

U.S. Economic Outlook

Research and Statistics Group

October 21, 2010



The views expressed are those of the New York Federal Reserve Research Staff and do not necessarily represent the views of the Federal Reserve Bank of New York nor the Federal Reserve System.

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Growth, AR or Q4/Q4 gth. rate	2010 Q2*	2010 Q3	2010 Q4	2009*	2010	2011
Real GDP						
FRBNY	1.7	1.4	2.2	0.2	2.2	3.7
Consensus**	1.7	1.9	2.3	0.2	2.4	2.9
PCE Deflator						
FRBNY	0.0	1.3	2.0	1.5	1.1	1.4
Core PCE Deflator						
FRBNY	1.0	1.6	1.7	1.7	1.1	1.2
Unemp. Rate (Annual Data is Q4 Average)						
FRBNY	9.7	9.6	9.8	10.0	9.8	8.3
Consensus**	9.7	9.6	9.6	10.0	9.6	9.1

*Released Data

**Blue Chip Forecast (10/10/2010)

	Evolution of FRBNY Forecast			
	2010 (Q4/Q4)		2011 (Q4/Q4)	
	9/10/10	10/21/10	9/10/10	10/21/10
Real GDP	2.6	2.2	4.0	3.7
PCE Deflator	1.1	1.1	1.4	1.4
Core PCE Deflator	1.1	1.1	1.1	1.2
Unemp. Rate (Q4 Avg.)	9.5	9.8	8.0	8.3

Outlook Overview

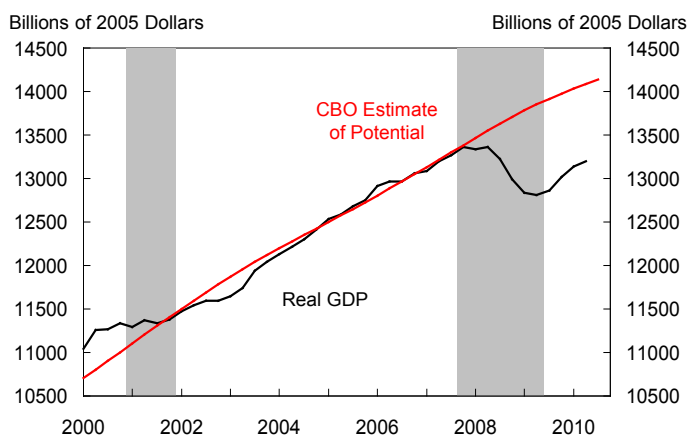
Our modal forecast for growth of real GDP in 2010 and 2011 has been marked down somewhat from that in September, while the inflation forecast is little changed. A number of recent data releases have been weaker than we anticipated, particularly those related to residential and business fixed investment as well as the state and local government sector. However, the broad themes of the forecast are unchanged—relatively sluggish growth through mid 2011 as the economy continues to work through several structural imbalances. With growth only slightly above potential in 2011, the unemployment rate will remain stubbornly high and core inflation is likely to remain below the mandate consistent range.

The projected growth rates for 2010 and 2011 are well below the rates of growth experienced during the initial stages of recovery from previous severe recessions. There are several reasons for expecting a relatively muted recovery. The household sector has suffered a large shock to income and wealth and remains highly leveraged.

Second, there remains a substantial overhang in the housing market which, combined with tightened mortgage underwriting standards, is impeding a recovery of housing production. With the two main drivers of final demand, consumption and residential investment, on a muted growth trajectory, any further recovery of business fixed investment (which to this point largely reflected replacement investment) is likely to be subdued. This is particularly true with regard to investment in nonresidential structures given the continued high retail and office vacancy rates. Finally, the state and local government sector continues to undergo a major adjustment to a new fiscal reality. Combined, these forces are resulting in a weak job market with a quite low rate of growth of compensation per hour.

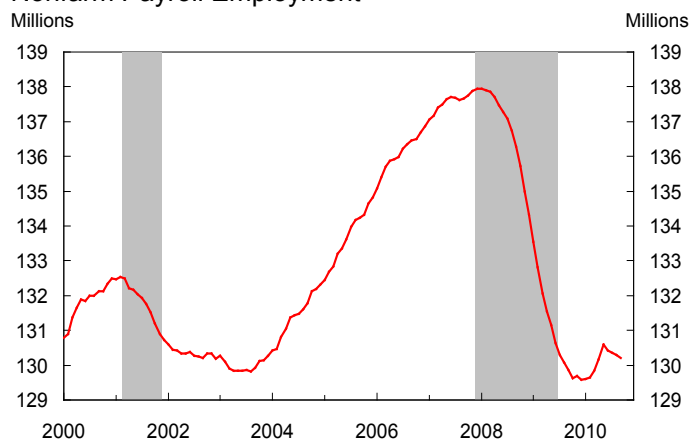
As we move into 2011 we expect the underlying fundamentals of the recovery to gradually improve such that growth rises to about 3 ½% to 4% in 2011 and 4% to 4 1/2% in 2012 with the unemployment rate steadily declining.

Real and Potential GDP



Source: Bureau of Economic Analysis and Congressional Budget Office

Nonfarm Payroll Employment



Source: Bureau of Labor Statistics

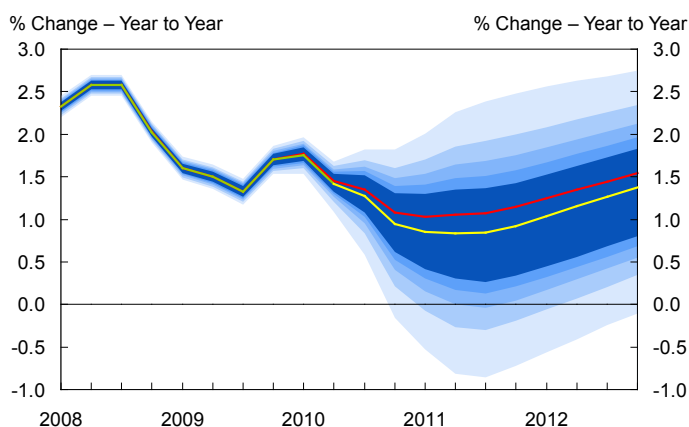
Underlying this projection is our expectation that financial market functioning improves, lending standards ease somewhat, and consumer and business confidence and the general appetite for risk increases. With household income and balance sheets improving and credit flowing more normally, the substantial pent-up demand for consumer durables and housing will start to be satisfied. This will create an environment more conducive to business fixed investment and will generate more tax revenues for state and local governments.

The inflation data have been largely consistent with our expectations, and so our inflation outlook is little changed. Barring a significant decline in the level of the economy's potential output or its potential growth rate, a large output gap will persist through the end of 2011, putting downward pressure on the inflation rate. However, stable inflation expectations near the mandate-consistent range are the dominant force, keeping inflation from falling much further. Accordingly, we expect core inflation to slow to just above 1% (Q4/Q4) in 2010 and to edge up

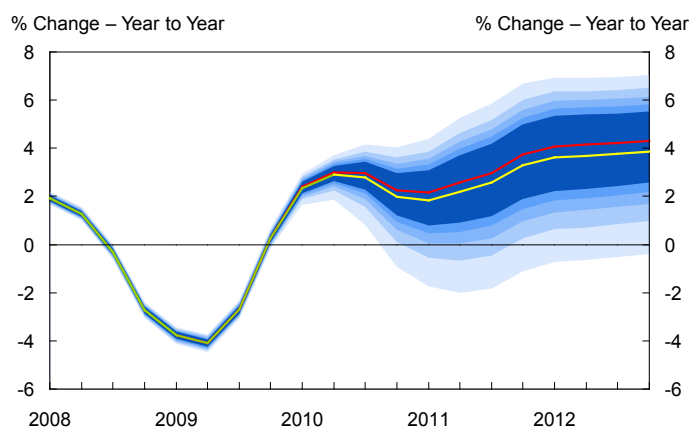
modestly in 2011. By 2012, as final demand continues to firm, resource slack diminishes, and inflation expectations remain anchored, we expect core inflation to move up toward the "mandate consistent" range.

The risks to the outlook for real GDP growth are skewed to the downside. The risks to the inflation outlook also are skewed to the downside. Because of the unusual developments in recent years, the heightened uncertainty surrounding recoveries from recessions associated with financial crises, and uncertainties about the timing of the removal of global policy accommodation as well as about fiscal policy developments, the uncertainty around our outlook remains much greater than is typical.

Core PCE Inflation Forecast Distribution



Real GDP Growth Forecast Distribution

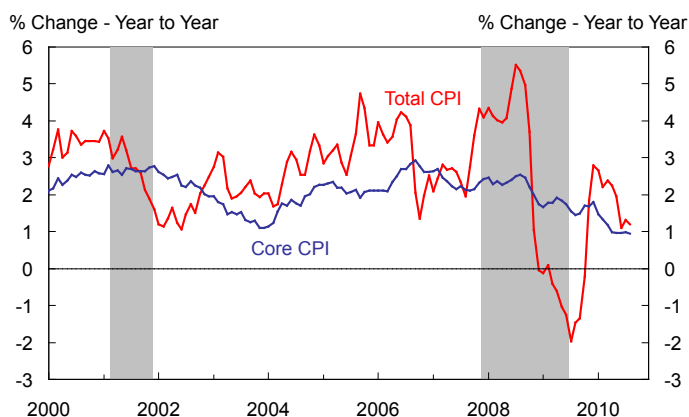


Risks Overview

Inflation. The economic and financial market developments over the past month have led to little change in our inflation risk assessment. Consequently, the risks to the inflation outlook remain skewed to the downside. We still put considerable weight on the *Global Credit Crunch* scenario, which has downside inflation implications. A near-term downside risk is that continued sizable resource slack will put further downward pressure on inflation. Continued robust productivity growth (the *Productivity Boom* scenario) is another downside inflation risk, because it exerts downward pressure on costs. One upside risk is that concerns about fiscal sustainability lead to a dollar depreciation and higher inflation (the *Fiscal Consolidation* scenario). Another upside risk is that accommodative policy begins to raise inflation expectations (the *Loss of Credibility* scenario). We put a relatively lower weight on this latter scenario, as measures of inflation expectations still appeared to be contained. There continues to be a significant probability of deflation over the near-to-medium term.

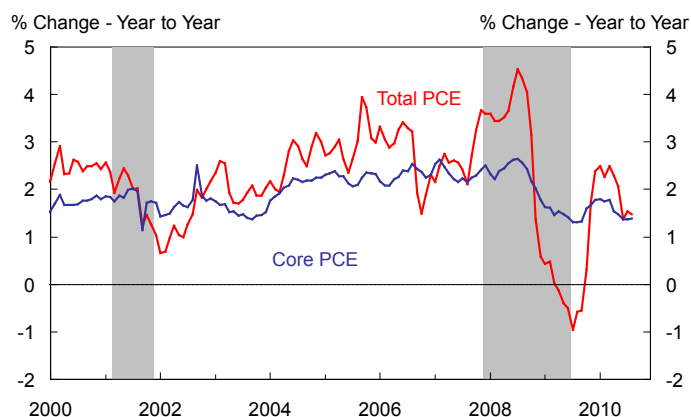
Real activity. The recent developments also indicate little change to the risks to the real activity outlook; consequently, these risks remain skewed more to the downside than they were earlier in the year. One downside risk is that tight credit conditions persist and continue to restrain real activity (the *Global Credit Crunch* and *Global Deflation* scenarios—a major difference between the two is in their persistence). Another downside risk is that concerns about fiscal sustainability will lead to a US fiscal consolidation at a time when aggregate demand remains weak, thus slowing real activity (the *Fiscal Consolidation* scenario). One additional downside risk is that recent gains in productivity growth are reversed (the *Productivity Slump* scenario). The primary upside risk to our forecast is that the rapid productivity growth of 2009 continues into 2010 and beyond, leading to higher-than-expected GDP growth. This risk is encompassed in the *Productivity Boom* scenario, whose weight is lower than it was earlier in the year even though it remains our most likely alternative scenario.

Total and Core CPI Deflator



Source: Bureau of Labor Statistics

Total and Core PCE Deflator



Source: Bureau of Economic Analysis

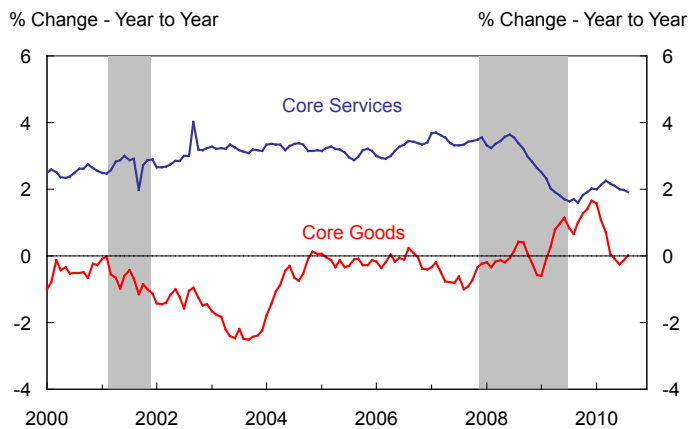
Inflation

Developments. The steady process of disinflation that has been a constant of the U.S. macroeconomic landscape since 2008—with only a brief interruption at the end of 2009—appears to have stopped for now, although at levels of inflation below its mandate consistent range. The 12-month change in the core Consumer Price Index (CPI ex food and energy) was 1% in August, the same it has been since April. This compares to a high before the recent recession of 2.9% in September 2006. In the meantime, inflation in the core Personal Consumption Expenditure (PCE) price index returned close to the lows observed in the summer of 2009. This price index rose 1.4% over the 12 months ended in August 2010, down from a recent maximum of 2.6% in July 2008. Also the headline inflation measures have been trending downwards since the beginning of the year and are currently close to their core counterparts. Overall CPI inflation was 1.2% in August, while headline PCE inflation was 1.5% in June, both on a 12-month basis.

Another notable feature of the inflation landscape during this recession is the pronounced deceleration in core service prices. This turnaround, which is evident in both the CPI and the PCE price index, is remarkable, because service price inflation tends to be quite stable and in fact had been moving in a fairly narrow range since 2000.

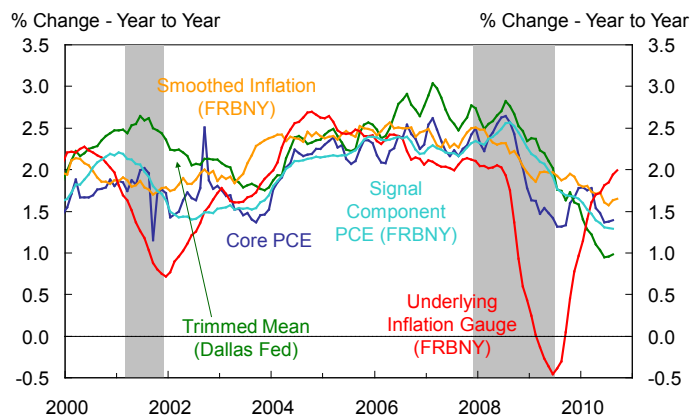
Moreover, service prices are often thought of as conveying a particularly useful signal for monetary policy, because they are influenced mostly by domestic economic developments. At the same time, inflation in core goods increased fairly steadily through 2008-09, from negative levels in 2007. This pattern in the relative inflation of services and goods stands in contrast to what was observed in 2003, when low levels of core inflation very similar to those we are experiencing today were driven primarily by a fall in the inflation rate of core goods. However, the pattern observed during the recent recession partly reversed itself in 2010, when inflation in core goods fell, while that in core services stabilized. This reversal might indicate that the strong deflationary pressures that

PCE: Core Services and Core Goods



Source: Bureau of Economic Analysis and FRBNY calculations

Measures of PCE Inflation Since 2000



Source: Bureau of Economic Analysis, Dallas Fed, FRBNY and Bank of Switzerland

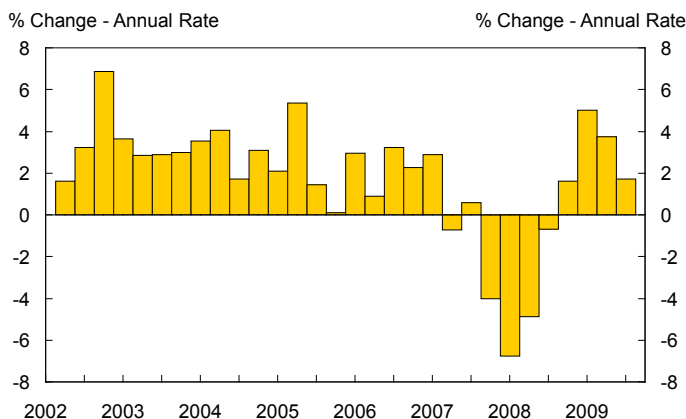
were at work during most of the recession might finally be subsiding.

Besides core measures, we look at several alternative measures of underlying inflation: median, trimmed mean, smoothed measures, our underlying inflation gauge (UIG), and our signal-component indicator (for PCE inflation). Most of these measures have been falling since the fall of 2008, although they have also stabilized more recently, thus confirming the impression of considerable slowing of underlying inflation that is conveyed by the simple ex-food and energy core measure. The UIG, which has rebounded from its mid-2009 low, has increased recently mostly as a result of the real activity variables included in its calculation. However, this effect is fading given the recent weakness in the real economy.

Outlook and Risks. Our central projection for 2010-11 continues to see core inflation roughly stable at current levels through 2011. This forecast is based on the low levels of resource utilization that continue to prevail in the economy, on the extreme weakness in unit labor costs, and on the broad stability of long-term inflation expectations.

Around this central scenario, risks remain somewhat to the downside, given the economy's extreme vulnerability to further negative shocks at a time when the policy rate is effectively stuck at its zero lower bound.

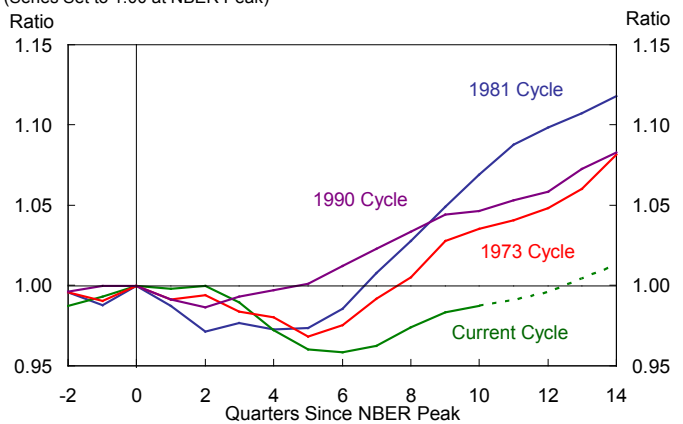
Quarterly Real GDP Growth



Source: Bureau of Economic Analysis

Level of Real GDP

(Series Set to 1.00 at NBER Peak)



Source: Bureau of Labor Statistics

Note: Dashed line represents FRBNY modal forecast.

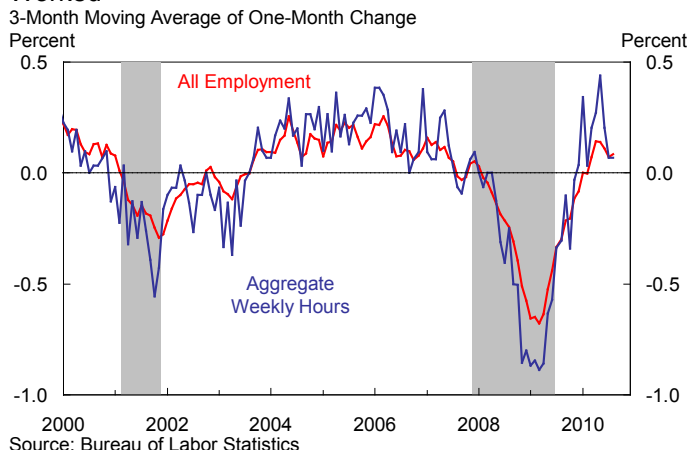
Real Activity

Developments. Following the deepest downturn since the Great Depression, we have now had four consecutive quarters of growth of real GDP. However, as of 2010Q2 real GDP was just 3% above the year ago level, which is only modestly above our estimate of the economy's potential growth rate. The unemployment rate, which rose to 10% in 2009Q4 from 4½% over the first half of 2007, remains stubbornly high at 9.6% as of September. To add to the sense of disappointment, the initial burst of growth, led by a pronounced inventory cycle and a relatively large fiscal stimulus package, has begun to fade. Economic growth slowed to just 1.7% (annual rate) in 2010Q2, and at this writing is likely to have been around 1½% in the third quarter.

Outlook and Risks. While the downside risks to growth have increased as the forward momentum of the recovery has faded, in our modal forecast the current relatively sluggish pace of growth is a pause rather than the precursor to a "double dip". Pauses in the midst of recoveries are not uncommon.

By the final quarter of 2010 and into 2011 we expect growth of real GDP to begin to firm as financial conditions continue their gradual improvement and the structural imbalances currently impeding growth begin to fade. By 2011 we expect growth in the 3½% to 4% range (Q4/Q4), which is solidly above our estimate of potential. The rate of growth of employment is likely to be held back by further increases in the average workweek and the unemployment rate is likely to remain stubbornly high due to a rising labor force participation rate. Nonetheless, growth of hours worked, and therefore of wage and salary income, should be quite solid, particularly under the assumption that the rate of growth of productivity slows to its long-run trend. Given the unusual developments of the past few years, the uncertainties and risks around this forecast are larger than normal.

Private Nonfarm Payroll Employment and Total Hours Worked



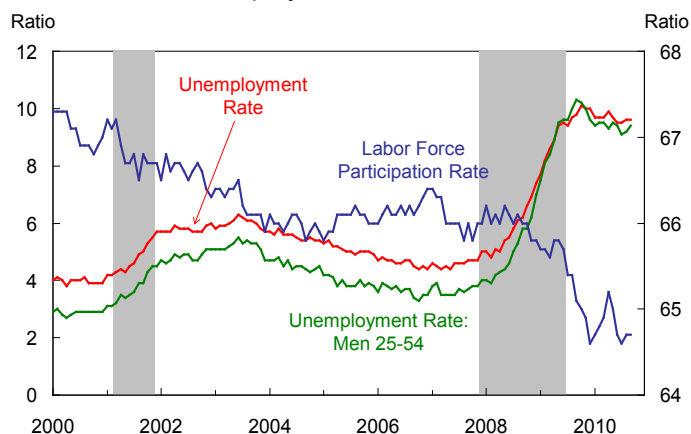
Labor Market

Developments. The labor market gradually started to recover in 2010 and nonfarm payroll employment increased by 613,000 through September. Private nonfarm payroll employment increased 863,000, averaging around 95,000 per month. Payroll increases were concentrated in a certain group of sectors. Education and health care, leisure and hospitality, professional and business services, and manufacturing were among the strong sectors. The diffusion index---the fraction of industries increasing employment---was 49.8 in September, well above its level a year ago, but still low for a recovery.

Consistent with the increase in employment, aggregate weekly hours also started to recover and have risen by 2.2% from October 2009 to September 2010. The length of the average workweek also started to recover and increased from 33.7 hours in October 2009 to 34.2 hours in September 2010.

The unemployment rate rose rapidly over the recession, increasing from 7.4% in December 2008 to a peak of 10.1% in October 2009 (its highest level since 1983). It declined to 9.7% in January 2010 and has since remained around 9.5% to 9.9%. The labor

Measures of the Employment Situation

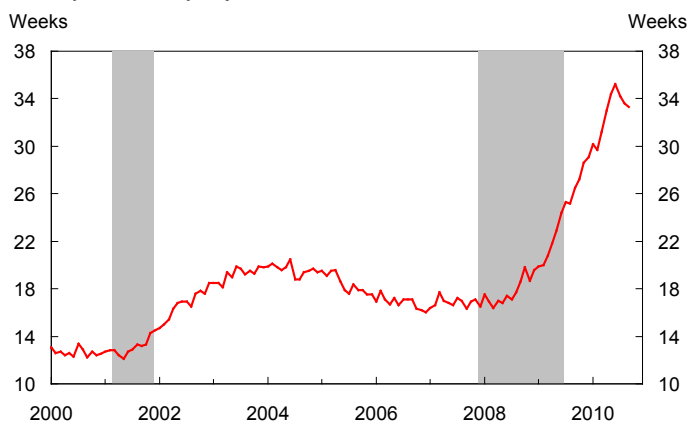


force participation rate declined by 1.2 percentage points over 2009 to 64.6%, while the employment to population ratio fell 2.7 percentage points to 58.2% (the lowest since 1983). Both the labor force participation rate and the employment to population ratio increased in each of the first four months of 2010 before declining in May, June and July. The labor force participation rate bottomed out in December 2009 at 64.6% and had increased to 65.2% in April. However, in May, June and July, this increase reversed and the labor force participation rate went down to 64.6%. The employment to population ratio also increased in the first four months of 2010 from its December 2009 low of 58.2% to 58.8% in April. However, it dropped to 58.4% in July. In August, both the labor force participation rate and the employment to population ratio recovered slightly. Currently, both indicators stand at levels very close to their January 2010 levels.

The average duration of unemployment was at a postwar high of 35.2 weeks in June. Since then the average duration of unemployment has come down to 33.3 weeks. Even though it is hard to be certain that the peak had been reached, the declines in the duration

Average Duration of Unemployment

Monthly, Seasonally Adjusted



Source: Bureau of Labor Statistics

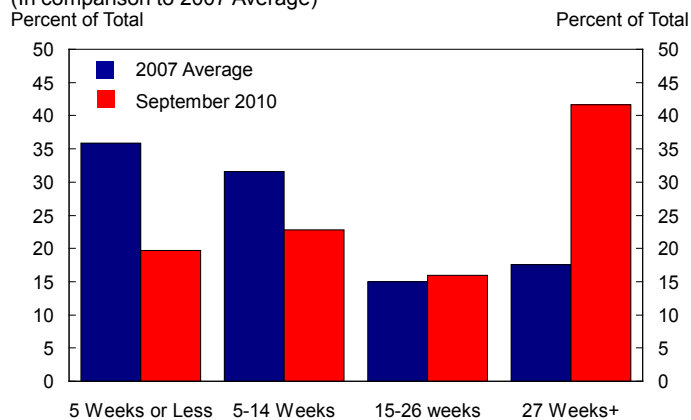
of unemployment is a good sign since the average duration of unemployment is a lagging indicator, peaking after the unemployment rate as more jobs begin to be created. The exhaustion of unemployment insurance benefits could also affect the duration of unemployment by causing some long-term unemployed claimants to leave the labor force

Outlook and Risks. Labor market developments in 2010 indicate that the recovery in the labor market has begun. However, recent labor market data are in line with a lackluster labor market recovery. The household survey had been strong in the first four months of 2010 but has since slackened. As a result, the unemployment rate still remains high at 9.6%.

We project that the unemployment rate will persist just under 10% in 2010 while employment growth will be sluggish around 85,000 per month. In addition to slow employment growth, we expect that there are other factors that may delay a significant fall in the unemployment rate. A reduction in the mobility of workers due to continued problems in the housing market and skill and location mismatches between job vacancies and unemployed workers reflect risks that might contribute to a slow decline in the unemployment rate. Another important issue is long-

September 2010 Unemployed Persons by Duration

(In comparison to 2007 Average)

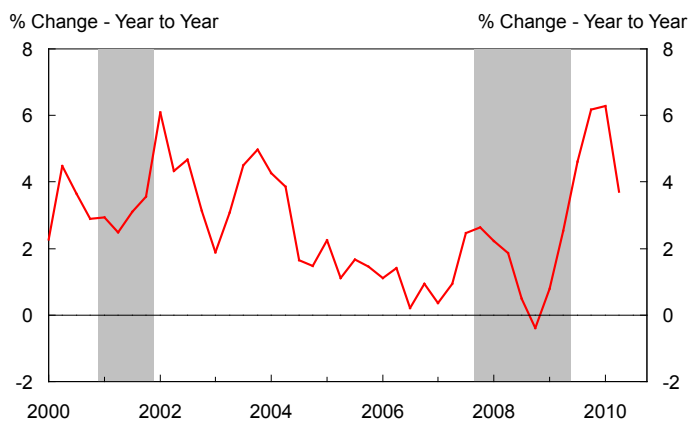


Source: Bureau of Labor Statistics

term unemployment. Despite recent declines in the duration of unemployment, the average duration of unemployment stands at 33.3 weeks. The duration distribution of unemployment is now more skewed towards the long-term unemployed than it was before the recession started. The fraction of unemployed workers who have been unemployed for 27 or more weeks was 18.7% in March 2007 while it stands at 41.7% in September 2010. An important feature of unemployment flows in the U.S. is that average exit rates from unemployment decline with duration of unemployment spells—so called negative duration dependence. As a consequence, the interaction of long-term unemployment and negative duration dependence is likely to be an important risk factor in the labor market in the near-term since the long-term unemployed leave unemployment more slowly.

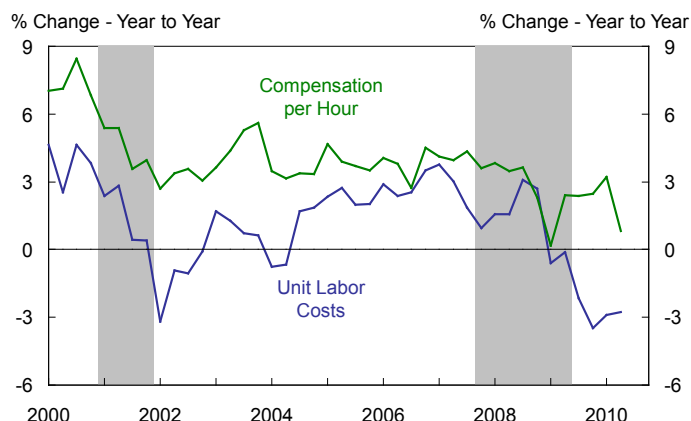
In 2011, we expect the structural issues to subside, leading to a labor market recovery that is more robust than those following the 1990-91 and 2001 recessions. We project payroll employment to increase by roughly 330,000 jobs per month, which should lead the unemployment rate to fall gradually throughout 2011 to just over 8% by the end of the year.

Productivity Nonfarm Business Sector



Source: Bureau of Labor Statistics

Compensation and Unit Labor Costs Nonfarm Business Sector



Source: Bureau of Economic Analysis

Productivity and Costs

Developments. Output per hour declined 1.8% (annual rate) in 2010Q2, after rising 3.9% in Q1. The decline in productivity in Q2 follows five consecutive quarters of robust growth. Based on the recently revised NIPA data, productivity was up 3.7% (four quarter change basis) in 2010Q2, down from 6.3% in the first quarter. Our estimate for trend productivity growth is around 1.75%.

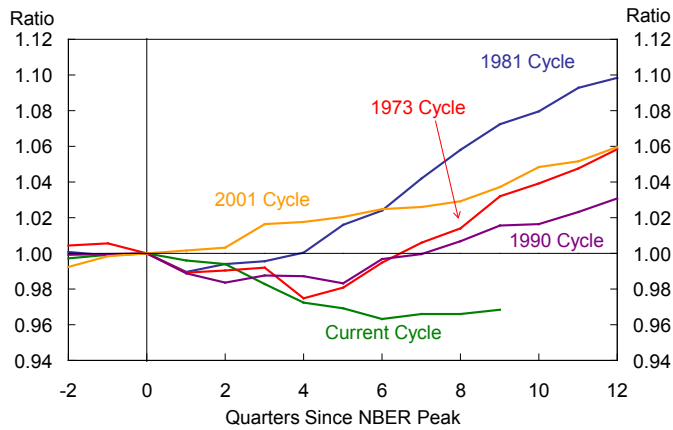
The ongoing strength in productivity in 2010Q1 and its outsized gains during 2009 were associated with very weak behavior of hours. Hours worked experienced a very steep decline between 2007Q3, just before the onset of the NBER recession, and 2009Q3. The last three quarters have witnessed a steady rise in hours worked, with hours growing at an annual rate of 1.1% for 2010Q1 and a robust 3.5% for 2010Q2.

Labor compensation growth remains very weak: it fell 0.7% (annualized) in 2010Q2, after falling 0.9% in 2010Q1. While compensation fell in Q2, the even larger decline in productivity resulted

in a 1.1% (annual rate) increase in unit labor costs. For 2010Q1, unit labor costs declined 4.6% (annual rate). The price deflator for the output of the nonfarm business sector rose 2.6% (annual rate) in 2010Q2. The fact that prices rose faster than unit labor costs suggests that profit margins continued to widen over the quarter.

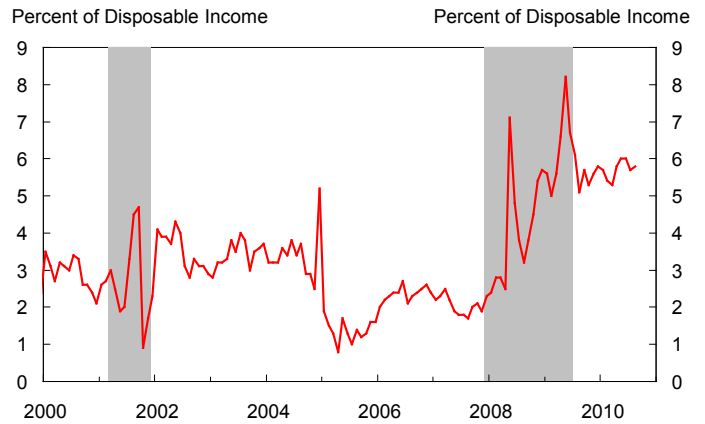
Outlook and Risks. An issue of great importance concerns the behavior of productivity and its implications for trend productivity growth. Evidence from a model developed to analyze this issue had recently viewed the robust productivity growth from 2009 through 2010Q1 as indicative of a shift to a higher trend growth. After the Q2 data release and NIPA revisions, the model is returning to the view that productivity shifted back to a slow growth regime in 2004, and that the high growth experienced in the wake of the recession was transitory and cyclical rather than a return to the strong trend growth experienced during the 1996-2004 period.

Real PCE per capita
(Series Set to 1.0 at NBER Peak)



Source: Bureau of Labor Statistics

Personal Saving Rate



Source: Bureau of Economic Analysis

Consumption

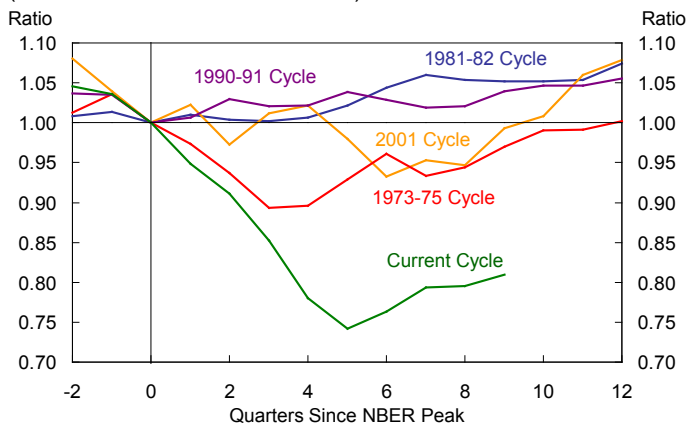
Developments. After declining sharply over the second half of 2008 and first half of 2009, real personal consumption expenditures (PCE) began to grow again in the second half of 2009. That recovery gathered momentum over the first half of 2010, with real PCE increasing at a 2.0% annual rate. At this writing, it appears that real PCE continued to expand at that pace. While growing, as seen in the chart above, the recovery of consumer spending has been quite muted relative to past recoveries. Indeed, the expected 2010Q3 level of real PCE is still slightly below what it was at the business cycle peak of 2007Q4.

Boosted by increases in transfer payments and lower tax liabilities, over the course of 2008 and 2009 nominal disposable income grew faster than nominal PCE, resulting in a steady increase of the personal saving rate. As of 2010Q2, the personal saving rate was 5.9%, up from 2% in mid 2007. This increase of the personal saving rate is generally regarded as a response of the household sector to

the steep decline of net worth suffered during the financial crisis and ensuing recession as well as a desire for increased precautionary savings in light of a more volatile economy.

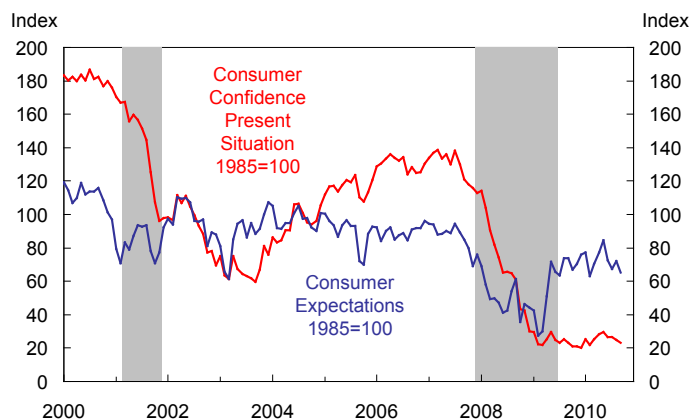
Outlook and Risks. In our modal forecast we expect a very gradual strengthening of the growth of real PCE. Forces supporting this trend include a gradually improving labor market with stronger growth of income, some improvement in household net worth from the trough, and what appears to be an end to the tightening of consumer lending standards. Sales of light-weight motor vehicles have been on a gradually rising trend for the past three quarters, and that improvement is expected to continue with sales reaching an 11 ³/₄ million annual rate in 2010Q4, up from 10 ³/₄ million in 2009Q4. Anecdotal reports suggest that it is now easier to obtain automobile financing than was the case a year ago. However, a key feature of our forecast is a further gradual increase of the personal saving rate.

Real Per Capita Household Net Worth
(Series Set to 1.00 at NBER Peak)



Source: Federal Reserve Board, Bureau of Economic Analysis, Census Bureau

Components of Conference Board Index



Source: The Conference Board

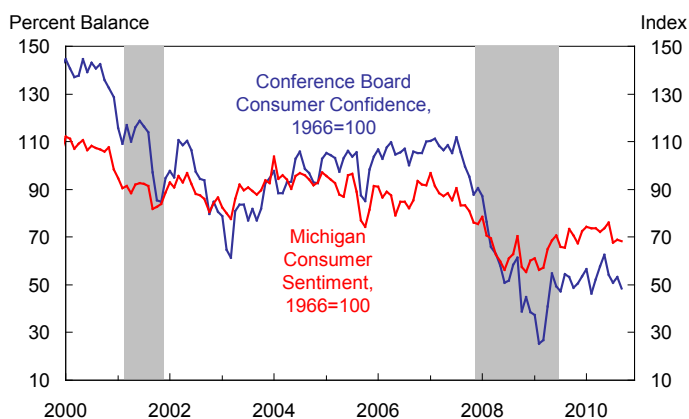
Of course, there are both upside and downside risks to this forecast for consumer spending. On the upside, it could be the case that households have boosted the saving rate as much as desired and that going forward they will begin to satisfy the existing pent up demand for consumer goods and services. This case is supported by the apparent easier access to consumer credit and relatively low interest rates. On the downside, it could be that households want to reduce their indebtedness substantially further, resulting in a protracted period of very sluggish growth of real PCE. Unfortunately, we have such limited experience with episodes such as the current one that models based on historic experience are of limited usefulness.

Consumer Confidence

Developments. At the depths of the recession in late 2008 and early 2009, the three major measures of consumer confidence—based on monthly surveys by the University of Michigan and the Conference Board, and a weekly survey by ABC—all stood at or near record lows. All three of these measures rebounded somewhat in the spring of 2009 but have fluctuated within a relatively narrow range since. After climbing in the 2nd quarter of 2010, these confidence measures retreated in the 3rd quarter, and all three were at the low end of their recent ranges in September. All remain at levels typically associated with recession.

The components of the Conference Board’s index reveal a noteworthy dichotomy: while the Expectations measure has recovered considerably from its 2009 low, the Present Situation component—largely reflecting people’s assessment

Consumer Confidence/Sentiment Indices



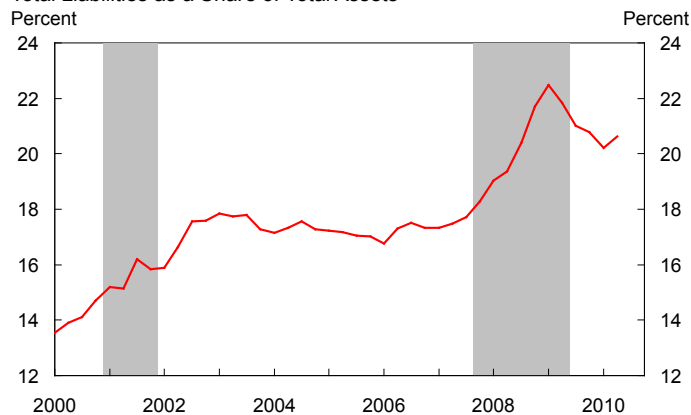
Source: University of Michigan and the Conference Board

of the job market—has remained near its recent cyclical lows.

Outlook and Risks. Although consumer confidence is not the predominant determinant of consumer spending, it has been shown to have some effect; thus it is likely that the persistently low levels of confidence have held back consumption somewhat. Given that job market perceptions are a factor influencing consumer confidence, it is a channel through which a pickup in the labor market would buoy consumer spending. Considering the rebound in the economy since mid-2009 occurred with little change in consumer confidence, which is still at a low level by all measures, it would seem that there is more upside than downside risk to the economy stemming from shifts in consumer confidence. Moreover, monitoring the Conference Board's Present Situation component index may be helpful in identifying incipient shifts in the job market before they show up in the employment numbers. This series tends to correlate closely with the unemployment rate, often with a slight lead—partly due to its early release. Both measures have remained mired at recessionary levels thus far.

Household Balance Sheet

Total Liabilities as a Share of Total Assets



Source: Flow of Funds, Federal Reserve Board

Household Financial Conditions

Developments. One of the big wildcards for the performance of the economy over the forecast horizon is the extent and duration of the household deleveraging process. Available data suggests that households have already made substantial progress. While still relatively high, the ratio of total household liabilities to assets has declined from its peak, and likely fell further in 2010Q3 due to rising equity values. An alternative measure of household leverage, the ratio of financial obligations over disposable income, shows considerably more improvement as households have been able to reprice existing debt at lower interest rates.

This deleveraging combined with some growth of aggregate income has resulted in some improvement in the credit quality of the household sector. Analysis of Equifax data indicates that from its peak in 2008Q3, total household debt (mortgage and nonmortgage) has declined by 6.4% with even steeper declines in the stock of debt in the 30 and 60 days delinquent categories. The stock of debt in the 90+ days delinquent category has increased due to

Total Debt by Payment Status, Billions of Dollars

Status	2005-Q1		2008-Q3		Percent Change from Previous Period	2010-Q2		Percent Change from Previous Period
	Amount of Total Debt by Payment Status	Percent of Total Debt	Amount of Total Debt by Payment Status	Percent of Total Debt		Amount of Total Debt by Payment Status	Percent of Total Debt	
	Billions of Dollars	%	Billions of Dollars	%		Billions of Dollars	%	
Current	8700.0	95.9%	11400.0	91.4%	31.0%	10340.0	88.6%	-9.3%
30 Days Late	136.0	1.5%	289.0	2.3%	112.5%	234.8	2.0%	-18.8%
60 Days Late	37.4	0.4%	138.0	1.1%	269.0%	106.3	0.9%	-23.0%
90+ Days Late	197.9	2.2%	641.5	5.1%	224.2%	985.6	8.4%	53.6%
Total	9071.3	100.0%	12468.5	100.0%	37.4%	11666.7	100.0%	-6.4%

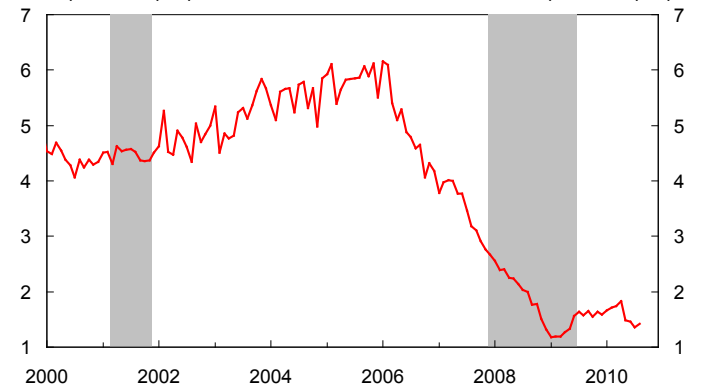
Source: FRBNY Equifax Panel Dataset

Ratio of Housing Starts to Population

Single-Family Homes

Starts per 1,000 people

Starts per 1,000 people



Source: Census Bureau

Housing

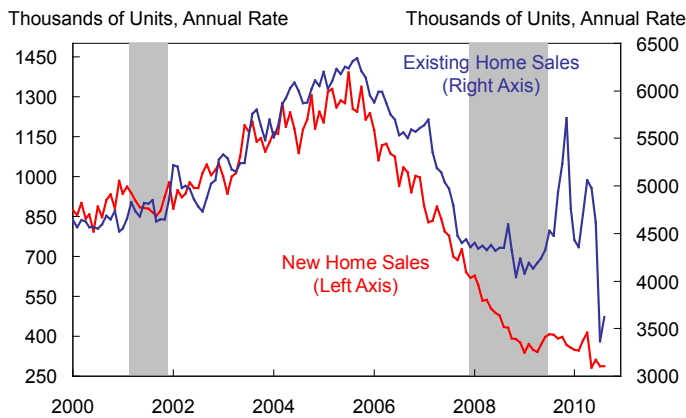
Developments. After bottoming out at the extremely low level of 362,000 (seasonally adjusted annual rate) in 2009Q1, single-family housing starts had been on a gradual uptrend over the past year. However, from their recent peak of 563,000 (seasonally adjusted annual rate) in April, single-family units were started at an annual rate of just 438,000 in August, reflecting a retrenchment of activity following the expiration of eligibility for the homebuyer tax credit. Single-family permits were just 403,000 in August, suggesting that a near term rebound in starts is not imminent.

A number of cross currents are affecting the housing market. As mentioned above, the homebuyer tax credit pulled forward a good deal of housing market activity, leading to a significant retrenchment following the credit's expiration on April 30. In addition, the weak labor market and general uncertainty about the outlook for the economy and home prices are no doubt dampening demand, despite the fact that mortgage interest rates are at their lowest levels since the mid 1950s.

the fact that, if a loan falls into the 30 or 60 delinquent category, the probability that it will move into the 90+ days category is still relatively high, likely reflecting the overall weakness of the labor market. Nonetheless, that transition rate has begun to decline from its peak value of late 2009.

Outlook and Risks. Uncertainty about the pace of further deleveraging by the household sector is a source of both upside and downside risk for overall growth over the forecast horizon. The personal saving rate has increased from 2% in 2007 to 6% in 2010Q2. In addition, lending standards for consumer loans appear to have stopped tightening. Under these circumstances, one could make the case that growth of real consumer spending is poised to move higher. However, with household net worth still well below levels reached at the peak, a strong argument could be made that household deleveraging will continue to impede growth. Our point forecast hedges these two views, with a gradual increase in the rate of growth of consumer spending combined with a modest upward trend of the personal saving rate.

Single-Family Home Sales

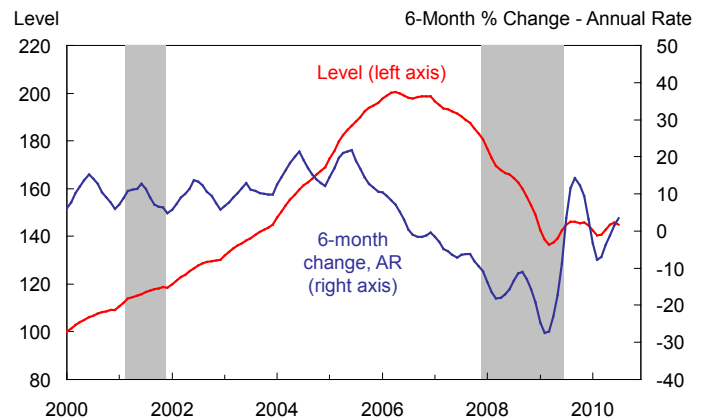


Source: Census Bureau

Home Prices. The increase in housing demand that took place over the past year has been associated with the stabilization of several national home price indices after more than two years of steady and steep declines. Another factor supporting home prices was a decline in so-called “distressed sales” or sales of “real estate owned” (REO) properties by lenders who had taken ownership at the end of the foreclosure process. The decline in distressed sales was the result of foreclosure moratoria enacted in late-2008 and extending well into 2009, a general lengthening of the time required to foreclose due to the sheer volume of that activity, and an increase in trial loan modifications.

Outlook and Risks. The recent retrenchment in housing starts and sales has been more severe than previously anticipated, leading us to lower our assumed path for housing starts over the forecast horizon. As a result, residential investment is expected to decline again over the second half of 2010, a key factor in the downgrading of the forecast for growth of real GDP.

CoreLogic National Home Price Index

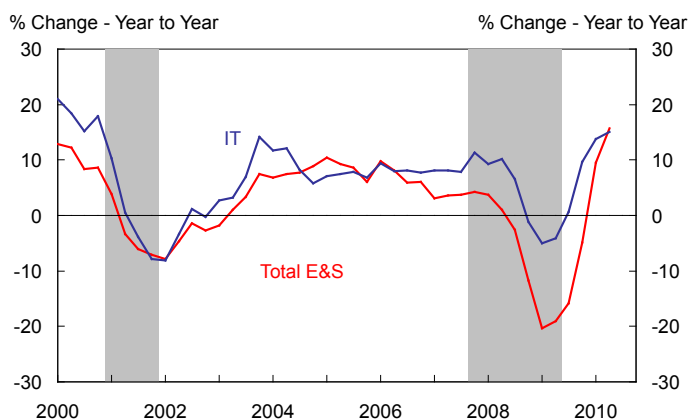


Source: LoanPerformance

Home prices are expected to be essentially flat over the forecast horizon, with some downward pressure remaining in the second half of 2010 and first half of 2011 due to the large stock of homes in the foreclosure process leading to an increasing volume of distressed home sales.

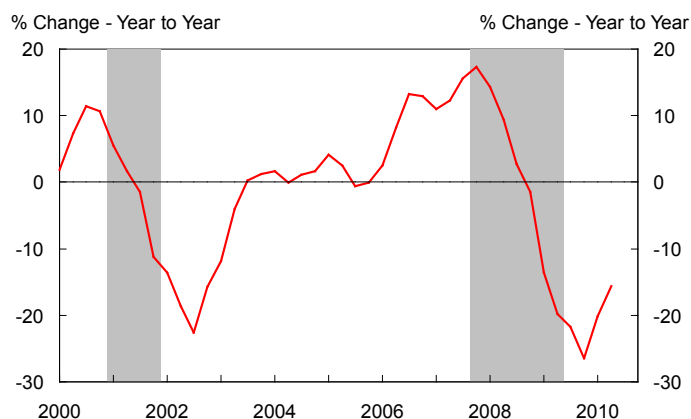
The risks around our outlook for housing market activity and home prices are reasonably balanced. Mortgage interest rates are quite low and home prices have declined substantially in some markets, leading to a significant improvement in cash flow affordability. It certainly could be the case that home sales and starts improve considerably more than we are assuming. On the other hand, it appears that there is widespread uncertainty regarding the future path of home prices, with many commentators convinced that they will decline much further over the next few years. In addition, mortgage underwriting standards are described by several sources as being unusually tight.

Real Business Investment: Equipment and Software



Source: Bureau of Economic Analysis

Business Investment in Nonresidential Structures



Source: Bureau of Economic Analysis

Investment and Inventories

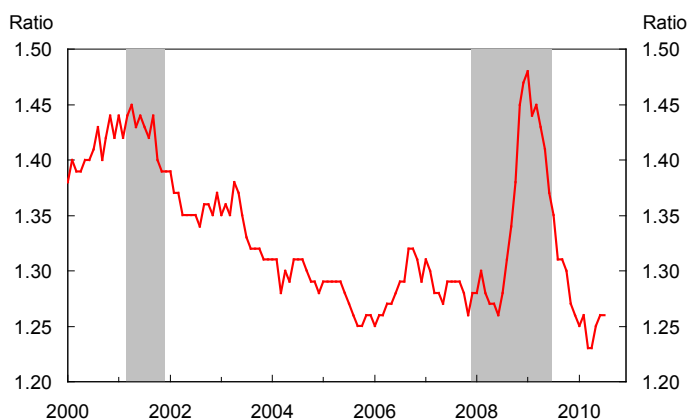
Developments—Equipment and Software. Real spending on equipment and software has grown at a double-digit annual rate in each of the last three quarters, with the growth rate exceeding 20% in both 2010Q1 and 2010Q2. Despite this surge, the level of real outlays in 2010Q2 was still about 7¾% below its cyclical peak in 2008Q1. After being initially concentrated in the high-tech sector, the recovery in equipment and software expenditures has broadened across equipment types in the most recent quarters.

Data on shipments of nondefense capital goods indicate that equipment spending probably grew fairly robustly in 2010Q3, although at a somewhat slower rate than in the previous two quarters. Orders for nondefense capital goods excluding aircraft rebounded in August after a sharp drop in July and remained well above the levels of a year ago, suggesting that some continued near-term momentum in equipment spending.

Nonresidential Structures. After sizable drops in the previous six quarters, real expenditures on nonresidential structures fell only a slight 0.5% (annual rate) in 2010Q2, as strong growth in spending on oil and gas wells was sufficient to offset most of continuing declines in other categories.

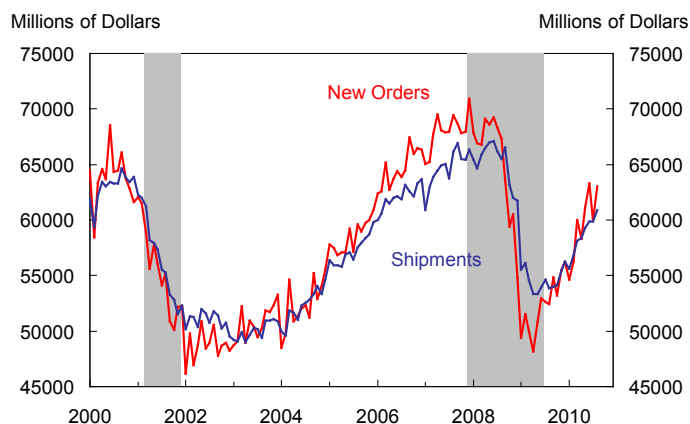
Outside of energy (where the rebound in energy prices continues to support activity), the fundamentals for investment in nonresidential structures remain feeble, with elevated vacancy rates and continued financing problems. Consequently, we expect expenditures in this category to continue to be weak over the near term. The data on private nonresidential construction spending in July and August suggest that these expenditures probably fell at a near double-digit rate in 2010Q3.

Inventory / Sales: Total Business



Source: Census Bureau

Nondefense Capital Goods Excluding Aircraft



Source: Census Bureau

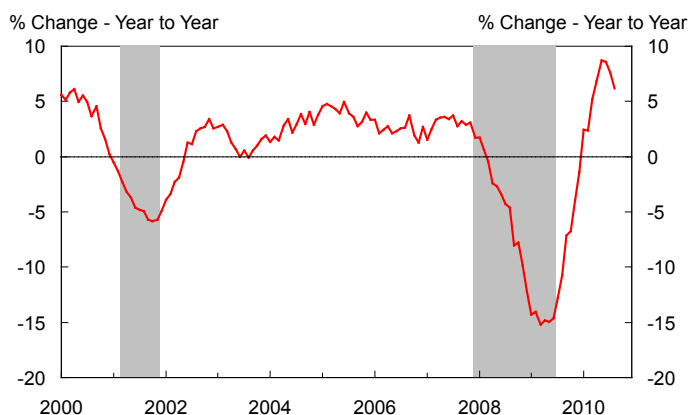
Inventories. Businesses started to add to inventory stocks at a fairly vigorous rate in the first half of the year, with 2010Q2 seeing the largest rate of accumulation of real nonfarm inventories in nearly four years. This accumulation has reflected some rebuilding of depleted stocks following the dramatic liquidation during the recession, as well as the effects from some firming of sales and less dire financial conditions. The monthly inventory data indicate some further inventory accumulation in 2010Q3.

The recent swing from liquidation to accumulation has arrested the decline in inventory-sales ratios. The ratio for business as a whole is near its pre-recession levels: the ratio of retailers is still below pre-recession figures, the manufacturing ratio is somewhat higher, and the wholesale trade ratio is close to its prerecession norm. This observed leveling-off suggests that inventories-sales ratios may be fairly near firms' desired levels.

Outlook and Risks. With inventories-sales ratios probably near desired levels, we do not expect much further pick-up in the pace of inventory accumulation; therefore, inventory investment is projected to contribute little to future growth. The expansion in equipment and software spending is expected to be sustained at a fairly strong rate, albeit less than the robust growth of the first half of 2010. We project that spending on nonresidential structures will level off toward the end of 2010 and begin to grow as the constraining effects of high vacancies and tight financial conditions fade.

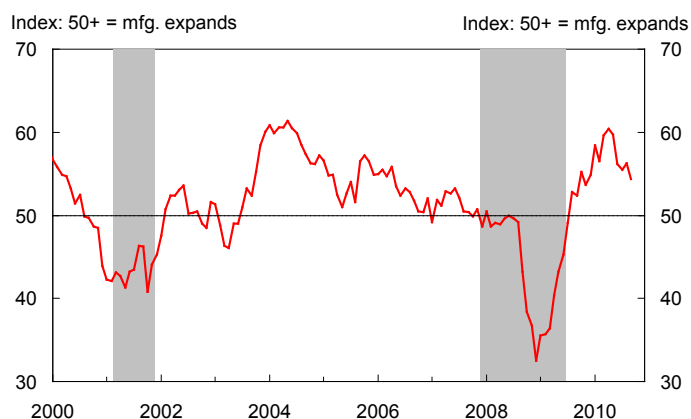
The risks to the equipment and software outlook look balanced. Those to inventory investment also are balanced; however, if final sales were unexpectedly weak, there probably would be an undesired inventory accumulation, which would result in future liquidation with negative consequences for production. The risks to nonresidential structures expenditures are still concentrated to the downside, reflecting continuing financial problems and downward pressures on property values.

Manufacturing Output Growth



Source: Federal Reserve Board

ISM Manufacturing Index



Source: Institute for Supply Management

Manufacturing

Developments. The strong rebound in manufacturing output that continued into the summer of 2010 has begun to show some signs of moderation in the past month as the impetus from inventory rebuilding has begun to wane. These signs of moderation have been evident in a number of major industries as well as through several production and survey indicators.

Production in most major manufacturing industries remains well below earlier peaks, with the one notable exception of the computer industry, where output in recent months has surpassed its prior peak. As such, the capacity utilization rate in manufacturing remained at a quite low level of 72.2% in August 2010. These utilization estimates incorporate an assumption that manufacturing capacity has been flat over the past several months—reflecting the limited levels of capital spending in the sector.

Outlook and Risks. The recent data, including moderating production, declines in many manufacturing survey measures, and a leveling-off in manufacturing orders in recent months, suggest a further moderation in the manufacturing expansion. The projected flattening in inventory investment is a major factor contributing to the expected moderation in growth.

With continued downside risks to final demand and the waning of impetus from inventory rebuilding, the risks to the manufacturing outlook now appear to be skewed to the downside. Continued intense competition from foreign producers may exacerbate these downside risks for domestic manufacturers. Finally, given the shrinkage in capacity observed over the past couple of years, there is greater potential for bottlenecks in some sectors to hinder expansion in the overall manufacturing sector.

GDP Growth			
Percent Change (Q4/Q4)			
	2009	2010	2011
Euro Area	-2.0	1.9	1.8
Japan	-1.4	1.9	1.2
U.K.	-3.0	2.8	2.5
Canada	-1.1	3.1	2.7
China	10.7	9.0	8.5
Asia-4 NIEs	6.2	6.4	5.7
Mexico	-2.3	3.2	3.5
Foreign Economies	0.3	3.3	3.0

Inflation			
Percent Change (Q4/Q4)			
	2009	2010	2011
Euro Area	0.4	1.3	1.4
Japan	-2.0	-0.8	-0.1
U.K.	2.1	2.7	2.4
Canada	0.8	1.8	2.0
China	1.9	4.0	3.0
Asia-4 NIEs	1.5	2.5	2.6
Mexico	3.6	4.1	3.8
Foreign Economies	0.6	1.7	1.6

Foreign Outlook

Advanced economies did well in the first half of 2010, helped by inventory restocking, expansionary fiscal policies, and a broad recovery in exports. There are signs that growth is slowing in the second half of the year, but the forecast still calls for relatively solid growth.

Emerging Asia did very well with the global restocking. In addition, strong domestic demand growth in China supported by policy-induced lending helped regional growth. Like the advanced economies, there are signs of moderation in Q3 as the inventory cycle ends.

Persistently high unemployment in advanced economies, fiscal consolidation in Europe and stress in the European financial markets are downside risks to the global outlook.

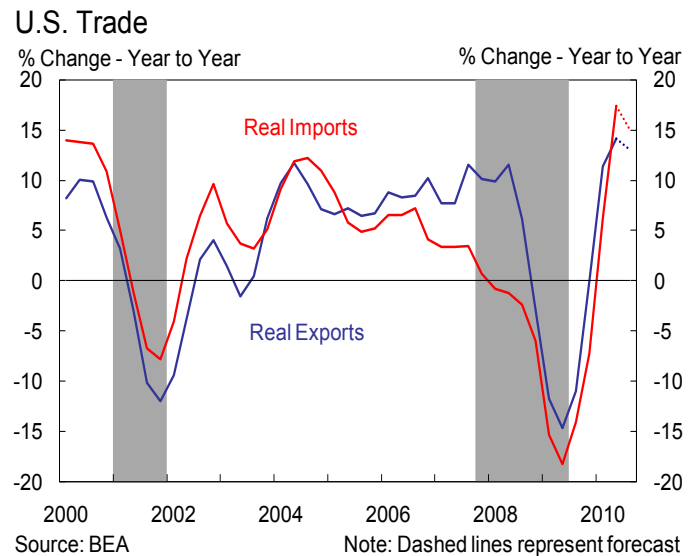
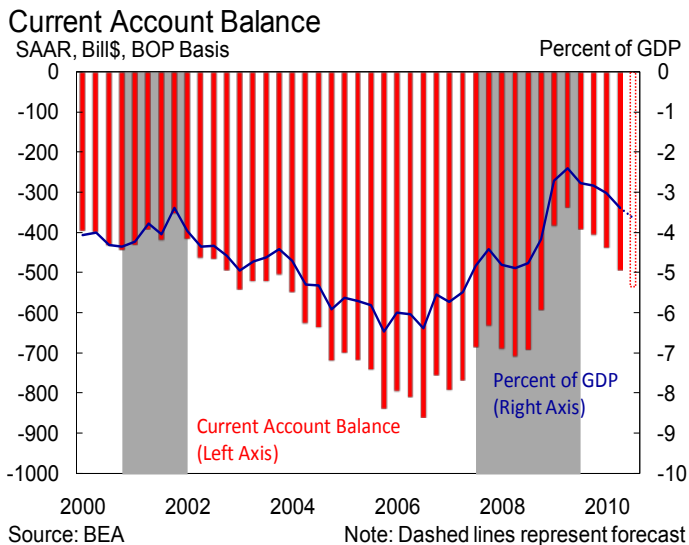
Euro area: Output growth finally picked in Q2 after two lackluster quarters. Exports, consumption, and business spending all contributed. A slower growth number is expected for Q3, although August production and September confidence data were encouraging.

Japan: GDP growth in Q2 was weaker than expected as strong export growth could not overcome flat consumer and business spending. Another soft GDP reading is expected for Q3 as production and exports in July and August were down relative to their Q2 averages. Core prices are falling at a 1.5% rate, with government cuts in tuition expenses accentuating the decline.

Emerging Asia: China's growth appears to be stabilizing at a robust level. Production, export and confidence data for the rest of Asia, though, have not been as strong.

Brazil: The economy is slowing from a very rapid pace. A modest contraction in production is likely in Q3, but consumer spending remains strong.

Mexico: The economy posted a strong rebound in Q2 after a modest contraction in Q1. Growth in Q3 will likely cool as production is expanding at a slower pace and consumer demand remains sluggish.



Trade

Developments. The US trade deficit widened to \$46.3 billion in August, from \$42.6 billion in July. Nonoil import volumes increased while export volumes declined.

Export volumes fell 1 percent, partially offsetting the jump of 3 percent in the previous month. With two months of data, we expect to see an annualized growth in real exports of goods and services of 8 percent in Q3 over the previous quarter, following a 9 percent increase in Q2.

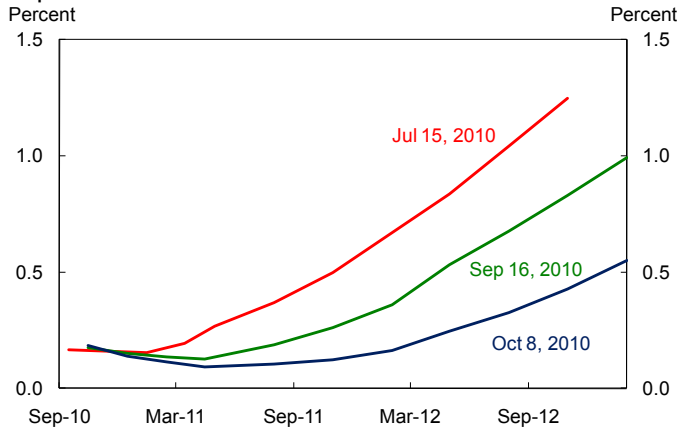
Nonoil import volumes returned to their upward trajectory in August, increasing 2 percent, after a decline of 3 percent in the previous month. We expect real imports of goods and services to grow 13 percent in Q2, following the massive surge of 33 percent in Q1.

As a share of GDP, this represents an increase in the current account deficit from 3.4 percent in Q2 to 3.6 percent in Q3. Most of this widening was due to higher import volumes and higher oil prices. Net exports are expected to subtract 1 percentage point in Q3, following a drag of 3.5 percentage points in Q2.

Outlook and Risks. Going forward, the outlook for 2010 is for net exports to subtract 0.8 percentage point over the year. The current account deficit is forecast to widen from 2.7 percent of GDP in 2009 to 3.4 percent of GDP in 2010, mainly due to higher import volumes and higher oil prices.

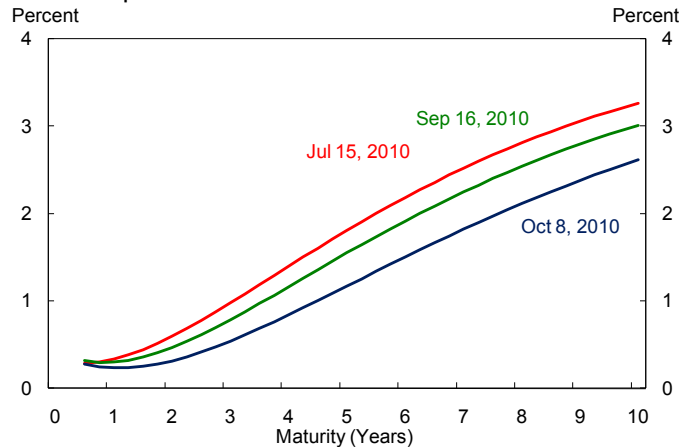
The risk for net exports is largely tied to the U.S. and foreign growth outlooks. The uncertainty surrounding the forecast for Europe is a key risk to the current account outlook.

Expected Federal Funds Rate



Source: Federal Reserve Board

Zero Coupon Yield Curves



Source: Federal Reserve Board

Note: Estimated using 8:40 am quotes of off-the-run securities.

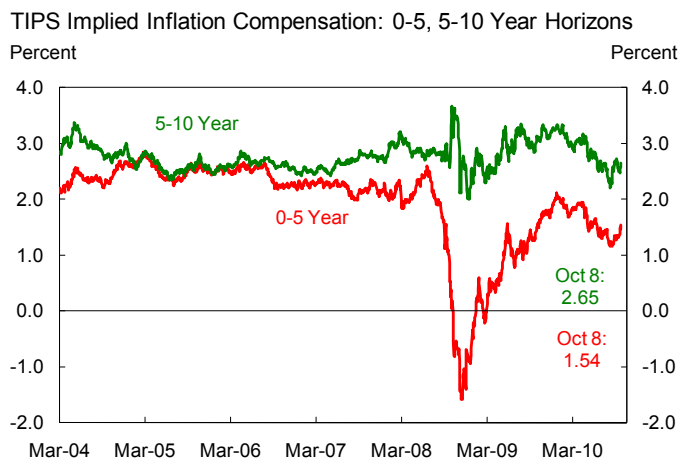
Financial Markets

Expected Policy Rate Path. The expected path of the fed funds rate as inferred from futures markets has shifted down considerably since the beginning of the year and has continued to decline since mid-September. Economic growth has been sluggish while inflation readings remain low. Accordingly, in its most recent statement, the FOMC downgraded its assessment of current economic conditions and noted that inflation remained below a level consistent with its mandate.

Market expectations currently suggest that the target fed funds rate will remain at 0.0%-0.25% into 2012 and reach approximately 0.5% at the end of 2012. Professional forecasters have also revised down their expected policy paths over the medium term. The median expectation of the fed funds rate from the Blue Chip Financial Forecasts survey for the fourth quarter of 2011 stood at 0.6% in October, down from 0.9% in September and 1.3% in August.

Nominal Interest Rates. After being fairly stable over the first few months of 2010, the yield curve has continued to flatten. Continued downside risks to inflation and real activity coupled with recent FOMC communications are likely the main drivers of the flattening. The on-the-run 10-year Treasury note currently trades around 2.4%. The yield on the 2-year note, driven more by near- and medium-term policy expectations, has also continued its decline and now stands at its lowest level on record at 0.35%.

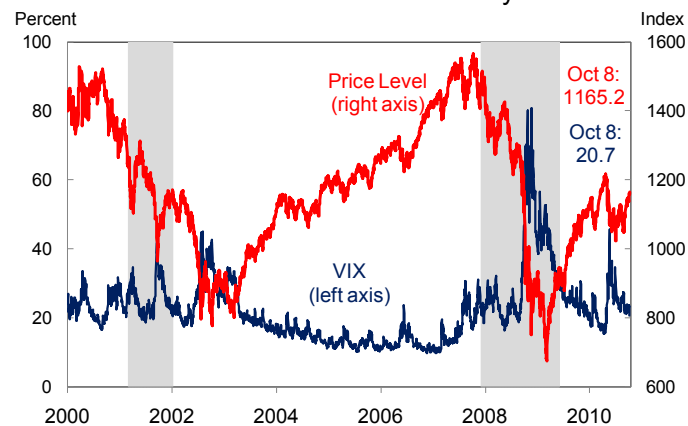
Option implied yield volatility in Treasury and swap markets as measured by the 3-month MOVE and SMOVE indices have further pared back recent increases. Both indices have come down to levels below 80, down from 114 and 121 in early May, respectively. This is at the lower range of their levels observed since March 2008, but still above the historical lows seen prior to the financial crisis.



Source: Federal Reserve Board

Note: Carry-adjusted.

S&P 500 Index: Price Level and Volatility



Source: Haver, Datastream

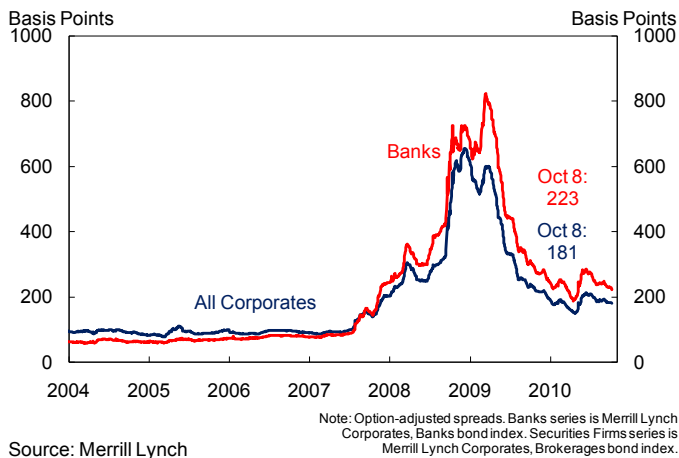
Inflation Compensation. Market-based measures of inflation expectations have recently experienced a small uptick relative to their large decline since the beginning of the year. The 0-5 year inflation compensation, gauging inflation expectations over the next five years, has risen by about 38 basis points from its low at the end of August and now stands at 1.54%. Meanwhile, the 5-10 year measure, gauging expected inflation 5-10 years out, has risen by about 45 basis points from its low on August 24th and now stands at 2.65%. However, the present readings are still well below the levels observed at the beginning of the year.

The broader trend of declines in market-based measures of inflation expectations since the spring is in line with low inflation readings and sluggish economic growth and implies that inflation expectations remain well-anchored. Meanwhile, long-term inflation expectations as measured by the Survey of Professional Forecasters remain low. Professional forecasters now expect the consumer price index to grow at only 1.9% and 2.3% on average over the next five and ten years, respectively.

Equity Markets. Equity markets have extended the recent rally that began at the end of August. Since August 31st the S&P 500 Composite Index has risen by about 11%. However, at 1165, the index is still about 4% below the recent peak observed on April 23, 2010.

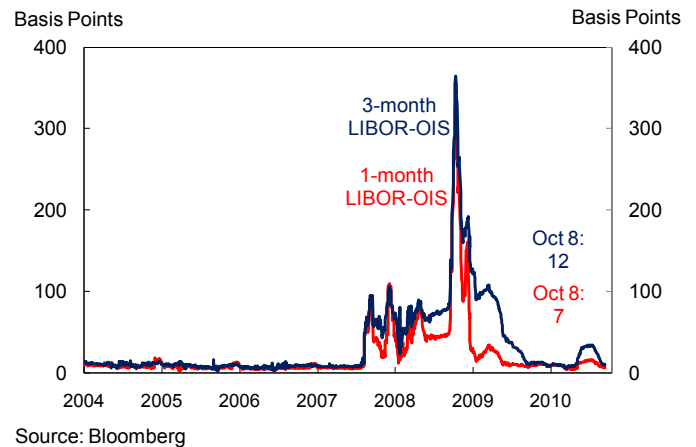
Implied equity volatility as measured by the VIX had trended lower over the first quarter of 2010, but spiked up considerably over Euro area sovereign risk concerns in May. At 20.7% on October 8th, the S&P 500 implied volatility stands well below the recent peak at the end of the second quarter, but at the same time remains well above its pre-crisis levels.

Credit Spreads



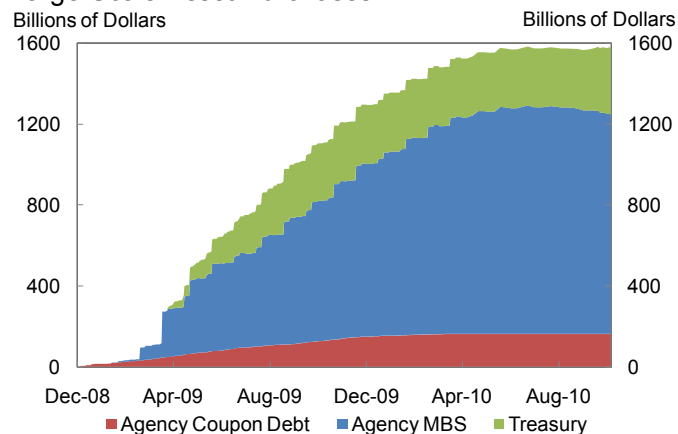
Credit Spreads. Improved economic and financial market conditions caused credit spreads to narrow considerably over much of 2009 and into the early part of the second quarter of 2010. However, during the latter part of the second quarter credit spreads reversed course and rose about 100 basis points for banks and about 60 basis points for all corporates. More recently credit spreads have been gradually declining from these recent highs and have continued to decline since the end of August. Since August 31st, spreads have decline by 25 and 14 basis points for banks and all corporates, now standing at levels of 223 and 181 basis points, respectively.

Libor-OIS Spreads



Money Markets. Money market functioning has been largely restored since the significant dislocations at the height of the financial crisis with Libor-OIS spreads returning to pre-crisis levels in late 2009 after peaking in October 2008. Although measures of money market stress ticked up at the end of the second quarter they have recently reversed course. The 3-month LIBOR-OIS spread currently trades at 12 basis points, which is only slightly above the average level observed before the crisis.

Large-Scale Asset Purchases

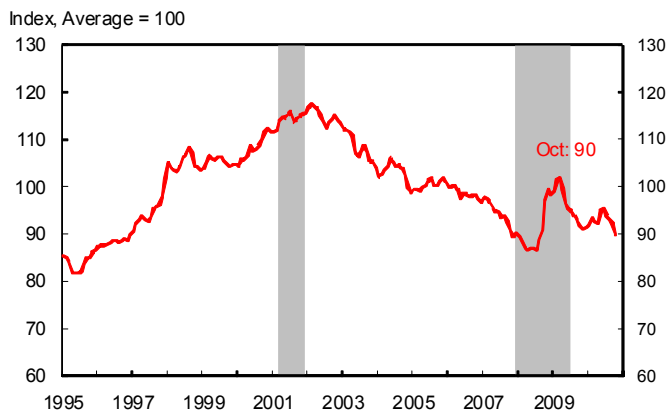


Source: Federal Reserve

Large-Scale Asset Purchases. The Federal Reserve completed its large-scale asset purchases in March 2010. In total, the Fed purchased over \$1.7 trillion in securities over the course of the program, including \$300 billion in Treasury securities, \$1.25 trillion in agency mortgage-backed securities (MBS), and \$175 billion in agency debt securities.

At the August FOMC meeting it was announced that principal payments from agency debt and agency mortgage-backed securities would be reinvested in longer-term Treasury securities rather than adding to cash holdings. More recent FOMC communications have suggested that additional large-scale asset purchases may be conducted if growth remains anemic or inflation remains at subdued levels. It now appears that market participants are expecting an announcement of renewed asset purchases at the November FOMC meeting.

Nominal Broad Dollar Index

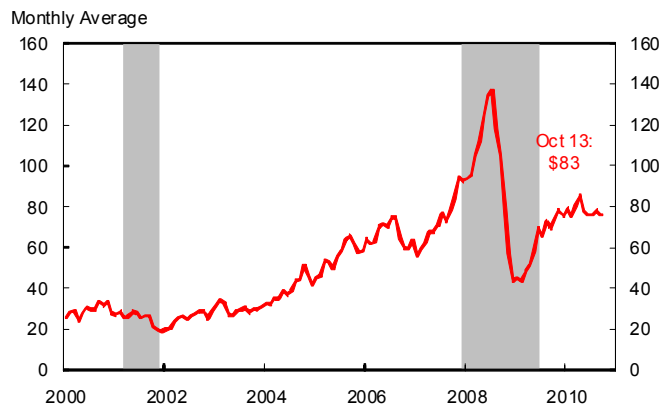


Source: Federal Reserve Board

Foreign Exchange. The trade-weighted dollar index is around 8% below its average over the last fifteen years. The dollar has been falling in recent months in line with the drop in U.S. interest rates. The Japanese currency has strengthened against all major currencies since mid-2007, supported by that economy's deflationary trend rates and the stability of Japanese long-term interest rates relative to lower rates in Europe and the United States. The euro fell sharply in the first half of 2010 reflecting concerns about European debt, but has strengthened recently against the dollar. The euro is currently near its average over the past two years.

China's yuan's has appreciated modestly against the dollar. The reluctance to allow more movement is tied to concerns about the global economy. The underlying upward pressure on the yuan can be measured by the rate of reserve accumulation by Chinese monetary authorities. Reserve purchases totaled \$440 billion in 2009, \$95 billion in 2010Q1 and \$65 billion in 2010Q2 and \$90 billion in Q3. Reserve purchases in the rest of Emerging Asia were above average in September.

Oil Prices



Source: Department of Energy

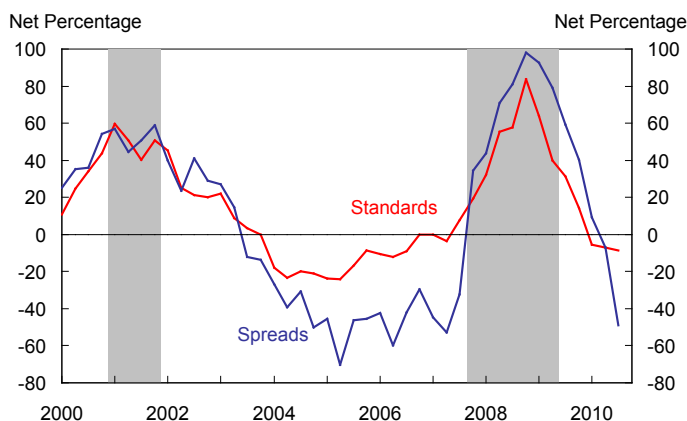
Petroleum Prices. The WTI benchmark oil price increased last year in line with the global recovery, before falling in May in response to concerns about the European outlook. Prices have since stayed near \$80 per barrel in recent months.

Oil demand is set to increase 2.5% in 2010, after falling 1.4% last year. Most of the swing is due to demand growth in the United States with demand stable in Europe and Japan after big declines in 2009. Demand from Emerging Asia remains quite strong. Prices have been restrained by a substantial increase in OPEC production. Supply from North America is unchanged this year while that from Europe continues to fall.

Other Commodities. Industrial metals have been stable at a high level over the past year, while raw industrial prices are moving higher.

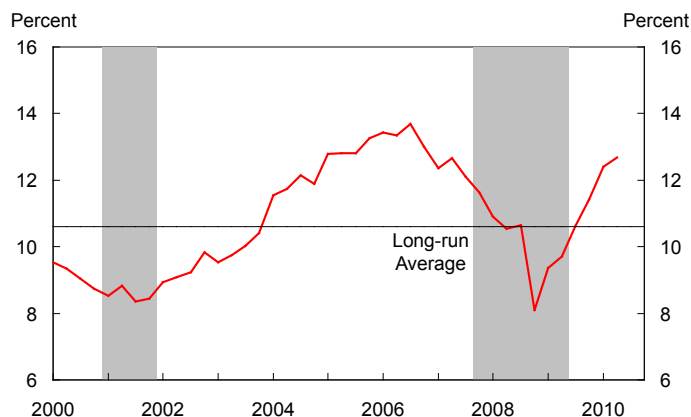
Wheat and corn prices are increasing due to worries that global harvests will be weaker than expected. Current prices are roughly 30 percent above average prices over the past two years.

Banks Tightening Terms and Standards for Business Loans to Large and Mid-Sized Firms



Source: FRB Senior Loan Officer Opinion Survey

Corporate Profits as a Percent of National Income



Source: Bureau of Economic Analysis

Bank Loan Spreads and Standards

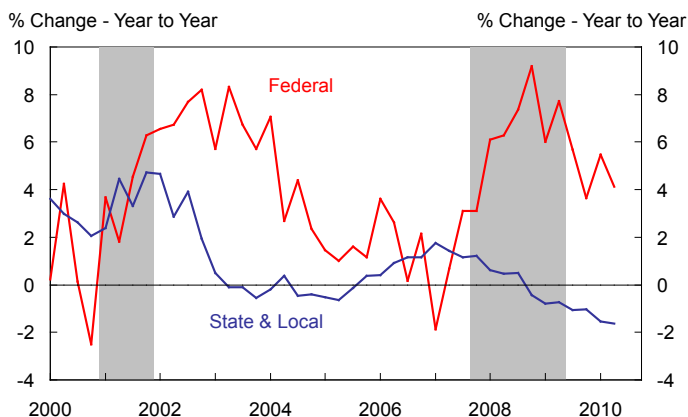
Developments. The latest Senior Loan Officers Opinion Survey suggests that the prolonged contraction in the supply of business loans continues to unwind. The net percent of loan officers reporting higher spreads over cost of funds declined to -49.1 percent in the 2010Q3 survey, a dramatic drop compared to the -7.1 percent figure registered in 2010Q2. Loan officers also reported they were easing non-price lending terms, namely standards; the net percent of loan officers reporting tightening standards for approving loans to large and mid-sized firms declined to -8.8 percent in 2010Q3, from -7.1 percent in 2010Q2. Recent research at FRBNY suggest that tight supply rather than weak demand is the predominant force explaining the recent record slow business loan growth, so the continued signs of easing supply is a harbinger of stronger business loan growth ahead.

Corporate Profits

The most recent peak in corporate profits expressed as a share of national income was 13.7% in 2006Q3—the highest share since the early 1950s. As typically happens late in a business cycle, corporate profits fell from mid-2006 through mid-2008 as unit labor costs began to rise and labor's share of national income increased. The financial crisis and ensuing acute decline in economic activity then led to a further sharp drop of corporate profits, led by financial firms.

In 2009 corporate profits began to rebound, and that improvement continued through 2010Q2. Productivity growth has been quite strong while the rate of increase of labor compensation has slowed. In 2009Q4 unit labor costs were 3.5% below year-ago levels, the steepest four-quarter decline in the series since 1950Q1. Unit labor costs continued to decline over the first half of 2010, although the rate of decline was substantially less. As of the second quarter, the corporate profits share of national income was back up to 12.7%, well above its long run average.

Real Government Consumption and Gross Investment



Source: Bureau of Economic Analysis

	FY2008*	FY2009*	FY2010	FY2011
Receipts				
\$ Billions	2,524	2,105	2,130	2,524
% of GDP	17.5	14.8	14.7	16.7
Outlays				
\$ Billions	2,983	3,518	3,485	3,793
% of GDP	20.7	24.7	24.1	25.1
Balance				
\$ Billions	-459	-1,413	-1,355	-1,269
% of GDP	-3.2	-9.9	-9.4	-8.4
Debt Held by the Public				
% of GDP	40.2	53.0	62.4	67.7

Government Spending

The rate of growth of real federal spending was relatively strong in both 2008 and 2009 in both defense and non-defense categories. Since then the rate of growth has been slowing, particularly in the defense category. Under current policy, the growth of federal spending is expected to continue to slow over the remainder of 2010 and into 2011.

In contrast, the growth of real outlays by state and local governments slowed over the course of 2008, was slightly negative in 2009, and has declined at a faster rate in 2010. Total employment at the state and local level is down by nearly 415,000 (2.1%) from its 2008 peak, with the bulk of the decline at the local level. Further cuts in employment are anticipated over the remainder of 2010 and into 2011, although the rate of decline is likely to slow. The fiscal condition of state and local governments has improved somewhat in recent quarters, with total tax receipts up 7% on a year-over-year basis as of 2010Q2. Despite this growth, the level of tax receipts at the state and local level remain below their previous peak.

Federal Fiscal Outlook

The federal budget deficit increased to \$1.4 trillion (10% of GDP) during FY2009, up from \$459 billion or 3.2% of GDP in FY2008. Expressed as a percent of GDP, the deficit in FY2009 was the largest since World War II. Total federal receipts fell 16.6% in FY2009, the largest percentage decline since the 1930s. Debt held by the public expressed as a percent of GDP rose 12.8 percentage points to 53.0%.

For FY2010 we project a deficit of \$1.35 trillion or 9.4% of GDP, a modest improvement, with debt held by the public reaching 62.4% of GDP. For FY2011 there remains substantial uncertainty regarding tax and spending policy. Like most forecasters, we assume that all tax cuts currently scheduled to expire at the end of calendar year 2010 will be extended except for high income tax payers. In that case the deficit would decline to 8.5% of GDP while debt held by the public rises to 67.7% of GDP.

FRBNY Forecast Summary

	2010 Q2	2010 Q3		2010 Q4		2010 Q4/Q4		2011 Q4/Q4	
Summary	<i>Final</i>	9/10	10/21	9/10	10/21	9/10	10/21	9/10	10/21
Real GDP	<i>1.7</i>	1.6	1.4	3.5	2.2	2.6	2.2	4.0	3.7
Total PCE Deflator	<i>0.0</i>	1.1	1.2	1.2	1.2	1.1	1.1	1.4	1.4
Core PCE Deflator	<i>1.0</i>	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.2
Fed Funds Rate Target*	<i>0-0.25</i>	0 - 0.25	0 - 0.25	0 - 0.25	0 - 0.25	0 - 0.25	0 - 0.25	0 - 0.25	0 - 0.25
Nonfarm Business Sector									
Output	<i>1.6</i>	2.3	2.0	4.8	3.1	3.7	2.9	5.4	5.1
Hours	<i>3.5</i>	0.8	1.1	3.1	1.4	2.1	1.8	3.7	3.4
Productivity Growth	<i>-1.8</i>	1.5	0.9	1.8	1.8	1.5	1.2	1.7	1.7
Compensation	<i>-0.7</i>	0.5	0.5	1.0	1.0	0.2	0.0	1.6	1.6
Unit Labor Costs	<i>1.1</i>	-1.0	-0.4	-0.8	-0.8	-1.3	-1.2	-0.1	-0.1
Real GDP Growth Contributions**									
Final Sales to Domestic Purchasers	<i>4.4</i>	2.4	1.1	2.3	2.2	2.6	2.3	3.4	3.2
Consumption	<i>1.5</i>	1.4	1.4	1.4	1.6	1.4	1.5	1.8	1.8
BFI: Equipment and Software	<i>1.5</i>	1.2	0.8	0.8	0.6	1.2	1.0	0.6	0.6
BFI: Nonresidential Structures	<i>0.0</i>	-0.1	-0.3	0.0	0.0	-0.2	-0.2	0.2	0.2
Residential Investment	<i>0.6</i>	-0.7	-1.0	-0.3	-0.2	-0.2	-0.3	0.5	0.4
Government: Federal	<i>0.7</i>	0.4	0.2	0.1	0.1	0.4	0.3	0.1	0.1
Government: State and Local	<i>0.1</i>	0.2	-0.2	0.2	0.2	0.0	-0.1	0.1	0.1
Inventory Investment	<i>0.8</i>	-0.7	0.7	0.0	-1.3	0.6	0.7	0.3	0.2
Net Exports	<i>-3.5</i>	-0.1	-0.4	1.2	1.2	-0.6	-0.7	0.3	0.3
Real GDP Components' Growth Rates									
Final Sales to Domestic Purchasers	<i>4.3</i>	2.3	1.0	2.2	2.1	2.5	2.2	3.3	3.1
Consumption	<i>2.2</i>	2.0	2.0	2.0	2.2	2.0	2.1	2.6	2.6
BFI: Equipment and Software	<i>24.8</i>	18.0	12.0	12.0	8.0	18.8	16.1	8.0	8.0
BFI: Nonresidential Structures	<i>-0.5</i>	-5.0	-10.0	0.0	0.0	-5.9	-7.4	6.5	6.5
Residential Investment	<i>25.6</i>	-25.0	-35.0	-12.8	-10.0	-7.6	-10.4	24.8	17.4
Government: Federal	<i>9.1</i>	5.0	3.0	1.7	1.7	4.3	3.9	1.5	1.5
Government: State and Local	<i>0.6</i>	1.4	-1.3	1.3	1.3	0.0	-0.8	1.1	1.1
Inventory Investment	<i>n/a</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Net Exports	<i>n/a</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exports	<i>9.1</i>	11.4	10.1	9.5	6.9	10.3	9.4	11.1	10.3
Imports	<i>33.5</i>	9.5	10.4	-0.2	-2.3	12.6	12.5	6.8	6.3
Labor Market									
Nonfarm Payroll Employment (Average per Month, Thousands)	<i>231</i>	-159	-94	279	67	121	85	372	334
Unemployment Rate***	<i>9.7</i>	9.7	9.6	9.5	9.8	9.5	9.8	8.0	8.3
Income									
Real Disposable Personal Income	<i>4.4</i>	0.4	0.5	2.8	1.6	2.2	2.0	3.5	3.1
Personal Saving Rate***	<i>5.9</i>	5.6	5.6	5.8	5.5	5.8	5.5	6.6	6.0

*End-of-period value

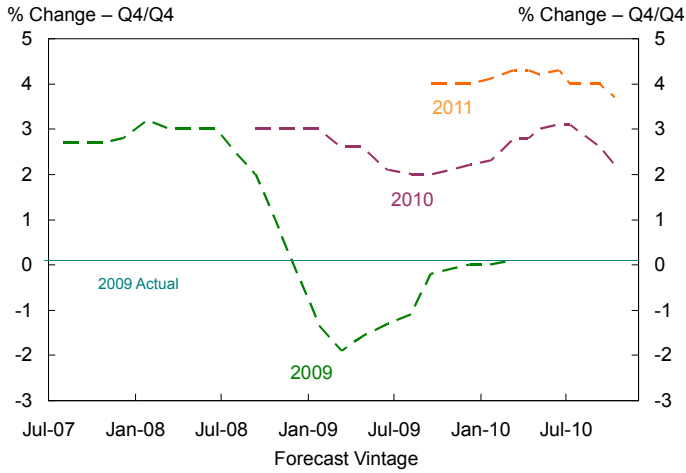
**Growth contributions may not sum to total due to rounding.

***Quarterly values are the average rate for the quarter. Yearly values are the average rate for Q4 of the listed year.

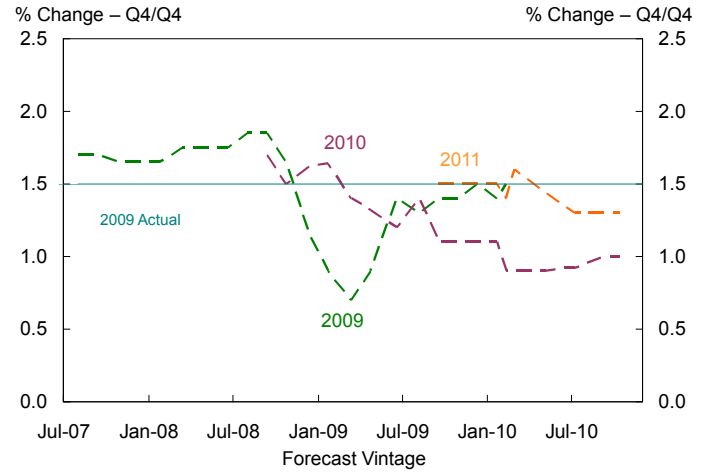
Blue and *italic* text indicate released data; darker colors indicate the most recent forecast.

Evolution of FRBNY Forecasts

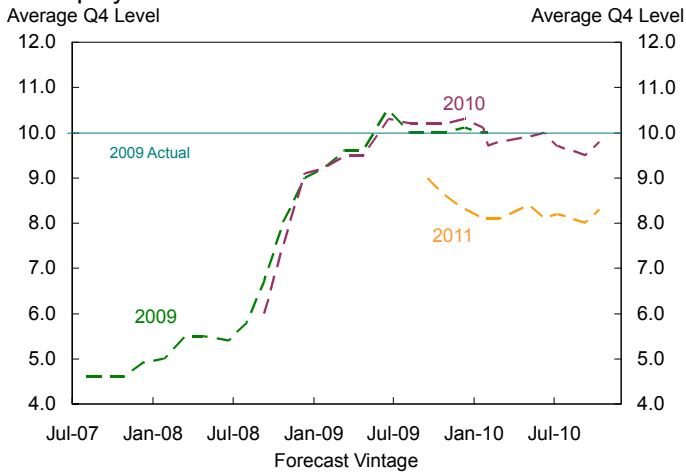
Real GDP Growth



Core PCE Inflation



Unemployment Rate



Note: Forecast vintage represents date at which forecast was produced.

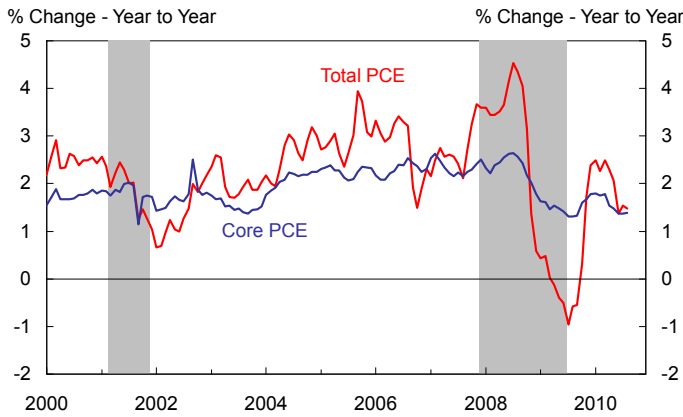
Alternative GDP and Inflation Forecasts

Real GDP Growth					
	Release Date	2010Q3	2010Q4	2010 Q4/Q4	2011 Q4/Q4
FRBNY	10/12/2010	1.4	2.2	2.2	3.7
Blue Chip	10/10/2010	1.9	2.3	2.4	2.9
Median SPF	8/13/2010	2.3	2.8	2.8	--
Macro Advisers	10/31/2010	1.3	2.1	2.2	3.6
Core PCE Inflation					
	Release Date	2010Q3	2010Q4	2010 Q4/Q4	2011 Q4/Q4
FRBNY	10/12/2010	1.1	1.0	1.1	1.2
Median SPF	8/13/2010	1.1	1.1	1.1	1.5
Macro Advisers	10/31/2010	1.1	1.0	1.1	0.9
CPI Inflation					
	Release Date	2010Q3	2010Q4	2010 Q4/Q4	2011 Q4/Q4
FRBNY	10/12/2010	1.4	1.4	0.9	1.7
Blue Chip	10/10/2010	1.5	1.6	1.0	1.7
Median SPF	8/13/2010	1.4	1.6	0.9	1.8
Macro Advisers	10/31/2010	2.0	1.2	1.1	1.1
Core CPI Inflation					
	Release Date	2010Q3	2010Q4	2010 Q4/Q4	2011 Q4/Q4
FRBNY	10/12/2010	1.4	1.4	0.9	1.5
Median SPF	8/13/2010	1.4	1.2	0.9	1.5
Macro Advisers	10/31/2010	1.1	0.9	0.8	0.8

Source: FRBNY, Blue Chip Consensus Forecasts, Survey of Professional Forecasters, and Macro Advisers

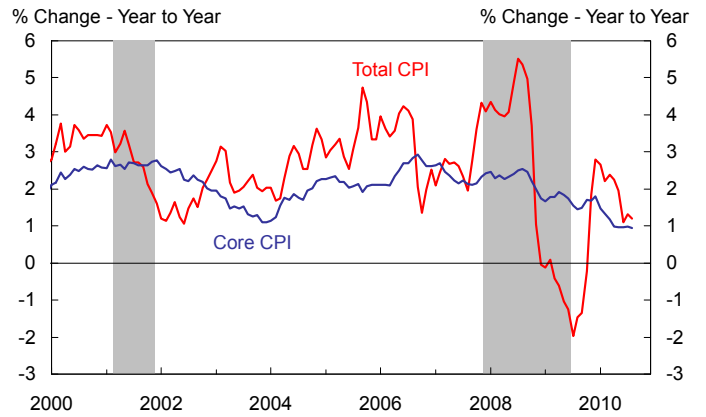
PCE and CPI Measures of Inflation since 2000

Total and Core PCE Deflator



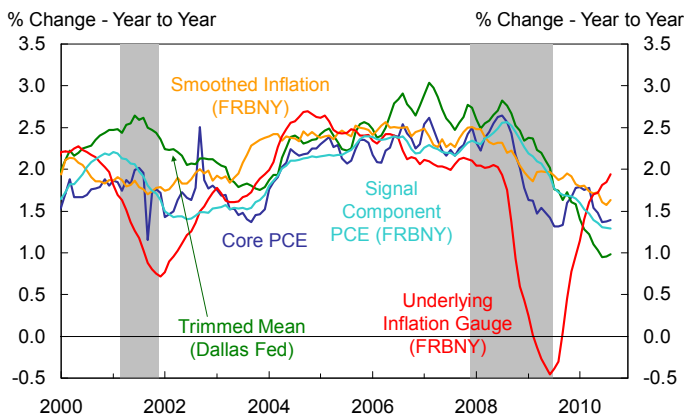
Source: Bureau of Economic Analysis

Total and Core CPI Deflator



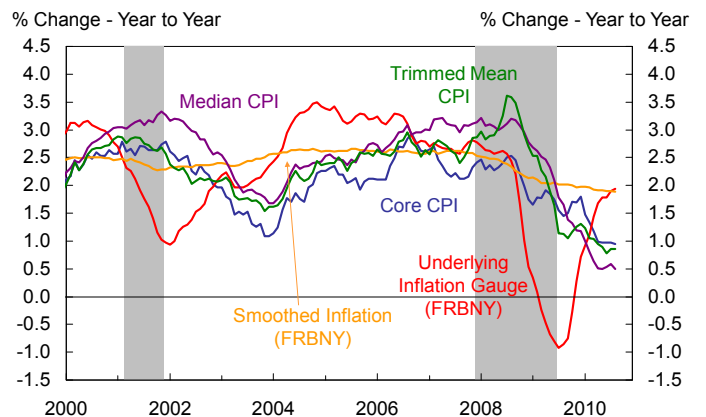
Source: Bureau of Labor Statistics

Measures of PCE Inflation



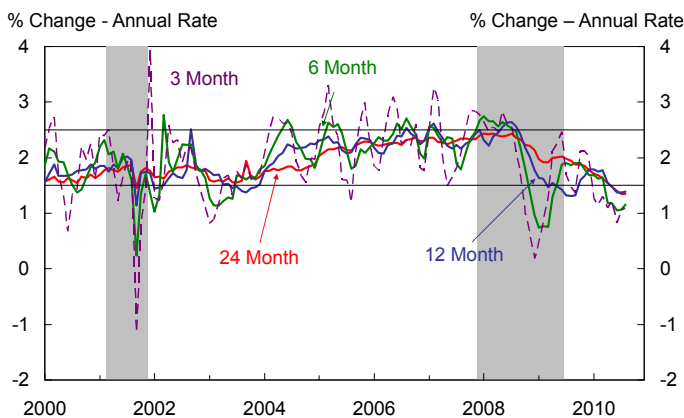
Source: Bureau of Economic Analysis, Dallas Fed, FRBNY and Bank of Switzerland

Measures of CPI Inflation



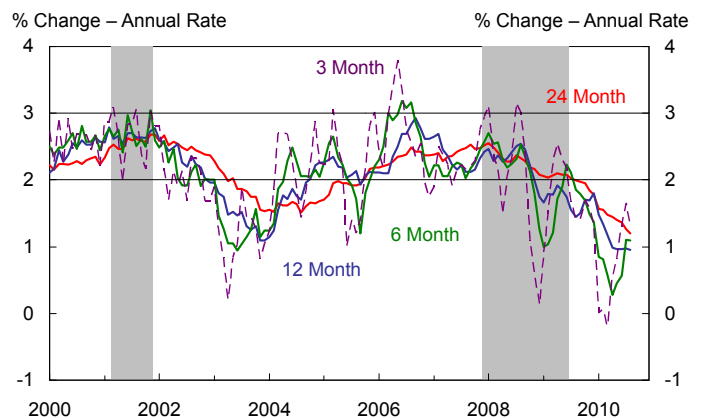
Source: Bureau of Labor Statistics and FRBNY

Core PCE Inflation over Various Horizons



Source: Bureau of Economic Analysis

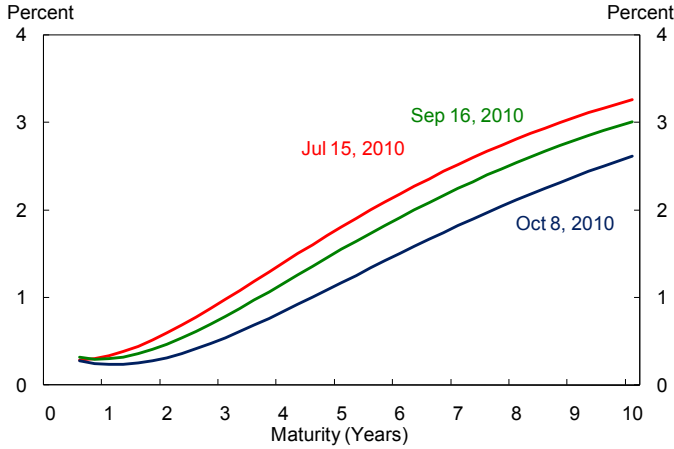
Core CPI Inflation over Various Horizons



Source: Bureau of Labor Statistics

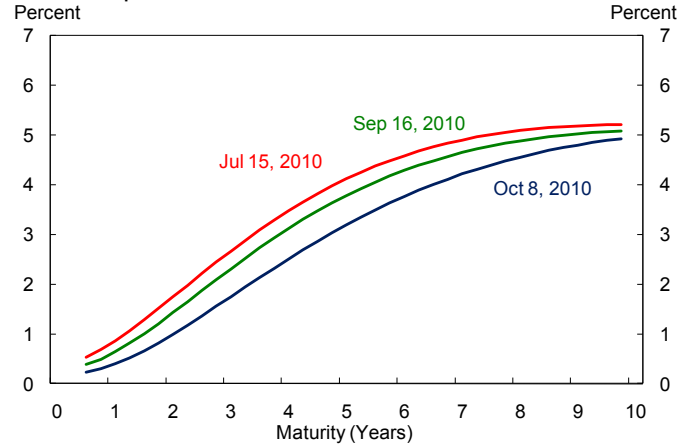
Treasury Yields and Inflation Expectations

Zero Coupon Yield Curves



Source: Federal Reserve Board

Zero Coupon Yield Curves: One-Year Forward Rates



Source: Federal Reserve Board

Short- and Long-Term Treasury Yields



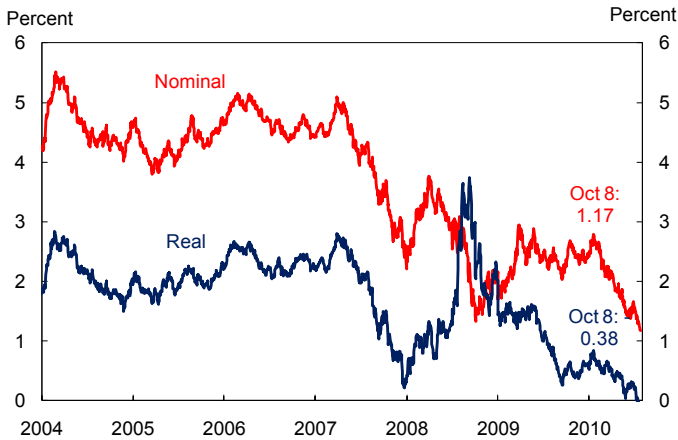
Source: Bloomberg

Option and Swaption Volatility Expectations



Source: Federal Reserve Board, Barclays, and FRBNY

4-5 Year Forward Rates



Source: Federal Reserve Board

TIPS Implied Inflation: 4-5, and 5-10 Year Horizons

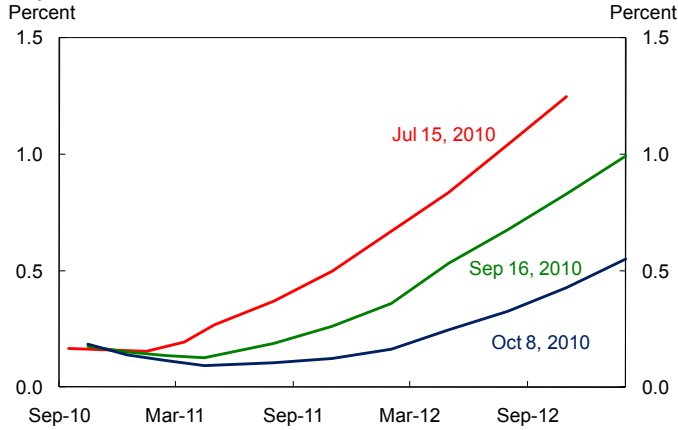


Source: Federal Reserve Board

Note: Carry-adjusted.

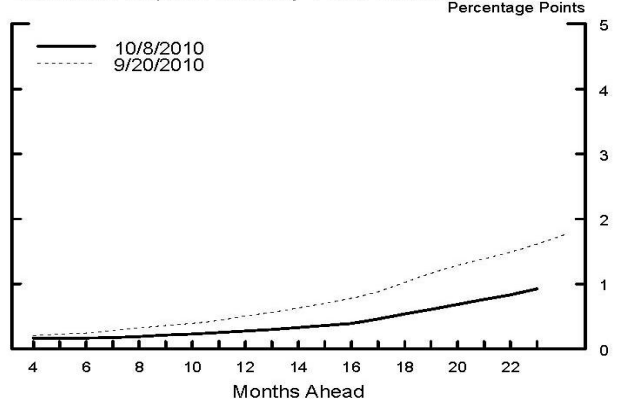
Market Policy Expectations and Uncertainty

Expected Federal Funds Rate



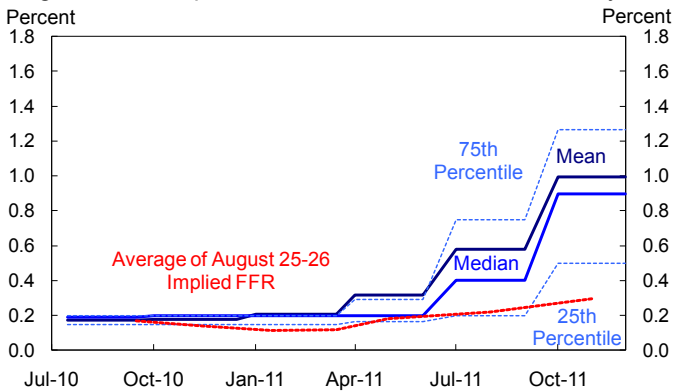
Source: Federal Reserve Board

Eurodollar Implied Volatility Term Structure*



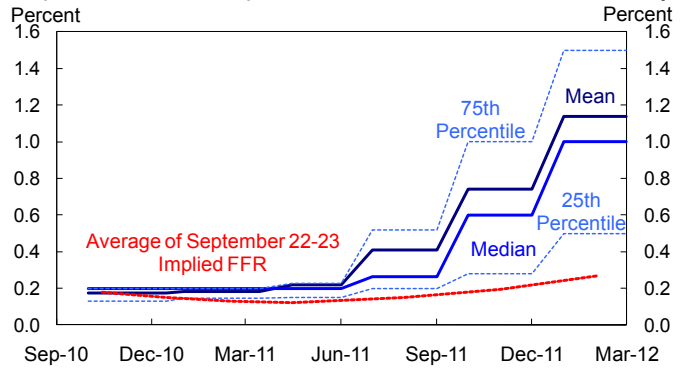
*Width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility.

August 2010: Expected Fed Funds from BCFF Survey



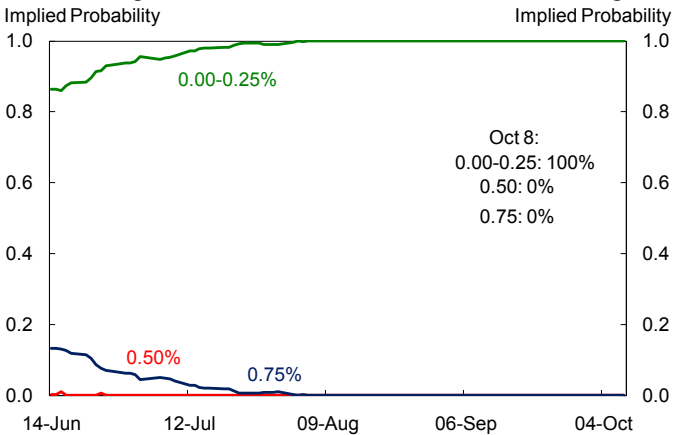
Note: Implied FFR are from fed funds and Eurodollar futures. The BCFF survey was conducted on August 25-26.

September 2010: Expected Fed Funds from BCFF Survey



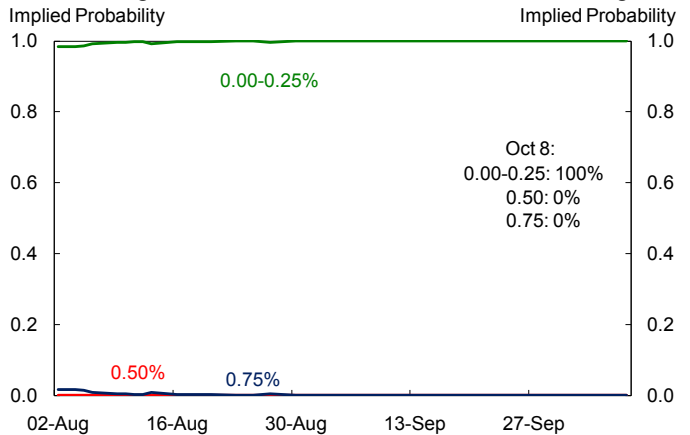
Note: Implied FFR are from fed funds and Eurodollar futures. The BCFF survey was conducted on September 22-23.

FOMC Target Probabilities: November 2010 Meeting



Source: Cleveland FRB Note: Estimated using options on fed funds futures.

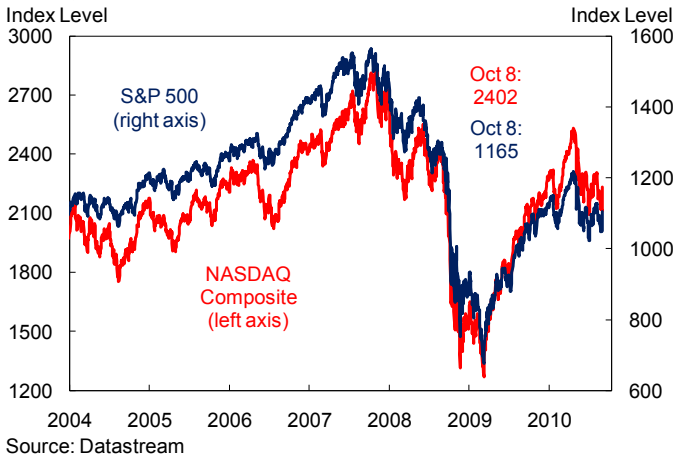
FOMC Target Probabilities: December 2010 Meeting



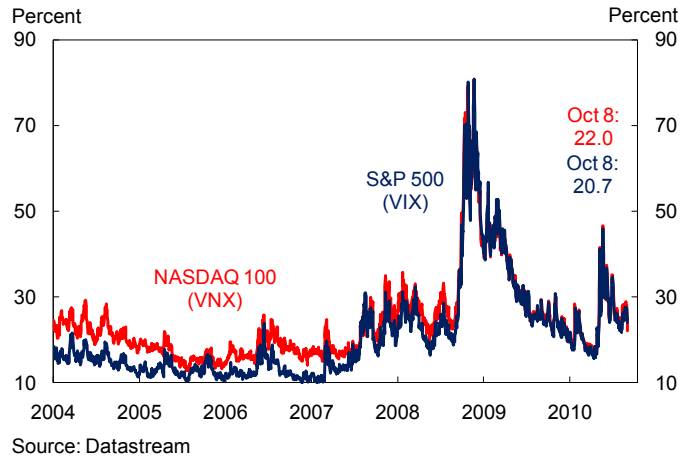
Source: Cleveland FRB Note: Estimated using options on fed funds futures.

Equity Markets and Corporate Credit Risk

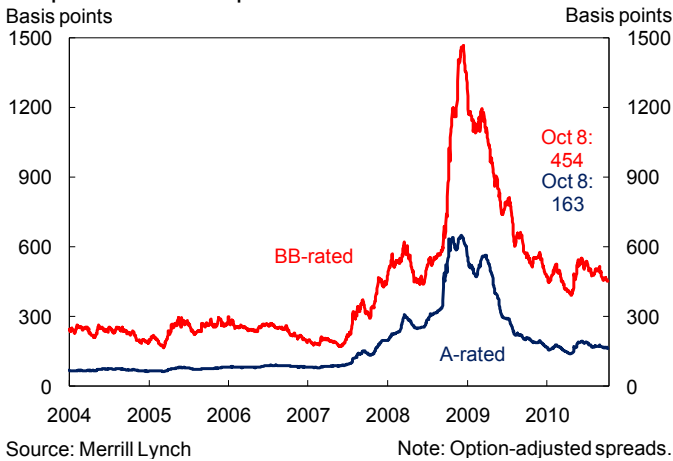
Equity Indices



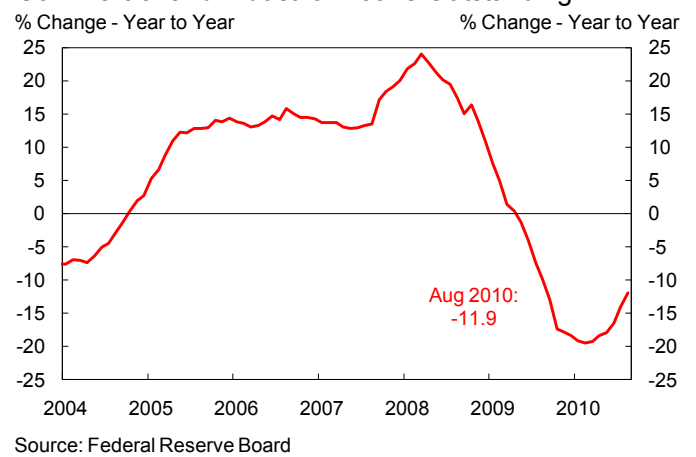
Equity Indices: One-Month Implied Volatility



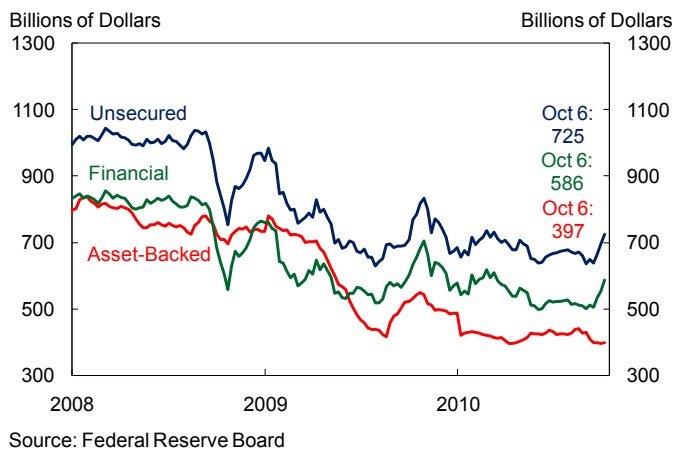
Corporate Credit Spreads



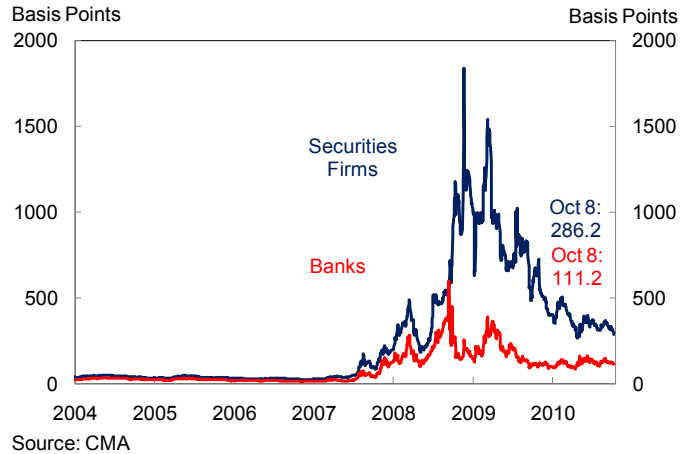
Commercial and Industrial Loans Outstanding



Commercial Paper Outstanding

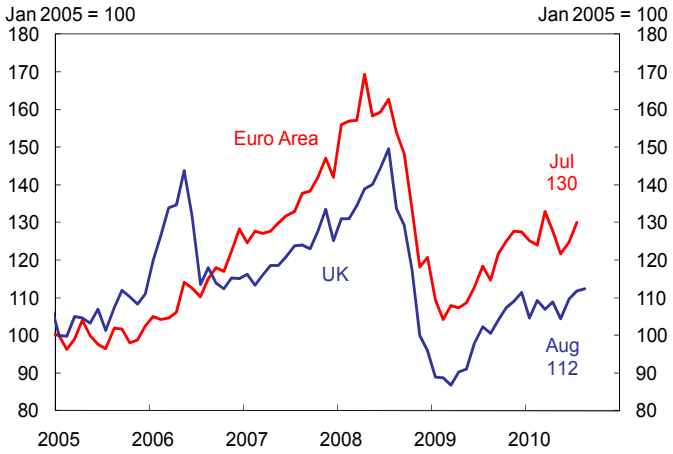


Sector CDS Spreads

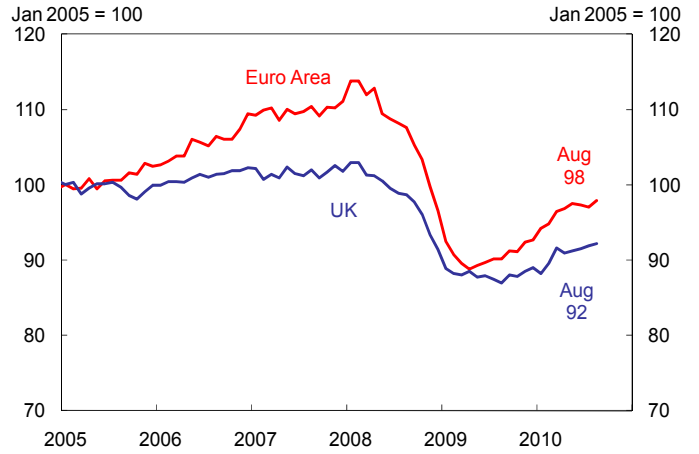


Exports and Industrial Production

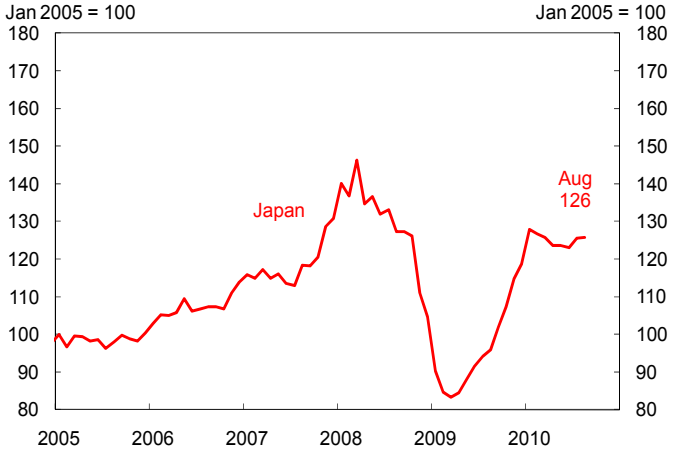
Exports



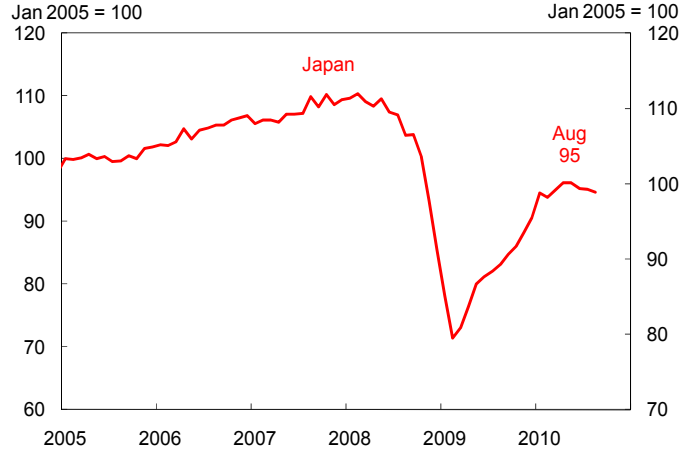
Industrial Production



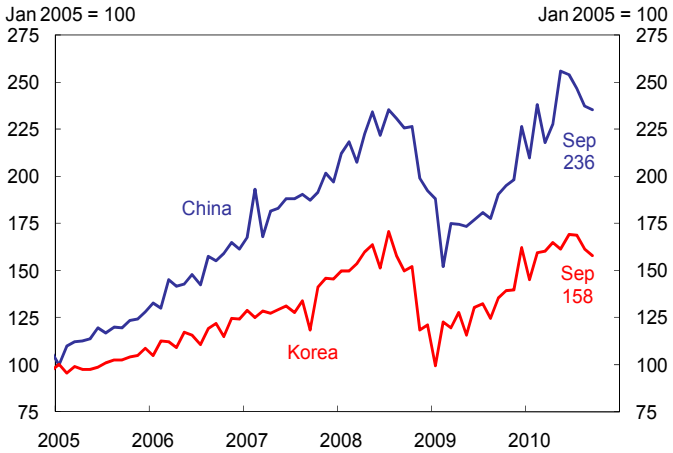
Exports



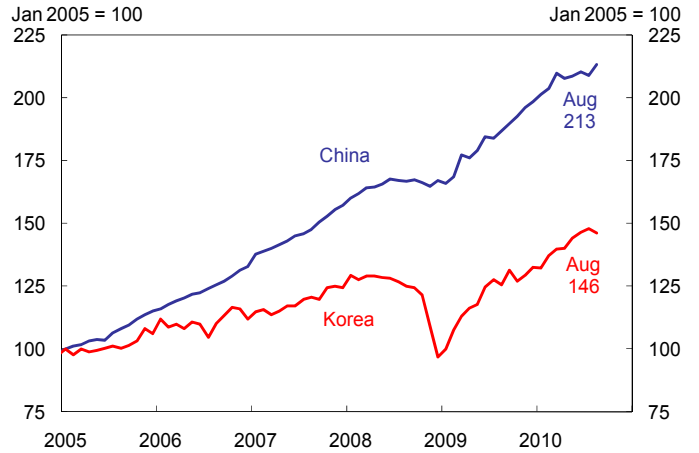
Industrial Production



Exports

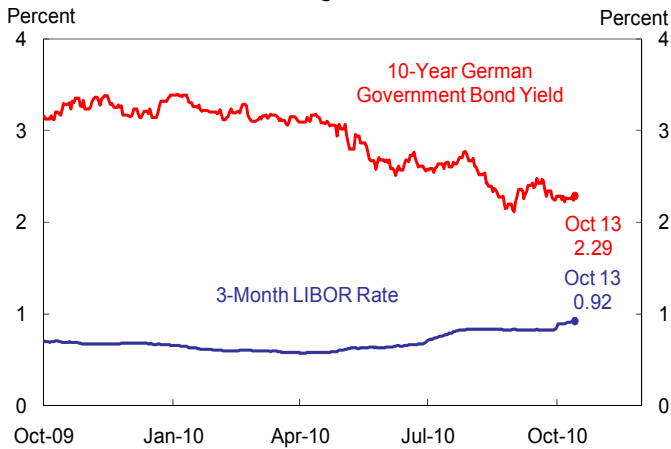


Industrial Production



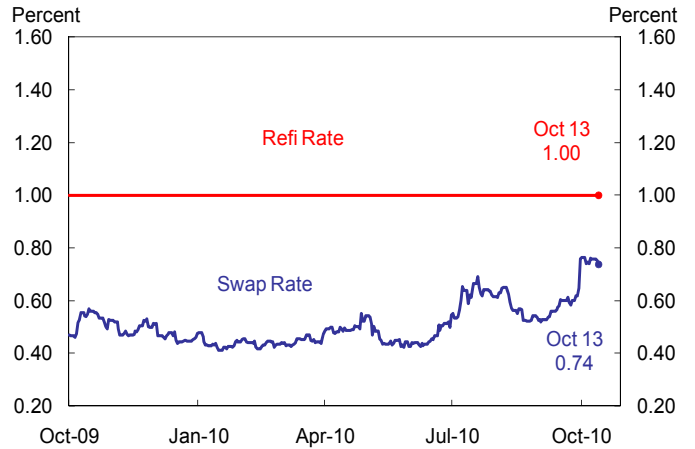
Global Interest Rates and Equity Markets

Euro Area Short- and Long-Term Interest Rates



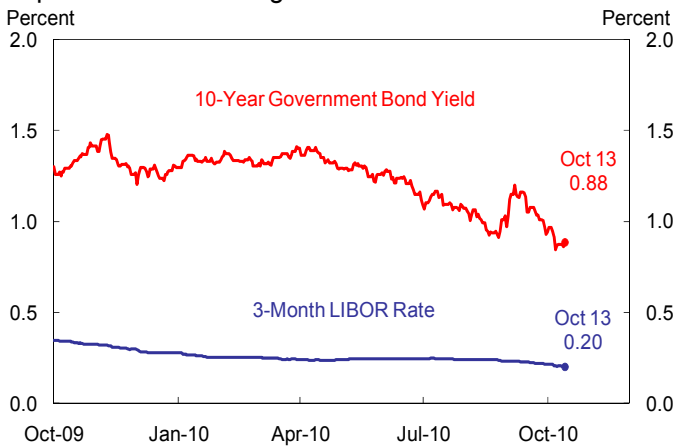
Source: Bloomberg

Euro Area: OIS Rate (Six Months)



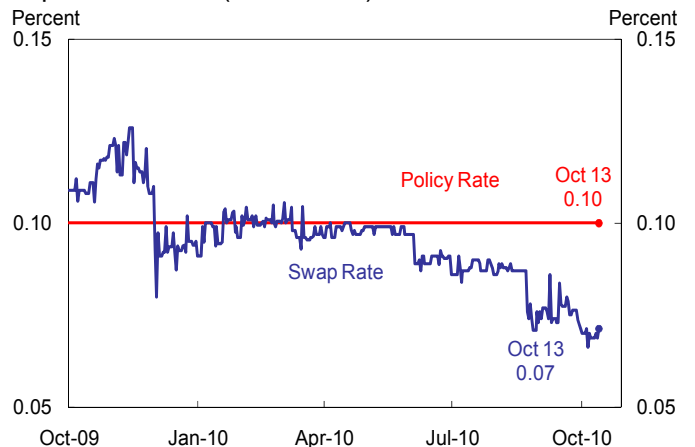
Source: Bloomberg

Japan Short- and Long-Term Interest Rates



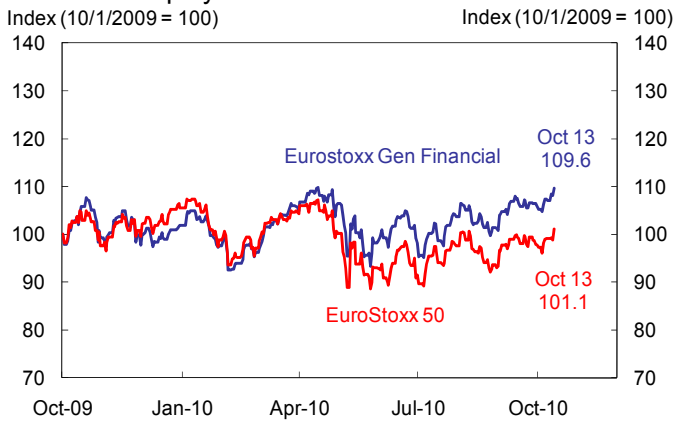
Source: Bloomberg

Japan: OIS Rate (Six Months)



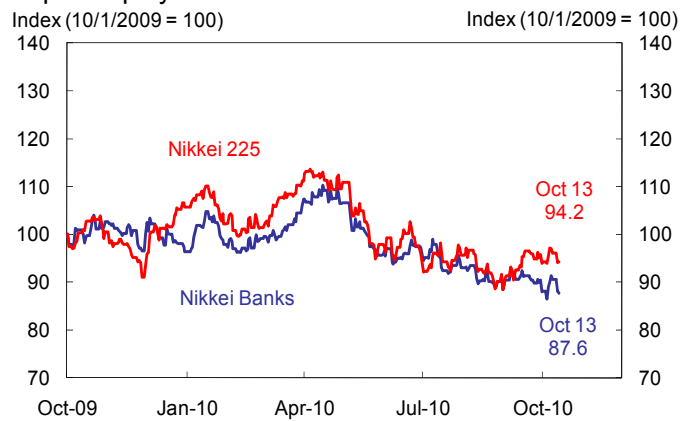
Source: Bloomberg

Euro Area Equity Price Indices



Source: Bloomberg

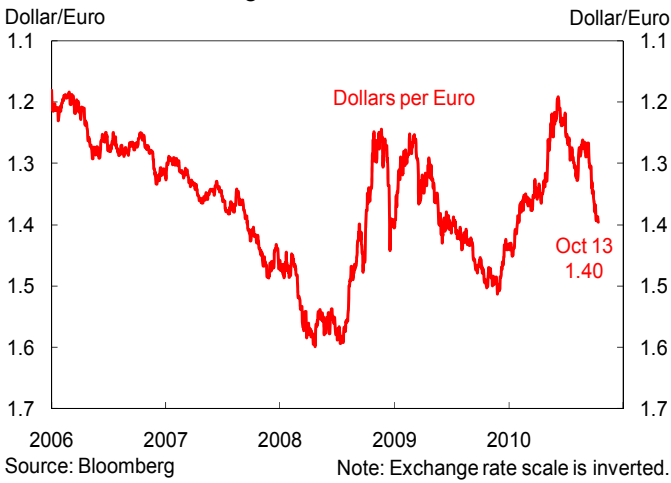
Japan Equity Price Indices



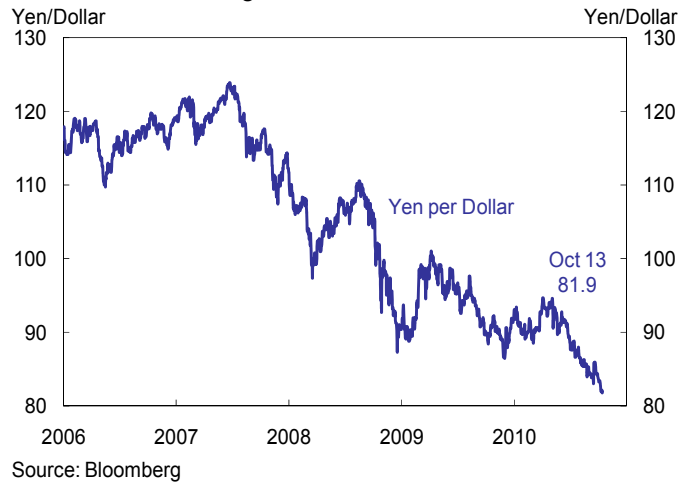
Source: Bloomberg

Exchange Rates

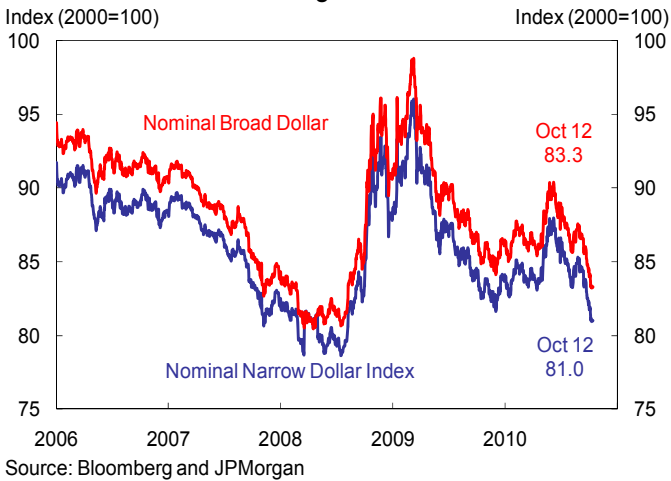
Dollar-Euro Exchange Rate



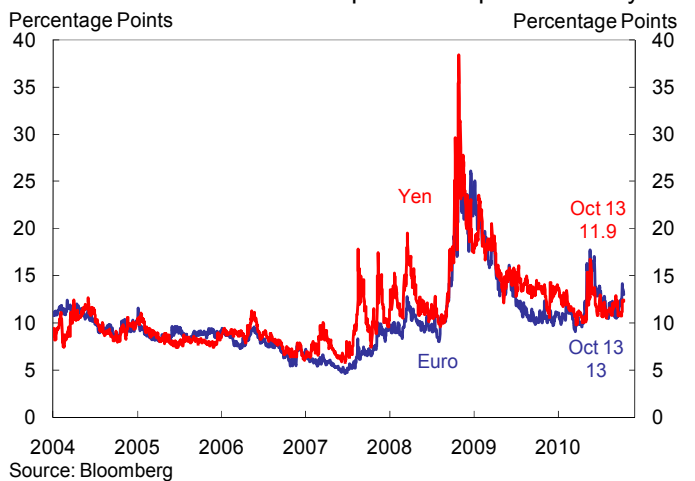
Yen-Dollar Exchange Rate



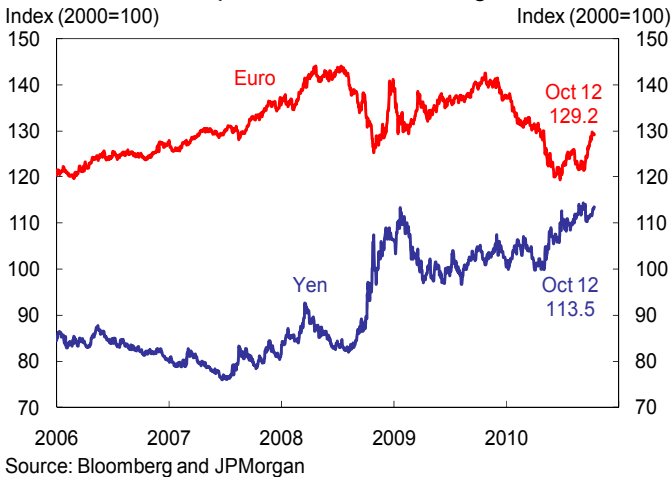
Nominal Effective Exchange Rates



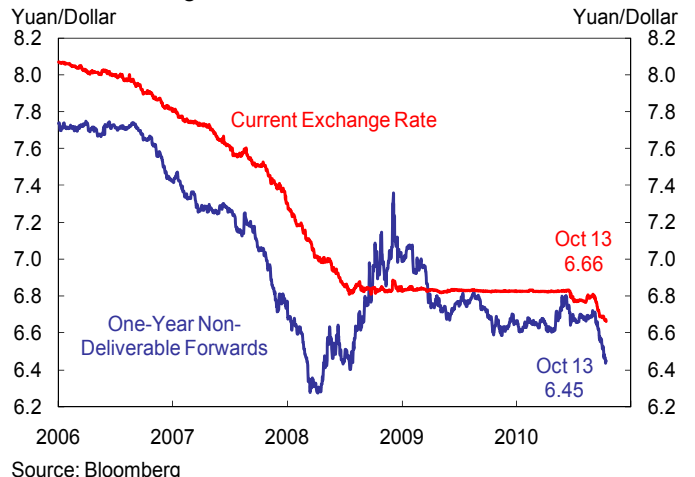
Euro and Yen One-Month Implied FX Option Volatility



Euro Area and Japan Effective Exchange Rates



China Exchange Rates



Some Measures of the Current Stance of Monetary Policy

Vasco Curdia, Marco Del Negro, Simon Potter, Argia Sbordone

We examine five alternative measures of the stance of monetary policy:

1. Prescriptions of contemporaneous feedback rules -- using 2010Q3 data -- with response coefficients to output and inflation gaps as in Taylor's original work.
2. Prescriptions of forecast-based rules -- using 2011Q3 projections -- with response coefficients to output and inflation gaps taken from Taylor's original work. The forecasts are set equal to either the FRBNY central scenario projection or the FRBNY forecast taking into account our risk assessment.
3. Prescription of two difference rules, where the change in interest rate is related to the inflation gap and to output growth above potential. In these rules no assumption is required about the level of the nominal neutral rate and the output gap. In the first rule inflation gap and output growth are contemporaneous values, in the second they are computed from FRBNY central scenario projections. Such rules prescribe changes in the fed funds rate, thus they do not directly address the zero bound issue.
4. Counterfactual simulations from i) a Bayesian vector autoregression with a prior generated by a small Dynamic Stochastic General Equilibrium (DSGE-VAR) and ii) a medium-scale DSGE model. The DSGE-VAR model is estimated using data from the last 25 years on GDP and core PCE deflator with the average target FFR in the 3rd month of the quarter as the policy rate. In addition to GDP and core PCE deflator, the DSGE is estimated using data on total hours and the labor share. The counterfactual is constructed by setting the shock to the policy rule to zero.
5. Optimal interest rate policy computed from a small DSGE model with credit frictions. In addition to GDP, GDP deflator and FFR rate, the model is estimated with data on commercial and industrial (C&I) loans rate spread relative to the FFR as a measure of credit spread, and a measure of bank lending (C&I and consumer loans). This model is estimated on data for the period from 1986Q3 to 2010Q3. Optimal interest rate policy is computed imposing the zero lower bound on the nominal interest rate.

These measures are not intended to span the prescription of all policy type rules, optimal policy or robust control.

Specifically, none of the rules takes into account the large scale asset purchase program. There are a range of estimates of the effects of this program on long-term yields (some of these estimates are zero by assumption). Estimates based on the portfolio balance effect suggest a decrease in long-term Treasury yields of around 3 to 6 bps per \$100 billion purchase of assets (so a stock of \$2 trillion would have reduced the 10 year yield by about 60 to 120bps). It is difficult to reliably translate these effects into the same metric as the standard feedback rules but some simple rule of thumbs can be used. For example, if one looks at evidence from vector autoregressive models on the effects of shocks to the fed funds rate on unemployment, an equivalent decrease in long-term yields could be obtained by a one-time surprise decrease in the fed funds rate of about 3.5 times the change in the 10 year yield. Alternatively, one can consider more sustained movements in the fed funds rate in which case the 10 year yield change could map into a change in the short-rate 2 times the change in the 10 year yield.

In Taylor's original formulation the policy rate is moved by 1.5 times the size of the inflation gap and 0.5 times the size of the output gap. We assume a 2% objective for core PCE inflation. This leaves the value of intercept (often called the nominal neutral rate) to be determined. It is difficult to obtain precise estimates of this time varying value. In the past we have assessed the plausible range of values to be between 3.0 and 5.5%. Because of lingering effects of the financial crisis, the neutral rate is likely to be somewhat lower. Thus we focus on policy prescriptions obtained using a range of 2.0 to 4.5% for the neutral rate. A summary of the results is presented in the table at the end of this note.

The contemporaneous feedback rule prescribes a policy rate about 450 bps below the neutral rate, mainly as a result of an output gap estimated to be larger than 6%. Using the forecast based rule with the FRBNY modal projections for 2011, the prescription changes marginally, to about 400 bps below the neutral rate. Taking into account the balance of risks around the FRBNY projection prescribes an additional 20 bps of easing.

The difference rule prescriptions pick up the recent slowdown in economic conditions, and suggest a modest decline in the fed funds rate of around 10-20 bps.

The calculations above assume no inertia in the adjustment of the policy rate. The counterfactuals generated by the estimated vector autoregression and by the DSGE model capture instead some of the inertia observed in the policy rates over the last 25 years, as well as the average neutral rate over this period and estimated response coefficients to inflation and output gap. The counterfactual prediction for the FFR in 2010Q4 is at 25 bps according to the DSGE-VAR and at 50 bps according to the DSGE model. According to the DSGE model the counterfactual FFR remains near zero through 2012Q1, as it responds to the forecasted low levels of inflation.

Finally, the optimal interest rate is computed from an estimated small scale DSGE model with credit frictions, minimizing a model consistent loss function. Optimal policy prescribes that the FFR should be at zero. Note that the calculation imposes the zero lower bound for the FFR.

Policy Rule	Rate Prescription
Taylor rule, Contemporaneous Feedback	-2.5 to 0
Taylor rule, Forecast-Based	-2 to 0.5
Taylor rule, Forecast-Based with Risks	-2.2 to 0.2
Contemporaneous Difference Rule	0.1 decrease
Forecast-Based Difference Rule	0.2 decrease
Counterfactual with DSGE-VAR	0 to 0.25
Counterfactual with DSGE	0 to 0.5
Optimal rate in DSGE with credit frictions	0