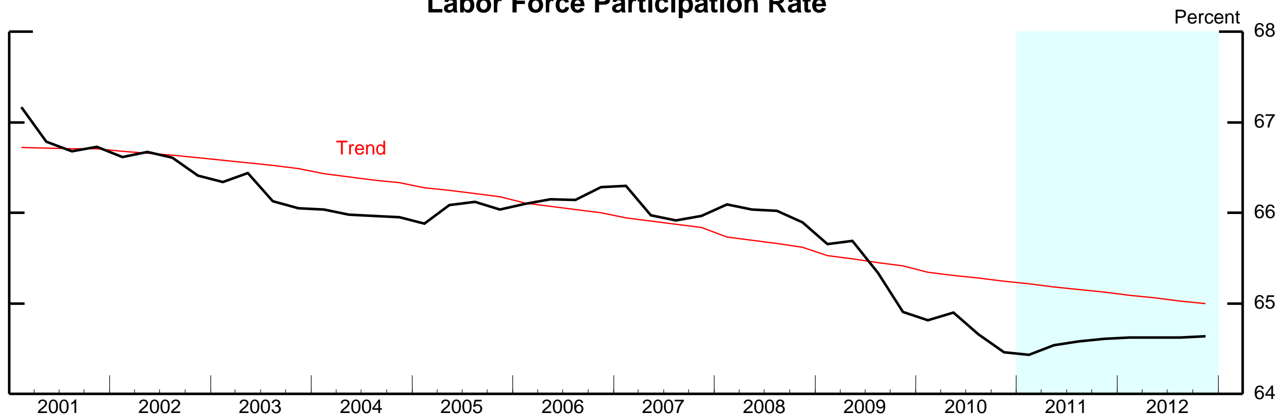
[4] We did make a small adjustment to our estimate of the effective NAIRU, which includes the influence of extended and emergency unemployment benefits and is the level of the unemployment rate that we view as being consistent with no slack in the labor market. In particular, our revised assumptions about the EUC program imply an upward revision of nearly 0.2 percentage point to our estimate of the effective NAIRU by late 2011, but that effect largely disappears by the end of 2012. We still think the effective NAIRU is in the neighborhood of 6½ percent at present and will decline to around 6 percent by the end of 2012.

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	2.2	2.5	2.5	2.6
Previous Tealbook	3.0	3.5	2.7	2.2	2.5	2.5	2.6
Selected contributions[1]							
Structural labor productivity	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Previous Tealbook	1.5	2.7	2.5	2.3	2.0	2.1	2.1
Capital deepening	.7	1.5	.7	.3	.4	.7	.9
Previous Tealbook	.7	1.5	.7	.3	.4	.7	.9
Multifactor productivity	.5	.9	1.6	1.9	1.5	1.3	1.2
Previous Tealbook	.5	.9	1.6	1.9	1.5	1.3	1.2
Trend hours	1.5	1.1	.8	.0	.7	.7	.7
Previous Tealbook	1.5	1.1	.8	.0	.7	.7	.7
Labor force participation	.4	.0	-.2	-.2	-.2	-.2	-.2
Previous Tealbook	.4	.0	-.2	-.2	-.2	-.2	-.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.





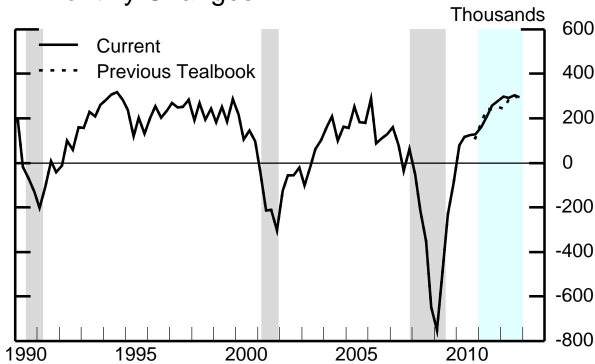
Source: For both figures, U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

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

Measure	2009	2010	2011	2012
Output per hour, nonfarm business	6.2	1.7	1.5	1.9
Previous Tealbook	6.2	1.3	1.7	2.1
Nonfarm private employment	-4.7	1.1	2.3	3.2
Previous Tealbook	-4.7	1.1	2.4	3.0
Labor force participation rate[1]	64.9	64.5	64.6	64.6
Previous Tealbook	64.9	64.5	64.6	64.6
Civilian unemployment rate[1]	10.0	9.6	8.9	7.8
Previous Tealbook	10.0	9.7	8.9	8.0
Memo:				
GDP gap[2]	-6.7	-6.3	-5.1	-3.3
Previous Tealbook	-6.7	-6.6	-5.5	-3.7

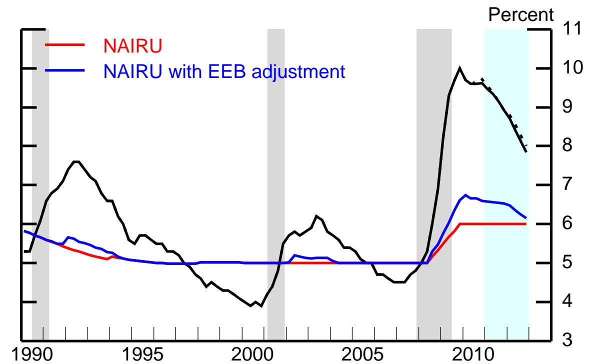
Note: A negative number indicates that the economy is operating below potential.
1. Percent, average for the fourth quarter.
2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated.
Source: U.S. Department of Labor, Bureau of Labor Statistics; staff assumptions.

Private Payroll Employment, Average Monthly Changes



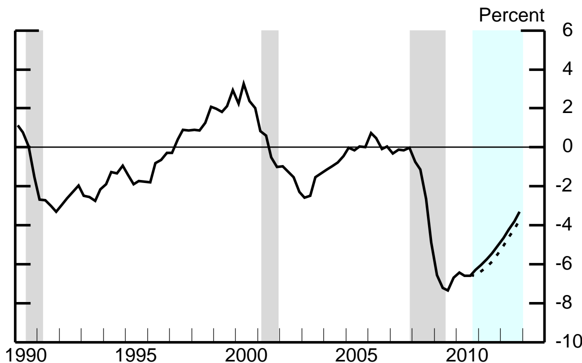
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Unemployment Rate



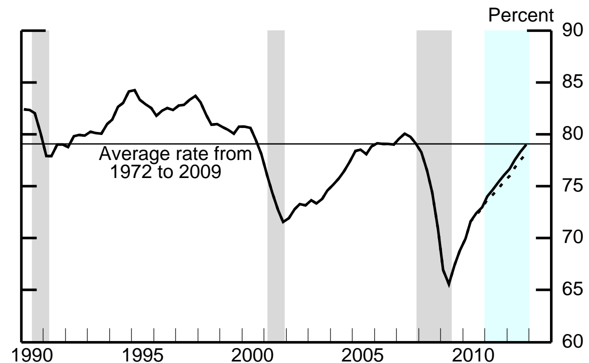
Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics; staff assumptions.

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.

rate in the fourth quarter of that year is 7¾ percent, ¼ percentage point lower than in the December Tealbook.

Resource Utilization

We estimate the amount of economic slack to be sizable at present and expect it to remain so over the next two years; in particular, the level of real GDP is projected to still be about 3¼ percent below the level of potential output at the end of 2012. Similarly, by our reckoning, the unemployment rate will be 1¾ percentage points above the effective NAIRU at the end of 2012, compared with an estimated unemployment gap of about 3 percentage points in the fourth quarter of 2010. 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.

The margin of unused plant capacity in the industrial sector should be taken up more rapidly than the slack in the economy as whole, in part because manufacturing capacity seems likely to expand slowly over the forecast period; indeed, we project that manufacturing capacity will increase just 1 percent this year and 1½ percent in 2012. As a result, by the end of 2012, our projection calls for the factory operating rate to be around its long-run average despite the still-sizable GDP gap prevailing at that time.

Compensation and Prices

Given the high unemployment rates and low rates of price inflation in our forecast, we expect labor costs to remain subdued over the projection period. In our forecast, the Productivity and Cost measure of nonfarm hourly compensation rises about 2 percent in 2011 and 2¼ percent in 2012, while the employment cost index increases at a roughly similar rate. Combined with the moderate gains in productivity that we project, these increases in compensation imply only a small rise in unit labor costs over the medium term.

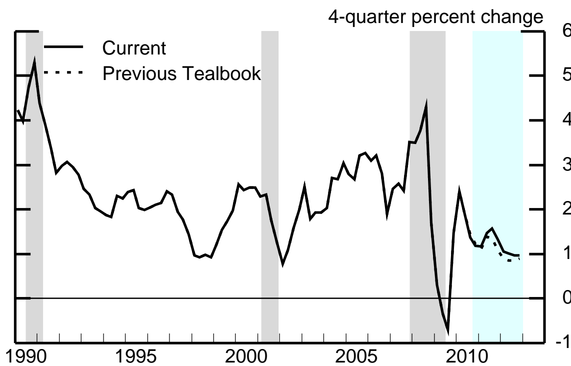
Prices of imported core goods (all goods excluding fuels, computers, and semiconductors) appear to have increased at an annual rate of about 6 percent in the fourth quarter of 2010, pushed up by higher commodity prices and dollar depreciation; we expect them to increase at nearly this pace in the current quarter, as commodity prices rise further and foreign inflation stays high. These near-term increases are somewhat

Inflation Projections
(Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.2	1.3	1.0
Previous Tealbook	1.5	1.2	1.1	.9
Food and beverages	-1.6	1.3	1.7	1.1
Previous Tealbook	-1.6	1.4	1.1	1.1
Energy	2.7	6.3	6.2	.1
Previous Tealbook	2.7	5.7	3.8	.0
Excluding food and energy	1.7	.8	1.0	1.0
Previous Tealbook	1.7	.9	.9	.9
Prices of core goods imports[1]	-1.9	3.1	3.2	1.4
Previous Tealbook	-1.9	3.0	2.5	1.4

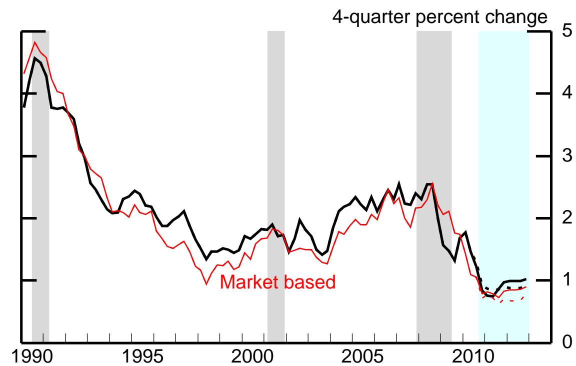
1. Core goods imports exclude computers, semiconductors, oil, and natural gas.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Total PCE Prices



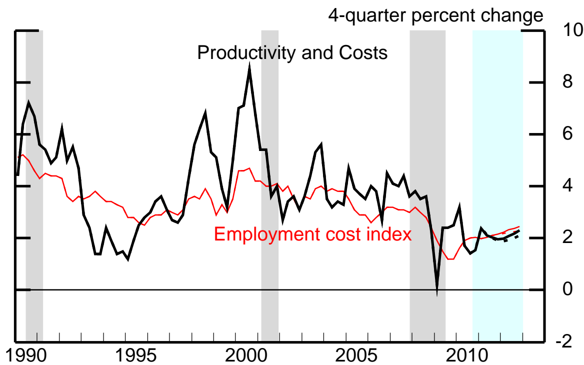
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

PCE Prices ex. Food and Energy



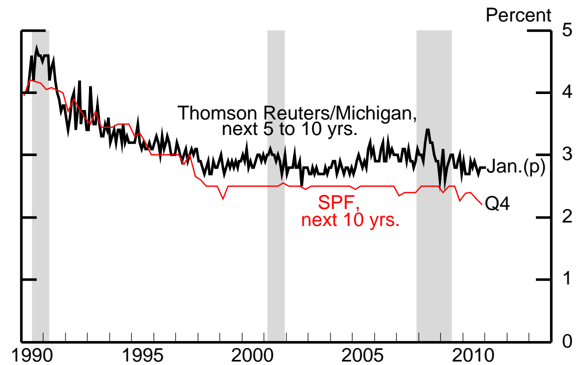
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

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.

larger than those in the December Tealbook, but we still expect import price inflation to taper off noticeably in coming quarters and to be down to about 1½ percent in 2012, as commodity prices level off and the effects of dollar depreciation wane.

As discussed in the box "Pass-Through of Industrial Commodity Prices to Core Inflation," we do not expect the run-up in industrial commodity prices to have much effect on domestic core inflation. Accordingly, even after taking on board the higher prices for commodities, imports, and energy—as well as the slightly smaller margin of resource slack—in this Tealbook, we have raised our forecast for core PCE inflation just 0.1 percentage point, to 1 percent in both 2011 and 2012. The basic story of our inflation forecast is unchanged—namely, that while the substantial slack in resource utilization will continue to exert downward pressure on inflation over the projection period, that influence will be muted by the continuing stability of long-run inflation expectations. Given our path for food and energy prices, total PCE inflation is expected to be a little faster than core inflation in 2011 and in line with core in 2012.

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 November meeting.

- The Federal Reserve's holdings of securities follow the baseline portfolio projections reported in Book B. We assume that the projected decline in the System's holdings beginning in 2013 will contribute about 25 basis points to the rise in the 10-year Treasury yield over the 2013–15 period.

- 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 about 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 real foreign exchange value of the dollar is assumed to depreciate ¾ percent per year in the 2013–15 period. The price of WTI crude oil edges up a bit after 2012 and reaches $98 per barrel by 2015, consistent with futures prices. Under these assumptions, movements in the prices of energy and imports have only minor implications for domestic inflation in the extension. Foreign real GDP expands, on average, about 3¼ percent per year from 2013 through 2015, a bit above its trend rate.

- Over the 2013–15 period, the NAIRU declines from 6 percent to 5¼ percent, as the functioning of the labor market improves. Potential GDP expands 3 percent per year on average.

The economy enters 2013 with the staff's estimate of the output gap quite wide, the unemployment rate well above the estimated NAIRU, and inflation very low. In the long-run projection, improving confidence, diminishing uncertainty, and supportive financial conditions eventually enable the level of aggregate demand to catch up with aggregate supply and inflation to move closer to 2 percent. Specifically, real GDP rises at an annual rate of 4½ percent in 2013 and 2014, considerably faster than its potential pace; as a result, unemployment declines appreciably and inflation rises slowly. In response, the federal funds rate begins to increase in the first quarter of 2013 and reaches 3½ percent by late 2014.[5] By 2015, with improvements in confidence and financial conditions largely complete, and with the federal funds rate climbing further to 4 percent, gains in real GDP moderate. Nevertheless, overall economic growth remains robust enough relative to potential to reduce the unemployment rate to the NAIRU by late 2015; in addition, inflation continues to rise and reaches 1½ percent.

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

Pass-Through of Industrial Commodity Prices to Core Inflation

Although prices for crude oil, natural gas, and farm commodities are important determinants of consumer energy and food prices, prices for other industrial commodities typically have only a small effect on our projection of core inflation. Accordingly, even though core commodity prices have risen sharply over the past couple of years—in many cases rising above pre-crisis levels—we do not expect these price increases to significantly boost core inflation in the medium term.

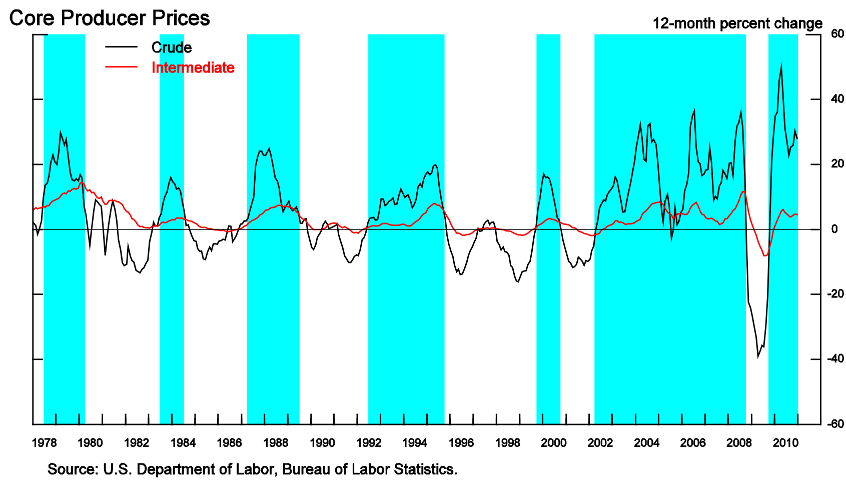
Several factors account for the small estimated pass-through of commodity price increases into core inflation. First, core industrial materials account for only a small fraction—around 1 percent—of the overall cost of producing core consumer goods and services. Roughly three-fourths of core consumer spending is on services, which are not materials intensive. In addition, even for a good like an automobile, the cost of iron, rubber, and glass is small compared with labor costs and the cost of financing plant and equipment.

Moreover, the cost share of commodities—which we estimate using input-output tables to compute the total amount of raw materials that is *eventually* needed to produce a dollar of core personal consumption expenditures (PCE)—likely overstates the medium-term effect of changes in materials prices on finished goods prices. For example, part of the cost of producing air travel in the input-output framework reflects the cost of the aluminum that is used to build the airplanes that an airline uses. If the price of aluminum were to jump, we would expect this cost increase to put upward pressure on the price of new airplanes and eventually on airfares and core PCE prices. But this pass-through would be drawn out over a long period of time, and would be attenuated in the short run to the extent that aircraft manufacturers, airlines, or both allowed their price-cost margins to absorb some of the cost increase and in the longer run to the extent that aircraft manufacturers shifted to lower-cost production methods. Thus, changes in raw material prices probably have a smaller effect on a given year's core inflation rate than a straight application of the cost share would imply.

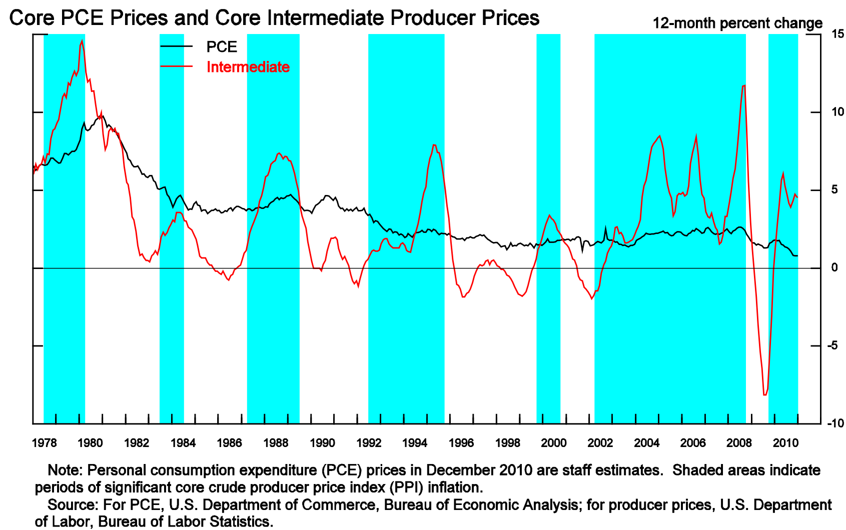
As a result, even when commodity prices rise at double-digit rates, they tend to be associated with much smaller changes in intermediate and final goods prices. The upper panel of the figure on the facing page plots 12-month changes in the core crude producer price index (PPI)—the black line—and the core intermediate PPI—the red line—with the shaded areas indicating periods of significant core crude PPI inflation (other broad-based indexes of core commodity prices move in a similar manner). Changes in intermediate price inflation are much smaller than the swings in crude price inflation; the echoes in core consumer price inflation—which is plotted against core intermediate PPI inflation in the lower panel—are smaller still (note the change in scale across the two panels).

Hence, given the size of the pass-through effect that we estimate, we expect that the commodity price increases that we have seen so far will add only a small amount to core inflation. However, a risk to our projection is that recent commodity price movements have been driven by upward revisions to expected future demand or prices. If these developments reflect either a stronger projected recovery than we have assumed in the staff forecast or a broader rise in inflation expectations, then the run-up in commodity prices that we have seen could be a precursor of higher general inflation.

Measures of Crude, Intermediate, and Consumer Price Inflation



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



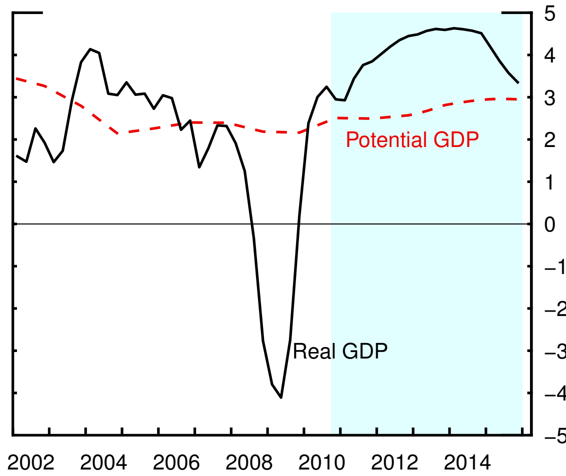
Note: Personal consumption expenditure (PCE) prices in December 2010 are staff estimates. Shaded areas indicate periods of significant core crude producer price index (PPI) inflation.
Source: For PCE, U.S. Department of Commerce, Bureau of Economic Analysis; for producer prices, U.S. Department of Labor, Bureau of Labor Statistics.

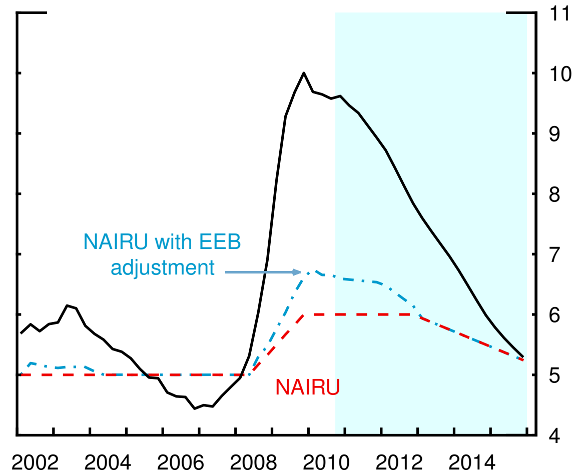
The Long-Term Outlook

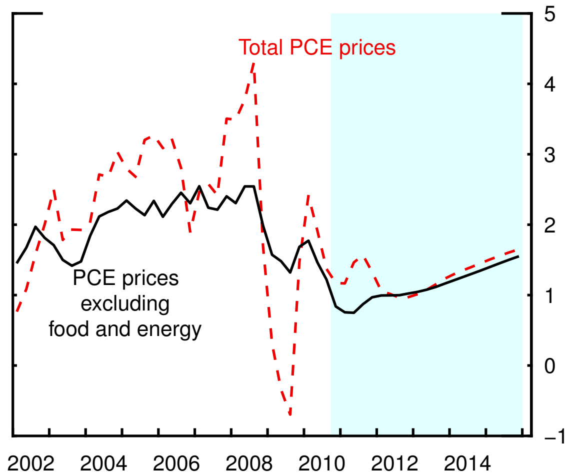
(Percent change, Q4 to Q4, except as noted)

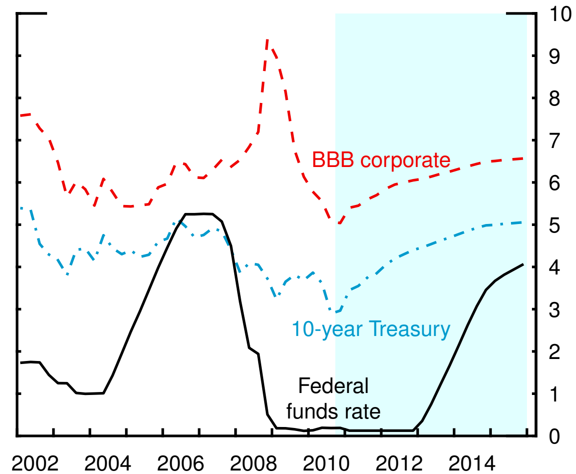
Item	2010	2011	2012	2013	2014	2015
Real GDP	2.9	3.8	4.4	4.6	4.5	3.4
Civilian unemployment rate[1]	9.6	8.9	7.8	7.0	6.0	5.3
PCE prices, total	1.2	1.3	1.0	1.2	1.5	1.6
Core PCE prices	.8	1.0	1.0	1.2	1.4	1.5
Federal funds rate[1]	.2	.1	.1	1.7	3.5	4.1
10-year Treasury yield[1]	3.0	3.8	4.4	4.7	5.0	5.1

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





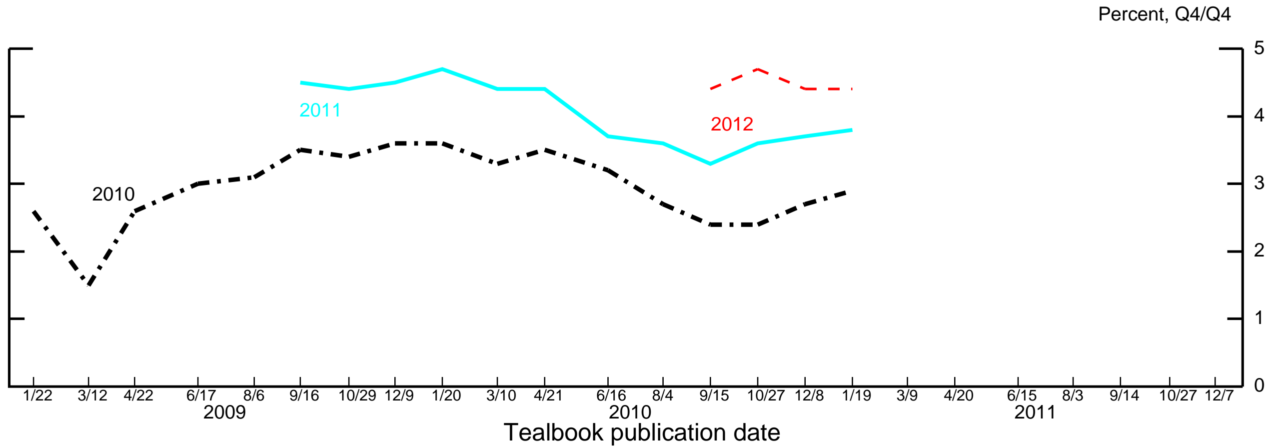




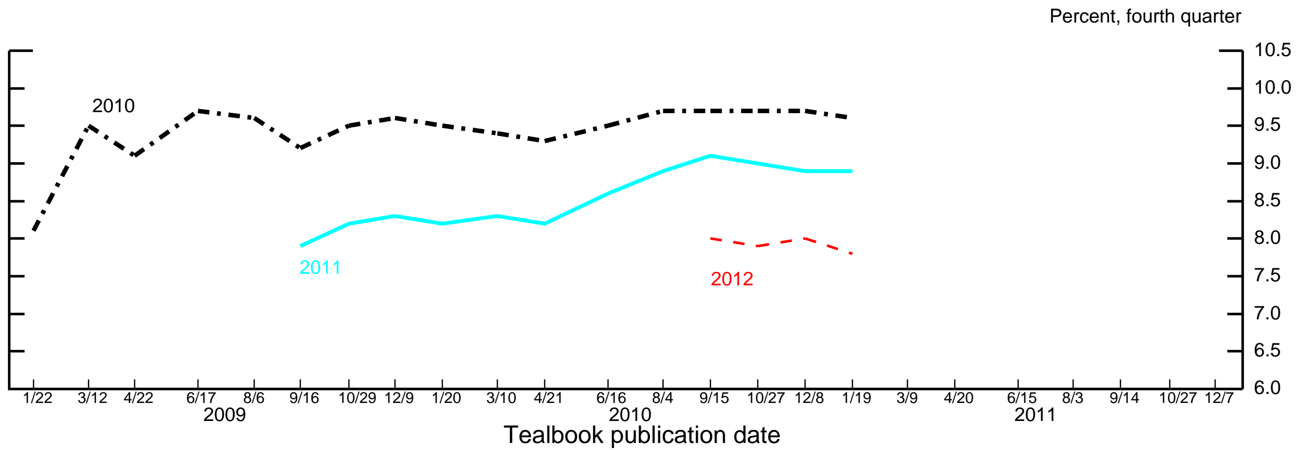
Note: In each panel, shading represents the projection period.

Evolution of the Staff Forecast

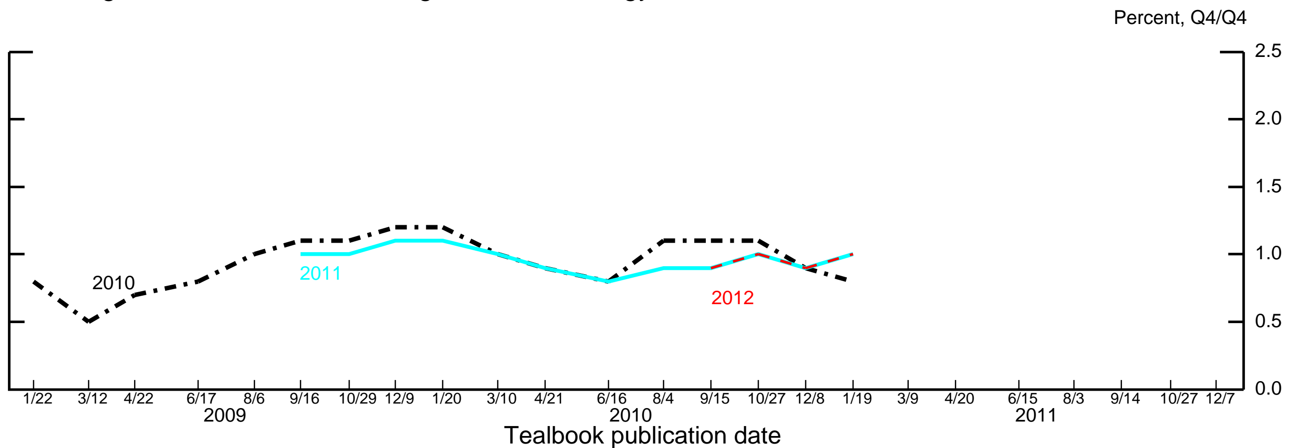
Change in Real GDP



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.

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International Economic Developments and Outlook

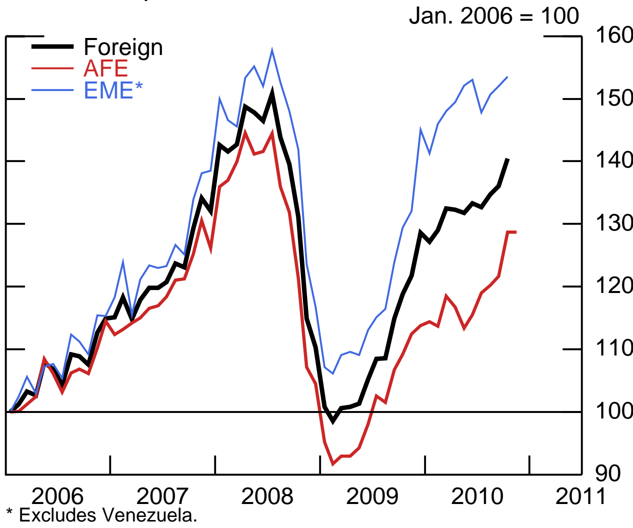
Economic data that we have received since the previous Tealbook appear to confirm a strengthening global recovery, though one that remains on two tracks. Much of the current strength is centered in the emerging market economies (EMEs), where growth is expected to remain robust over the forecast period. In contrast, we estimate that fourth-quarter growth in the advanced foreign economies (AFEs) stayed subdued. However, as households and firms in the AFEs repair their balance sheets and labor markets improve, the recovery in these countries seems poised to firm. That said, developments in the euro-area periphery continue to pose a significant risk to the global outlook, with market participants increasingly expecting the Portuguese government to be forced to seek financial assistance. Assuming that the need for such measures does not spread beyond Portugal, with attendant spillovers to global financial markets, we expect that foreign GDP growth will rise from its 3 percent pace last quarter to more than 3½ percent in 2012. This outlook is a little higher than in the December Tealbook, in part as recent data have been somewhat stronger than we had expected.

Foreign inflation rose to an estimated 5 percent in the fourth quarter, mostly because of an acceleration of energy and food prices. (See the box "What Explains the Recent Increase in Commodity Prices?" in the Domestic Economic Developments and Outlook section.) The still-considerable economic slack in the AFEs should keep inflation pressures contained, and we expect that AFE central banks will keep policy accommodative over the forecast period. In contrast, inflation pressures appear to be building in the EMEs. In response, a number of EME central banks have continued to tighten policy and allowed some currency appreciation. We assume that policy will be tightened further, although ongoing concerns about capital inflows will keep EMEs cautious about raising rates.

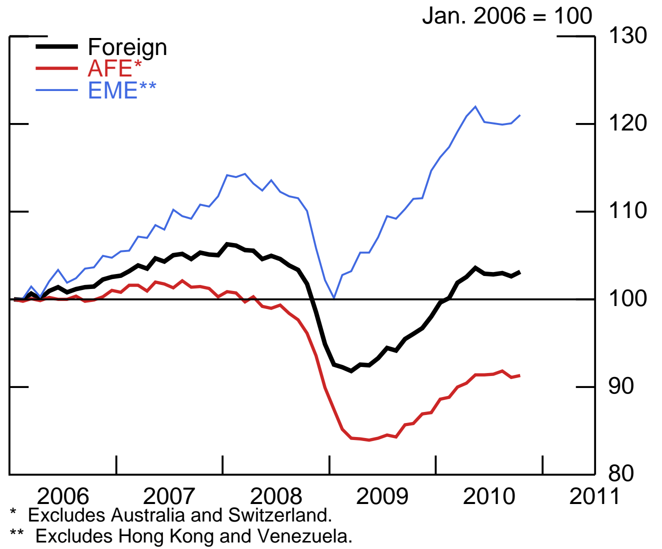
Advanced Foreign Economies

The step-down in growth in the AFEs in the summer persisted into the fourth quarter, and we continue to project that economic growth will pick up only modestly over the course of this year and next. Although prospects for manufacturing have improved amid a resurgence in global trade, the outlook for activity more generally remains relatively subdued. The outlook is especially damped in Europe, where domestic demand will be restrained by heightened fiscal consolidation and continued financial stresses. We

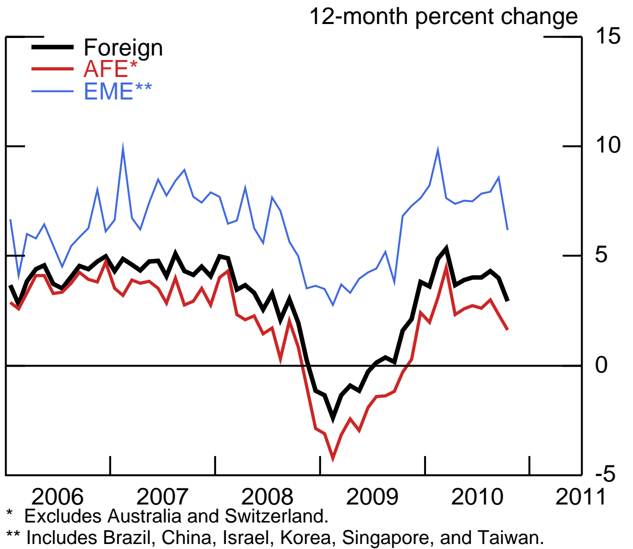
Recent Foreign Indicators



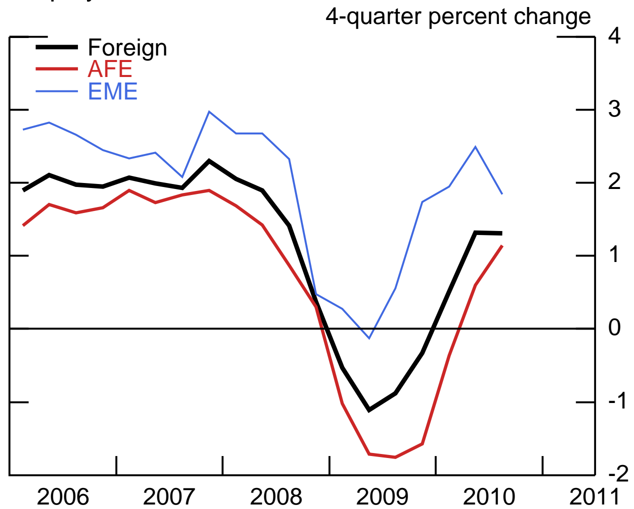
* Excludes Venezuela.

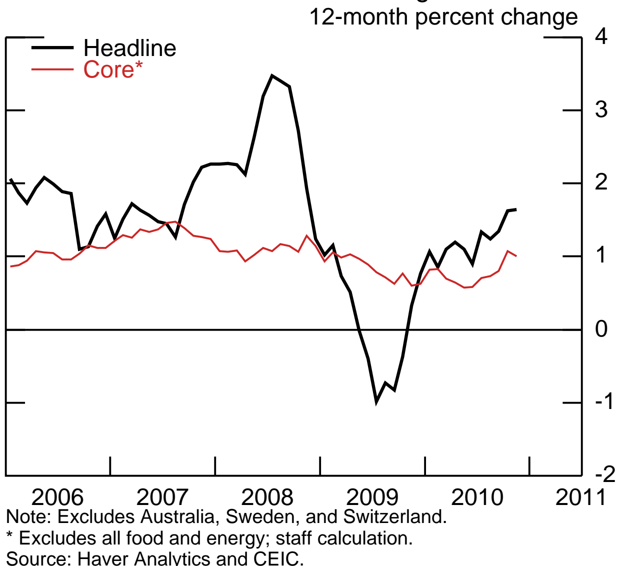


* Excludes Australia and Switzerland.
** Excludes Hong Kong and Venezuela.

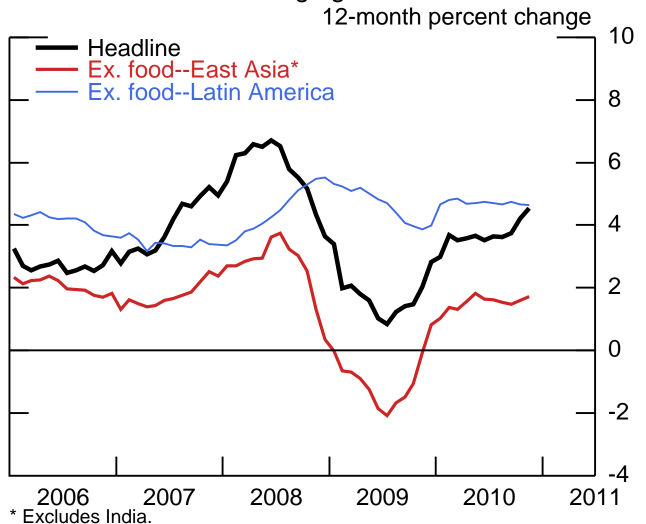


* Excludes Australia and Switzerland.
** Includes Brazil, China, Israel, Korea, Singapore, and Taiwan.





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



* Excludes India.

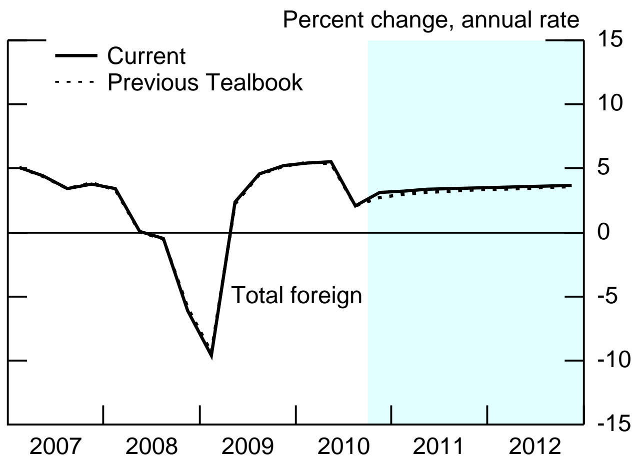
The Foreign Outlook

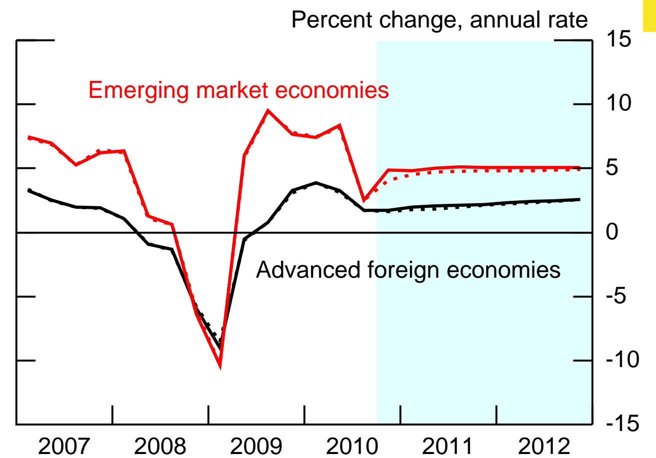
(Percent change, annual rate)

	2010			2011			
	H1	Q3	Q4e	Q1p	Q2p	H2p	2012p
Real GDP							
Total foreign	5.5	2.1	3.1	3.2	3.4	3.5	3.6
Previous Tealbook	5.4	2.1	2.7	3.0	3.1	3.3	3.5
Advanced foreign economies	3.6	1.7	1.7	2.0	2.1	2.2	2.4
Previous Tealbook	3.5	1.7	1.6	1.8	1.8	2.1	2.4
Emerging market economies	7.9	2.5	4.9	4.8	5.0	5.1	5.1
Previous Tealbook	7.8	2.5	4.1	4.5	4.7	4.8	4.9
Consumer Prices							
Total foreign	2.3	2.2	4.9	3.7	2.6	2.2	2.3
Previous Tealbook	2.4	2.2	3.9	3.0	2.5	2.2	2.3
Advanced foreign economies	1.0	1.0	3.4	2.3	1.3	1.2	1.4
Previous Tealbook	1.1	1.1	2.6	1.6	1.3	1.1	1.4
Emerging market economies	3.6	3.3	6.4	5.1	3.7	3.2	3.2
Previous Tealbook	3.6	3.3	5.1	4.2	3.6	3.2	3.2

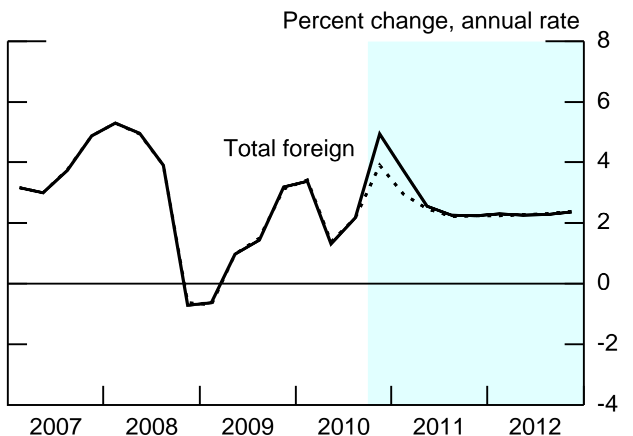
Note: Annualized percent change from final quarter of preceding period to final quarter of period indicated.

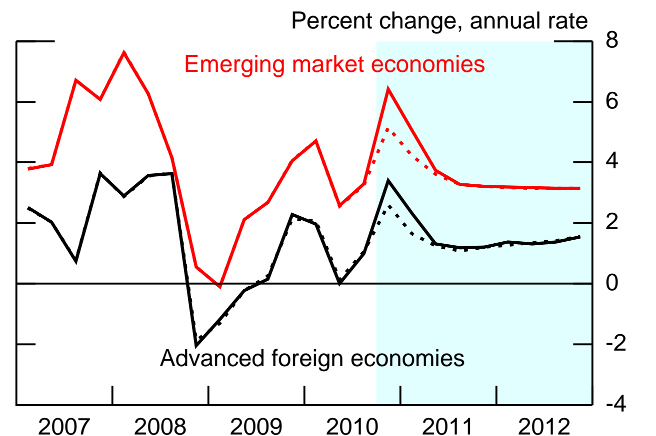
Real GDP





Consumer Prices





have maintained the working hypothesis that the debt crisis in Europe will be contained without significant disruptions to financial markets and economic activity outside the peripheral economies. In our view, this outcome requires several actions by European authorities. They will have to increase the funds available for financial assistance to countries in distress. Also, they must take additional measures to shore up confidence in the banking sector, including more-stringent stress tests where a number of banks are required to raise additional capital. Further, the European Central Bank (ECB) needs to continue to provide liquidity and purchase sovereign bonds.

Consumer prices in the AFEs accelerated markedly around year-end, driven by a run-up in food and energy prices. However, underlying inflationary pressures remain generally subdued amid considerable economic slack, so we anticipate that inflation will edge back down over the forecast period as increases in food and energy prices moderate. Although monetary policy in the major AFEs will remain accommodative over the forecast period, we now assume that central banks will begin tightening monetary policy sooner than in the December Tealbook.

Euro Area

We estimate that real GDP growth in the euro area remained around 1½ percent at an annual rate in the fourth quarter. Industrial production, manufacturing purchasing managers indexes (PMIs), and industrial confidence showed considerable recent strength, supported in part by a rebound in exports. However, this strength remains concentrated in Germany and to a lesser extent in other core economies. Economic performance was generally stagnant or declining in the euro-area periphery (Greece, Ireland, Portugal, and Spain). Moreover, the improved business conditions have not spilled over to the euro-area household sector: Consumer confidence has softened, and retail sales have declined sharply.

Recent data have led us to revise up our projection of euro-area growth in 2011 to 1¼ percent, but this is still slightly slower than in the second half of 2010, as the twin headwinds of fiscal consolidation and financial turmoil more than offset support coming from the depreciation of the euro. Euro-area GDP growth should then move up to 2¼ percent in 2012. We expect GDP in the euro-area periphery to stagnate in 2011 and to lag growth in the rest of the euro area in 2012.

Market sentiment toward the euro-area periphery deteriorated through early January on the expectation that increasing funding difficulties for Portugal's government and its banks would force the country to seek a rescue package from the European Union (EU) and the International Monetary Fund. Sentiment recently has improved somewhat, however, in part on news of the successful government debt auction in Portugal and on reports that European officials were considering increasing the effective size and widening the scope of the European Financial Stability Facility (EFSF). Some EU officials have proposed allowing the EFSF to buy sovereign bonds in the secondary market (transferring these operations from the ECB) and to issue short-term lines of credit to member countries facing liquidity difficulties, but German officials have voiced reluctance to expand the EFSF's current powers.

Despite the ongoing tensions in the euro area, we now assume that the ECB will begin to raise its benchmark policy rate, currently at 1 percent, in the first quarter of 2012. The ECB is concerned about recent increases in headline inflation, which rose to 2.2 percent on a 12-month basis in December, above the ECB's inflation target ceiling. This rise primarily reflects a jump in energy prices; although core inflation picked up a bit as well, it remained subdued at around 1 percent. We see headline inflation easing to around 1½ percent next year, as energy price inflation slows and economic slack erodes only slowly. Although we now expect the ECB to kick off its policy rate hikes a bit sooner, the ECB is likely to continue to provide ample liquidity to banks and purchase peripheral sovereign bonds. ECB President Jean-Claude Trichet alluded to this possibility recently, making a strong distinction between macroeconomic policy and liquidity policy.

Japan

After having risen at a pace of 5 percent over the previous year, Japanese real GDP is estimated to have declined 1½ percent last quarter. Private consumption likely contracted as a government subsidy for auto purchases expired, and exports appear to have declined as well. But monthly data suggest that economic activity rebounded toward year-end. Industrial production turned up in November, and manufacturers reported plans to significantly increase production. Accordingly, we are projecting 1½ percent growth in the current quarter. Going forward, growth should pick up a bit further, to 2 percent by 2012, supported by continued improvement in the labor market, no significant tightening in fiscal policy, and a little further easing by the Bank of Japan (BOJ).

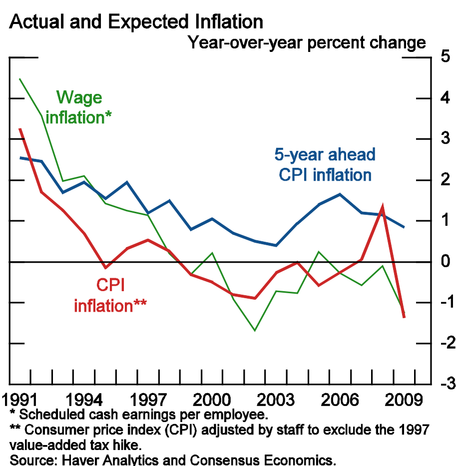
Int'l Econ Devel & Outlook

The Cost of Deflation: The Japanese Experience

After four decades of strong growth, the Japanese economy slowed sharply in the early 1990s and stagnated thereafter. The post-1980s period also coincided with falling inflation and later deflation, raising questions about the effect of disinflation and outright deflation on Japanese activity. To address this issue, we focused on three transmission channels: debt deflation, downward nominal wage rigidity, and the zero lower bound (ZLB) on nominal interest rates.

In the debt deflation channel, unanticipated declines in inflation or the price level boost the real value of fixed-interest-rate debt, thereby redistributing wealth from borrowers to lenders. To estimate the effect of debt deflation on economic activity in Japan, we use actual and expected inflation rates over the past two decades (see figure below) to compute a sequence of inflation surprises and apply the results to our estimates of the stock of Japanese debt with fixed interest rates.[1] Although private nonfinancial sector debt in Japan is large, fixed-rate debt is composed primarily of a subset of household mortgage debt amounting to only 20 percent of disposable income. As a consequence, we find that the increase in real debt due to unexpected disinflation averaged less than 1 percent of household disposable income per year. Assuming a standard marginal propensity to consume out of wealth (5 percent), and even without factoring in any rise in consumption by now-wealthier creditors, these unanticipated increases in real debt likely exerted a negligible drag on consumption and thus on real GDP growth.

Downward nominal wage rigidities are another channel through which deflation might be costly. With sufficient inflation, firms needing to cut costs in real terms may simply slow the growth of nominal wages, but with low-to-negative inflation, cuts in nominal wages are required. If workers resist such cuts, firms may be forced to scale back production. Akerlof and others estimate that, for the United States, reducing annual (steady-state) nominal wage growth from 4 percent to 1 percent, as occurred in Japan during the first half of the 1990s (shown in the figure below), would lower annual output growth 0.1 to

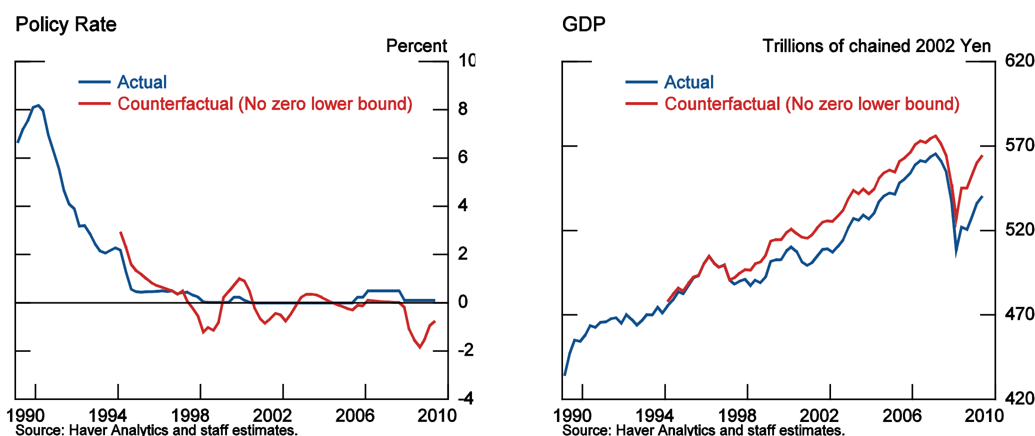


[1] The effects of inflation surprises on loans with variable rates should be negligible because these rates adjust more freely to movements in inflation.

0.2 percentage point.[2] A further drop in wage growth to negative 1 percent, similar to Japan's wage deflation by the turn of 2000, would depress GDP growth as much as ¾ percentage point per year. However, this latter estimate is generally viewed as being an upper bound. Moreover, Japanese microdata indicate that wages became more flexible as disinflation proceeded, and the Japanese unemployment rate did not surge to the extent predicted by the Akerlof model.[3] All told, our assessment is that downward wage rigidity is unlikely to have held down Japanese GDP growth by more than 0.1 or 0.2 percentage point per year.

A third way deflation may affect activity is by constraining the exercise of monetary policy through conventional means. When inflation rates, and thus interest rates, are very low, monetary policy may be limited by the ZLB, potentially leading to undesirably high real interest rates that would hinder the return to full employment. To assess this channel, we use the SIGMA model to simulate the course that the Japanese economy would have taken had the ZLB not been binding. The Asian crisis in 1998, the high-tech recession in 2001, and the global financial crisis in 2008 all pushed the counterfactual policy rate below zero (see lower-left panel). Accordingly, our admittedly uncertain calculations suggest that since 1998, average annual GDP growth has been depressed 0.4 percentage point due to the presence of the ZLB, for a cumulative output loss of 4½ percent (see lower-right panel). Our simulations do not explicitly account for the Bank of Japan's 2001–06 quantitative easing program, but most observers believe that this program provided at most a very partial offset.

Pulling together the different strands, we conclude that low or negative inflation may have shaved up to about ⅓ percentage point off of average annual Japanese growth over the past 20 years, with the bulk of the effects being attributed to the ZLB since 1998. This annual reduction implies a level of Japanese GDP that is as much as 5 to 7 percent lower than it would be otherwise.



Source: Haver Analytics and staff estimates.

Source: Haver Analytics and staff estimates.

[2] See George A. Akerlof, William R. Dickens, and George L. Perry (1996), "The Macroeconomics of Low Inflation," in George L. Perry and William C. Brainard, eds., *Brookings Papers on Economic Activity*, vol. 1 (Washington: Brookings Institution Press), pp. 1–76.

[3] See Sachiko Kuroda and Isamu Yamamoto (2005), "Wage Fluctuations in Japan after the Bursting of the Bubble Economy: Downward Nominal Wage Rigidity, Payroll, and the Unemployment Rate," Institute for Monetary and Economic Studies, Bank of Japan, *Monetary and Economic Studies*, vol. 23 (May), pp. 1–29.

November's report of 12-month headline inflation remained slightly positive. However, core inflation, excluding energy and food prices, continued to linger near negative 1 percent amid considerable economic slack. Accordingly, with energy prices leveling out, headline deflation is set to reemerge in early 2011 and to persist over the forecast period, leading the BOJ to moderately step up its asset purchases. Japan's experience with deflation over the past two decades is examined in the box "The Cost of Deflation: The Japanese Experience."

Canada

We estimate that real GDP growth, having slowed considerably in the third quarter, moved back up to 2¾ percent in the fourth quarter, supported by a stronger-than-expected rebound in exports. Economic activity should continue to expand at that pace in 2011 and 2012, supported by solid growth in domestic demand, even as the strength of the Canadian dollar leads to some drag from net exports. The withdrawal of fiscal stimulus should restrain demand, but investment is set to remain strong, as firms enjoy low borrowing costs, abundant cash, and cheap imported machinery and equipment. Rising fuel prices have boosted headline inflation, which we expect to peak at 2½ percent on a 12-month basis around midyear before moderating to near the 2 percent target. Both our GDP growth and inflation paths are higher in the near term than in the previous Tealbook, leading us to bring forward our assumption of the Bank of Canada's next rate hike to the fourth quarter of 2011.

United Kingdom

We estimate that real GDP in the United Kingdom rose 2 percent in the fourth quarter, with only a limited pulling forward of consumption in advance of January's value-added tax hike. As fiscal consolidation increasingly bites, restraining improvement in private activity, output growth should remain at around 2 percent in 2011. Growth should increase to around 2½ percent by 2012, helped by fading effects from financial stresses and continued support from a weak pound. December's reading on 12-month CPI inflation, at 3.7 percent, stood well above the 2 percent target, reflecting tax increases, the pickup in food and energy prices, and higher import prices. Given our higher inflation path, we have brought the first rate hike by the Bank of England forward to the first quarter of 2012. However, policy will remain accommodative in the face of the many factors weighing on growth and amid expectations that the surge in inflation will prove transitory.

EMERGING MARKET ECONOMIES

We now estimate that real GDP growth in the EMEs rebounded to 5 percent in the fourth quarter. This performance is up ¾ percentage point from the December Tealbook, in part reflecting an upward spike in Singapore's growth, although recent widespread increases in exports and manufacturing PMIs point to resurgent growth for the developing world as a whole. Growth is expected to remain robust this year and next—at around 5 percent—as activity firms in the advanced economies and domestic demand in the EMEs stays strong. Our outlook for 2011 and 2012 has been revised up slightly, as global commodity prices and domestic indicators suggest more vigor in EME activity than we had previously expected.

Inflation has picked up in the EMEs. Although the increase largely reflects accelerating food prices, several countries, including China, show signs of more widespread inflationary pressures. Despite increases in policy rates in several countries, the level of policy rates in EMEs overall is still low by historical standards and perhaps lower than the cyclical positions of these economies would warrant. Monetary authorities in EMEs continued to show some reluctance to raise policy rates out of concerns that such moves could encourage further capital inflows and generate upward pressures on currencies. Even though currency appreciation would help moderate inflation, authorities in several countries sought to limit upward pressures on their currencies by imposing new capital controls, intervening in currency markets, or both.

China

Recent data suggest that the Chinese economy continued to expand at a robust 9 percent pace in the fourth quarter, slightly higher than our expectations. Industrial production rose briskly through November, and surveys indicate this rise extended into December. November nominal retail sales and fixed-asset investment remained more than 20 percent above their year-earlier levels. We continue to project that Chinese authorities will be successful in engineering a soft landing, with economic growth of around 8½ percent this year and next—near its potential rate.

Headline consumer price inflation jumped in November, to more than 5 percent on a 12-month basis. Food price inflation continued to be the largest contributor to the increase, but nonfood inflation also rose to nearly 2 percent from 1½ percent in October. In response, Chinese authorities have further tightened policy over the intermeeting period, raising the one-year bank lending rate 25 basis points and hiking required reserve

ratios for large banks 100 basis points to 19 percent. In addition, authorities have been clamping down on credit growth, and we expect this tightening to continue. The Chinese government also has allowed somewhat more appreciation of the renminbi against the dollar in recent weeks, even as reserves continued to accumulate rapidly. Since last June, when the authorities announced greater exchange rate flexibility, the renminbi has risen 3½ percent against the dollar but has been roughly flat on a real trade-weighted basis. As in the previous Tealbook, we project the renminbi to appreciate 4 percent against the dollar this year and 6 percent in 2012 as part of China's efforts toward gradual rebalancing of its economy.

Other Emerging Asia

Incoming data indicate that economic activity in the rest of emerging Asia rebounded in the fourth quarter, in line with the stronger pace of activity in China. Exports rose significantly in a number of emerging Asian economies, and industrial production growth was generally positive.

The pickup in activity across the region has been accompanied by a somewhat greater rise in inflation in the fourth quarter than we had previously anticipated, driven by the pickup in food and global commodity prices. In response, Korea and Taiwan, among others, have tightened monetary policy further and have also taken some measures to slow capital inflows and limit upward pressures on their currencies. We continue to assume that Asian policymakers will allow some moderate further currency appreciation this year and next, in line with projected movements in the renminbi.

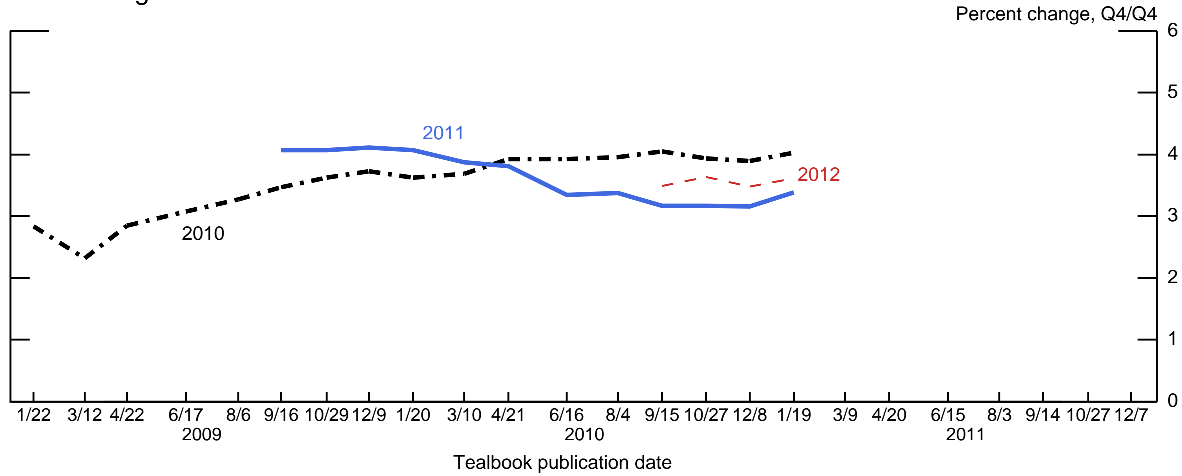
Latin America

After slowing sharply in the third quarter of last year, real GDP growth in Latin America is estimated to have picked up only slightly in the fourth quarter, to 3 percent. We expect growth in the region to rise to 4¼ percent by next quarter and then remain at that pace through the rest of the forecast period. In Mexico, we estimate that real GDP grew 3¼ percent in the fourth quarter. Industrial production declined slightly in October and November, but exports and retail sales continued to expand. We anticipate that Mexican growth will increase to 4¼ percent in the second half of 2011 and in 2012, driven in part by the recovery in U.S. demand. Food prices have been boosting Mexican inflation; we project inflation there will rise to an annual rate of 5½ percent in the current quarter before edging below 4 percent, the upper end of the government's target range of 2 to 4 percent, by the end of the forecast period.

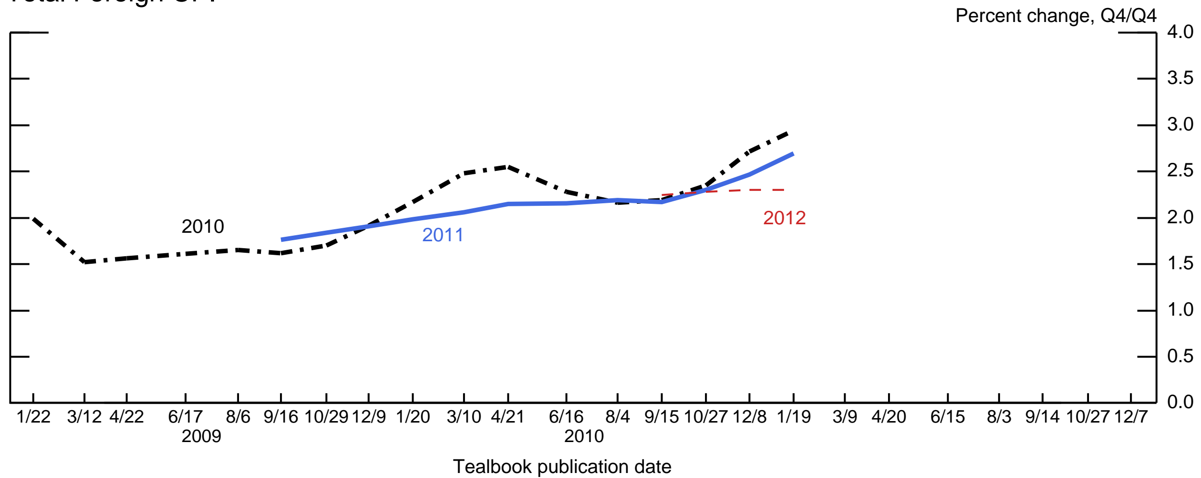
We estimate that Brazilian growth moved up to 3¾ percent in the fourth quarter, boosted by strength in commodity markets, lax fiscal policies, and rapid credit growth. GDP growth will likely remain in that vicinity over the forecast period. Headline inflation (on a 12-month basis) rose to around 6 percent at the end of 2010, fueled by both robust aggregate demand and rising food prices. In response to strong growth and rising inflation, the incoming Dilma Rousseff government has pledged to tighten fiscal policies, and Alexandre Tombini, the new central bank president, has made it clear that fighting inflationary pressures will remain a high priority. At the same time, Brazilian authorities continued to take measures in an attempt to limit upward pressures on the *real*, including the introduction in January of a 60 percent unremunerated reserve requirement on banks' short dollar positions.

Evolution of Staff's International Forecast

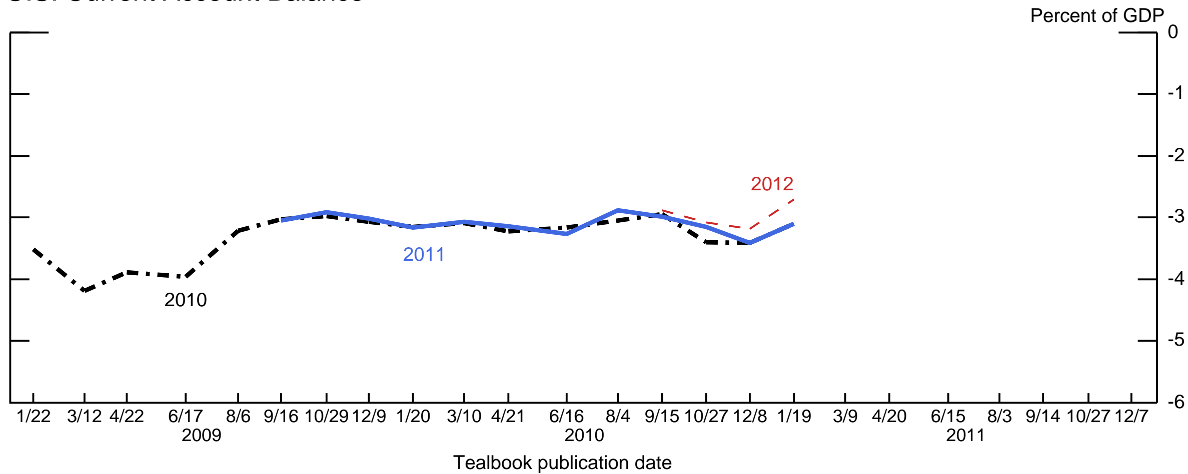
Total Foreign GDP



Total Foreign CPI



U.S. Current Account Balance



Financial Developments

Financial conditions improved modestly over the intermeeting period, reflecting a sense that the economic recovery was firming. Broad stock price indexes extended their stretch of strong gains, and risk spreads on corporate bonds narrowed somewhat. Both short- and longer-term nominal Treasury rates were relatively little changed, on net, over the period. TIPS-based measures of inflation compensation over the next 5 years increased, but they were about unchanged for the period 5 to 10 years ahead. Short-term funding conditions remained stable, and the year-end passed without any significant or unexpected strains. Over the intermeeting period, the broad nominal value of the U.S. dollar declined more than 1 percent, partly reflecting more-solid growth prospects abroad, particularly in emerging market economies (EMEs), along with actual and prospective tightening of foreign monetary policies. However, the dollar was little changed against the euro amid the continued strains in the euro area.

The latest indicators of business credit quality showed further improvement, while those for consumer credit quality generally confirmed the improvements seen earlier in the year. However, the commercial and residential real estate segments have continued to lag. Borrowing by nonfinancial corporations remained robust in December, and issuance of commercial mortgage-backed securities (CMBS) picked up in the fourth quarter, though from a very low level. On the household side, consumer credit outstanding appears to have expanded in the fourth quarter, the first quarterly increase in two years. House prices continued to trend lower, weighed down by the large inventory of unsold homes and by weak demand among potential homebuyers.

Bank credit decreased in December, as banks shed some of the Treasury securities that they had accumulated earlier in the year and core loans on banks' books edged down. Portfolio-weighted averages of responses to the January Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) indicated that banks' lending standards on core loans eased slightly further last quarter, in the aggregate, but loan demand weakened (see appendix). M2 continued to expand moderately in December.

TREASURY YIELDS AND POLICY EXPECTATIONS

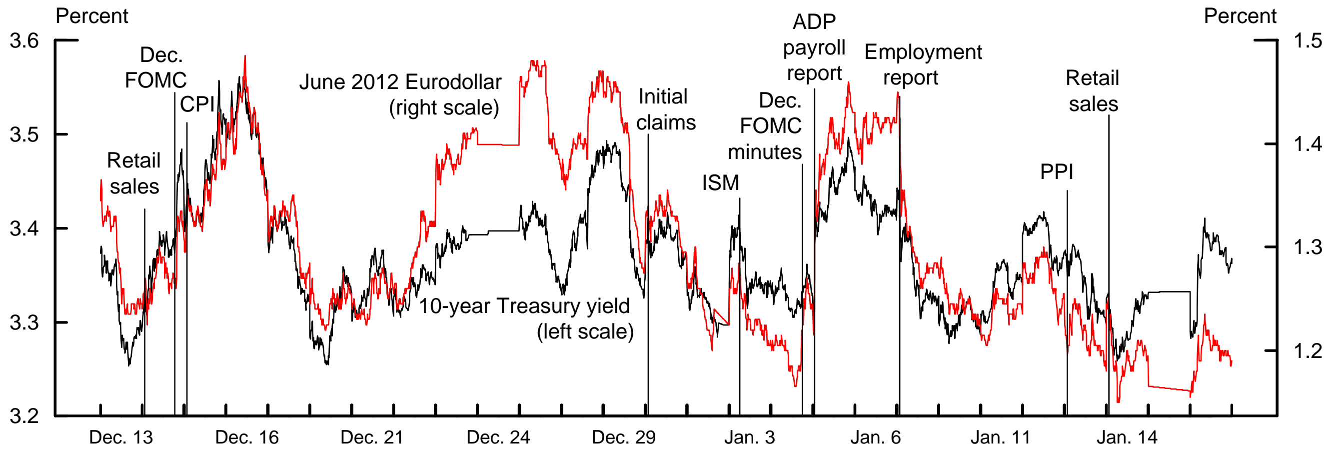
Money market futures rates and Treasury yields were somewhat volatile at times but were relatively little changed, on net, over the intermeeting period. Both the December FOMC statement and the minutes of the December meeting were largely in line with market expectations and elicited limited price action.[1] Nonetheless, the statement in the minutes indicating that some FOMC members had a "fairly high threshold for making changes to the [Treasury purchase] program" reportedly made investors more confident that the FOMC's purchases would total $600 billion.[2] Data releases over the intermeeting period generally pointed to some firming of the economic recovery. However, upward pressure on yields reportedly was moderated by expectations of only a gradual pace of improvement in the labor market, the Federal Reserve's commitment to maintain an accommodative policy stance, and ongoing concerns about fiscal and banking pressures in the euro area.

TIPS-based inflation compensation over the next five years rose 29 basis points to a little more than 2 percent, likely pushed higher by rising prices for oil and other commodities and by the firming of the economic outlook. In addition, estimated probabilities of deflation during the next four years measured from TIPS continued to decline over the intermeeting period and now stand around 7 percent. Further out, TIPS-based inflation compensation 5 to 10 years ahead was little changed at about 3 percent. The preliminary January reading of median long-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers was 2.8 percent, the same as in each of the previous three months.

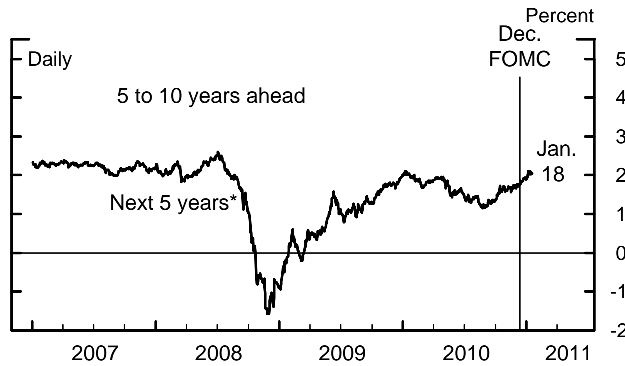
[1] The effective federal funds rate averaged 18 basis points over the intermeeting period, with the intraday standard deviation averaging about 3½ basis points.

[2] The Open Market Desk at the Federal Reserve Bank of New York purchased $117.8 billion of Treasury securities over the period, reflecting purchases under the new asset purchase program and reinvestment of principal payments on Federal Reserve holdings of agency MBS and agency debt. After the Desk announced in November that it would temporarily relax its 35 percent per-issue limit, it announced on December 20 that it would limit its holdings of any single Treasury security in the SOMA portfolio to 70 percent of the outstanding issue. The Desk indicated that it would purchase individual securities in progressively smaller increments as the SOMA holdings of such securities increased above the 35 percent threshold. In addition, on January 12, the Desk announced that it would increase its purchases of longer-term Treasury securities (excluding reinvestments of repayments of principal on agency debt and mortgage-backed securities) to $80 billion over the period between mid-January and mid-February, consistent with the monthly pace needed to reach $600 billion of cumulative purchases by the end of June. There was no market reaction to that announcement.

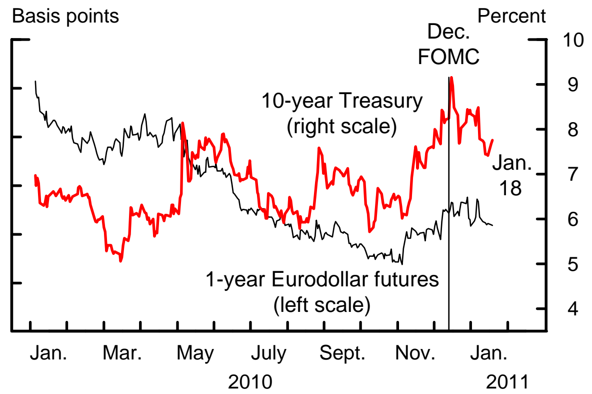
Policy Expectations and Treasury Yields



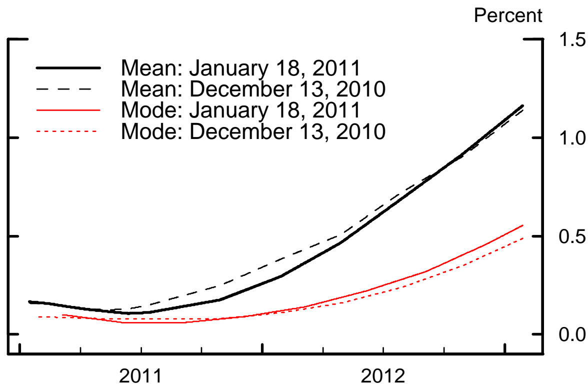
Note: 5-minute intervals. 8:00 a.m. to 4:00 p.m. No adjustments for term premiums.
Source: Bloomberg.



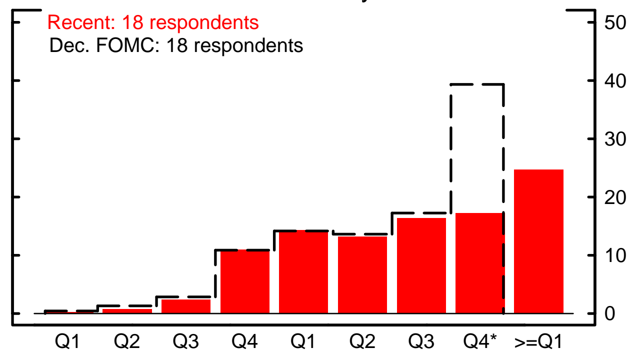
Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.
*Adjusted for the indexation-lag (carry) effect.
Source: Barclays PLC and staff estimates.



Source: Bloomberg; CME Group; staff analysis.



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.



*For the Dec. FOMC, the probability reported in the 2012:Q4 bin corresponds to the probability that the first policy rate hike will occur in 2012:Q4 or later.
Source: Desk's Dealer Survey from January 18, 2011.

The Desk's continuing purchases of longer-term Treasury securities reportedly had no discernible effects on Treasury market functioning. Thin trading volumes ahead of year-end and perhaps some flows related to hedging of mortgage convexity appear to have contributed to elevated volatility in Treasury yields during the early part of the intermeeting period. More recently, market-based measures of uncertainty about longer-term Treasury yields declined and ended the period slightly lower, on net, likely reflecting in part solidifying market expectations regarding the ultimate size of the FOMC's asset purchase program. Uncertainty about the future path of the federal funds rate, measured from Eurodollar implied volatilities, also edged down on balance.

Neither the expected nor the modal path of the federal funds rate changed appreciably over the intermeeting period. Futures quotes, combined with the staff's standard assumption about term premiums, indicate that market participants expect the federal funds rate to rise above the current target range in the first quarter of 2012 and to reach 1 percent by the end of 2012. The distribution of futures rates remains highly skewed to the right, with quotes on interest rate caps continuing to suggest that the modal expected federal funds rate does not rise above the current target range until the end of 2012.

The Desk's latest survey of primary dealers also suggested that market participants' expectations for the path of the federal funds rate were little changed since December. However, median expectations in the survey for the total size and length of the new asset purchase program were revised down to $600 billion to be completed by June 2011, compared with $850 billion to be completed through the end of 2011 in the December survey. Dealers also noticeably upgraded their forecasts for economic growth in 2011 but modestly scaled back their projections for growth in 2012.[3]

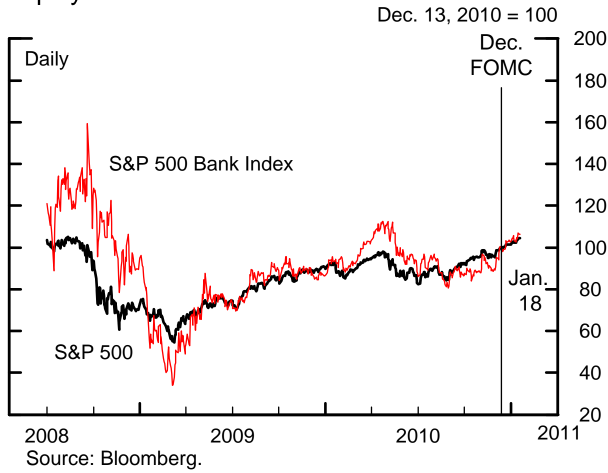
Financial Developments

Asset Market Developments

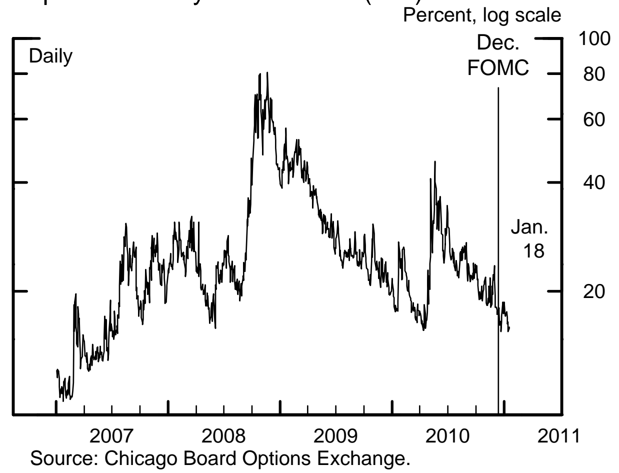
Broad stock price indexes rose about 4½ percent, on net, over the intermeeting period, extending their recent strong performance. The increase reflected the apparent firming of the economic recovery and favorable early reports on fourth-quarter corporate earnings, as well as the continued accommodative stance of monetary and fiscal policies. Option-implied volatility on the S&P 500 index remained at a relatively low level. The

[3] Note that the December survey was completed prior to the announcement of a compromise fiscal package. Anecdotal reports following the announcement suggested that dealers upwardly revised their views about monetary policy and the economic outlook in the wake of that agreement.

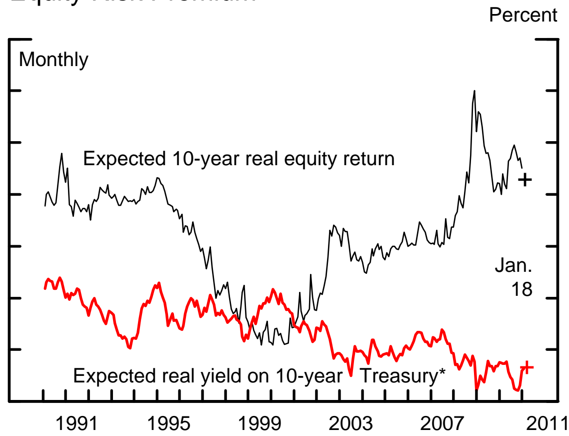
Asset Market Developments



Source: Bloomberg.



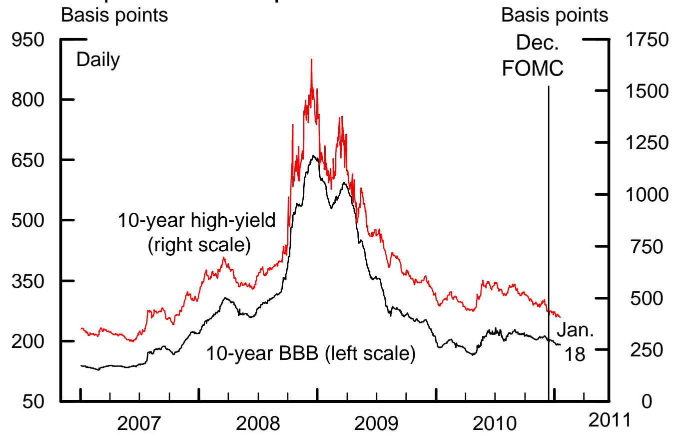
Source: Chicago Board Options Exchange.



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

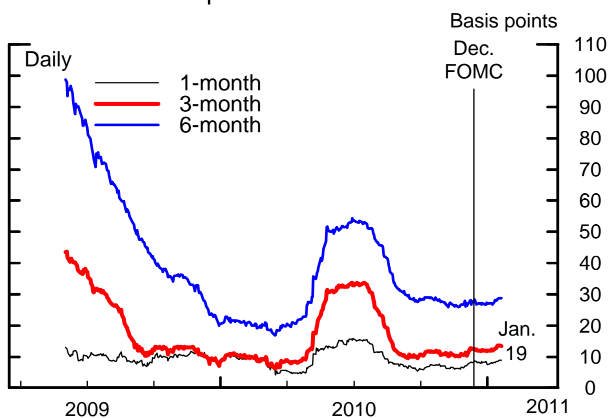
\+ Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

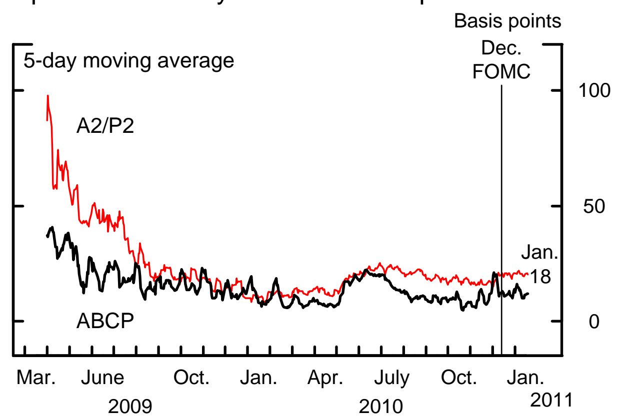


Note: Measured relative to a smoothed nominal off-the-run Treasury yield curve.

Source: Merrill Lynch and staff estimates.



Source: British Bankers' Association and Prebon.



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.

spread between the staff's estimate of the expected real equity return for S&P 500 firms and an estimate of the real 10-year Treasury yield—a gauge of the equity risk premium—narrowed further over the period but remained elevated by historical standards.

Yields on BBB-rated and speculative-grade corporate bonds declined about 5 basis points and 24 basis points, respectively, over the intermeeting period, and their spreads over yields on comparable-maturity Treasury securities narrowed a bit more. Near-term corporate-bond forward spreads declined, suggesting that investors are pricing in somewhat less default risk in the near term, and far-term forward spreads—a rough gauge of required compensation for risk-taking—also inched lower. Meanwhile, the average bid price in the secondary market for leveraged loans moved up to about 95 percent of par, continuing its climb from a low of 60 percent in early 2009 and recording its highest reading since November 2007.

Conversations with market participants indicate that the modestly rising trend in the use of dealer-intermediated leverage has continued into 2011, but a variety of indicators suggest that leverage remains well below the levels reached before the crisis. Hedge funds that focus on long-short equity strategies appeared to be a little more willing to take on risk during early January. By contrast, risk appetite at macro hedge funds has reportedly remained muted. Overall, the performance of hedge funds improved significantly during the final months of 2010, bringing the average return for hedge funds that report to the Lipper TASS database to 10 percent for the year.

Short-term funding conditions remained stable over the intermeeting period. Spreads of dollar Libor over OIS rates held fairly steady across the term structure, as the year-end passed without significant incident. Some modest year-end pressures were observed in repo markets, but they dissipated by early January. On net, spreads on A2/P2-rated 30-day commercial paper remained low, and spreads on AA-rated ABCP appeared to have stabilized after having been a bit volatile across year-end.

Over the intermeeting period, bank stock prices modestly outperformed broader equity market indexes, and CDS spreads for most banks narrowed a bit. Investor sentiment toward banks continued to be influenced by developments related to the potential for significant put-backs of mortgages from MBS pools and to mortgage documentation and foreclosure issues. An announcement by Bank of America that it had reached an agreement with Fannie Mae and Freddie Mac to resolve repurchase claims on residential mortgages sold to the GSEs was well received by market participants. A

ruling by the Massachusetts Supreme Judicial Court that voided two foreclosure sales by Wells Fargo and U.S. Bancorp is unlikely to have broader implications, but it highlighted the continuing legal uncertainties around foreclosures. Also of note, a number of smaller financial institutions fully repaid TARP funds toward the end of 2010, and AIG completed a recapitalization plan that allowed it to repay $46 billion of Federal Reserve support (see the box "Balance Sheet Developments over the Intermeeting Period").

Business Finance

Overall, net debt financing by nonfinancial corporations was robust in the fourth quarter. Net issuance of bonds was particularly strong, supported by heavy issuance in both the speculative- and investment-grade sectors. Meanwhile, nonfinancial commercial paper outstanding decreased slightly over the quarter, but C&I loans posted a small gain, reflecting increases at many of the 25 largest banks in December. The SLOOS conducted in January indicated that demand for C&I loans had increased somewhat in the fourth quarter, especially for large and middle-market firms. As in recent surveys, a modest fraction of banks, on net, had eased standards on C&I loans somewhat, and a large fraction had reduced spreads on such loans. Other data showed that issuance of leveraged syndicated loans—especially those funded by institutional investors such as loan mutual funds, pension funds, insurance companies, and hedge funds—has been robust in recent months. Although market participants reported that deal terms (including leverage) loosened a bit further, they emphasized that some of the riskier features and structures that were fairly widespread at the height of the credit boom in 2006−07 have so far remained uncommon.

Gross public equity issuance by nonfinancial firms dropped back in December to its average pace in 2010, following the bump-up in November that resulted from GM's initial public offering. In the third quarter, equity retirements from share repurchases and cash-financed mergers continued apace, leaving net equity issuance slightly more negative. Incoming data on cash-financed mergers and on announcements of new share repurchase programs suggest a continued rapid pace of equity retirements in the fourth quarter.

The fourth-quarter earnings reporting season commenced just before the close of the intermeeting period, with the first wave of reports beating analysts' expectations by a wide margin. Based on about 50 reports in hand and using analyst estimates for the rest, the staff expects operating earnings per share for S&P 500 firms to post another solid

Balance Sheet Developments over the Intermeeting Period

The total size of the Federal Reserve's balance sheet advanced to just above $2.4 trillion over the intermeeting period (see table on facing page). The Federal Open Market Committee's (FOMC) asset purchase program boosted securities holdings by $73 billion, while the closure of American International Group's (AIG) recapitalization plan reduced support for specific institutions by $46 billion. On net, Federal Reserve assets increased by $30 billion.

The Open Market Desk at the Federal Reserve Bank of New York (FRBNY) conducted 21 operations to purchase longer-term Treasury securities over the intermeeting period. There were operations across the nominal yield curve as well as 3 operations in Treasury inflation-protected securities (TIPS); purchases over the intermeeting period totaled $119 billion, and $118 billion in purchases settled during the period.[1] The Desk has temporarily relaxed its 35 percent per issue limit on System Open Market Account (SOMA) holdings of individual Treasury issues; the limit is now 70 percent. As of January 12, 2011, SOMA holdings of 28 issues with total par value of $178 billion exceeded 35 percent. The SOMA's largest ownership concentration is currently 57 percent; holdings of four issues with total par value of $21 billion now exceed 50 percent. Holdings of agency debt and mortgage-backed securities (MBS) declined by $44 billion over the intermeeting period; consistent with the FOMC's directive, these declines were offset by purchases of Treasury securities.[2]

On January 14, 2011, AIG repaid the credit extended by the Federal Reserve under the revolving credit line, and the Federal Reserve was paid in full for its preferred interests in the special purpose vehicles (SPVs) AIA Aurora LLC and ALICO Holdings LLC, thereby reducing the balances in these accounts to zero.

These transactions involved several steps. First, AIG repaid the balance on the revolving credit facility and redeemed a portion of the Federal Reserve's preferred interests in the SPVs with cash proceeds from asset dispositions. These cash proceeds had been held by the FRBNY as agent and are shown in the table as the liability item "Funds from AIG asset dispositions, held as agent"; as a result of this transaction, this item declined by $27 billion. Second, AIG purchased the remaining preferred interests in the SPVs from the FRBNY through a draw on the Treasury's Series F preferred stock commitment, a component of the Troubled Asset Relief Program, and transferred the SPV preferred interests to the Treasury as consideration for the draw on the available Series F funds.

Financial Developments

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[1] These figures for securities holdings reflect only trades that settled over the intermeeting period. During this time, $7.8 billion in coupon purchases conducted earlier settled, and the Open Market Desk committed to purchase, but had not settled, $9.5 billion in TIPS and coupon purchases.

[2] On January 10, 2011, the FRBNY announced that it will begin a process to streamline the administration of SOMA agency MBS holdings by consolidating these securities through a service offered by Fannie Mae and Freddie Mac called CUSIP aggregation. Through this process, aggregated CUSIPs are formed by consolidating existing agency MBS with similar characteristics into larger pass-through securities. This process will reduce the number of CUSIPs held in the SOMA portfolio from over 44,000 to about 10,000.

Federal Reserve Balance Sheet
Billions of dollars

	Change since last FOMC	Current (01/18/11)	Maximum level	Date of maximum level
Total assets	**30**	**2,426**	**2,472**	**01/13/11**
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)	-1	24	49	03/11/10
Support for specific institutions	-48	65	121	05/05/10
Credit extended to AIG, net	-20	0	91	10/27/08
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	-26	0	26	01/13/11
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-2	65	75	12/30/08
Securities held outright*	73	2,204	2,209	01/14/11
U.S. Treasury securities	118	1,078	1,078	01/18/11
Agency debt securities	-2	146	169	03/11/10
Agency mortgage-backed securities	-42	980	1,129	06/14/10
Total liabilities	**35**	**2,373**	**2,419**	**01/13/11**
Selected liabilities:				
Federal Reserve notes in circulation	1	938	944	12/29/10
Reverse repurchase agreements	10	59	110	10/14/08
Foreign official and international accounts	10	59	92	12/22/08
Others	-0	0	26	09/26/08
Reserve balances of depository institutions**	-6	1,058	1,249	02/24/10
Term deposits held by depository institutions	-5	0	5	11/03/10
U.S. Treasury, general account	69	92	187	12/31/09
U.S. Treasury, supplementary financing account	+0	200	559	10/22/08
Funds from AIG asset dispositions, held as agent	-27	0	27	01/13/11
Other deposits	-11	+0	81	03/12/10
Total capital	**-5**	**53**	**60**	**08/03/10**

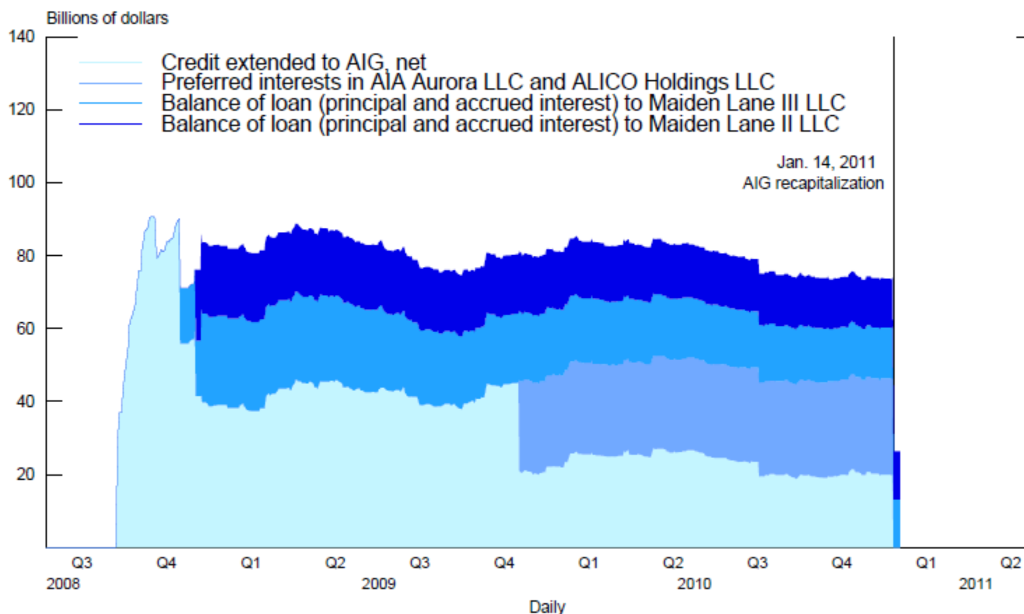
Note: +0 (-0) denotes positive (negative) value rounded to zero.
* Par value.
** Includes required clearing balances and overdrafts. Excludes as-of adjustments.

(Continued on next page)

Overall, the Federal Reserve's direct exposure to AIG, which peaked at $91 billion, now has dropped to zero. The Federal Reserve continues to have exposure to the assets acquired from AIG that are held in Maiden Lane II LLC and Maiden Lane III LLC. The balance on Federal Reserve loans to these entities, including accrued interest, currently stands at $26 billion; the combined fair value of the assets held in Maiden Lane II and Maiden Lane III is about $38 billion.[3] With the Treasury's investment in AIG at about $68 billion, the combined value of the Treasury's investments in AIG and the balance on the Federal Reserve's loans to Maiden Lane II and Maiden Lane III now stands at $94 billion. Total support provided to AIG by the Treasury and the Federal Reserve peaked at $136 billion in April 2009.

Other notable movements on the liability side of the balance sheet were in the Treasury's general account and term deposits. The Treasury's general account increased $69 billion, on net, over the intermeeting period, reflecting typical fluctuations in that account. Term deposits declined by $5 billion, to zero, as the small-scale real-value Term Deposit Facility operation conducted on November 29, 2010, matured on December 30, 2010.

Federal Reserve Lending to AIG



Source. Federal Reserve Board (2011), Statistical Release H.4.1, "Factors Affecting Reserve Balances" (January 13) and internal data.

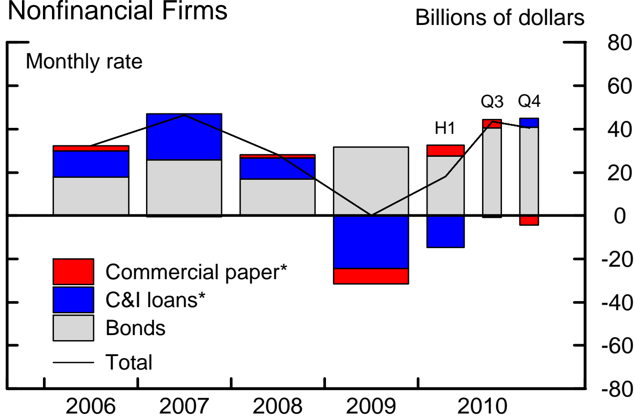
[3] Net portfolio holdings are measured at fair value, which is an estimate of the price that would be received upon selling an asset if the transaction were to be conducted in an orderly market. These figures reflect valuations as of September 30, 2010.

Financial Developments

Authorized for Public Release

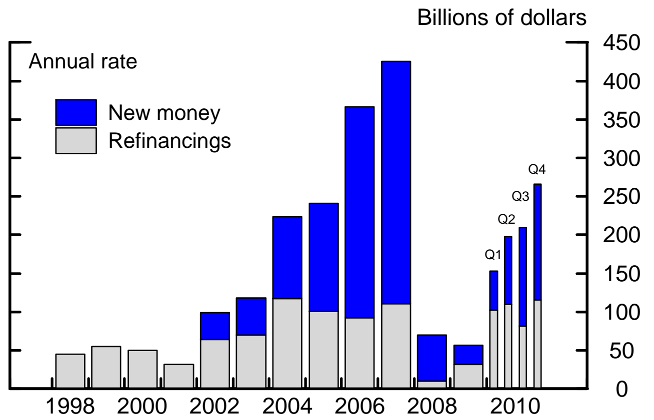
Business Finance

Selected Components of Net Debt Financing, Nonfinancial Firms



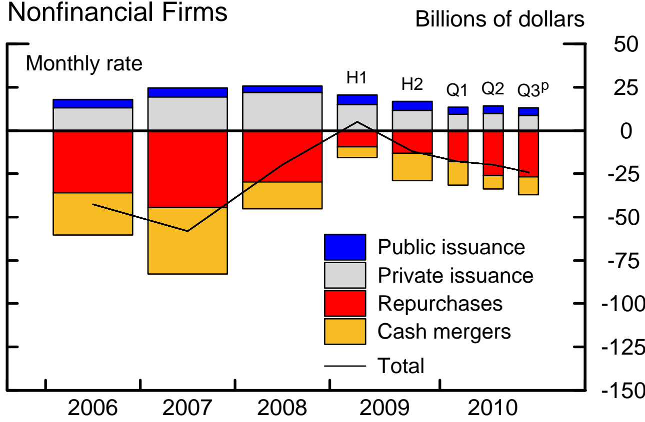
* Seasonally adjusted, period-end basis.
Source: Depository Trust & Clearing Corporation; Thomson Financial; Federal Reserve Board.

Syndicated Loan Issuance by Institutional Investors



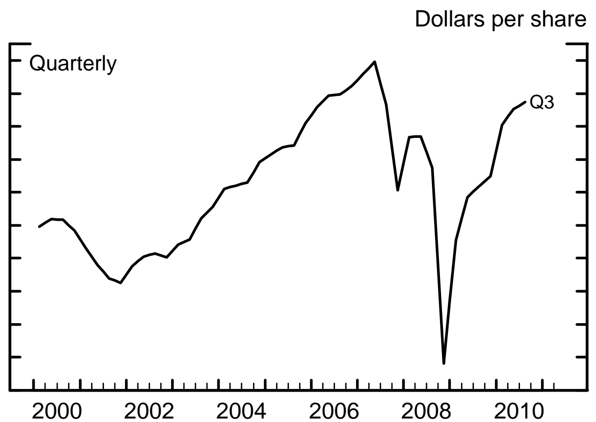
Source: Reuters LPC.

Selected Components of Net Equity Issuance, Nonfinancial Firms



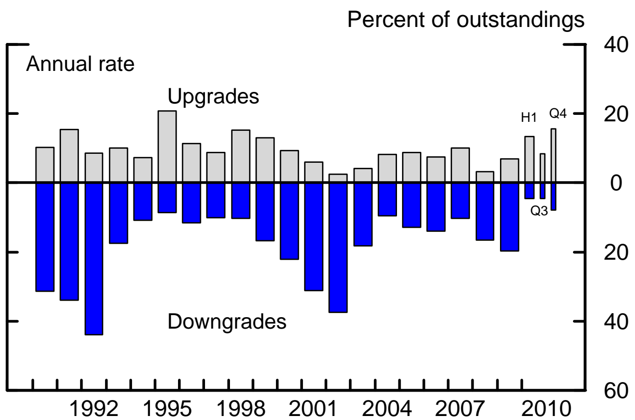
p Preliminary.
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

S&P 500 Earnings Per Share



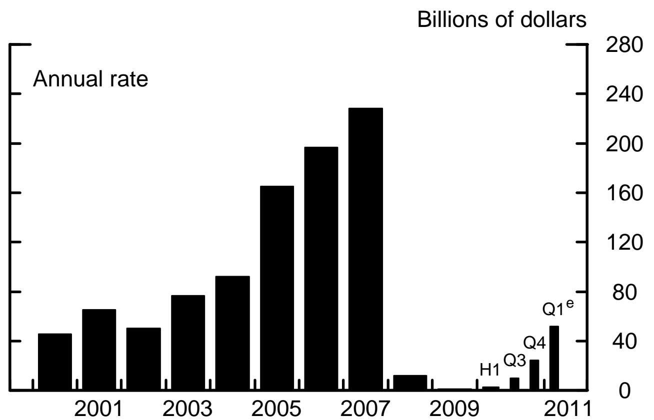
Note: Data are seasonally adjusted by staff.
Source: Thomson Financial.

Bond Ratings Changes of Nonfinancial Firms



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

CMBS Issuance



e Estimate from deals in 2011:Q1 pipeline.
Source: Commercial Mortgage Alert.

gain in operating earnings per share on a quarter-over-quarter basis. Preliminary data indicate that revisions to analysts' forecasts of year-ahead earnings for S&P 500 firms have been positive, on balance, since mid-December.

The credit quality of nonfinancial firms continued to improve. The ratio of liquid assets to total assets for nonfinancial corporations stayed at record highs in the third quarter, while the sector's debt-to-asset ratio declined a bit further. Upgrades by Moody's Investors Service on nonfinancial corporate bonds again outpaced downgrades in the fourth quarter, and the six-month trailing bond default rate for nonfinancial firms remained very low in December. The expected default rate for nonfinancial firms from Moody's KMV declined somewhat in December, in part reflecting higher stock prices.

In contrast, delinquency rates for broad categories of commercial real estate have not improved, and financing conditions have remained tight for most types of commercial real estate. That said, credit appears to have become somewhat less restricted for larger properties in strong markets. Issuance of CMBS, which are generally used to finance such properties, is scheduled in the first quarter of 2011 to exceed the entire amount issued in 2010. However, it remains a fraction of its pre-crisis levels. In addition, commercial mortgage CDS index prices for AAA-rated securities have continued to trend up in recent weeks, likely reflecting a greater willingness of investors to take on risk in order to boost returns as well as greater clarity regarding the likely magnitude of losses on the structured securities. Prices of larger properties in strong markets have moved up, on net, from their lows at the beginning of 2010, while prices of other commercial properties continued to trend down.

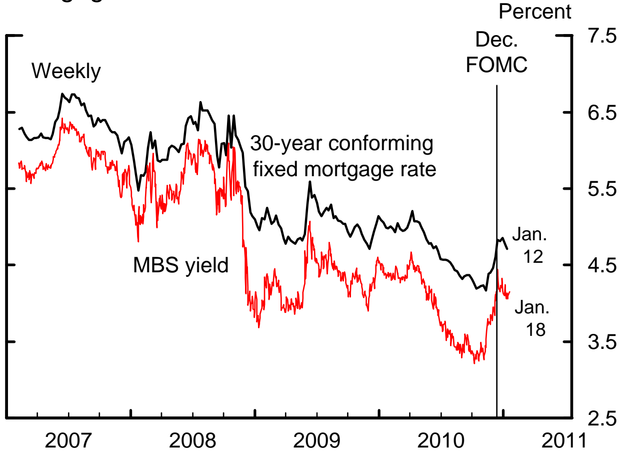
HOUSEHOLD FINANCE

Mortgage rates edged down a bit during the intermeeting period after having risen appreciably in November and early December, leaving their spreads over the 10-year Treasury yield down slightly. Refinancing activity, which had fallen in response to the increase in mortgage rates in November, remained at a low level during the intermeeting period.

House prices continued to be weighed down by the large inventory of unsold homes and by weak demand among potential homebuyers. According to the repeat-sales index from CoreLogic, house prices fell in November for the sixth consecutive month, leaving the index down 7 percent since May and 2½ percent below its previous trough in

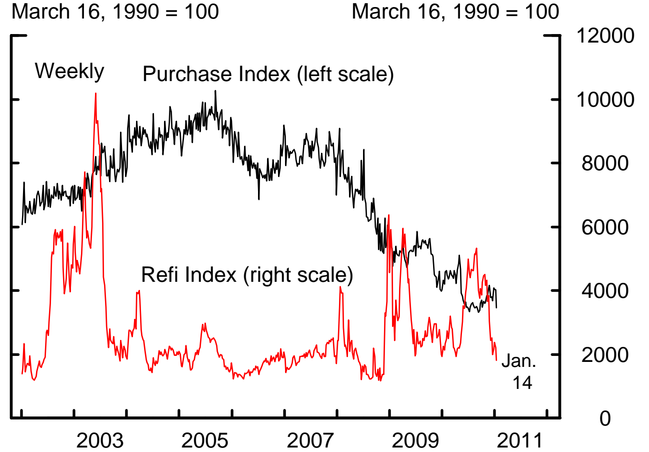
Household Finance

Mortgage Rate and MBS Yield



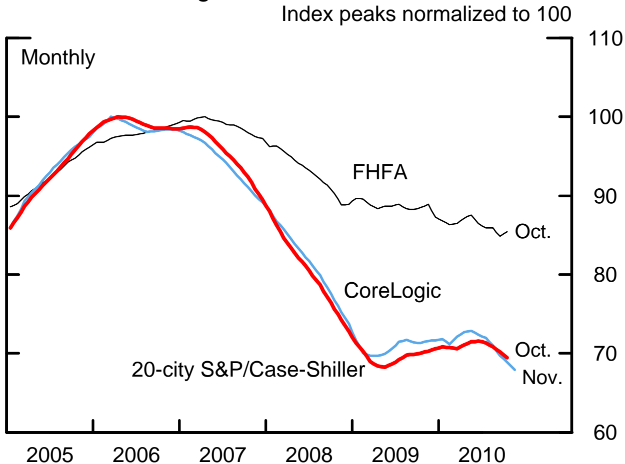
Note: For MBS yield, Fannie Mae 30-year current coupon rate.
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Purchase and Refinance Activity



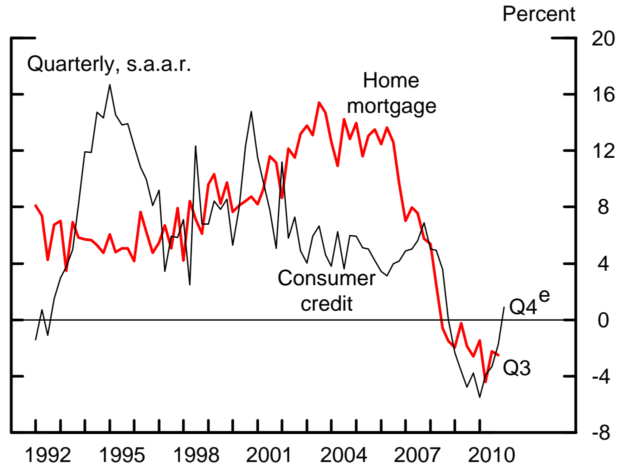
Note: Seasonally adjusted by FRB staff.
Source: Mortgage Bankers Association.

Prices of Existing Homes



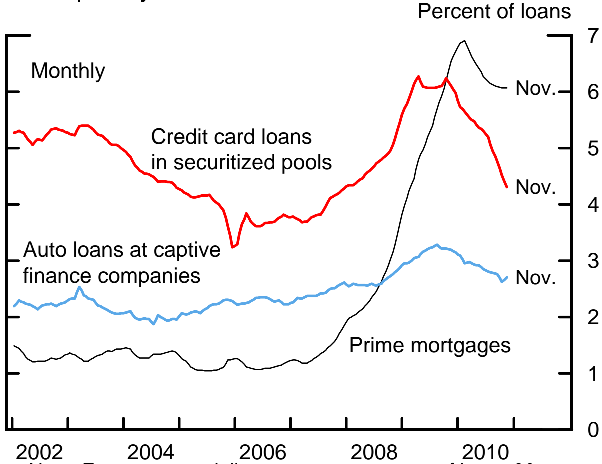
Source: For FHFA, Federal Housing Finance Agency; for CoreLogic, CoreLogic; for S&P/Case-Shiller, Standard & Poor's.

Growth of Household Sector Debt



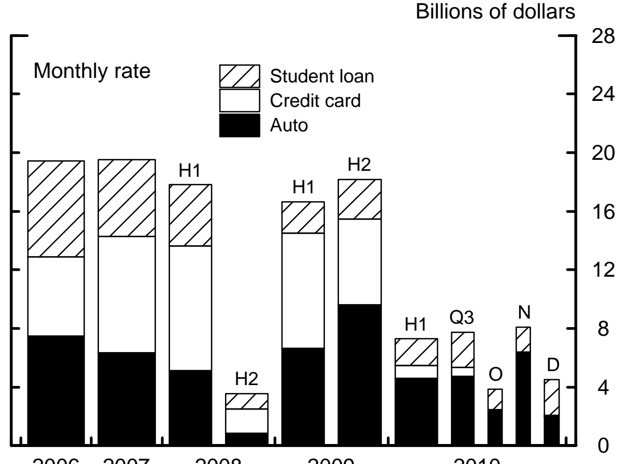
e Estimate.
Source: Federal Reserve Board.

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.

April 2009. An increase in sales of distressed properties likely put additional downward pressure on house prices. Overall mortgage debt declined further in the third quarter, and with the housing market still weak and lending standards remaining tight, the staff projects that it contracted further in the fourth quarter.

Serious delinquency rates on prime and subprime mortgages—meaning the fraction of mortgage loans that are at least 90 days delinquent and loans in the foreclosure process—flattened out in October and November after having moved down earlier in the year. The foreclosure moratoriums instituted by a number of mortgage servicers in the fall of 2010 may have lifted delinquency rates more recently by delaying completion of foreclosures. (Once a foreclosure is completed, the mortgage is extinguished and is thus no longer delinquent.) The fraction of loans transitioning from current to delinquent—a measure not influenced by foreclosure moratoriums—continued to trend down through November. Issues surrounding mortgage foreclosure and documentation issues appear to have had little effect, to date, on house prices and mortgage financing activity.

Signs of improvement have been more evident in recent months in the consumer credit market than in the residential mortgage market. Consumer credit is estimated to have edged up in the fourth quarter, the first increase since the third quarter of 2008. In addition, delinquency rates on auto and credit card loans declined for most of 2010 and continue to trend toward their longer-run norms. Meanwhile, the number of credit card offers mailed to households moved up considerably over the course of 2010, although in November solicitations remained lower than the level that prevailed from 2002 to 2006. Consumer ABS issuance was strong early in the fourth quarter, supported by improved levels of auto ABS issuance, but auto-backed issuance was weak in December and the first half of January while investors and the FDIC worked to resolve concerns about the treatment of securitizations in the event that an issuer declares bankruptcy.[4]

[4] The Dodd–Frank Wall Street Reform and Consumer Protection Act gave the FDIC resolution authority over systemically important nonbank institutions. Investors are worried that the FDIC might repudiate securitization contracts in the event of the bankruptcy of such an institution. On January 14, the FDIC issued a General Council Letter clarifying that it would exercise its repudiation power under the Orderly Liquidation Authority provisions of the Dodd–Frank Act consistent with the U.S. bankruptcy code or other applicable insolvency laws, including those governing legal isolation. The letter reportedly reassured market participants, and issuance is expected to pick up again.

FOREIGN DEVELOPMENTS

Over the intermeeting period, euro-area authorities continued to grapple with the ongoing fiscal and financial strains in the euro-area periphery. Meanwhile, policymakers in emerging market economies took steps to address a number of challenges posed by rapid economic growth, including rising inflation and appreciating currencies.

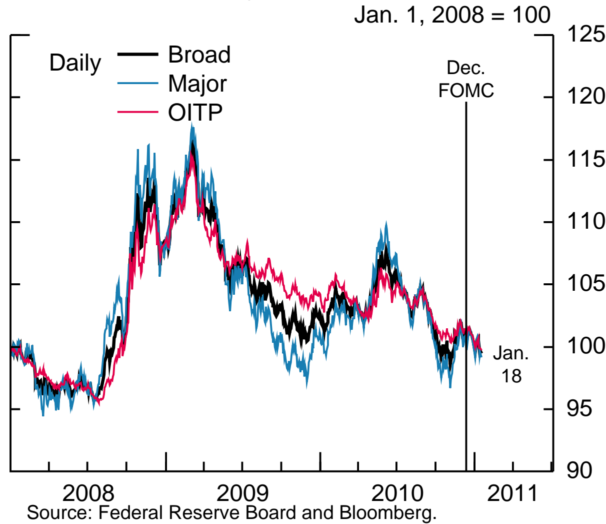
The broad nominal index of the U.S. dollar declined 1¼ percent over the period. The dollar depreciated against many EME currencies, largely reflecting buoyant EME economic growth and tighter monetary policies in those economies. In addition, expectations for somewhat earlier policy tightening in the advanced foreign economies weighed on the dollar's value against the major currencies late in the period. However, the dollar was little changed against the euro, on net, amid the continued strains in the euro area.

Greek, Irish, and Portuguese sovereign debt spreads over German bunds rose modestly in December and early January, as credit rating agencies downgraded the credit ratings on the sovereign debt of Ireland and Portugal. Recently, though, spreads narrowed in response to several relatively successful sovereign debt auctions by countries in the euro-area periphery, stepped-up purchases of their sovereign bonds by the ECB, and reports that the EU is considering expanding the backstop capacity of the European Financial Stability Facility. Overnight and term lending from the Eurosystem to banks in the periphery increased over the period. Some modest dollar-funding pressures developed as the year-end approached, but they did not persist into January. Market participants welcomed the extension through August 1, 2011, of the Federal Reserve's swap arrangements with the ECB and the central banks of Japan, Canada, Switzerland, and the United Kingdom. In addition, the Bank of England established a temporary liquidity swap facility with the ECB that is designed to provide Ireland's central bank with sterling to help meet the potential needs of the Irish banking system.

Benchmark 10-year sovereign yields increased about 10 basis points in the United Kingdom and in Germany, and measures of inflation compensation at the 10-year maturity increased 10 to 20 basis points in these countries. Market-based readings on expectations of future short-term rates moved up in the euro area, the United Kingdom, and Canada on rising inflationary pressures and indications of firming economic activity.

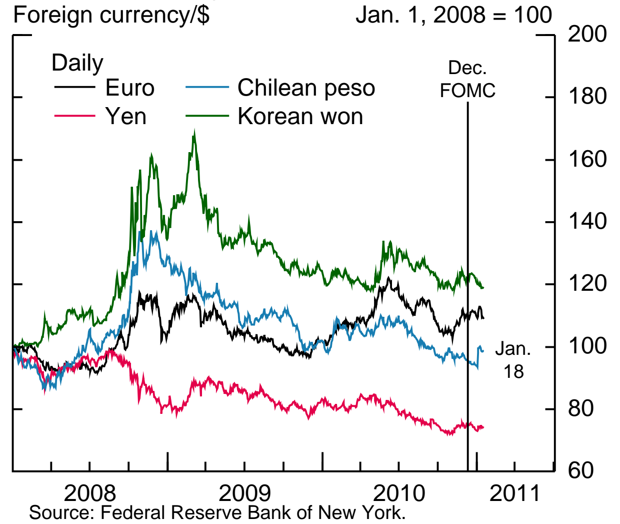
Foreign Developments

Nominal Trade-Weighted Dollar Indexes



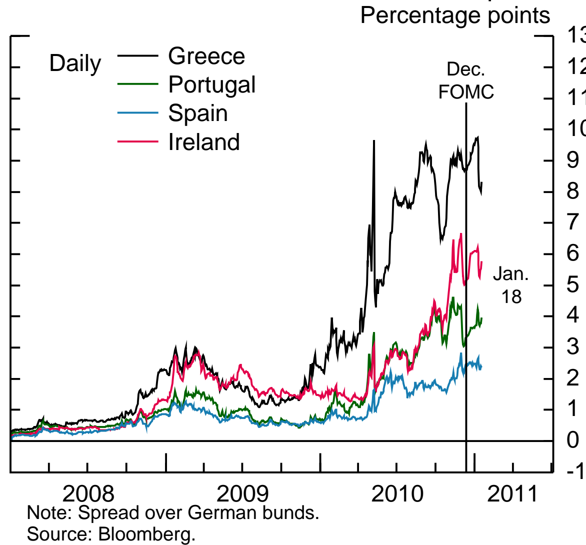
Source: Federal Reserve Board and Bloomberg.

Bilateral Exchange Rates



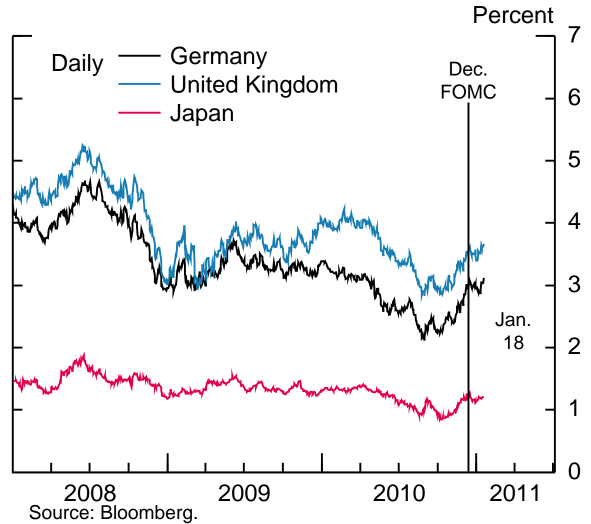
Source: Federal Reserve Bank of New York.

Euro-Area 10-Year Government Bond Spreads



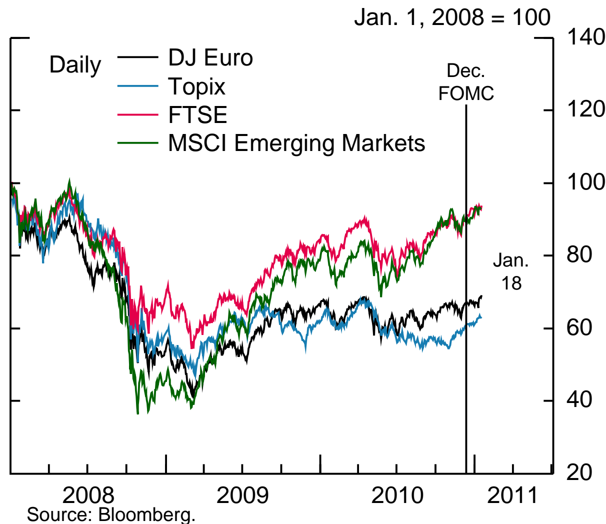
Note: Spread over German bunds.
Source: Bloomberg.

Nominal 10-Year Government Bond Yields



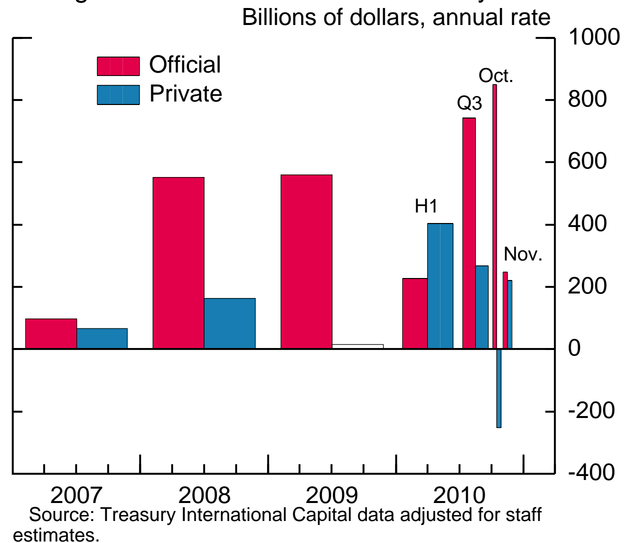
Source: Bloomberg.

Stock Price Indexes



Source: Bloomberg.

Foreign Net Purchases of U.S. Treasury Securities



Source: Treasury International Capital data adjusted for staff estimates.

Financial Developments

Equity prices rose in advanced foreign economies and in most EMEs as the global economic outlook improved over the period. In contrast, the Shanghai Composite index declined 7½ percent, on net, likely in reaction to continued tightening by the People's Bank of China, which increased its one-year benchmark lending and deposit rates for the second time in two months and again raised reserve requirements to curb bank lending. Market participants expect further rounds of tightening in China. The central banks of Chile, Hungary, Peru, Russia, South Korea, Taiwan, and Thailand also tightened policy over the intermeeting period in response to rising inflationary pressures.

Most emerging market currencies continued to rise against the U.S. dollar, spurred by monetary policy tightening in many EMEs, by favorable EME economic growth rates, and by rising commodities prices. A number of governments took actions to counter currency appreciation. For example, the central bank of Chile announced that it will begin buying $12 billion against Chilean pesos to stem the rise of the peso. Building on earlier moves to discourage capital inflows, the central bank of Brazil announced it would impose a reserve requirement on banks' short positions in the U.S. dollar against the Brazilian *real*. The Chilean peso and Brazilian *real* depreciated sharply following these announcements, although, over the period as a whole, the *real* is up 1 percent against the dollar. Central banks in Korea, Malaysia, and Thailand are also believed to have intervened in the foreign exchange market in recent weeks.

Government Finance

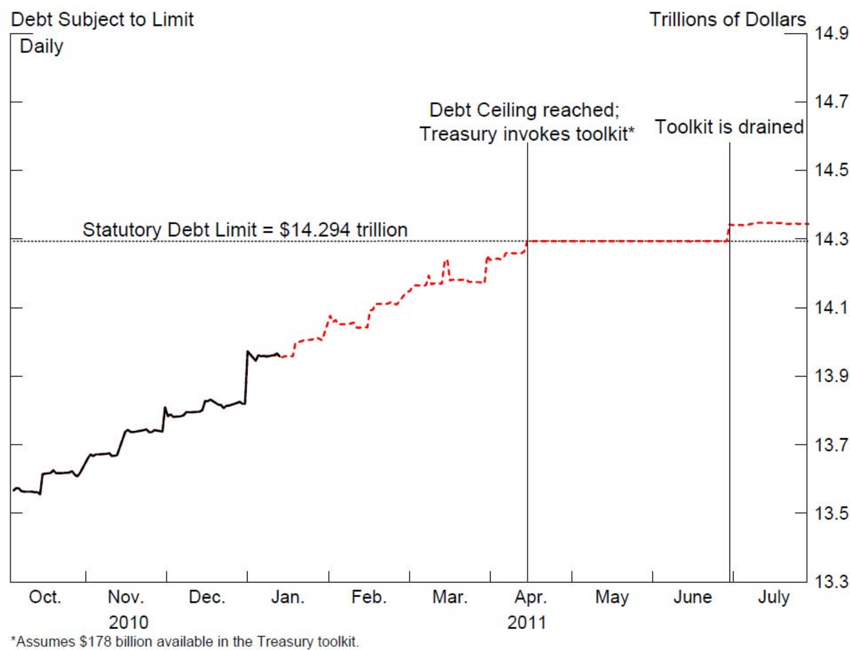
During the intermeeting period, the Treasury auctioned $165 billion of nominal coupon securities across the maturity spectrum. Offer amounts were in line with previous auctions. On the whole, the auctions were well received, with bid-to-cover ratios generally close to recent averages. On January 6, Treasury Secretary Geithner sent a letter to the Congress requesting an increase in the debt limit currently set at $14.29 trillion (see the box "Debt Subject to Limit").

Concerns about the credit quality of municipal bonds were heightened early in the intermeeting period but eased somewhat after Illinois lawmakers substantially raised the state's personal and corporate income tax rates. Spreads on credit default swaps for the bonds of some major states rose appreciably around year-end but generally have retraced a significant portion of those increases more recently. Despite these improvements, the municipal bond market appeared to continue to price in significantly higher default risk than normal. The ratios of yields on long-term general obligation bonds to those on

Debt Subject to Limit

The level of public debt outstanding that is subject to the federal debt limit is approaching the statutory ceiling of $14.294 trillion set by the Congress in February 2010. As of December 31, 2010, debt subject to limit was $13.973 trillion.

An increase in the debt limit requires an act of the Congress. On January 6, 2011, Treasury Secretary Timothy Geithner made a formal request to the Congress that it raise the debt limit by the end of the first quarter. Under our baseline forecast, federal debt will reach the debt limit by mid-April 2011. Our baseline forecast is consistent with the Tealbook projection for government spending, debt issuance, and Supplementary Financing Program (SFP) bill issuance. As a result of the minimal room currently left under the ceiling, the baseline forecast assumes that new issuance of SFP bills ceases in early February and the Supplementary Financing Account (SFA) balance falls to $5 billion by the end of March.[1] The draining of the SFA is consistent with the actions of the Treasury during the fall of 2009, which is the last time Treasury debt outstanding approached the debt limit.



Should the Congress fail to raise the debt limit, the Treasury has a toolkit of possible accounting actions that it can use to delay reaching the debt limit for a time. These actions

[1] At the request of the Federal Reserve, the Treasury Department initiated the SFP in September 2008. It consists of a series of Treasury bill auctions, with the proceeds of these auctions maintained in the SFA held at the Federal Reserve Bank of New York. The transfer of funds into this account acts to drain reserves from the banking system, thereby offsetting some of the reserve effect of the Federal Reserve's balance sheet expansion. SFP bills are counted as marketable debt and are included in debt subject to limit.

include redeeming or suspending investment in selected nonmarketable debt series and issuing a small amount of debt that is not subject to limit. Specifically, as shown in the table below, we estimate that these tools could provide an estimated $178 billion of "headroom" under the ceiling, and, as shown in the figure on the facing page, could be used, as needed, to delay the date at which the debt limit is breached until the end of June 2011. The specific tools available to the Treasury include[2]

- suspending daily reinvestment in the Government Securities Investment Fund (G Fund), a retirement fund that invests in nonmarketable Treasury securities. The Treasury has statutory authority to suspend daily reinvestment if it cannot be fully invested without exceeding the debt limit. The G Fund has $125 billion available.
- redeeming existing and suspending new investments in the Civil Service Retirement and Disability Fund (CSRDF), a trust fund that invests in nonmarketable Treasury securities. The Treasury has statutory authority to redeem and suspend investments if and when a "Debt Issuance Suspension Period" (DISP) exists. In line with past episodes, we assume a four-month DISP and available funds averaging $7 billion per month.
- disinvesting the Exchange Stabilization Fund (ESF), which is used to purchase or sell foreign currencies. The dollar-denominated holdings of the ESF are invested in nonmarketable Treasury securities and the entire balance matures daily. While statutory authority to invest these balances exists, the investments are not required by the statute. As of December, the ESF balance was $20 billion.
- issuing Federal Financing Bank (FFB) debt, which is not subject to the debt limit, but is capped at $15 billion. Currently, because $10 billion of FFB debt is outstanding, only $5 billion is available.

Estimated Treasury Toolkit (Billions of dollars)	
Total	178
Government Securities Investment Fund (G Fund)	125
Civil Service Retirement and Disability Fund (CSRDF)	28
Exchange Stabilization Fund (ESF)	20
Federal Financing Bank (FFB)	5

The current set of tools and their nominal level are in line with past episodes.[3] However, if a breach appeared imminent, the tools would be used on an as-needed basis, and if the debt limit were to be raised in a timely manner after the debt limit was reached, only minimal use of the tools might be necessary. In previous debt limit episodes, the actual use of the tools ranged from approximately $30 billion to about $60 billion.

[2] In past debt limit episodes, one of the first actions the Treasury took was to suspend the issuance of State and Local Government Series (SLGS) securities. However, because the benefit of suspending SLGS securities issuance is only to give the Treasury more certainty over debt flows, and because any SLGS securities not issued will likely have to be made up by issuing additional marketable debt to replace the incoming cash, we do not include suspending SLGS securities in our analysis.

[3] The Treasury also has various assets it could sell to raise funds in a debt limit crisis, including equity stakes in selected private companies as well as $155.7 billion in holdings of agency mortgage-backed securities. Presumably, however, the Treasury would resort to such sales only after other funding and debt management tools had been exhausted.

comparable-maturity Treasury securities and to those on AAA-rated corporate bonds moved up to a very high level. Moreover, long-term tax-exempt bond funds experienced significant outflows over the past two months, though tax-exempt money market mutual funds experienced modest net inflows.

Despite these strains, gross issuance of long-term municipal bonds remained strong in December. New capital issuance continued to be robust, though its strength was largely driven by a rush to issue Build America Bonds before the program expired at the end of 2010. By contrast, refunding issuance slowed noticeably, hindered by higher interest rates, and the pace of short-term issuance was slow.

Commercial Banking and Money

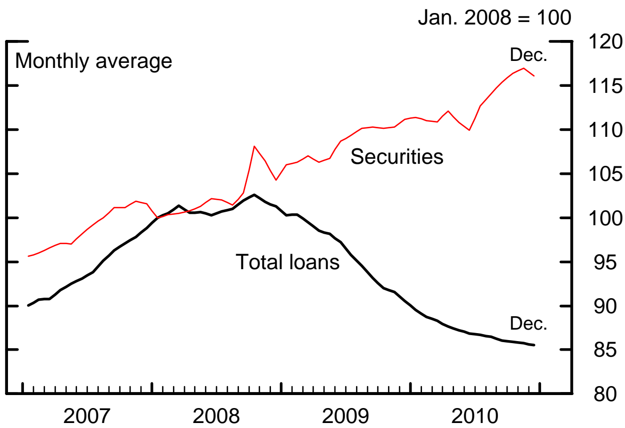
Bank credit fell at an annual rate of about 4¼ percent in December, its weakest monthly reading since June as banks reduced their holdings of securities. Core loans on banks' books edged down again last month, but the rate of contraction still appears to be abating. Indeed, after having been little changed, on balance, since the summer, C&I loans expanded at a 7¼ percent pace in December. Despite continued weakness in many residential real estate indicators, closed-end residential mortgage loans held by banks rose moderately for the fifth consecutive month and registered the first quarterly gain since the first quarter of 2008.[5] Although the increase was concentrated at a few large banks, results from a special question included in the most recent SLOOS suggest that the gains may persist: The fraction of banks that attributed the recent rise in such loans on their books to their greater willingness to accommodate those increases was noticeably larger than the fraction that attributed the rise to transitory factors. By contrast, commercial real estate loans and home equity loans continued to contract in December. Consumer loans also decreased last month, as credit card loans dropped further while other consumer loans rose only modestly.

The behavior of the components of core loans in recent months is broadly consistent with the results of the January SLOOS. The survey responses indicate that, during the fourth quarter of 2010, modest net fractions of banks continued to ease

[5] According to flow of funds estimates, at the end of the third quarter, commercial banks held approximately one-fifth of outstanding home mortgages, and so the estimated increases in the portfolios of commercial banks do not imply growth in total mortgage debt during the fourth quarter. See Federal Reserve Board, Statistical Release Z.1, "Flow of Funds Accounts of the United States," www.federalreserve.gov/releases/z1/Current.

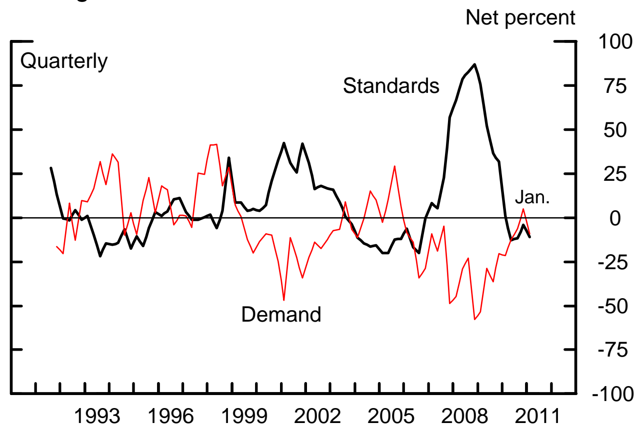
Commercial Banking and Money

Bank Credit



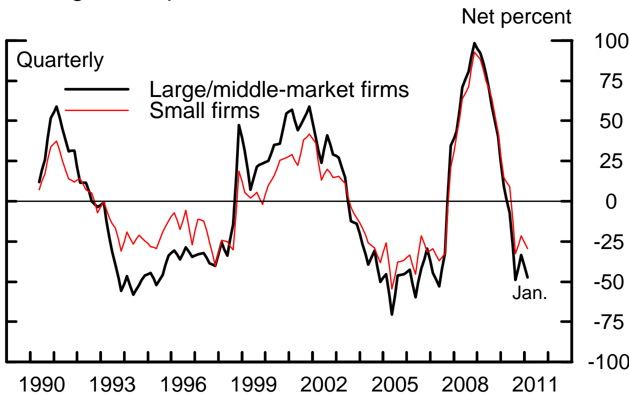
Note: The data have been adjusted to remove the estimated effects of marking certain securities to market (FAS 115); the initial consolidations of assets under FIN 46, FAS 166, and FAS 167; and nonbank structure activity of $5 billion or more.
Source: Federal Reserve Board.

Changes in Standards and Demand for Bank Loans



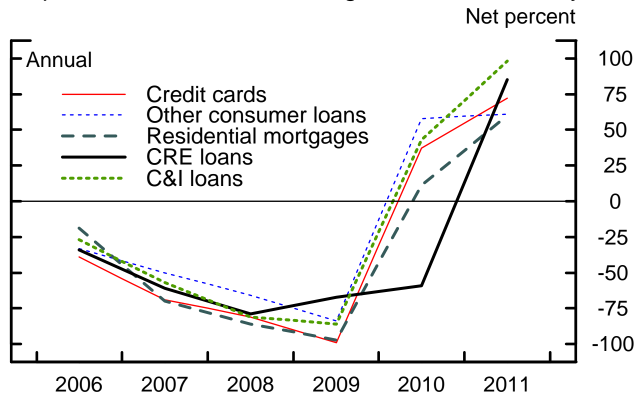
Note: A composite index of changes in standards or loan demand that represents the net percentage of loans on respondents' balance sheets that were in categories for which banks reported tighter lending standards or stronger loan demand over the past 3 months.
Source: Federal Reserve Board, Senior Loan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

Expected Year-Ahead Changes in Credit Quality



Note. Results shown are the net fraction of banks reporting that credit quality is expected to improve and are weighted at the bank level by outstanding loans in each category.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

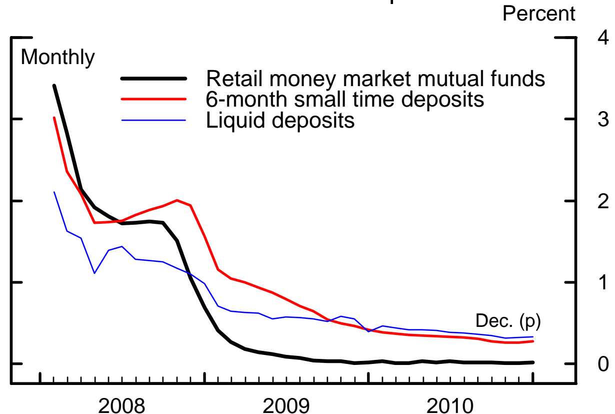
Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	RMMF	Curr.
2008	8.5	6.9	12.3	13.6	5.8
2009					
H1	8.0	17.1	-6.4	-15.0	11.0
H2	2.0	15.7	-25.8	-31.4	2.7
2010					
H1	1.3	9.6	-22.4	-22.9	4.5
Q3	4.5	10.6	-21.3	-7.5	5.9
Oct.	5.5	12.7	-27.8	-13.2	8.9
Nov.	5.1	12.3	-27.8	-16.1	8.6
Dec. (p)	4.2	10.7	-24.5	-13.7	3.8

RMMF 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

standards for C&I loans, and larger net fractions reported having eased terms for such loans. Changes in lending policies for other categories of loans were mixed and generally small. Meanwhile, moderate net fractions of respondents indicated that demand for C&I loans had strengthened, and similar fractions reported that inquiries from business borrowers for new or increased credit lines had picked up. In contrast, demand reportedly weakened somewhat, on balance, for residential real estate loans and was little changed for consumer loans. In addition, large fractions of banks reported that if economic activity progressed in line with consensus forecasts, they anticipated that credit quality would strengthen in all major loan categories over the course of 2011.

M2 expanded at an annual rate of 4¼ percent in December, a bit below its pace in November.[6] Liquid deposits, the largest component of M2, continued to increase rapidly last month, while the contraction in small time deposits and retail money market mutual funds persisted. The ongoing compositional shift within M2 toward liquid deposits likely reflects their relatively higher yields compared with other components of M2. The rise in currency stepped down in December to an annual rate of only about 3¾ percent, with part of the slowdown stemming from severe winter weather that delayed shipments of new U.S. currency to Europe. The monetary base increased at an annual rate of about 25 percent in December, as the Desk's purchases of Treasury securities boosted reserve balances

[6] The staff recently revised measures of the money stock and its components to incorporate updated seasonal factors and a new quarterly benchmark. The revisions increased the growth rate of M2 about ½ percentage point in the first half of 2010 and lowered the growth rate roughly ⅛ percentage point in the second half.

Appendix

Senior Loan Officer Opinion Survey on Bank Lending Practices

The January 2011 Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that, during the fourth quarter of 2010, a modest net fraction of banks continued to ease standards and terms for commercial and industrial (C&I) loans while banks reported small mixed changes in their lending policies for other types of loans.[1] The survey also indicated a notable increase in the share of banks reporting strengthened demand for C&I loans. Nevertheless, demand for most types of loans appeared to remain subdued, and lending standards likely remained tight for many households and firms.

Domestic survey respondents reported having eased standards and most terms on C&I loans to firms of all sizes, with a greater fraction of banks reporting having done so for large firms.[2] These movements are consistent with a continued and gradual unwinding of the widespread tightening in standards that occurred over the past few years. Only one bank (a large bank) reported tightening its standards somewhat. In explaining the net easing, banks mainly credited increased competition from other banks and nonbank lenders; they also cited a more favorable or less uncertain economic outlook, similar to the past three surveys.

On the household side, the net fraction of banks that reported having tightened standards on nontraditional mortgage loans crept up for the second consecutive quarter, while banks, on net, did not change standards on prime residential mortgage loans and home equity lines of credit (HELOCs). Similarly, banks reported that changes in standards and terms on consumer loans had been small and mixed, though a modest net fraction reported easing spreads on non-credit-card consumer loans, and banks again reported an increased willingness to make consumer installment loans.

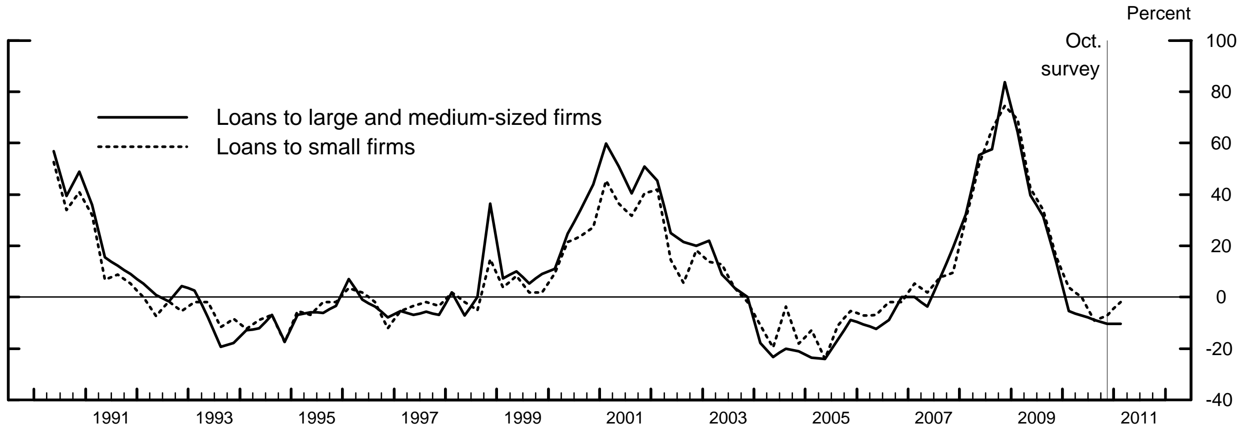
The survey recorded a jump in the net fraction of banks reporting somewhat stronger demand for C&I loans, and the fraction of respondents reporting a pickup in inquiries from business borrowers for new or increased credit lines also increased notably. A smaller net fraction of banks reported that demand for commercial real estate (CRE) loans increased somewhat. In contrast, respondents, on net, did not indicate much change in demand for

[1] The January 2010 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 factors affecting recent closed-end residential real estate loan growth, on changes in commercial real estate loan terms over the past year, and on asset quality expectations for 2011. This appendix is based on responses from 56 domestic banks and 22 U.S. branches and agencies of foreign banks. Respondent banks received the survey on or after December 22, 2010, and responses were due by January 11, 2011.

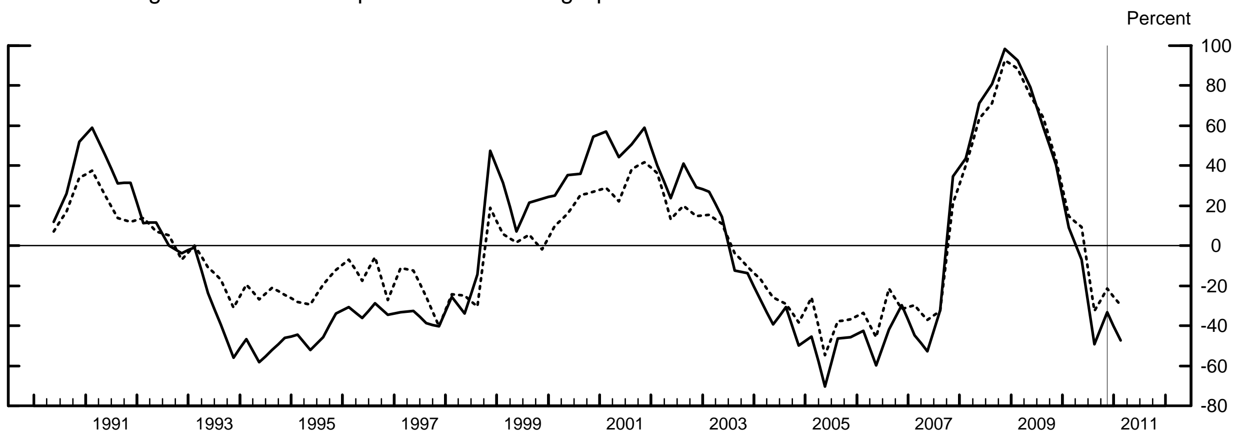
[2] Large and middle-market firms are generally defined as firms with annual sales of $50 million or more and small firms as those with annual sales of less than $50 million.

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

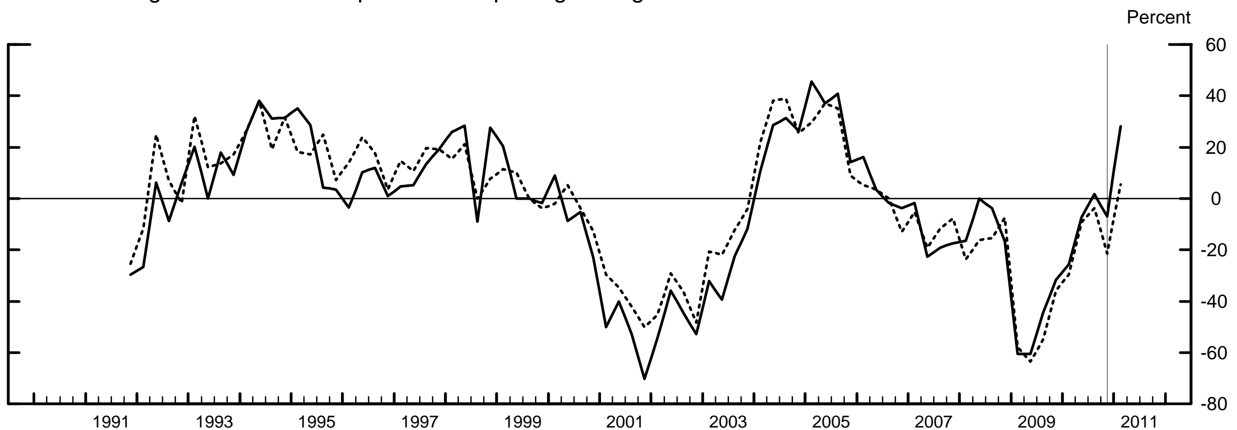
Net Percentage of Domestic Respondents Tightening Standards for Commercial and Industrial Loans



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



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



Financial Developments

consumer loans, and a fair number reported that demand had weakened somewhat for residential real estate loans.

A set of special questions asked respondents about asset quality expectations for 2011, assuming that economic activity progresses in line with consensus forecasts. Large net fractions of banks expected that credit quality would improve in all major loan categories, especially when responses are weighted by the amount of outstanding loans in that category at the respondent bank. Notably, a majority of banks expected the credit quality of commercial real estate (CRE) loans to improve somewhat despite ongoing weakness in the fundamentals in that sector. Expectations for improvement in the quality of residential real estate loans were subdued compared with expectations for other categories.

Federal Reserve data indicate that banks in the aggregate have recently added to their holdings of closed-end residential real estate loans. In response to a special question regarding this increase, banks generally did not credit transitory factors, instead indicating that the rise was due primarily to the relative attractiveness of holding these loans in their portfolios and a pickup in originations of loans that are not eligible for securitization via government-sponsored enterprises (GSEs).

Lending to Business

Questions on Commercial and Industrial Loans

The survey indicated that the market for C&I loans continued to thaw in the fourth quarter. About 15 percent of banks reported having eased standards on C&I loans to large and middle-market firms, with no banks reporting having tightened standards, and about 5 percent, on net, reported easing to small firms, about the same as in the previous survey. The banks that eased standards were almost all large banks.[3]

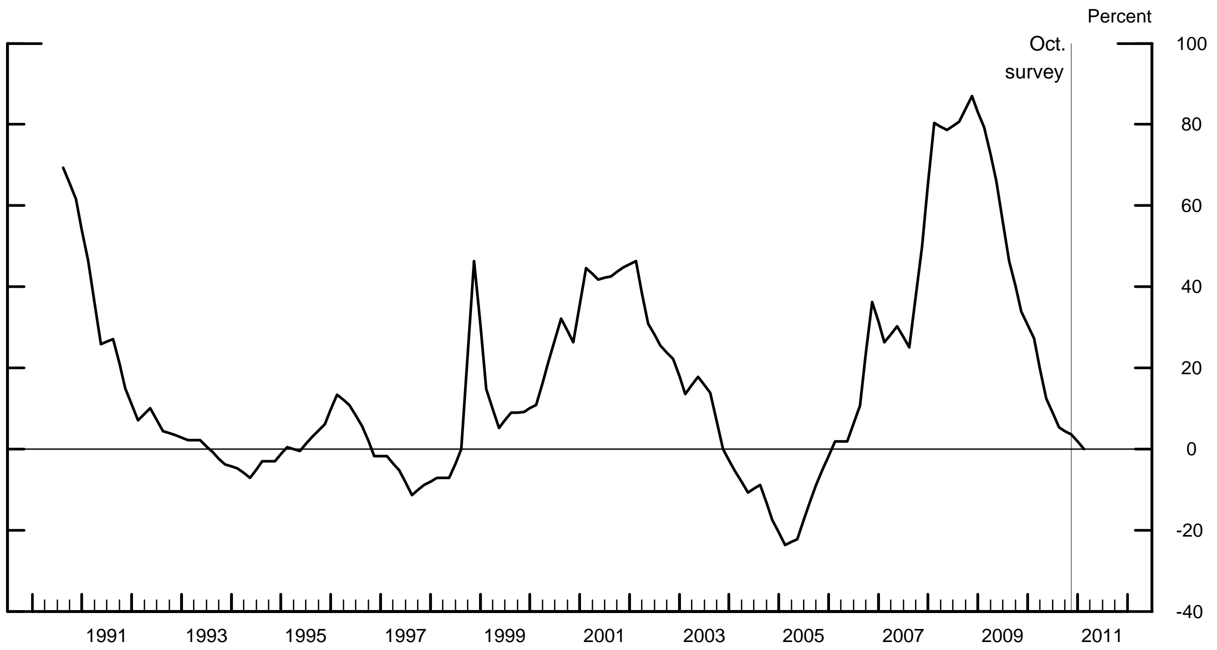
Positive net fractions of banks eased most terms on C&I loans, with larger net fractions easing terms for loans to large and middle-market firms than for loans to small firms. Somewhat more banks reported having reduced spreads of loan rates over their bank's cost of funds than in the previous quarter, with about 50 percent of banks, on net, trimming spreads on loans to large and middle-market firms and 30 percent, on net, narrowing spreads on loans to small firms. Somewhat smaller net fractions of banks lowered the costs of credit lines and lengthened the maximum maturity for loans to firms of all sizes. The sizes of C&I credit lines and business credit card accounts were reportedly little changed, continuing a period of stabilization after a series of cuts in such lines seen in surveys during the first half of 2010.

Of banks that reported having eased standards or terms, large majorities pointed to increased competition from other banks and nonbank lenders, as well as a more favorable or less uncertain economic outlook, as reasons for the changes. Between 25 percent and 30 percent of

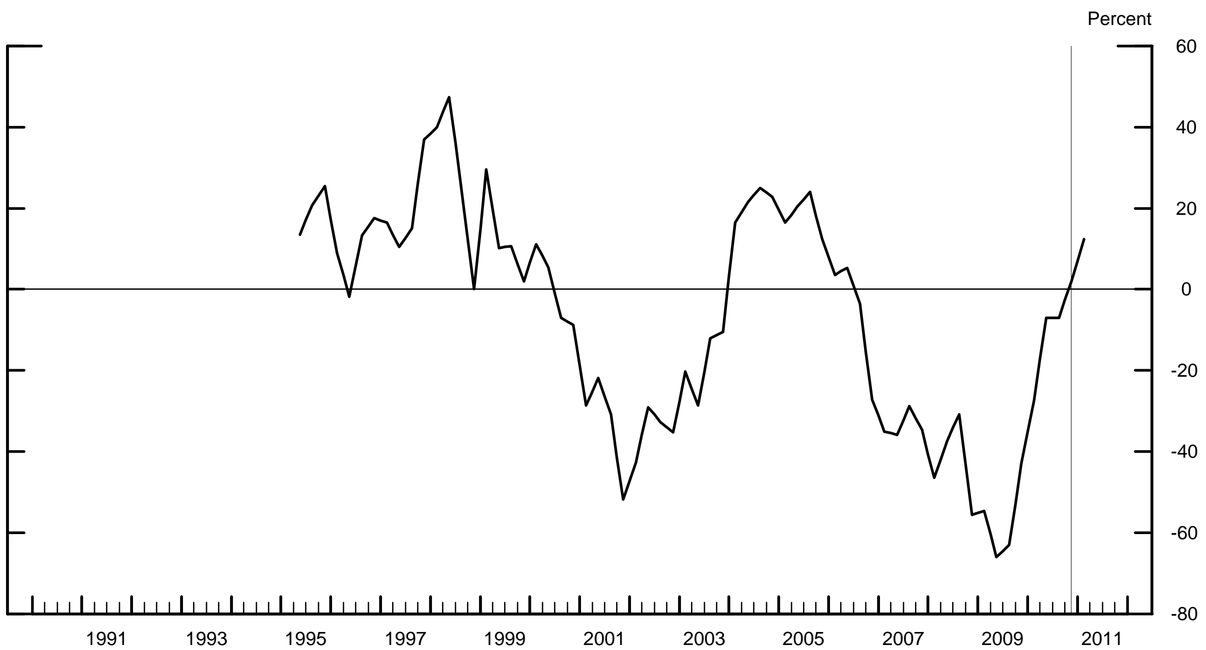
[3] Large banks are defined as banks with assets greater than or equal to $20 billion as of October 31, 2010, and other banks as those with assets of less than $20 billion.

Measures of Supply and Demand for Commercial Real Estate Loans

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



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



Financial Developments

respondents also cited reductions in defaults by borrowers in the public debt market, increased tolerance for risk, and industry-specific improvements, with three banks noting improvements in the auto supply industry.

Reports of strengthened demand for C&I loans were notably more widespread than in the previous survey. About 30 percent of banks, on net, reported greater demand from large and middle-market firms, and about 10 percent reported strengthened demand from small firms. In addition, compared with the October survey, a noticeably larger fraction of banks reported an increase in inquiries from business borrowers for new or increased credit lines. Of the banks reporting stronger demand, about 80 percent indicated that the increased demand was due to funding needs for merger and acquisition activity, and more than half noted reduced borrowing from other banks or nonbank sources. Somewhat less than half of the banks also noted increased financing needs for inventories, accounts receivable, and investment in plant and equipment. The reported increase in demand in this survey is consistent with the increase in banks' C&I loan holdings during December, according to the Federal Reserve's weekly statistical release H.8, "Assets and Liabilities of Commercial Banks in the United States."

A few branches and agencies of foreign banks (foreign banks) reported having eased standards on C&I loans, while none of those institutions tightened standards. Foreign banks also reported a small net increase in demand and in inquiries regarding lines of credit, in line with the previous quarter.

Questions on Commercial Real Estate Lending

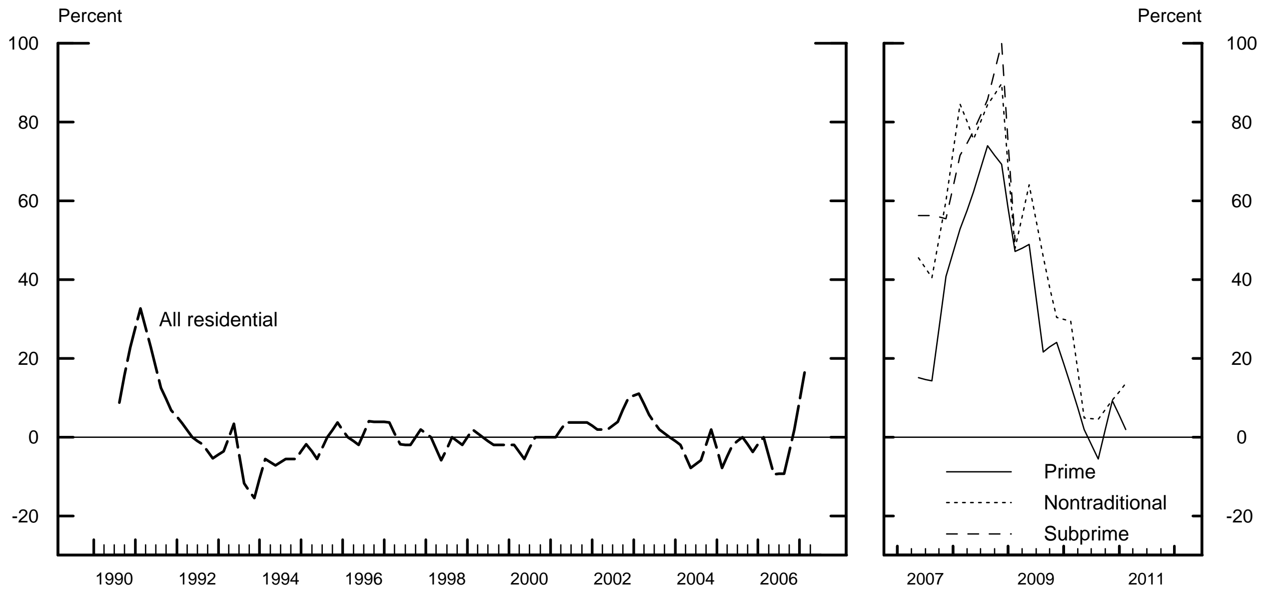
The January survey indicated some stabilization in CRE lending policies and a strengthening of demand for such loans. Standards on CRE loans appear to have stabilized (likely at a very stringent level, given the tightening reported in recent surveys), with little net movement in domestic bank lending standards in this survey or the previous survey. However, a few foreign banks reported having tightened standards. Roughly 25 percent of banks, on net, reported that they had reduced the sizes of lines of credit for commercial construction, about the same as in the previous quarter.

A positive net fraction of domestic banks (about 15 percent) reported increased demand for CRE loans, the strongest reading since early 2006. Foreign banks also reported that demand had strengthened on net. These reports are consistent with modest increases in commercial real estate sales over the second half of 2010.

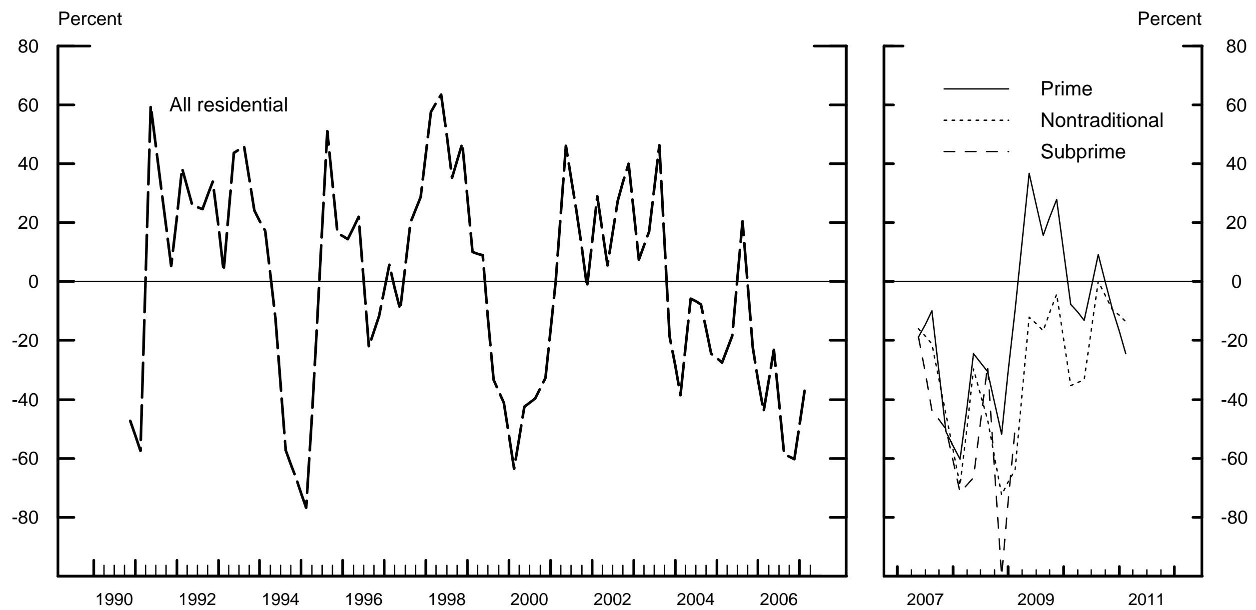
Special Question on Commercial Real Estate Terms

The survey included a special question regarding changes in terms on CRE loans over the past year (repeated annually since 2001). Domestic banks reported that they generally tightened such terms over 2010, but the tightening was less widespread than in 2009. Moreover, in contrast to 2009, almost no banks reported having tightened loan terms considerably over the past 12 months. About 40 percent of banks, on net, tightened loan-to-value ratios, and moderately smaller fractions tightened debt service coverage ratios and maximum loan sizes. Spreads,

Measures of Supply and Demand for Residential Mortgage Loans



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



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

Financial Developments

maximum maturities, and requirements for takeout financing were little changed on net. Moderate net fractions of foreign banks reported having increased maximum loan sizes, narrowed spreads, and eased requirements on debt-service coverage ratios.

LENDING TO HOUSEHOLDS

Questions on Residential Real Estate Lending

Standards on prime closed-end residential real estate loans were little changed, on net, over the fourth quarter. In contrast, standards on nontraditional loans were tightened by about 15 percent of banks, on net, a touch more than in the previous survey. The net fraction of banks tightening standards on nontraditional loans has now increased a bit for two consecutive quarters, after having fallen to nearly zero during the first half of 2010. Banks reported little net change in standards for, or the sizes of, HELOCs.

Demand reportedly weakened somewhat, on net, for both prime and nontraditional closed-end loans as well as for HELOCs. Reported demand for closed-end loans has now declined for two consecutive surveys after having increased during parts of 2009 and 2010.

Special Question on Factors Affecting the Recent Increase in Residential Real Estate Loans

A special question asked respondents about factors affecting the recent increase in closed-end residential real estate loan holdings. According to the H.8 statistical release, banks' aggregate holdings of closed-end residential real estate loans increased steadily over the second half of 2010, despite standards for residential mortgages being little changed over the past six months, and despite the reported net decrease in demand. About 45 percent of the respondents indicated that they had experienced growth in residential mortgage portfolios over that period. The majority of banks that recorded such increases noted the relative attractiveness of these loans compared with other assets and reported having become more willing to expand their overall balance sheets via this category of loans. About one-third of these banks also reported having originated an increased volume of loans that were not eligible for securitization through GSEs.

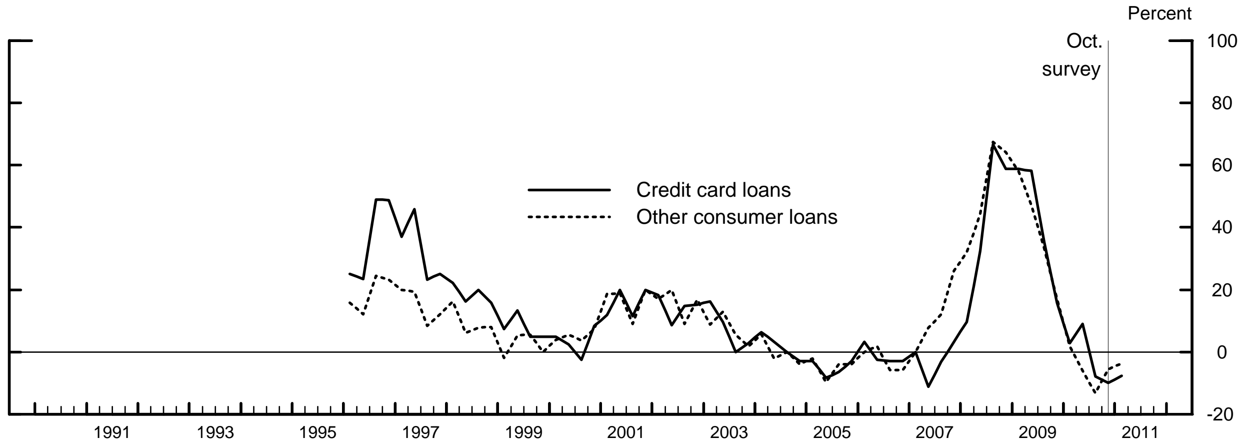
Banks were somewhat less likely to credit their accumulations of closed-end residential mortgages to transitory factors such as capacity constraints in securitizing loans or reduced charge-offs or paydowns. Moreover, only two banks (neither of which was among the very largest banks) attributed their loan accumulations to repurchases from the GSEs or other securitization pools.

Questions on Consumer Lending

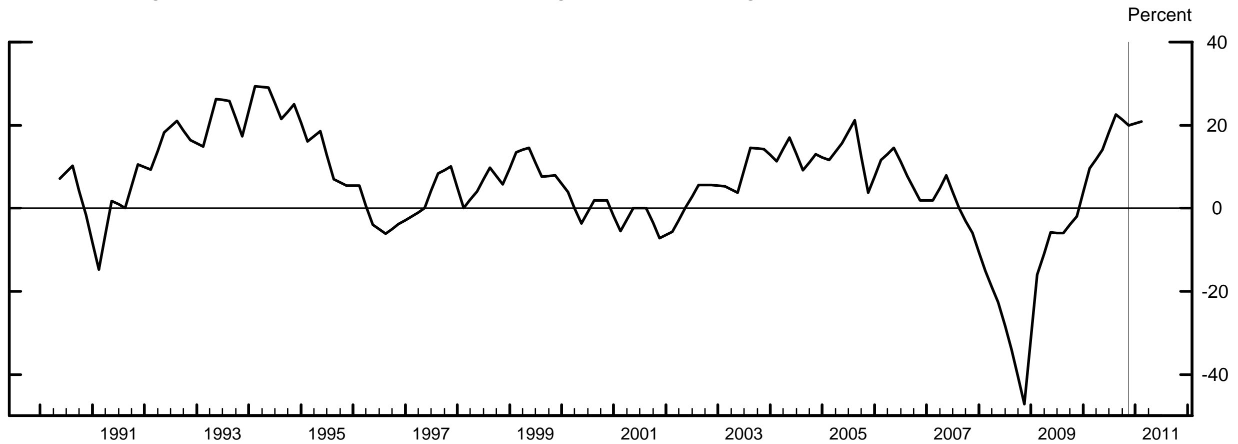
Only a small net fraction of banks reported having eased standards on consumer credit card and non-credit-card loans in the fourth quarter, consistent with the past two surveys. Indeed, a modest net fraction of banks, about 10 percent, reported cutting back the sizes of consumer credit card lines.

Measures of Supply and Demand for Consumer Loans

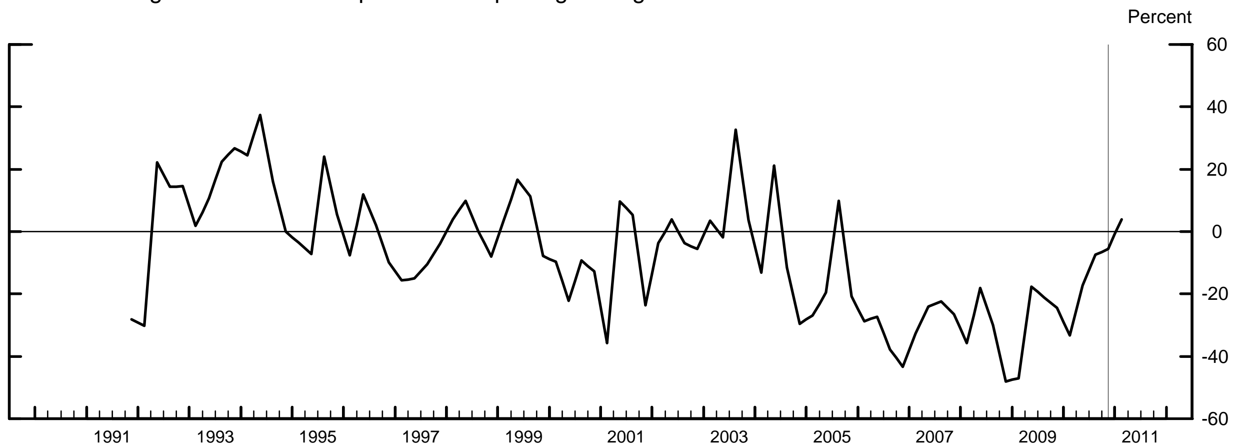
Net Percentage of Domestic Respondents Tightening Standards for Consumer Loans



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



Net Percentage of Domestic Respondents Reporting Stronger Demand for Consumer Loans



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Banks reported little change, on net, in most terms on consumer loans, with the exception of spreads on non-credit-card loans and minimum credit scores on credit card loans, which were eased by a modest net fraction of banks. The easing of terms on non-credit-card loans is consistent with the still elevated fraction of banks that reported an increased willingness to make consumer installment loans. Banks were somewhat split regarding changes in demand for consumer loans, but on net they reported little change.

Special Questions on Asset Quality Expectations

Large net fractions of banks expected improvements in delinquency and charge-off rates during 2011 in every major loan category, assuming that economic activity progresses in line with consensus forecasts. This special question has been asked once each year during the past four years, and expectations for improvement are more widespread in this survey than any prior survey, consistent with the apparent peak in delinquency and charge-off rates in most loan categories during 2010.

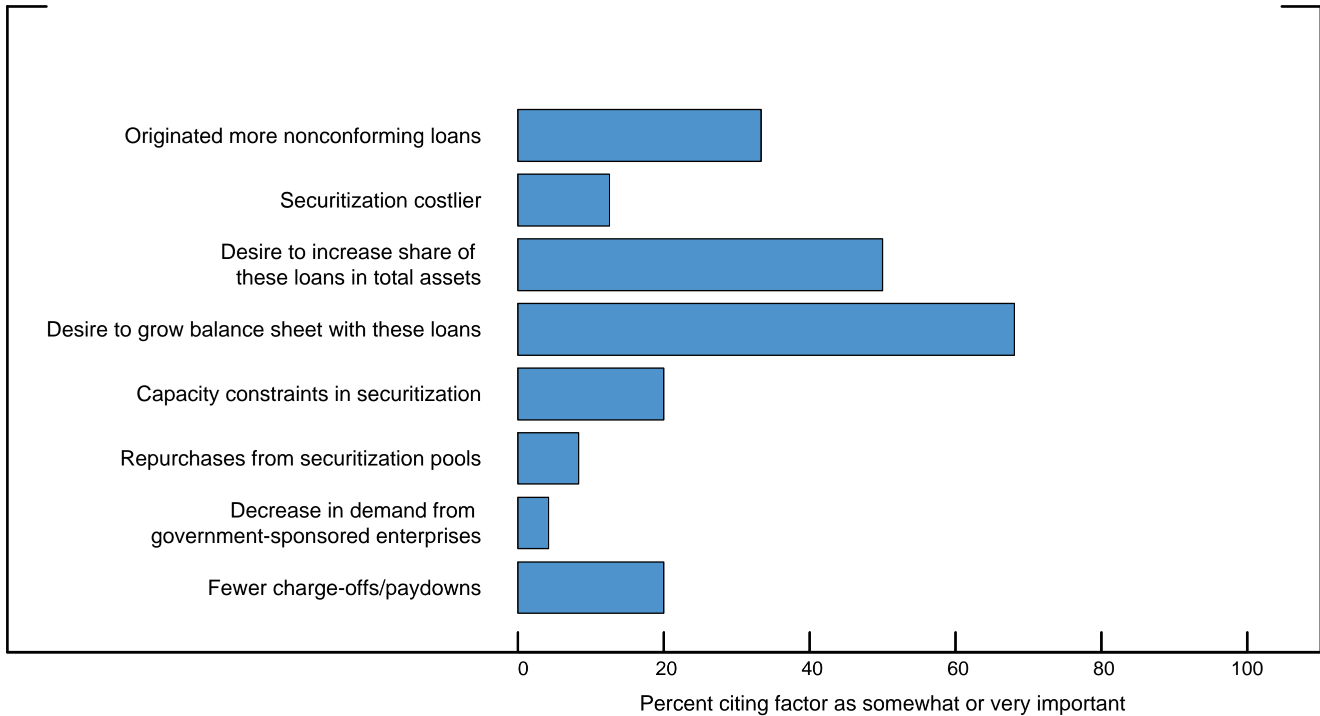
Banks were least likely to expect improvement in the quality of residential real estate loans. Only about 25 percent of banks, on net, expected improvement in nontraditional closed-end loans, and only about 35 percent of banks expected improvement in HELOCs. Almost 45 percent expected improvement for prime closed-end loans. Large banks were somewhat more likely than small banks to expect improvement in the quality of residential real estate loans.

About 50 percent of banks, on net, expected improvement this year in the quality of consumer loans, including both credit card loans and other loans. Similarly, about 55 percent of banks expected improvement in the quality of CRE loans, with large banks more likely to expect improvement. These expectations are somewhat notable in their contrast to the weakness in CRE fundamentals.

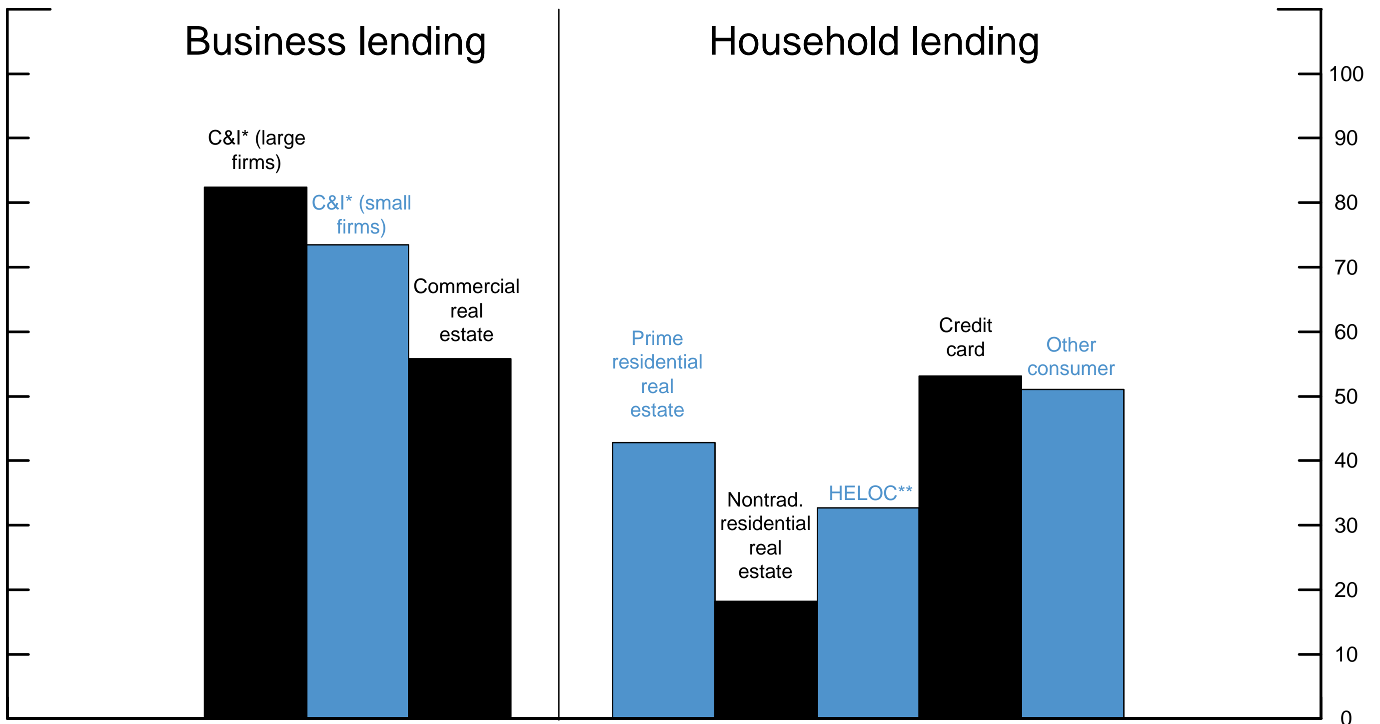
In contrast, about 85 percent of banks expected an improvement in the quality of C&I loans to large and middle-market firms, and about 75 percent expected improvement for such loans to small firms over the coming year. The fraction expecting substantial improvement on loans to large and middle-market firms was about 10 percent, the most in any loan category, and no bank expected deterioration in C&I loan quality on loans to firms of any size.

Special Questions

Factors Affecting Recent Growth in Banks' Closed-End Residential Real Estate Loan Holdings



Outlook for Asset Quality in 2011



* Commercial and industrial
** Home equity lines of credit

Risks and Uncertainty

ASSESSMENT OF FORECAST UNCERTAINTY

The strengthening of final domestic demand late last year has reduced some of the downside risk to our projection that seemed so prominent only a few months ago. As a result, we now judge the risks to our projection for real activity as roughly balanced. That said, we continue to see the risks around our projection for activity as elevated relative to the average experience of the past 20 years (the benchmark used by the Committee). The depth and duration of the recession as well as the severe financial crisis that precipitated the downturn were large and historically unusual. These factors compound the difficulty of identifying the roles of supply and demand in generating the contraction, and hence the difficulty of assessing the strength of the expansion. Moreover, the pace at which credit availability will improve is difficult to determine. While recent indications suggest that lending conditions are gradually improving along the lines anticipated by the staff, the risks to the outlook for credit supply remain sizable (in both directions), reflecting the complicated interplay among the quality of assets held by financial institutions, continued uncertainty regarding mortgage-related assets and mortgage documentation problems, and the effects of regulatory reforms on lending decisions over the next several years. Finally, we see outsized risks to the outlook for the global outlook—to the downside in Europe, where concerns over fiscal sustainability in several countries remain considerable, and to the upside in emerging market economies, where activity could be much stronger than we now expect.

For a variety of reasons, we continue to see the risks around our inflation projection as elevated relative to the experience of the past 20 years. Underlying inflation has moved down to a very low level. The shocks generating the pronounced contraction in labor and product markets were exceptionally large and unusual in character. The federal funds rate is effectively at the zero lower bound, limiting the scope for future actions. The Federal Reserve’s balance sheet has expanded dramatically. Future prospects for the dollar and hence import prices remain uncertain. Finally, fiscal policy is judged by many observers to be on an unsustainable path. 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. In the first scenario, we explore the possibility that incoming data signal a more pronounced acceleration in economic activity than that embedded in the staff projection. In the second scenario, a more robust expansion is accompanied by a pronounced rise in inflation expectations and higher commodity prices, thereby sparking a marked increase in both actual inflation and nominal interest rates. We then turn to a downside risk for real activity—namely, that demand for housing and commercial properties will weaken further, leading to another round of sizable declines in property prices and spending on new construction. The fourth scenario expands on this possibility by assuming that an intensified real estate slump would have important spillover effects on financial markets, credit supply, and confidence. In the fifth scenario, we present the implications of a more pronounced disinflation, similar to that predicted by some of the staff's reduced-form models. The final two scenarios consider contrasting risks to the global outlook—specifically, the possibility that ongoing fiscal and financial difficulties spark a recession in Europe, and the chance that emerging market economies expand more vigorously than we anticipate and put further upward pressure on oil prices.

In the alternative 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. We generate the first five scenarios using the FRB/US model and an estimated policy rule. The last two scenarios are generated using the multicountry SIGMA model, which uses a different policy rule for the federal funds rate that employs an alternative concept of resource utilization.[1]

Stronger Expansion

Overall, we interpret recent indicators as consistent with a gradual strengthening in real activity this year and next. But some of the incoming data were appreciably stronger than we expected, and in this scenario we consider the risk that a more robust

[1] For FRB/US, the federal funds rate follows the "outcome-based" rule, described in the appendix on policy rules in Book B. In the case of SIGMA, its rule is broadly similar but uses a measure of slack equal to the difference between actual output and the model's estimate of the level of output that would occur in the absence of a slow adjustment in wages and prices.

Alternative Scenarios

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

Measure and scenario	2010 H2	2011	2012	2013	2014-15
Real GDP					
Extended Tealbook baseline	3.2	3.8	4.4	4.6	3.9
Stronger expansion	3.2	4.5	5.4	4.8	3.0
Higher inflation	3.2	4.7	5.9	4.8	2.6
Intensified real estate slump	3.2	3.4	3.5	4.0	4.1
With spillovers	3.2	2.4	2.8	3.9	5.0
Further disinflation	3.2	3.6	3.9	4.2	4.6
Severe European recession	3.2	2.6	3.4	4.8	4.3
Foreign boom with higher oil prices	3.2	4.3	4.7	4.2	3.5
Unemployment rate[1]					
Extended Tealbook baseline	9.6	8.9	7.8	7.0	5.3
Stronger expansion	9.6	8.7	7.0	6.0	5.1
Higher inflation	9.6	8.5	6.7	5.5	5.0
Intensified real estate slump	9.6	9.0	8.3	7.9	6.0
With spillovers	9.6	9.4	9.1	8.9	6.3
Further disinflation	9.6	8.9	8.0	7.4	5.1
Severe European recession	9.6	9.3	8.7	7.9	5.9
Foreign boom with higher oil prices	9.6	8.8	7.4	6.7	5.3
Core PCE inflation					
Extended Tealbook baseline	.5	1.0	1.0	1.2	1.4
Stronger expansion	.5	1.0	1.0	1.4	1.8
Higher inflation	.5	1.4	2.1	2.7	2.9
Intensified real estate slump	.5	1.0	.9	1.0	1.1
With spillovers	.5	1.0	.8	.7	.7
Further disinflation	.5	.5	.1	-.1	-.3
Severe European recession	.5	.4	.4	1.0	1.4
Foreign boom with higher oil prices	.5	1.3	1.3	1.2	1.3
Federal funds rate[1]					
Extended Tealbook baseline	.2	.1	.1	1.7	4.1
Stronger expansion	.2	.7	1.5	3.2	4.1
Higher inflation	.2	1.2	3.4	5.8	5.7
Intensified real estate slump	.2	.1	.1	.3	2.7
With spillovers	.2	.1	.1	.1	2.2
Further disinflation	.2	.1	.1	.1	1.9
Severe European recession	.2	.1	.1	.9	3.6
Foreign boom with higher oil prices	.2	.1	.4	1.9	4.0

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

Risks & Uncertainty

expansion is under way, spurred by a mutually reinforcing dynamic of improved optimism, higher spending, greater hiring, and increasing credit availability. The stronger activity and improved optimism buoy financial markets and push equity prices about 12 percent above baseline by the end of this year. This virtuous circle causes real GDP to expand 4½ percent in 2011 and 5½ percent in 2012, bringing the unemployment rate down to 7 percent by late 2012—a rebound in activity more in line with previous recoveries from a deep recession. With less slack, inflation is higher; however, the upward pressure on prices is partially checked by more capital deepening, and thus by larger productivity gains, which hold down unit labor costs. Under these conditions, the federal funds rate rises to ¾ percent by the end of 2011 and remains above baseline thereafter.

Higher Inflation

A faster economic recovery would generate larger price effects if it raised inflation expectations markedly, possibly because of concerns about whether the Federal Reserve would tighten policy quickly enough in response to emerging inflation pressures. Moreover, rising prices for oil and other commodities could increase inflationary pressures somewhat further if a robust domestic expansion was accompanied by a stronger global economy. Relative to the previous scenario, this one features higher inflation expectations as well as stronger domestic and foreign activity. As a result, core PCE inflation rises above 2 percent in 2012 and to almost 3 percent by the middle of the decade. With inflation moving up quickly, real GDP persistently expanding at a pace well above its potential, and the unemployment rate falling rapidly back to the NAIRU, the federal funds rate begins to rise in the middle of this year and reaches as high as 6¾ percent in 2014. As investors seek protection against higher expected inflation and respond to the anticipated tightening in monetary policy, long-term interest rates rise much sooner and by substantially more than in the baseline, causing the 10-year Treasury rate to reach 6¾ percent by the end of 2014.

Intensified Real Estate Slump

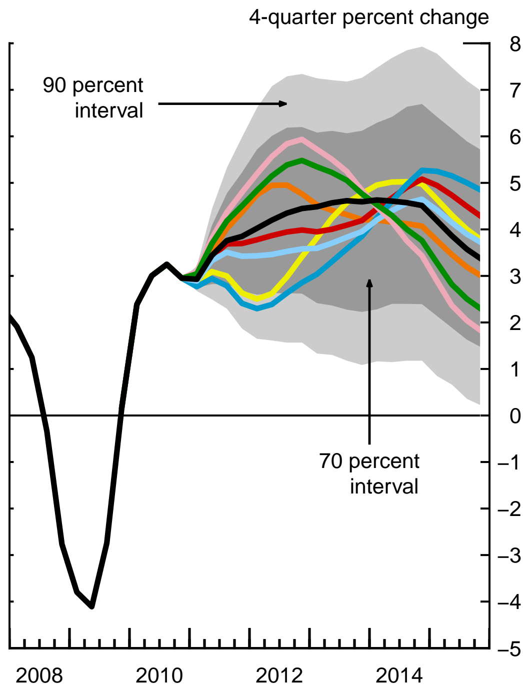
In the baseline projection, conditions in the real estate sector improve a bit this year and next, as a recovery in homebuilding slowly gets under way, house prices fall only modestly, and nonresidential construction stabilizes. However, a large volume of home foreclosures, elevated inventories of unsold homes, high office and commercial vacancy rates, and restrictive credit conditions may restrain construction activity by more

Forecast Confidence Intervals and Alternative Scenarios

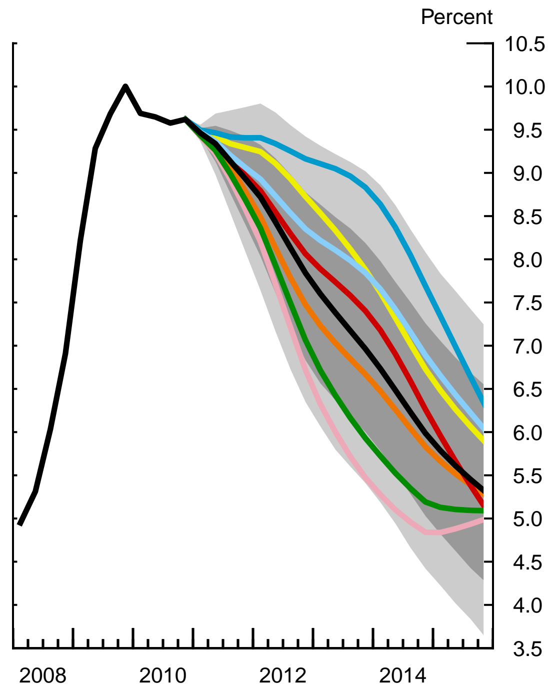
Confidence Intervals Based on FRB/US Stochastic Simulations

Extended Tealbook baseline
Stronger expansion
Higher inflation
Intensified real estate slump
With spillovers
Further disinflation
Severe European recession
Foreign boom with higher oil prices

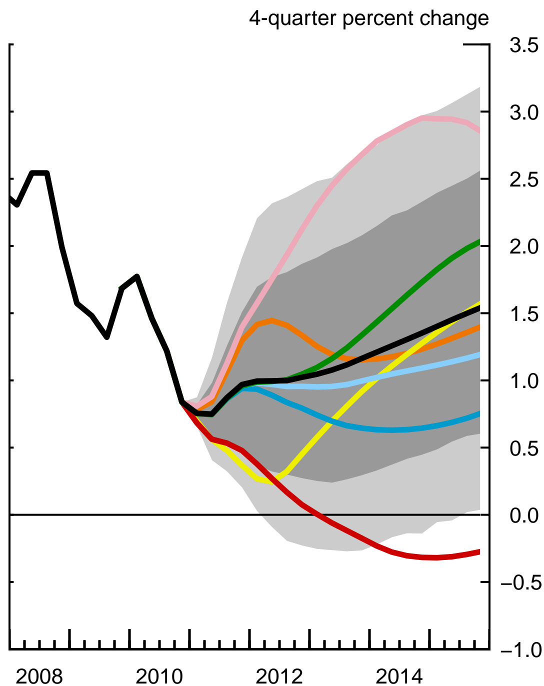
Real GDP



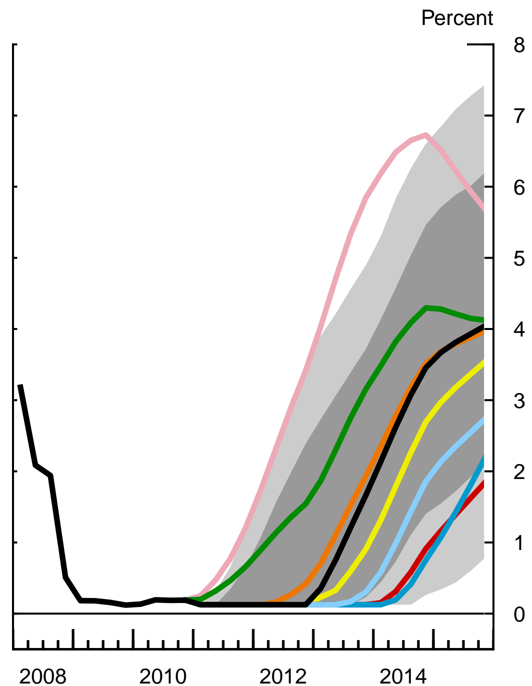
Unemployment Rate



PCE Prices excluding Food and Energy



Federal Funds Rate



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	3.8	4.4	4.6	4.5	3.4
Confidence interval					
Tealbook forecast errors	2.3–5.4	2.8–6.1	. . .	. . .	. . .
FRB/US stochastic simulations	2.7–5.2	2.6–6.2	2.2–6.1	2.4–6.7	1.5–5.7
Civilian unemployment rate					
(percent, Q4)					
Projection	8.9	7.8	7.0	6.0	5.3
Confidence interval					
Tealbook forecast errors	8.3–9.5	6.8–8.8	. . .	. . .	. . .
FRB/US stochastic simulations	8.4–9.4	6.8–8.8	6.0–8.2	5.0–7.3	4.3–6.5
PCE prices, total					
(percent change, Q4 to Q4)					
Projection	1.3	1.0	1.2	1.5	1.6
Confidence interval					
Tealbook forecast errors	.3–2.3	-.1–2.1	. . .	. . .	. . .
FRB/US stochastic simulations	.6–2.2	-.1–2.2	.1–2.5	.2–2.7	.4–3.0
PCE prices excluding food and energy					
(percent change, Q4 to Q4)					
Projection	1.0	1.0	1.2	1.4	1.5
Confidence interval					
Tealbook forecast errors	.4–1.5	.2–1.8	. . .	. . .	. . .
FRB/US stochastic simulations	.5–1.5	.3–1.9	.3–2.1	.4–2.3	.6–2.6
Federal funds rate					
(percent, Q4)					
Projection	.1	.1	1.7	3.5	4.1
Confidence interval					
FRB/US stochastic simulations	.1–.7	.1–2.4	.2–3.7	1.4–5.5	2.1–6.2

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.

than we expect. In this scenario, we assume that the slump in the real estate sector intensifies. Specifically, house prices decline an additional 12 percent from the baseline by the end of 2012, a development that not only discourages potential homebuyers and causes housing starts to remain at their current levels, but also damps the recovery in consumer spending by reducing household net worth. In addition, nonresidential construction falls a further 17 percent. Under the assumption that these adverse developments would not generate substantial spillovers in the financial sector, real GDP rises 3½ percent per year on average from 2011 through 2013. As a result, the unemployment rate declines very gradually and is still close to 8 percent by the end of 2013—1 percentage point above the baseline. With greater slack, inflation remains close to 1 percent through the middle of the decade. These weak conditions push the liftoff of the federal funds rate to late 2013.

Intensified Real Estate Slump with Spillovers

A further deterioration of conditions in the real estate sector might entail significant losses for many financial institutions, renewing concerns about the adequacy of banking-sector capital and causing credit terms and conditions for households and businesses to tighten; such developments might also make the general economic outlook more uncertain. This scenario builds on the previous one by assuming that falling real estate prices and related factors lead to major credit losses, reduced credit availability, and higher risk premiums. In addition, heightened uncertainty damages the confidence of firms and households, causing them to delay their purchases of business capital and consumer durables. On balance, real GDP rises only 2½ percent, on average, in 2011 and 2012. As a result, the unemployment rate remains close to 9 percent until 2014—a full percentage point above what would occur in the absence of spillover effects—putting additional downward pressure on inflation. In response, the federal funds rate remains near zero until mid-2014.

Further Disinflation

In the baseline, inflation remains relatively stable over the next two years and then begins to rise as unemployment declines in an environment of well-anchored inflation expectations. But the stability of various measures of expected inflation to date may be misleading us about the potential for further disinflation in a persistently weak economy. In this scenario, actual inflation falls below zero by 2013 and remains negative thereafter—a decline that is in line with the predictions of some of our forecasting

equations that do not condition on survey measures of expected inflation. In addition, investors become less certain about the course of future inflation. As a result, bond premiums rise and put upward pressure on real long-term interest rates, thereby modestly damping spending and boosting unemployment relative to baseline over the next few years. In response to lower inflation and greater economic slack, the federal funds rate remains at its effective lower bound until early 2014. In the longer run, monetary policy is sufficiently stimulative to bring the unemployment rate eventually below baseline and to check the deflationary pressure.

Severe European Recession

In light of the risks posed by fiscal and financial problems in Europe, this scenario incorporates a large rise in European sovereign and private yields relative to the baseline projection and a substantial fall in the euro. Specifically, the scenario assumes that an intensification of problems in European financial markets spills over to financial markets in the United States and in our major non-European trading partners. In addition, European sovereign spreads rise 150 basis points by early next year relative to baseline, investment-grade corporate bond spreads in Europe rise about twice as much, and European real GDP falls more than 5 percent relative to baseline next year despite a depreciation of the euro of more than 20 percent against the dollar. U.S. net exports are adversely affected by the stronger dollar and weaker foreign activity, and domestic demand is restrained by a 50 basis point rise in U.S. investment-grade corporate bond spreads, a weaker stock market, and reduced confidence. Altogether, U.S. real GDP rises just 2½ percent in 2011 and 3½ percent in 2012, and the unemployment rate remains above 9 percent through mid 2012. The greater resource slack, coupled with lower import prices, pushes PCE inflation down to about ½ percent in 2011 and 2012. The federal funds rate lifts off later and stays lower than in the baseline.

Foreign Boom with Higher Oil Prices

We project that real activity in the emerging market economies (EMEs) will expand about 5 percent. In this scenario, the EMEs expand more rapidly than under our baseline in response to faster-than-expected growth in domestic demand that is partly fueled by robust productivity growth. The stronger global demand, which we assume will fall disproportionately on oil-intensive products (such as automobiles), leads to a substantial rise in the price of oil. All told, aggregate foreign GDP rises 2½ percent

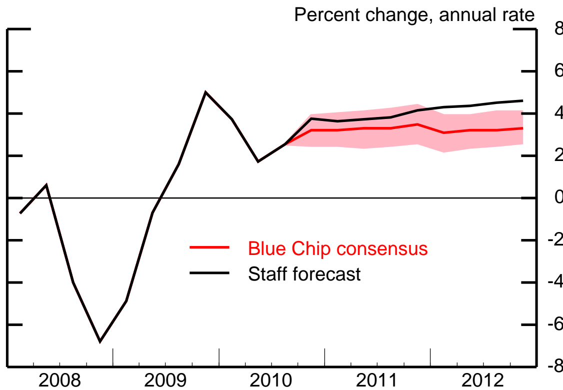
above baseline by the end of 2012, and oil prices rise 30 percent above baseline—to about $120 per barrel. In the near term, the expansion of foreign activity and an associated depreciation of the dollar boost U.S. real net exports, lifting the increase in U.S. real GDP to about 4¼ percent in 2011. U.S. core inflation is about ¼ percentage point above baseline due to a combination of stronger U.S. activity, dollar depreciation, and higher oil prices; headline inflation is nearly ¾ percentage point above baseline. By 2013, U.S. GDP growth falls below baseline because of monetary policy tightening, which starts earlier than in the baseline, and higher oil prices, which exert some drag on potential GDP.

OUTSIDE FORECASTS

The Blue Chip consensus forecast for real GDP released in early January showed a marked improvement in participants' expectations for economic activity this year. The consensus projection now anticipates a 3.3 percent increase in real GDP over the four quarters of 2011, 0.4 percentage point higher than reported in the December survey; real GDP is expected to advance at a similar pace in 2012. While the Blue Chip consensus for real GDP growth is weaker than the staff outlook through 2012, survey participants indicated that they saw notable upside risks to the outlook for real activity. Similarly, the Blue Chip forecast for the unemployment rate at the end of 2012 is 8.4 percent, about ½ percentage point higher than the staff projection. Regarding inflation, the Blue Chip consensus anticipates the total CPI increasing 1.8 percent over the four quarters of 2011 and 2.0 percent in 2012, little changed from its projection from a month earlier and higher than the staff forecasts of 1.5 percent in 2011 and 0.9 percent in 2012. The Blue Chip forecast for short-term interest rates shows a more pronounced increase in 2012 than assumed by the staff, while the Blue Chip path for long-term interest rates is broadly similar to the staff projection.

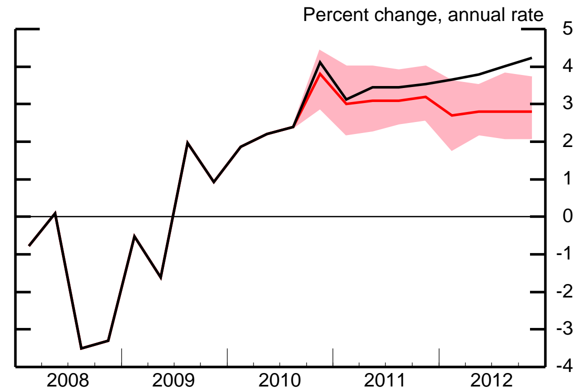
Tealbook Forecast Compared with Blue Chip
(Blue Chip survey released January 10, 2011)

Real GDP

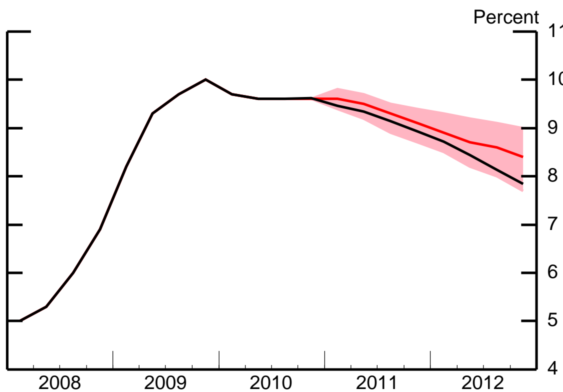


Note: The shaded area represents the area between the Blue Chip top 10 and bottom 10 averages.

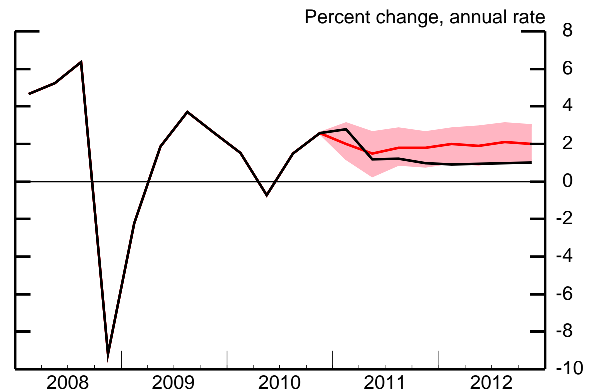
Real PCE



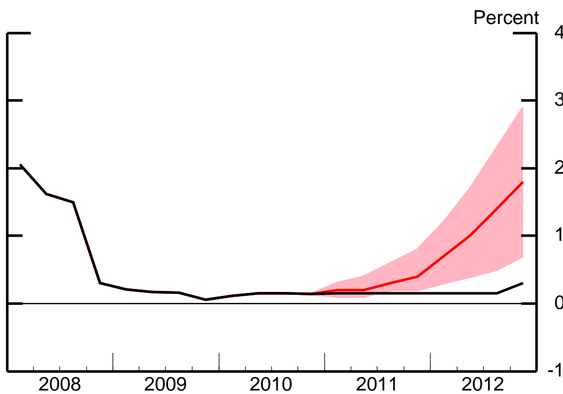
Unemployment Rate



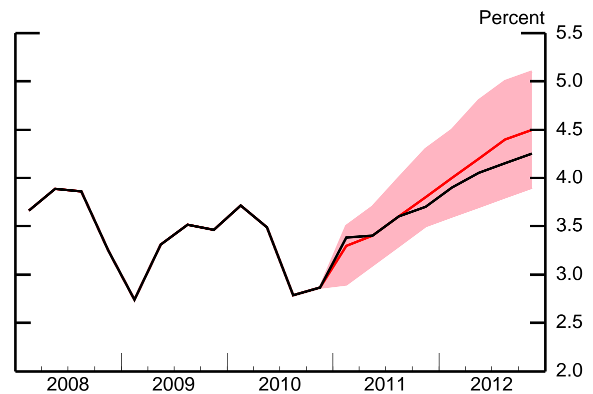
Consumer Price Index



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.

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]	
	12/08/10	01/19/11	12/08/10	01/19/11	12/08/10	01/19/11	12/08/10	01/19/11	12/08/10	01/19/11
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	9.7	9.6
Q3	5.0	4.6	2.7	2.6	1.0	.8	.8	.5	9.6	9.6
Q4	2.8	3.8	2.5	3.8	1.8	1.9	.6	.6	9.7	9.6
2011:Q1	4.6	5.7	3.4	3.6	1.6	2.0	1.0	.9	9.5	9.5
Q2	4.5	4.7	3.5	3.7	1.0	1.1	.9	1.0	9.4	9.3
Q3	4.6	4.9	3.7	3.8	.9	1.2	.9	1.0	9.1	9.1
Q4	5.1	5.1	4.3	4.2	.7	1.0	.8	.9	8.9	8.9
2012:Q1	5.5	5.5	4.3	4.3	.9	1.0	.9	1.0	8.8	8.7
Q2	5.6	5.6	4.4	4.4	.9	1.0	.9	1.0	8.6	8.4
Q3	5.6	5.6	4.5	4.5	.9	1.0	.9	1.0	8.3	8.1
Q4	5.6	5.7	4.5	4.6	.9	1.0	.9	1.0	8.0	7.8
Two-quarter[2]										
2010:Q2	4.3	4.3	2.7	2.7	1.0	1.0	1.1	1.1	-.3	-.4
Q4	3.9	4.2	2.6	3.2	1.4	1.3	.7	.5	.0	.0
2011:Q2	4.5	5.2	3.5	3.7	1.3	1.6	1.0	1.0	-.3	-.3
Q4	4.9	5.0	4.0	4.0	.8	1.1	.8	1.0	-.5	-.4
2012:Q2	5.6	5.6	4.4	4.4	.9	1.0	.9	1.0	-.3	-.5
Q4	5.6	5.7	4.5	4.5	.9	1.0	.9	1.0	-.6	-.6
Four-quarter[3]										
2009:Q4	.6	.6	.2	.2	1.5	1.5	1.7	1.7	3.1	3.1
2010:Q4	4.1	4.3	2.7	2.9	1.2	1.2	.9	.8	-.3	-.4
2011:Q4	4.7	5.1	3.7	3.8	1.1	1.3	.9	1.0	-.8	-.7
2012:Q4	5.6	5.6	4.4	4.4	.9	1.0	.9	1.0	-.9	-1.1
Annual										
2009	-1.7	-1.7	-2.6	-2.6	.2	.2	1.5	1.5	9.3	9.3
2010	3.8	3.9	2.8	2.9	1.7	1.7	1.4	1.3	9.7	9.6
2011	4.3	4.8	3.2	3.5	1.2	1.4	.9	.8	9.2	9.2
2012	5.3	5.4	4.3	4.3	.9	1.0	.9	1.0	8.4	8.3

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	3.8	3.6	3.7	3.8	4.2	4.3	4.4	4.5	4.6	2.9	3.8	4.4
Previous Tealbook	3.7	1.7	2.7	2.5	3.4	3.5	3.7	4.3	4.3	4.4	4.5	4.5	2.7	3.7	4.4
Final sales	1.1	.9	.9	7.0	3.1	3.4	3.7	5.1	4.0	4.1	4.0	4.6	2.4	3.8	4.1
Previous Tealbook	1.1	.9	1.2	4.2	3.3	3.8	4.0	4.4	3.9	4.0	4.0	4.5	1.8	3.9	4.1
Priv. dom. final purch.	2.1	4.4	2.3	4.0	3.9	4.3	4.7	4.7	4.2	4.5	4.7	5.0	3.2	4.4	4.6
Previous Tealbook	2.1	4.4	2.6	2.7	3.5	4.1	4.5	5.0	4.2	4.5	4.8	5.0	3.0	4.3	4.7
Personal cons. expend.	1.9	2.2	2.4	4.1	3.1	3.5	3.6	3.7	3.5	3.7	3.9	4.2	2.6	3.5	3.8
Previous Tealbook	1.9	2.2	2.8	2.7	3.2	3.3	3.5	4.0	3.7	3.9	4.2	4.2	2.4	3.5	4.0
Durables	8.8	6.8	7.6	22.2	4.9	6.8	8.6	8.6	9.5	11.3	11.0	9.8	11.2	7.2	10.4
Nondurables	4.2	1.9	2.5	4.3	4.3	3.5	3.3	2.8	2.8	2.8	3.2	3.6	3.2	3.5	3.1
Services	.1	1.6	1.6	1.4	2.5	3.0	3.0	3.2	2.8	2.8	3.0	3.5	1.2	2.9	3.0
Residential investment	-12.3	25.7	-27.3	.7	3.2	9.2	12.5	11.9	13.0	13.9	13.5	13.5	-5.2	9.1	13.5
Previous Tealbook	-12.3	25.7	-27.8	-3.8	2.9	8.0	14.0	15.6	13.5	13.6	13.5	13.7	-6.5	10.0	13.6
Business fixed invest.	7.8	17.2	10.0	3.7	9.4	9.5	10.4	10.1	6.8	7.9	8.1	8.9	9.6	9.8	7.9
Previous Tealbook	7.8	17.2	10.1	4.0	5.9	9.1	9.1	9.8	5.9	7.2	7.3	8.1	9.7	8.5	7.1
Equipment & software	20.4	24.8	15.4	3.7	13.3	13.0	14.3	13.8	9.2	10.5	10.8	11.8	15.8	13.6	10.6
Previous Tealbook	20.4	24.8	16.1	5.8	9.4	12.7	12.6	13.3	8.5	10.0	9.8	10.6	16.6	12.0	9.7
Nonres. structures	-17.8	-.5	-3.5	3.7	-.8	.0	-.3	-.4	-.3	.0	.0	.2	-4.9	-.4	.0
Previous Tealbook	-17.8	-.5	-4.9	-.9	-3.5	-.7	-.7	-.5	-1.8	-1.3	-.4	.4	-6.3	-1.4	-.8
Net exports[2]	-338	-449	-505	-389	-395	-402	-408	-373	-360	-353	-355	-346	-420	-394	-354
Previous Tealbook[2]	-338	-449	-506	-450	-441	-432	-426	-422	-413	-411	-418	-412	-436	-430	-413
Exports	11.4	9.1	6.8	8.9	10.1	9.1	8.7	8.8	8.9	8.6	8.4	8.5	9.0	9.2	8.6
Imports	11.2	33.5	16.8	-13.8	9.3	8.8	8.3	.8	5.0	5.8	7.5	5.6	10.6	6.7	6.0
Gov't. cons. & invest.	-1.6	3.9	3.9	-.1	.8	.5	.5	.6	.5	.6	.7	.9	1.5	.6	.7
Previous Tealbook	-1.6	3.9	4.0	.9	.5	.6	.8	.8	.7	.8	.9	1.0	1.8	.7	.8
Federal	1.8	9.1	8.8	1.1	2.1	.9	.6	.4	.0	.0	-.1	.0	5.2	1.0	.0
Defense	.4	7.4	8.5	1.0	1.2	.0	.0	.1	.0	.0	-.1	.1	4.2	.3	.0
Nondefense	5.0	12.8	9.5	1.4	4.0	3.0	2.0	1.0	.1	.0	.0	.0	7.1	2.5	.0
State & local	-3.8	.6	.7	-.9	-.1	.2	.4	.7	.9	1.0	1.3	1.5	-.8	.3	1.2
Change in bus. inventories[2]	44	69	121	26	42	53	57	28	41	54	70	69	65	45	59
Previous Tealbook[2]	44	69	116	66	69	62	53	50	65	81	98	99	74	58	86
Nonfarm[2]	37	61	117	22	39	49	54	24	37	50	67	66	59	41	55
Farm[2]	8	8	5	4	4	4	4	4	4	4	4	4	6	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	2.9	3.8	4.4
Previous Tealbook	3.1	2.7	2.4	2.3	-2.8	.2	2.7	3.7	4.4
Final sales	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	3.8	4.1
Previous Tealbook	2.8	2.7	2.8	2.5	-1.9	-.3	1.8	3.9	4.1
Priv. dom. final purch.	4.2	3.1	2.5	1.3	-3.8	-2.0	3.2	4.4	4.6
Previous Tealbook	4.2	3.1	2.5	1.3	-3.8	-2.0	3.0	4.3	4.7
Personal cons. expend.	3.5	2.7	3.3	1.7	-1.9	.2	2.6	3.5	3.8
Previous Tealbook	3.5	2.7	3.3	1.7	-1.9	.2	2.4	3.5	4.0
Durables	5.5	2.1	6.3	3.9	-12.3	4.8	11.2	7.2	10.4
Nondurables	3.0	3.3	3.2	.8	-2.9	1.1	3.2	3.5	3.1
Services	3.4	2.6	2.8	1.7	.3	-.8	1.2	2.9	3.0
Residential investment	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-5.2	9.1	13.5
Previous Tealbook	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-6.5	10.0	13.6
Business fixed invest.	7.0	4.4	7.8	8.2	-8.3	-12.7	9.6	9.8	7.9
Previous Tealbook	7.0	4.4	7.8	8.2	-8.3	-12.7	9.7	8.5	7.1
Equipment & software	8.8	6.1	6.0	4.3	-11.8	-4.9	15.8	13.6	10.6
Previous Tealbook	8.8	6.1	6.0	4.3	-11.8	-4.9	16.6	12.0	9.7
Nonres. structures	1.7	-.1	13.0	17.3	-1.5	-26.5	-4.9	-.4	.0
Previous Tealbook	1.7	-.1	13.0	17.3	-1.5	-26.5	-6.3	-1.4	-.8
Net exports[1]	-688	-723	-729	-655	-504	-363	-420	-394	-354
Previous Tealbook[1]	-688	-723	-729	-655	-504	-363	-436	-430	-413
Exports	7.1	6.7	10.2	10.1	-2.9	-.1	9.0	9.2	8.6
Imports	10.9	5.2	4.1	.7	-6.0	-7.2	10.6	6.7	6.0
Gov't. cons. & invest.	.6	.7	1.5	1.9	3.1	.8	1.5	.6	.7
Previous Tealbook	.6	.7	1.5	1.9	3.1	.8	1.8	.7	.8
Federal	2.3	1.2	2.2	3.1	9.2	3.6	5.2	1.0	.0
Defense	2.4	.4	4.4	2.6	9.5	3.3	4.2	.3	.0
Nondefense	2.3	2.6	-2.3	4.2	8.5	4.5	7.1	2.5	.0
State & local	-.4	.4	1.2	1.2	-.4	-1.0	-.8	.3	1.2
Change in bus. inventories[1]	66	50	59	28	-38	-113	65	45	59
Previous Tealbook[1]	66	50	59	28	-38	-113	74	58	86
Nonfarm[1]	58	50	63	29	-39	-117	59	41	55
Farm[1]	8	0	-4	-1	1	3	6	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				2011				2012				2010[1]	2011[1]	2012[1]
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.7	1.7	2.6	3.8	3.6	3.7	3.8	4.2	4.3	4.4	4.5	4.6	2.9	3.8	4.4
Previous Tealbook	3.7	1.7	2.7	2.5	3.4	3.5	3.7	4.3	4.3	4.4	4.5	4.5	2.7	3.7	4.4
Final sales	1.1	.9	.9	6.8	3.2	3.4	3.7	5.0	4.0	4.1	4.0	4.6	2.4	3.8	4.1
Previous Tealbook	1.1	.9	1.2	4.1	3.3	3.7	4.0	4.4	3.9	4.0	4.0	4.5	1.8	3.9	4.1
Priv. dom. final purch.	1.7	3.6	1.9	3.3	3.2	3.6	3.8	3.9	3.5	3.7	3.9	4.2	2.6	3.6	3.8
Previous Tealbook	1.7	3.6	2.2	2.2	2.9	3.4	3.7	4.1	3.5	3.8	4.0	4.1	2.4	3.5	3.9
Personal cons. expend.	1.3	1.5	1.7	2.9	2.2	2.5	2.6	2.6	2.5	2.6	2.8	2.9	1.9	2.5	2.7
Previous Tealbook	1.3	1.5	2.0	1.9	2.3	2.3	2.5	2.8	2.6	2.7	3.0	3.0	1.7	2.5	2.8
Durables	.6	.5	.5	1.5	.4	.5	.6	.6	.7	.8	.8	.7	.8	.5	.8
Nondurables	.7	.3	.4	.7	.7	.6	.5	.5	.5	.5	.5	.6	.5	.6	.5
Services	.0	.8	.7	.7	1.2	1.4	1.4	1.5	1.3	1.3	1.4	1.6	.6	1.4	1.4
Residential investment	-.3	.6	-.8	.0	.1	.2	.3	.3	.3	.3	.3	.3	-.1	.2	.3
Previous Tealbook	-.3	.6	-.8	-.1	.1	.2	.3	.3	.3	.3	.3	.3	-.2	.2	.3
Business fixed invest.	.7	1.5	.9	.4	.9	.9	1.0	1.0	.7	.8	.8	.9	.9	1.0	.8
Previous Tealbook	.7	1.5	.9	.4	.6	.9	.9	1.0	.6	.7	.7	.8	.9	.8	.7
Equipment & software	1.2	1.5	1.0	.3	.9	.9	1.0	1.0	.7	.8	.8	.9	1.0	1.0	.8
Previous Tealbook	1.2	1.5	1.1	.4	.7	.9	.9	1.0	.6	.8	.7	.8	1.1	.9	.7
Nonres. structures	-.5	.0	-.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	-.1	.0	.0
Previous Tealbook	-.5	.0	-.1	.0	-.1	.0	.0	.0	.0	.0	.0	.0	-.2	.0	.0
Net exports	-.3	-3.5	-1.7	3.5	-.2	-.3	-.2	1.0	.4	.2	-.1	.2	-.5	.1	.2
Previous Tealbook	-.3	-3.5	-1.7	1.7	.3	.2	.1	.1	.3	.0	-.2	.1	-1.0	.2	.0
Exports	1.3	1.1	.8	1.1	1.3	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2
Imports	-1.6	-4.6	-2.5	2.4	-1.5	-1.4	-1.4	-.1	-.8	-1.0	-1.3	-1.0	-1.6	-1.1	-1.0
Gov't. cons. & invest.	-.3	.8	.8	.0	.2	.1	.1	.1	.1	.1	.2	.2	.3	.1	.1
Previous Tealbook	-.3	.8	.8	.2	.1	.1	.2	.2	.1	.2	.2	.2	.4	.1	.2
Federal	.2	.7	.7	.1	.2	.1	.1	.0	.0	.0	.0	.0	.4	.1	.0
Defense	.0	.4	.5	.1	.1	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
Nondefense	.1	.3	.3	.0	.1	.1	.1	.0	.0	.0	.0	.0	.2	.1	.0
State & local	-.5	.1	.1	-.1	.0	.0	.0	.1	.1	.1	.2	.2	-.1	.0	.1
Change in bus. inventories	2.6	.8	1.6	-3.0	.5	.3	.1	-.9	.4	.4	.5	.0	.5	.0	.3
Previous Tealbook	2.6	.8	1.5	-1.6	.1	-.2	-.3	-.1	.4	.5	.5	.0	.8	-.1	.4
Nonfarm	2.6	.8	1.7	-2.9	.5	.3	.1	-.9	.4	.4	.5	.0	.5	.0	.3
Farm	.1	.0	-.1	-.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.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	.0	2.0	1.0	1.0	.9	1.1	1.1	1.1	1.1	1.3	1.2	1.1
Previous Tealbook	1.0	1.9	2.3	.2	1.2	.9	.8	.8	1.1	1.1	1.1	1.1	1.4	.9	1.1
PCE chain-wt. price index	2.1	.0	.8	1.9	2.0	1.1	1.2	1.0	1.0	1.0	1.0	1.0	1.2	1.3	1.0
Previous Tealbook	2.1	.0	1.0	1.8	1.6	1.0	.9	.7	.9	.9	.9	.9	1.2	1.1	.9
Energy	16.4	-17.5	5.4	25.9	20.5	1.7	2.8	1.0	.4	.0	-.1	-.1	6.3	6.2	.1
Previous Tealbook	16.4	-17.5	5.6	23.0	11.7	2.5	1.2	.4	.1	-.3	.0	.3	5.7	3.8	.0
Food	1.8	1.6	.3	1.5	2.1	2.1	1.6	1.1	1.0	1.1	1.2	1.2	1.3	1.7	1.1
Previous Tealbook	1.8	1.6	.3	1.8	1.6	1.2	.9	.8	1.0	1.1	1.2	1.2	1.4	1.1	1.1
Ex. food & energy	1.2	1.0	.5	.6	.9	1.0	1.0	.9	1.0	1.0	1.0	1.0	.8	1.0	1.0
Previous Tealbook	1.2	1.0	.8	.6	1.0	.9	.9	.8	.9	.9	.9	.9	.9	.9	.9
Ex. food & energy, market based	.7	1.0	1.1	.3	.8	.9	.9	.7	.9	.9	.9	.9	.8	.8	.9
Previous Tealbook	.7	1.0	1.1	.1	.9	.8	.8	.4	.8	.8	.8	.8	.7	.7	.8
CPI	1.5	-.7	1.5	2.6	2.7	1.1	1.2	1.0	.9	.9	1.0	1.0	1.2	1.5	.9
Previous Tealbook	1.5	-.7	1.5	2.2	1.8	1.1	1.0	.9	.9	.9	.9	1.0	1.1	1.2	.9
Ex. food & energy	.0	.9	1.2	.4	1.0	1.0	1.0	.9	1.0	1.0	1.1	1.1	.6	1.0	1.0
Previous Tealbook	.0	.9	1.2	.3	.9	.9	.9	.9	.9	1.0	1.0	1.1	.6	.9	1.0
ECI, hourly compensation[2]	2.6	1.8	1.8	2.0	2.3	2.1	2.1	2.1	2.6	2.4	2.4	2.4	2.0	2.1	2.4
Previous Tealbook[2]	2.6	1.8	1.8	2.0	2.3	2.1	2.0	2.1	2.5	2.2	2.2	2.2	2.0	2.1	2.3
Nonfarm business sector															
Output per hour	3.9	-1.8	2.3	2.6	1.8	1.4	1.3	1.6	1.8	2.0	1.9	2.0	1.7	1.5	1.9
Previous Tealbook	3.9	-1.8	2.5	.9	2.0	1.2	1.3	2.1	2.1	2.1	2.1	2.1	1.3	1.7	2.1
Compensation per hour	-.9	2.9	2.1	2.1	2.4	1.8	1.8	1.8	2.5	2.2	2.2	2.3	1.5	1.9	2.3
Previous Tealbook	-.9	2.9	2.2	2.1	2.4	1.8	1.7	1.7	2.3	2.0	2.0	2.1	1.6	1.9	2.1
Unit labor costs	-4.6	4.9	-.2	-.4	.6	.4	.5	.1	.7	.2	.3	.3	-.2	.4	.4
Previous Tealbook	-4.6	4.9	-.3	1.2	.4	.6	.4	-.4	.2	-.1	-.1	.0	.2	.2	.0
Core goods imports chain-wt. price index[3]	4.2	3.1	-.8	6.2	5.5	3.6	2.2	1.5	1.3	1.4	1.4	1.4	3.1	3.2	1.4
Previous Tealbook[3]	4.2	3.1	-.4	5.2	4.7	2.2	1.8	1.2	1.3	1.4	1.4	1.4	3.0	2.5	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.

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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	1.2	1.1
Previous Tealbook	3.2	3.5	2.9	2.6	2.1	.5	1.4	.9	1.1
PCE chain-wt. price index	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.3	1.0
Previous Tealbook	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.1	.9
Energy	18.6	21.5	-3.7	19.4	-9.0	2.7	6.3	6.2	.1
Previous Tealbook	18.6	21.5	-3.7	19.4	-9.0	2.7	5.7	3.8	.0
Food	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	1.7	1.1
Previous Tealbook	2.7	1.5	1.7	4.8	6.9	-1.6	1.4	1.1	1.1
Ex. food & energy	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.0	1.0
Previous Tealbook	2.2	2.3	2.3	2.4	2.0	1.7	.9	.9	.9
Ex. food & energy, market based	1.9	2.1	2.2	2.2	2.2	1.7	.8	.8	.9
Previous Tealbook	1.9	2.1	2.2	2.2	2.2	1.7	.7	.7	.8
CPI	3.4	3.7	1.9	4.0	1.6	1.5	1.2	1.5	.9
Previous Tealbook	3.4	3.7	1.9	4.0	1.6	1.5	1.1	1.2	.9
Ex. food & energy	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.0	1.0
Previous Tealbook	2.2	2.1	2.7	2.3	2.0	1.7	.6	.9	1.0
ECI, hourly compensation[1]	3.8	2.9	3.2	3.0	2.4	1.2	2.0	2.1	2.4
Previous Tealbook[1]	3.8	2.9	3.2	3.0	2.4	1.2	2.0	2.1	2.3
Nonfarm business sector									
Output per hour	1.5	1.4	.9	2.6	-.4	6.2	1.7	1.5	1.9
Previous Tealbook	1.5	1.4	.9	2.6	-.4	6.2	1.3	1.7	2.1
Compensation per hour	3.3	3.5	4.5	3.6	2.3	2.5	1.5	1.9	2.3
Previous Tealbook	3.3	3.5	4.5	3.6	2.3	2.5	1.6	1.9	2.1
Unit labor costs	1.9	2.0	3.5	.9	2.7	-3.5	-.2	.4	.4
Previous Tealbook	1.9	2.0	3.5	.9	2.7	-3.5	.2	.2	.0
Core goods imports chain-wt. price index[2]	3.6	2.2	2.5	2.9	3.5	-1.9	3.1	3.2	1.4
Previous Tealbook[2]	3.6	2.2	2.5	2.9	3.5	-1.9	3.0	2.5	1.4

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

Other Macroeconomic Indicators

Item	2010				2011				2012				2010[1]	2011[1]	2012[1]
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Employment and production															
Nonfarm payroll employment[2]	.1	.7	.0	.3	.4	.6	.7	.8	.9	.9	.9	.9	1.0	2.6	3.7
Unemployment rate[3]	9.7	9.6	9.6	9.6	9.5	9.3	9.1	8.9	8.7	8.4	8.1	7.8	9.6	8.9	7.8
Previous Tealbook[3]	9.7	9.7	9.6	9.7	9.5	9.4	9.1	8.9	8.8	8.6	8.3	8.0	9.7	8.9	8.0
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]	-6.4	-6.6	-6.6	-6.3	-6.0	-5.8	-5.4	-5.1	-4.7	-4.2	-3.8	-3.3	-6.3	-5.1	-3.3
Previous Tealbook[4]	-6.4	-6.6	-6.6	-6.6	-6.4	-6.1	-5.9	-5.5	-5.1	-4.6	-4.2	-3.7	-6.6	-5.5	-3.7
Industrial production[5]	7.1	7.2	6.5	2.4	6.7	3.2	4.3	3.6	4.1	5.3	5.2	4.3	5.8	4.4	4.7
Previous Tealbook[5]	7.1	7.1	5.2	1.8	5.9	3.5	3.7	3.5	3.8	4.8	4.8	4.2	5.3	4.1	4.4
Manufacturing industr. prod.[5]	6.2	9.4	4.5	3.3	6.9	4.7	4.8	4.3	5.0	6.2	5.9	5.1	5.8	5.2	5.5
Previous Tealbook[5]	6.2	9.3	3.7	3.8	5.4	3.7	4.2	4.3	4.4	5.7	5.5	4.7	5.7	4.4	5.1
Capacity utilization rate - mfg.[3]	70.0	71.6	72.4	73.0	74.0	74.7	75.4	76.1	76.7	77.5	78.4	79.0	73.0	76.1	79.0
Previous Tealbook[3]	70.0	71.6	72.3	72.9	73.7	74.2	74.8	75.5	76.0	76.8	77.6	78.2	72.9	75.5	78.2
Housing starts[6]	.6	.6	.6	.5	.6	.6	.7	.7	.8	.8	.9	1.0	.6	.6	.9
Light motor vehicle sales[6]	11.0	11.3	11.6	12.3	12.3	12.6	13.0	13.5	13.9	14.7	15.2	15.7	11.5	12.9	14.9
Income and saving															
Nominal GDP[5]	4.8	3.7	4.6	3.8	5.7	4.7	4.9	5.1	5.5	5.6	5.6	5.7	4.3	5.1	5.6
Real disposable pers. income[5]	1.3	5.6	.9	1.3	5.3	3.4	3.6	4.1	.1	3.9	4.1	4.3	2.3	4.1	3.1
Previous Tealbook[5]	1.3	5.6	.9	1.5	5.2	3.3	3.7	4.1	.1	4.3	3.9	4.3	2.3	4.1	3.1
Personal saving rate[3]	5.5	6.2	5.9	5.4	5.9	5.9	5.9	6.0	5.2	5.2	5.2	5.2	5.4	6.0	5.2
Previous Tealbook[3]	5.5	6.2	5.8	5.6	6.1	6.1	6.2	6.2	5.4	5.4	5.3	5.3	5.6	6.2	5.3
Corporate profits[7]	48.9	12.7	6.6	20.9	9.8	2.8	5.4	5.5	4.1	5.9	6.0	7.3	21.3	5.9	5.8
Profit share of GNP[3]	10.7	10.9	11.0	11.4	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.4	11.5	11.5
Net federal saving[8]	-1,314	-1,337	-1,344	-1,333	-1,409	-1,375	-1,357	-1,336	-1,170	-1,124	-1,100	-1,071	-1,332	-1,369	-1,116
Net state & local saving[8]	29	16	48	69	33	40	34	30	36	44	54	59	40	34	48
Gross national saving rate[3]	11.1	11.7	11.6	11.7	11.8	12.1	12.3	12.5	12.7	13.1	13.4	13.7	11.7	12.5	13.7
Net national saving rate[3]	-1.8	-1.1	-1.1	-.7	-.5	-.2	.0	.3	.5	1.0	1.3	1.7	-.7	.3	1.7

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

Greensheets

Other Macroeconomic Indicators

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

Item	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	-5.4	1.0	2.6	3.7
Unemployment rate[2]	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.9	7.8
Previous Tealbook[2]	5.4	5.0	4.5	4.8	6.9	10.0	9.7	8.9	8.0
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]	-.4	.0	.0	.0	-4.9	-6.7	-6.3	-5.1	-3.3
Previous Tealbook[3]	-.5	.0	.0	.0	-4.9	-6.7	-6.6	-5.5	-3.7
Industrial production[4]	2.9	2.3	2.5	2.3	-7.6	-3.8	5.8	4.4	4.7
Previous Tealbook[4]	2.9	2.3	2.5	2.3	-7.6	-3.8	5.3	4.1	4.4
Manufacturing industr. prod.[4]	3.5	3.5	2.0	2.6	-10.0	-4.1	5.8	5.2	5.5
Previous Tealbook[4]	3.5	3.5	2.0	2.6	-10.0	-4.1	5.7	4.4	5.1
Capacity utilization rate - mfg.[2]	77.4	78.8	79.0	79.1	70.9	68.8	73.0	76.1	79.0
Previous Tealbook[2]	77.4	78.8	79.0	79.1	70.9	68.8	72.9	75.5	78.2
Housing starts[5]	2.0	2.1	1.8	1.4	.9	.6	.6	.6	.9
Light motor vehicle sales[5]	16.8	16.9	16.5	16.1	13.1	10.3	11.5	12.9	14.9
Income and saving									
Nominal GDP[4]	6.4	6.3	5.4	5.0	-.7	.6	4.3	5.1	5.6
Real disposable pers. income[4]	3.5	.6	4.6	1.5	1.0	.4	2.3	4.1	3.1
Previous Tealbook[4]	3.5	.6	4.6	1.5	1.0	.4	2.3	4.1	3.1
Personal saving rate[2]	3.6	1.5	2.5	2.1	5.2	5.5	5.4	6.0	5.2
Previous Tealbook[2]	3.6	1.5	2.5	2.1	5.2	5.5	5.6	6.2	5.3
Corporate profits[6]	21.9	19.6	3.7	-8.1	-31.9	42.5	21.3	5.9	5.8
Profit share of GNP[2]	10.5	11.8	11.6	10.1	6.9	9.8	11.4	11.5	11.5
Net federal saving[7]	-379	-283	-204	-245	-616	-1252	-1332	-1369	-1116
Net state & local saving[7]	-8	26	51	12	-47	-20	40	34	48
Gross national saving rate[2]	14.3	15.5	16.3	13.6	11.8	10.8	11.7	12.5	13.7
Net national saving rate[2]	2.7	3.5	4.2	1.3	-1.4	-2.3	-.7	.3	1.7

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	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2104	2162	2274	2576	466	643	565	532	476	674	593	559	561	786	671	642
Outlays[1]	3520	3456	3668	3681	795	930	855	903	935	923	908	929	969	916	867	968
Surplus/deficit[1]	-1416	-1294	-1394	-1105	-329	-287	-290	-371	-459	-249	-315	-370	-408	-129	-197	-325
Previous Tealbook	*-1416*	*-1294*	*-1389*	*-1074*	*-329*	*-287*	*-290*	*-384*	*-451*	*-236*	*-318*	*-368*	*-403*	*-114*	*-188*	*-317*
On-budget	-1553	-1371	-1398	-1183	-359	-351	-267	-392	-434	-289	-282	-395	-406	-198	-184	-377
Off-budget	137	77	4	79	30	64	-23	21	-25	40	-33	25	-2	69	-13	52
Means of financing																
Borrowing	1743	1474	1375	1185	478	344	390	368	253	234	520	375	413	169	227	330
Cash decrease	96	-35	60	0	-25	-71	-20	-33	268	9	-185	15	15	-20	-10	15
Other[2]	-424	-145	-41	-80	-124	14	-80	36	-62	5	-20	-20	-20	-20	-20	-20
Cash operating balance, end of period	275	310	250	250	219	290	310	343	75	65	250	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2261	2334	2448	2708	2323	2365	2416	2457	2407	2444	2484	2524	2724	2769	2815	2863
Expenditures	3355	3660	3817	3890	3637	3701	3761	3791	3816	3819	3841	3860	3894	3892	3915	3934
Consumption expenditures	977	1030	1089	1118	1017	1038	1062	1070	1087	1095	1102	1107	1117	1121	1125	1130
Defense	659	691	726	743	684	695	711	717	727	730	733	735	742	745	748	751
Nondefense	318	339	362	375	333	343	350	353	361	365	369	371	375	376	377	379
Other spending	2378	2630	2728	2773	2620	2663	2699	2721	2729	2723	2739	2753	2777	2771	2790	2805
Current account surplus	-1094	-1326	-1368	-1182	-1314	-1337	-1344	-1333	-1409	-1375	-1357	-1336	-1170	-1124	-1100	-1071
Gross investment	151	165	174	175	161	168	172	173	174	175	175	175	175	175	175	175
Gross saving less gross investment[3]	-1122	-1363	-1409	-1217	-1348	-1376	-1386	-1375	-1450	-1415	-1395	-1373	-1205	-1158	-1132	-1103
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-839	-1019	-1091	-960	-1011	-1032	-1041	-1031	-1127	-1104	-1100	-1095	-931	-907	-907	-904
Change in HEB, percent of potential GDP	2.2	1.0	.2	-1.0	.1	.1	.0	-.1	.5	-.2	-.1	-.1	-1.0	-.2	-.1	-.1
Fiscal impetus (FI), percent of GDP	1.1	1.0	.3	-.7	.3	.3	.2	.0	.1	.0	.0	.0	-.4	-.2	-.2	-.2
Previous Tealbook	*1.1*	*1.1*	*.2*	*-.6*	*.3*	*.3*	*.2*	*.0*	*.0*	*.0*	*.0*	*.0*	*-.3*	*-.1*	*-.3*	*-.2*

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. 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 annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus.
a Actual.

Greensheets

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

Period[1]	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
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	13.1	9.5	4.9	5.0
2008	6.0	.3	-.4	1.5	5.5	2.3	24.2	-.7
2009	3.0	-1.7	-1.5	-4.4	-2.6	4.9	22.7	.6
2010	4.5	-2.0	-3.1	-2.0	1.3	5.2	20.2	4.3
2011	5.0	.2	-1.5	3.5	2.7	4.3	14.7	5.1
2012	5.3	2.2	-.1	7.9	4.1	4.8	10.6	5.6
Quarter								
2009:1	4.7	-.8	-.2	-3.7	.1	5.6	24.4	-3.9
2	4.4	-1.9	-1.9	-4.8	-2.6	4.3	28.9	-.4
3	2.1	-2.2	-2.6	-3.9	-4.3	5.8	19.0	2.3
4	.9	-2.0	-1.5	-5.6	-3.7	3.8	11.9	4.7
2010:1	4.3	-2.1	-4.4	-3.9	.4	5.6	20.5	4.8
2	4.7	-2.2	-2.3	-3.3	-.1	-1.5	24.4	3.7
3	4.1	-1.8	-2.5	-1.7	1.7	5.4	16.0	4.6
4	4.6	-1.9	-3.6	.9	3.1	11.0	14.6	3.8
2011:1	2.7	-.7	-2.2	1.5	2.6	3.9	7.5	5.7
2	5.3	.1	-1.4	2.9	2.4	4.2	16.3	4.7
3	6.5	.6	-1.2	4.2	2.6	4.3	19.2	4.9
4	5.1	.9	-1.1	5.3	3.1	4.6	12.9	5.1
2012:1	5.5	1.6	-.4	6.4	3.6	4.8	12.5	5.5
2	5.5	2.0	-.2	7.4	3.9	4.8	11.7	5.6
3	4.3	2.4	.1	8.2	4.2	4.7	6.5	5.6
4	5.5	2.6	.2	8.7	4.4	4.7	10.1	5.7

Note: Quarterly data are at seasonally adjusted annual rates.
1. Data after 2010:Q3 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		2011				2012			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	958.6	1302.8	1569.7	1770.0	1120.7	1359.3	767.4	1731.0	2119.7	1660.6	1850.7	1887.2	1433.6	1908.5
Net equity issuance	-64.6	-267.3	-244.0	-248.0	-348.3	-305.6	-220.0	-220.0	-268.0	-268.0	-248.0	-248.0	-248.0	-248.0
Net debt issuance	1023.2	1570.1	1813.7	2018.0	1468.9	1664.9	987.4	1951.0	2387.7	1928.6	2098.7	2135.2	1681.6	2156.5
Borrowing indicators														
Debt (percent of GDP)[1]	241.7	241.8	242.0	241.5	241.9	242.3	241.2	240.8	241.5	242.0	241.9	241.9	241.5	241.1
Borrowing (percent of GDP)	7.2	10.7	11.8	12.5	10.0	11.2	6.5	12.8	15.5	12.3	13.2	13.3	10.3	13.1
Households														
Net borrowing[2]	-240.0	-270.0	27.3	289.2	-236.9	-257.1	-98.6	19.4	73.7	114.8	216.2	265.1	323.3	352.3
Home mortgages	-161.2	-325.1	-146.9	-7.4	-255.8	-363.7	-220.2	-139.4	-119.0	-108.8	-39.5	-19.7	9.8	19.7
Consumer credit	-115.3	-49.3	85.7	198.9	-41.9	21.6	37.2	71.4	102.9	131.2	161.4	188.5	214.2	231.8
Debt/DPI (percent)[3]	124.4	118.5	112.2	109.2	117.9	116.4	114.0	112.6	111.4	110.2	110.3	109.4	108.7	107.9
Business														
Financing gap[4]	-44.7	45.3	-13.8	120.0	156.6	-39.2	-55.1	-16.5	10.8	5.7	67.3	103.2	144.3	165.2
Net equity issuance	-64.6	-267.3	-244.0	-248.0	-348.3	-305.6	-220.0	-220.0	-268.0	-268.0	-248.0	-248.0	-248.0	-248.0
Credit market borrowing	-292.0	136.6	296.1	463.6	181.3	335.7	283.0	264.3	290.1	347.0	411.6	443.1	489.9	509.9
State and local governments														
Net borrowing	111.3	123.4	107.6	125.6	128.6	266.9	97.6	105.6	109.6	117.6	125.6	125.6	125.6	125.6
Current surplus[5]	248.2	298.3	264.9	285.7	327.4	296.4	261.2	270.1	265.4	263.1	270.4	280.3	292.6	299.5
Federal government														
Net borrowing	1443.9	1580.2	1382.7	1139.6	1395.9	1319.5	705.4	1561.8	1914.4	1349.3	1345.3	1301.4	742.8	1168.9
Net borrowing (n.s.a.)	1443.9	1580.2	1382.7	1139.6	390.1	367.9	253.4	234.4	519.6	375.3	413.3	169.3	226.7	330.2
Unified deficit (n.s.a.)	1471.3	1277.0	1393.6	1059.6	290.2	370.8	459.5	248.8	315.0	370.3	408.3	129.3	196.7	325.2
Depository institutions														
Funds supplied	-639.9	-135.8	70.9	247.6	772.5	-313.4	-196.7	79.0	190.8	210.4	230.6	260.8	277.4	221.5

Note: Data after 2010:Q3 are staff projections.
1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
2. Includes change in liabilities not shown in home mortgages and consumer credit.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. For corporations, excess of capital expenditures over U.S. internal funds.
5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
n.s.a. Not seasonally adjusted.

Greensheets

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

			----------Projected----------									
	2010				2011				2012			
Measure and country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP [1]												
Total foreign	5.4	5.5	2.1	3.1	3.2	3.4	3.4	3.5	3.5	3.6	3.6	3.7
Previous Tealbook	*5.5*	*5.4*	*2.1*	*2.7*	*3.0*	*3.1*	*3.2*	*3.3*	*3.4*	*3.4*	*3.5*	*3.6*
Advanced foreign economies	3.9	3.3	1.7	1.7	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.6
Canada	5.6	2.3	1.0	2.7	2.7	2.8	2.8	2.8	2.7	2.7	2.6	2.6
Japan	6.8	3.0	4.5	-1.6	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1
United Kingdom	1.2	4.6	2.9	1.9	1.3	2.1	2.3	2.4	2.5	2.5	2.5	2.6
Euro area	1.5	4.1	1.4	1.5	1.3	1.2	1.2	1.4	1.7	2.0	2.3	2.7
Germany	2.3	9.5	2.8	2.5	2.1	1.9	1.8	1.8	2.1	2.4	2.7	3.0
Emerging market economies	7.4	8.4	2.5	4.9	4.8	5.0	5.1	5.1	5.1	5.1	5.1	5.1
Asia	14.4	8.0	2.1	6.1	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.1
Korea	8.8	5.8	3.0	3.4	3.8	4.2	4.3	4.4	4.4	4.4	4.5	4.6
China	10.1	6.8	9.8	9.1	8.7	8.7	8.6	8.6	8.5	8.5	8.5	8.5
Latin America	1.4	9.3	2.8	3.1	3.9	4.2	4.3	4.2	4.2	4.2	4.1	4.1
Mexico	-.2	9.5	3.0	3.2	3.7	4.0	4.3	4.3	4.3	4.3	4.3	4.3
Brazil	9.4	7.2	2.1	3.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Consumer prices [2]												
Total foreign	3.4	1.3	2.2	4.9	3.7	2.6	2.3	2.2	2.3	2.3	2.3	2.4
Previous Tealbook	*3.4*	*1.4*	*2.2*	*3.9*	*3.0*	*2.5*	*2.2*	*2.2*	*2.2*	*2.3*	*2.3*	*2.4*
Advanced foreign economies	2.0	-.0	1.0	3.4	2.3	1.3	1.2	1.2	1.4	1.3	1.4	1.5
Canada	2.3	-.9	2.4	3.5	2.3	1.8	1.9	2.0	2.3	2.1	2.1	2.1
Japan	.0	-1.9	-1.9	2.9	-.8	-.8	-.8	-.7	-.7	-.6	-.5	-.4
United Kingdom	5.4	2.4	1.3	4.5	8.1	1.8	1.8	1.8	1.8	1.8	2.0	3.4
Euro Area	1.9	1.5	1.2	3.5	3.0	1.8	1.3	1.3	1.4	1.4	1.5	1.6
Germany	1.5	.8	.9	3.2	1.9	1.7	1.3	1.2	1.3	1.4	1.4	1.6
Emerging market economies	4.7	2.6	3.3	6.4	5.1	3.7	3.3	3.2	3.2	3.2	3.2	3.1
Asia	3.6	2.1	3.6	7.0	4.7	3.3	2.8	2.8	2.8	2.8	2.8	2.8
Korea	3.3	1.9	3.4	6.0	4.4	2.9	2.6	2.4	2.4	2.4	2.4	2.4
China	3.0	2.6	4.3	8.4	4.6	3.1	2.7	2.7	2.7	2.7	2.7	2.7
Latin America	7.8	3.6	2.3	4.8	6.1	4.9	4.3	4.3	4.2	4.1	4.1	4.1
Mexico	7.9	2.7	2.1	4.3	5.6	4.4	3.9	3.9	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.1	7.4	7.8	6.6	5.3	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	-------Projected	-------	-------
							2010	2011	2012
Real GDP [1]									
Total foreign	3.9	4.0	4.0	4.2	-.8	.5	4.0	3.4	3.6
Previous Tealbook	*3.9*	*4.1*	*4.0*	*4.2*	*-.8*	*.5*	*3.9*	*3.2*	*3.5*
Advanced foreign economies	2.6	2.8	2.6	2.4	-1.8	-1.5	2.6	2.1	2.4
Canada	3.7	3.1	1.9	2.5	-.9	-1.1	2.9	2.8	2.7
Japan	1.1	2.9	2.1	1.8	-4.7	-1.8	3.1	1.7	2.0
United Kingdom	2.4	2.4	2.7	2.4	-2.7	-2.8	2.7	2.0	2.5
Euro area	1.7	2.1	3.6	2.2	-2.1	-2.0	2.1	1.2	2.2
Germany	.2	1.6	4.5	1.8	-2.0	-2.0	4.2	1.9	2.5
Emerging market economies	5.6	5.8	6.0	6.5	.4	2.9	5.8	5.0	5.1
Asia	6.1	7.8	7.2	8.4	.7	7.2	7.6	6.0	6.0
Korea	2.7	5.2	4.6	5.7	-3.2	6.1	5.2	4.2	4.5
China	10.0	10.5	11.0	12.6	7.2	11.5	8.9	8.6	8.5
Latin America	5.2	3.9	4.8	4.5	-.2	-.8	4.1	4.2	4.2
Mexico	4.6	3.6	4.1	3.7	-.9	-2.2	3.8	4.0	4.3
Brazil	6.1	2.2	4.8	6.6	.7	4.9	5.6	4.0	4.0
Consumer prices [2]									
Total foreign	2.8	2.3	2.1	3.7	3.3	1.2	2.9	2.7	2.3
Previous Tealbook	*2.8*	*2.3*	*2.1*	*3.7*	*3.4*	*1.2*	*2.7*	*2.5*	*2.3*
Advanced foreign economies	1.8	1.6	1.4	2.2	2.0	.2	1.6	1.5	1.4
Canada	2.3	2.3	1.4	2.5	1.9	.8	1.8	2.0	2.1
Japan	.5	-1.0	.3	.6	.8	-1.8	-.2	-.8	-.5
United Kingdom	1.4	2.1	2.7	2.1	3.9	2.1	3.4	3.3	2.2
Euro Area	2.3	2.3	1.8	2.9	2.3	.4	2.0	1.9	1.5
Germany	2.1	2.2	1.3	3.1	1.7	.3	1.6	1.5	1.4
Emerging market economies	3.9	3.0	2.9	5.1	4.6	2.2	4.2	3.8	3.2
Asia	3.1	2.6	2.4	5.5	3.7	1.3	4.1	3.4	2.8
Korea	3.4	2.5	2.1	3.4	4.5	2.4	3.6	3.1	2.4
China	3.2	1.4	2.1	6.6	2.6	.6	4.5	3.3	2.7
Latin America	5.6	3.7	4.1	4.2	6.6	4.0	4.6	4.9	4.1
Mexico	5.3	3.1	4.1	3.8	6.2	4.0	4.2	4.4	3.7
Brazil	7.2	6.1	3.2	4.3	6.2	4.2	5.4	6.2	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	**-436.6**	**-492.9**	**-508.9**	**-461.6**	**-503.6**	**-508.2**	**-525.6**	**-486.0**	**-483.6**	**-461.6**	**-465.9**	**-448.2**
Previous Tealbook	*-436.6*	*-493.1*	*-514.9*	*-506.3*	*-544.2*	*-531.2*	*-531.6*	*-530.2*	*-535.5*	*-523.0*	*-535.2*	*-522.7*
Current account as percent of GDP	-3.0	-3.4	-3.5	-3.1	-3.3	-3.3	-3.4	-3.1	-3.1	-2.9	-2.9	-2.7
Previous Tealbook	*-3.0*	*-3.4*	*-3.5*	*-3.4*	*-3.6*	*-3.5*	*-3.5*	*-3.4*	*-3.4*	*-3.3*	*-3.3*	*-3.2*
Net goods & services	-457.8	-532.3	-537.6	-489.4	-505.3	-524.8	-541.6	-507.5	-497.2	-490.0	-495.6	-489.4
Investment income, net	168.8	180.4	172.6	148.5	135.3	134.2	135.1	136.3	142.1	142.8	147.8	155.9
Direct, net	275.9	286.6	276.0	265.5	254.9	259.7	263.9	271.2	281.5	290.9	300.0	313.5
Portfolio, net	-107.1	-106.2	-103.4	-117.0	-119.5	-125.5	-128.8	-134.9	-139.3	-148.0	-152.2	-157.6
Other income and transfers, net	-147.6	-141.0	-143.9	-120.7	-133.6	-117.5	-119.1	-114.7	-128.6	-114.5	-118.1	-114.7

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**	**-475.0**	**-505.8**	**-464.8**
Previous Tealbook	*-630.5*	*-747.6*	*-802.6*	*-718.1*	*-668.9*	*-378.4*	*-487.7*	*-534.3*	*-529.1*
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.3	-2.9
Previous Tealbook	*-5.3*	*-5.9*	*-6.0*	*-5.1*	*-4.7*	*-2.7*	*-3.3*	*-3.5*	*-3.3*
Net goods & services	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-504.3	-519.8	-493.0
Investment income, net	73.4	78.8	54.7	106.6	159.3	129.2	167.6	135.2	147.2
Direct, net	150.9	173.2	174.0	241.6	287.7	252.1	276.0	262.4	296.5
Portfolio, net	-77.5	-94.4	-119.4	-134.9	-128.4	-122.8	-108.4	-127.2	-149.3
Other income and transfers, net	-94.5	-112.2	-98.1	-122.6	-129.3	-132.8	-138.3	-121.2	-119.0

Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
AIG	American International Group, Inc.
BEA	Bureau of Economic Analysis, Department of Commerce
BOJ	Bank of Japan
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CP	commercial paper
CPI	consumer price index
CRE	commercial real estate
CSRDF	Civil Service Retirement and Disability Fund
DISP	Debt Issuance Suspension Period
ECB	European Central Bank
EDO Model	Estimated Dynamic Optimization-Based Model
EFSF	European Financial Stability Facility
EME	emerging market economy
E&S	equipment and software
ESF	Exchange Stabilization Fund
EU	European Union
EUC	Emergency Unemployment Compensation
FDIC	Federal Deposit Insurance Corporation
FFB	Federal Financing Bank

FOMC	Federal Open Market Committee; also, the Committee
FRB	Federal Reserve Board
FRBNY	Federal Reserve Bank of New York
GDP	gross domestic product
G Fund	Government Securities Investment Fund
GM	General Motors
GSE	government-sponsored enterprise
IP	industrial production
JOLTS	Job Openings and Labor Turnover Survey
Libor	London interbank offered rate
LLC	limited liability company
MBS	mortgage-backed securities
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
PPI	producer price index
repo	repurchase agreement
SFA	Supplementary Financing Account
SFP	Supplementary Financing Program
SLGS	State and Local Government Series
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account

TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TIPS	Treasury inflation-protected securities
WTI	West Texas Intermediate
ZLB	zero lower bound