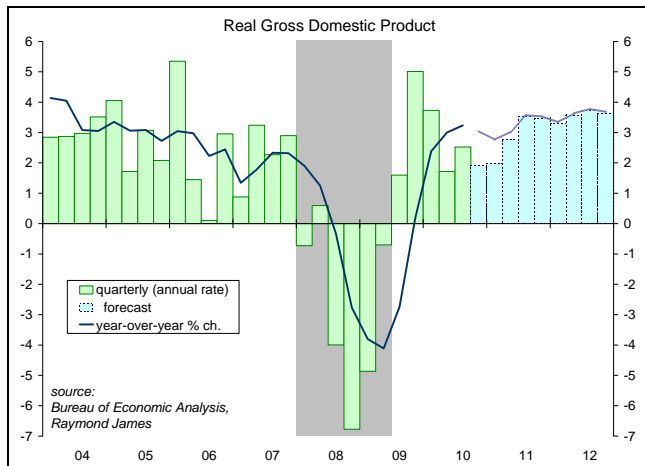


## 2011 Economic Outlook

### Gradual Recovery To Continue, Picking Up Over Time

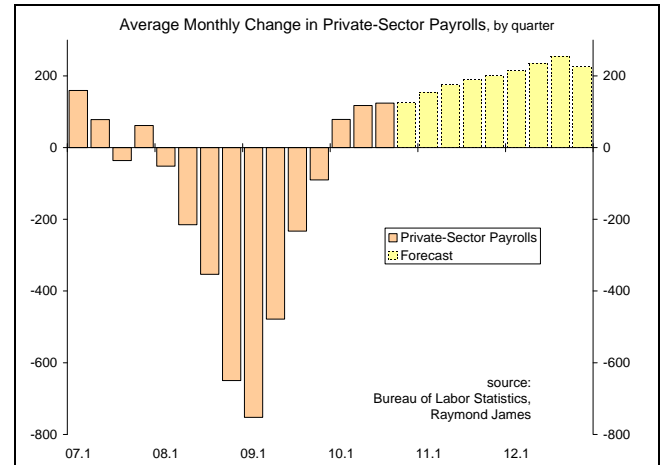
- *The good news is that the economic recovery is expected to continue in 2011, as positive momentum in consumer spending and business fixed investment battles continued headwinds.*
- *The bad news is that the recovery is unlikely to be strong enough to push the unemployment rate down by much.*
- *The risks to growth are still tilted predominately to the downside, but monetary policy will remain supportive.*

The Business Cycle Dating Committee of the National Bureau of Economic Analysis has pegged the ending date for the recession as June 2009. In the second half of that year, growth was supported by two strong, but temporary factors: the federal fiscal stimulus and an inventory rebuild. In early 2010, growth shifted to more basic underlying demand in consumer spending and business fixed investment. However, the pace of growth has not been strong enough to push the unemployment rate down. At this point, we'd like to see real GDP growth closer to 5%, with corresponding monthly gains in nonfarm payrolls on the order of 300,000. The economy faced a number of headwinds in 2010 – and those headwinds are expected to limit the pace of growth in early 2011.



In a typical recession/recovery scenario, the Federal Reserve raises short-term interest rates to cool inflation pressures, the economy slows, pent-up demand builds in autos and new homes during the downturn, the Fed lowers short-term rates, the economy begins to recover, and the satisfaction of pent-up demand slingshots you to 5% or 6% GDP growth. This wasn't your typical recession. It wasn't caused by the Fed raising short-term interest rates, so lowering rates isn't going to lead to a rapid recovery. Recessions that are caused by financial crises tend to be much more severe and the recoveries take a lot longer. This was the worst financial crisis since the Great Depression (and in some ways, the financial strains were more severe). It takes time to repair household and business balance sheets and to rebuild confidence. A rapid

recovery was not going to happen. Fiscal and monetary policy could provide support, but would not generate strong economic growth. A recovery depends ultimately on the private sector, but stimulus efforts were critical in preventing a much sharper economic downturn. While clearly unpopular with the American public, the bank rescue was critical in stabilizing the financial system. Efforts by the Fed and other central banks halted a global financial meltdown.



During the first quarter of 2009, the economy was losing 750,000 private-sector jobs per month. By the second half of that year, the pace of job losses had slowed dramatically. Private-sector job growth returned in 2010, a critical necessity in an economic recovery. However, the pace of job growth was not enough to push the unemployment rate down. Private-sector payrolls averaged about a 110,000 monthly gain in 2010 (note that annual benchmark revisions, due on February 4, are expected to lower the March 2010 level of payrolls by about 366,000, according to initial estimates from the Bureau of Labor Statistics). We need around 135,000 per month just to absorb the growth in the population and to keep the unemployment rate steady over time. We'd need about 250,000 to 300,000 additional jobs per month for a number of years to regain the number of jobs lost during the economic downturn. Such a pace does not seem likely anytime soon.

We tend to focus on net job growth, but the real story is under the surface, job destruction appears to be trending at low levels. Announced corporate layoff intentions are the lowest in a decade. The problem in the job market has been a lack of job creation. Corporate profits improved further in 2010, helping to fuel business fixed investment and to prevent large-scale job layoffs, but higher profits have not done much to induce new hiring. In fact, to keep earnings up, firms remain focused on cost containment, and labor is the biggest expense for most firms. Half of the job growth in an expansion typically comes from small, newer firms. Bank credit remains very tight for small firms, but should improve over time.

The economy is dynamic, meaning that what happens depends on what came before. The downturn was dominated by negative feedback loops. For example, job losses led to declines in consumer spending, which led to more job losses, and so on. Lower home prices contributed to increased foreclosures, which reduced home prices further. Policy efforts helped break those vicious cycles. In an expansion, positive feedback loops typically develop. A little more consumer spending leads to a little more job growth. Banks are a little more willing to lend, supporting growth. Positive news tends to generate more positive news. In early 2010, it looked as if we were on the cusp of a virtuous cycle. However, better growth in the spring was followed by a moderation in the summer – and fears of a possible double-dip recession. The economy seemed to have had enough positive momentum in the summer that a renewed economic downturn was unlikely. Real GDP growth slowed in the second and third quarter, but that's a bit misleading. A surge in imports, a sign of strength in domestic demand, subtracted considerably from GDP growth in 2Q10 and 3Q10. Domestic final sales (GDP less net exports and the change in inventories), a better measure of underlying demand, was relatively strong (averaging a 3.6% annual rate). The summer "slow patch" really wasn't all that slow.

Some economic headwinds limited the pace of the recovery in 2010 and those forces are likely to remain in play in the first half of 2011. Specifically, lingering problems in residential real estate have continued to dampen the pace of consumer spending growth. In addition, state and local government budgets remain under severe pressure, resulting in pro-cyclical policies – raising taxes and cutting services. The federal fiscal stimulus will ramp down in 2011, but the recent tax deal (the two-year extension of the Bush tax cuts, extending unemployment insurance benefits, and a reduction in payroll taxes) will prevent a significant drag on economic growth in the near term (this is not so much a positive for growth as it is a non-negative, but it's better than nothing).

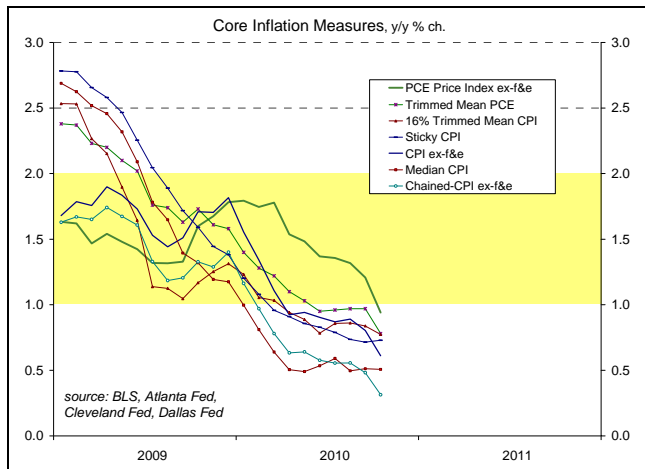
The housing sector is likely to remain very weak in many areas of the country. Two rounds of homebuyer tax incentives helped to stabilize housing activity, but appear to have had no lasting positive impact. It will take a long time to work through the volume of troubled mortgages and the foreclosure documentation scandal hasn't help. Ultimately, a recovery in the housing market will depend critically on better job growth. That should come over time, but not right away. In the meantime, a further decline in home prices would be an unwelcome development. Home prices fell following the expiration of the homebuyer tax credit, but may be stabilizing. A continued decline would worsen the problems in the housing sector and dampen consumer spending growth (through the wealth effect on spending).

State and local government usually provides a base level of support in a recovery. However, state and local government has been contracting, acting as a small drag on overall economic growth. State and local government payrolls fell by 250,000 over the 12 months ending in November. Some of the federal fiscal stimulus was aid to the states, which will be going away in 2011. Budget strains should fade as the economy and revenues recover, but they will not go away anytime soon.

The federal fiscal stimulus will decrease in 2011, effectively acting like a drag on overall GDP growth. Some of the infrastructure spending, which provides reasonably good bang for the buck, will continue for a while. However, such spending accounts for less than a fifth of the overall package. The negative impact of the falling off in the fiscal stimulus package should be more than offset by the positive impact of the recent tax agreement. Had the Bush tax cuts expired, growth would have been relatively weaker in the near term. The extension, more or less a continuation of the status quo, merely prevents some near-term downside. The 13-month extension of unemployment insurance benefits will also prevent a near-term hit to consumer spending (note that benefits will still cut off after 99 weeks) and the reduction in the employee-paid portion of payroll taxes will add to disposable income.

The tax agreement will add about \$900 billion to the federal budget deficit over the next two years. Large deficits are a concern for many investors. Much of the increase in the deficit has been due to the recession, which resulted in sharp declines in revenues. Those revenues will rebound as the economy recovers. However, a gradual economic recovery means only gradual improvement in revenues. In addition, there have been a number of recession-related increases in spending, such as extended unemployment insurance benefits and food stamps (note that one in seven Americans is now receiving food stamps). It's okay to run large budget deficits in a recovery from a severe recession. Tightening budgets, as is happening at the state and local levels of government, would weaken the recovery. The real problem with the deficit is long-term. Medicare expenditures are set to explode in about 10 to 15 years (this is partly a demographic story, but mostly a cost-escalation issue). Moreover, this is not a newly discovered problem. The issue was clear 20 years ago. It's important for lawmakers to come up with a credible plan to reduce the deficit in the years ahead. The President's commission on the budget deficit did not get us off to a good start.

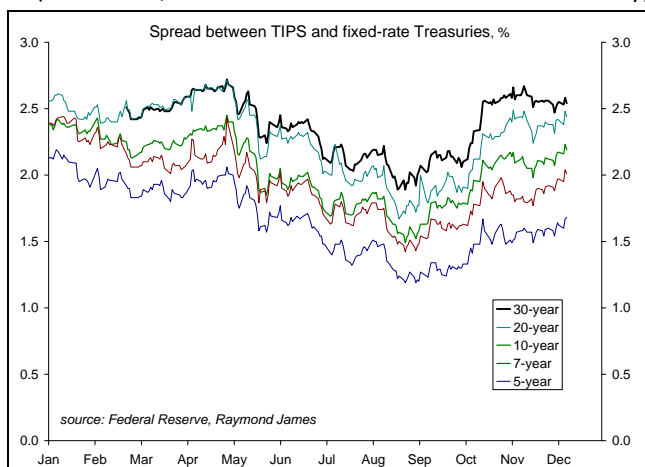
Monetary policy will remain supportive in 2011 and into 2012. With mortgage rates low, the Fed found that principal payments in its portfolio of mortgage-backed securities were reducing the size of its balance sheet. To keep the size of its balance sheet constant, the Federal Open Market Committee voted on August 10 to reinvest these principal payments into long-term Treasury securities, buying about \$35 billion per month. At the November 2-3 policy meeting, the FOMC voted to purchase an additional \$600 billion in long-term Treasuries by the end of 2Q11, which is about \$75 billion per month. Total monthly purchases by the Fed amount to about \$110 billion per month, which is large relative to the amount of debt the government is issuing. Note that, technically, this is not "quantitative easing," an attempt by the central bank to peg the quantity of reserves in the banking system (rather, the Fed is attempting to reduce long-term interest rates and lift inflation back toward the Fed's target rate). However, this was dubbed "quantitative easing," or "QE2" by the press and that's the term that's been widely used. The Fed's asset purchase plan has been widely criticized and (unfortunately) politicized. Many fear that the Fed policies will lead to excessive increases in the money supply and to significant increases in inflation.



The Fed's critics expressed the same concerns regarding its first round of asset purchases (\$1.25 trillion in mortgage-backed securities, \$200 billion in agency debt, and \$300 billion in long-term securities), which took place from late 2008 to the first quarter of 2010. However, instead of higher inflation, the underlying trend in inflation moved lower over the course of 2010. Ex-food & energy, the Consumer Price Index rose 0.6% in the 12 months ending in November, a record low (the figures go back to 1957). Other measures of core inflation (the PCE Price Index ex-f&e, the median CPI, the chain-weighted CPI, and various trimmed-mean measures) have also declined.

The Fed has a dual mandate, maximum sustainable employment and stable prices. However, the Fed does not define price stability as a 0% increase in the CPI. Rather, the Fed seeks a moderately low level of inflation. Most central banks around the world have explicit inflation targets. The Fed does not. However, a number of Fed officials have indicated a desire to have inflation around 2%. Real interest rates (that is, nominal interest rates adjusted for inflation) are what matter in the economy. A moderate inflation target gives the Fed more room to run accommodative policy in an economic downturn.

Lower inflation means higher real interest rates, which lead to slower economic growth. The Fed's asset purchases are meant to lower long-term interest rates, which will encourage more bank lending and risk taking. However, just as important, asset purchases should lead inflation back toward the Fed's goal (around 2%, rather than the sub-1% levels seen recently).

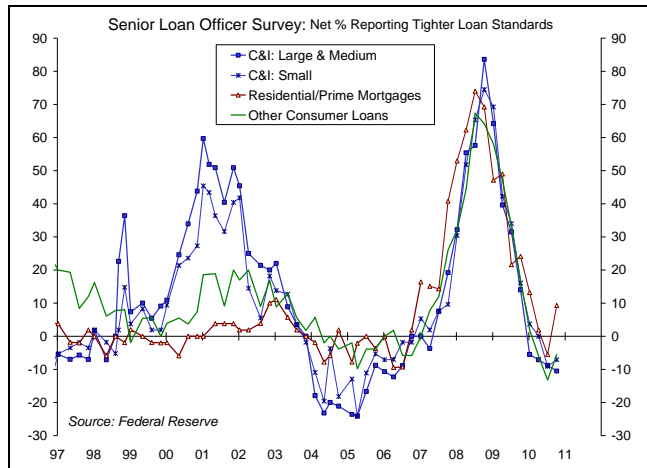


Inflation expectations are an important factor in the inflation process (acting as an anchor), and are an important guide for Fed policymakers. There are survey-based and market-based measures. The spread between inflation-adjusted and fixed-rate Treasuries is not an exact gauge of inflation expectations (there's a time-varying liquidity premium in Treasuries and a time-varying inflation-uncertainty premium in the TIPS), but it's a good approximation. As the underlying trend in inflation moved lower in 2010, inflation expectations also started to edge down (note that surveys of professional economic forecasters also showed some decrease in short- and long-term inflation expectations). However, once Fed officials began to discuss the possibility of further asset purchases in the summer, inflation expectations began to move higher – not substantially higher, just to where they were in the spring.

It's worth noting that while many have criticized the Fed's latest round of asset purchases, some have argued that it should have been larger. If reducing real interest rates is the goal, then the Fed could shoot above its long-term inflation target – say, 3% for a year. However, Chairman Bernanke has indicated that the Fed remains firmly committed to keeping inflation low over the long term. Such a pledge undercuts the effectiveness of the Fed's program, but it may also help dampen fears of higher inflation in the future.

Many point to the rise in gold, oil, and other commodity prices as evidence that inflation pressures are building. However, commodity price inflation is not the same as consumer price inflation. More than half of the Consumer Price index is services. In general, the price of consumer goods depends more on labor, distribution, advertising, and other costs. It takes a very large increase in commodity prices to have much of an impact by the time you get to the consumer. The exception is oil. Changes in the price of crude oil transfer quickly to gasoline prices, which have a significant impact on economic growth. The price of oil was range-bound for most of 2010, hitting the high end of the range in December. The average price of gasoline is now a little over \$3 per gallon, a level that has had a negative impact on overall consumer spending in the past. However, the inflation mechanism is lot different now than it was 30 years ago. Over the last decade, we've seen a number of increases in oil prices, but these tend to be more of a restraint on consumer spending growth than a catalyst for a higher inflation trend. Three factors are driving commodity prices. One is monetary policy. Easier monetary policy tends to be associated with higher commodity prices (decreasing incentives for extraction and reducing the cost of holding inventories). The second factor is the global growth story (China, India, other emerging markets). The third is the speculative element (also a function of interest rates).

So what drives inflation? As mentioned earlier, inflation expectations act like an anchor. The other major factor is a measure of the output gap (the difference between actual and potential GDP or the unemployment rate). Excess capacity tends to put downward pressure on inflation. The unemployment rate is expected to remain relatively high in 2011 (edging down over the course of the year) and capacity utilization in manufacturing should continue at a low level (rising, but no threat to the overall inflation outlook).

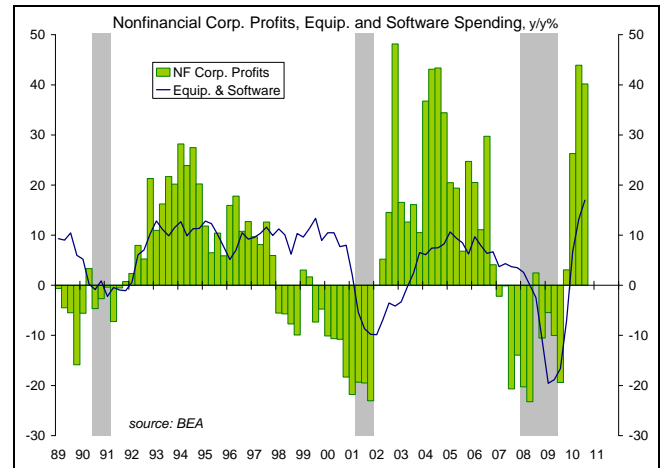


Bank terms and standards for consumer and business loans tightened further in 2010, but should ease in 2011. Credit to small firms tightened sharply during the economic downturn and remains tight. However, many small firms, unenthusiastic about future demand, do not want to take on additional financial obligations. Borrowing is a lot easier for large firms, which have access to the big banks and the corporate bond market. Consumers and businesses generally paid down debt in 2010, and a massive deleveraging continued in the financial sector. Government borrowing will remain high in 2011, but does not appear likely to crowd out private-sector borrowing.

The consumer outlook for 2011 is moderately positive. We should see enough growth in jobs and income to support consumer spending growth and the reduction in payroll taxes will add to disposable income in the near term. As usual, oil prices remain an important wildcard in the consumer spending outlook. A further rise in gasoline prices could dampen the positive effect of the tax agreement in early 2011.

Business fixed investment is also likely to remain moderately strong, fueled by strength in corporate profits.

	4Q09	1Q10	2Q10	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11	2009	2010	2011	2012
GDP (↓ contributions)	5.0	3.7	1.7	2.5	1.9	2.0	2.8	3.5	3.5	-2.6	2.8	2.5	3.4
<i>consumer durables</i>	-0.1	0.6	0.5	0.5	0.7	0.3	0.4	0.4	0.4	-0.3	0.5	0.5	0.4
<i>nondurables &amp; services</i>	0.8	0.7	1.1	1.4	1.5	1.6	1.7	1.8	1.7	-0.5	0.7	1.6	1.7
<i>bus. fixed investment</i>	-0.1	0.7	1.5	1.0	0.5	0.7	0.9	0.9	0.8	-2.0	0.5	0.8	0.9
<i>residential investment</i>	0.0	-0.3	0.6	-0.8	0.2	0.2	0.3	0.4	0.4	-0.7	-0.1	0.1	0.4
<i>government</i>	-0.3	-0.3	0.8	0.8	0.1	-0.2	-0.1	0.1	0.2	0.3	0.2	0.1	0.1
Domestic Final Sales	0.2	1.3	4.3	2.9	3.1	2.8	3.0	3.6	3.5	-3.2	1.9	3.1	3.5
<i>exports</i>	2.6	1.3	1.1	0.8	0.7	0.7	0.7	0.7	0.7	-1.2	1.3	0.7	0.7
<i>imports</i>	-0.7	-1.6	-4.6	-2.5	-0.9	-0.7	-0.8	-0.8	-0.8	2.3	-2.0	-1.2	-0.8
Final Sales	2.1	1.1	0.9	1.2	2.9	2.7	3.0	3.5	3.5	-2.0	3.0	2.9	3.1
<i>ch. in bus. inventories</i>	2.8	2.6	0.8	1.3	-0.9	-0.7	-0.2	0.0	0.0	-0.6	1.5	-0.2	0.0
Unemployment, %	10.0	9.7	9.7	9.6	9.7	9.7	9.6	9.4	9.2	9.3	9.7	9.4	8.5
NF Payrolls, monthly, th.	-90	87	190	-30	120	145	170	185	195	-395	92	174	228
Cons. Price Index (3 mo)	2.5	0.9	-1.5	2.7	1.9	1.5	1.5	1.6	1.7	2.8	1.0	1.6	1.8
<i>excl. food &amp; energy</i>	1.3	-0.2	1.3	0.7	0.4	0.8	1.0	1.1	1.3	1.8	0.6	1.1	1.6
PCE Price Index (q/q)	2.7	2.1	0.0	1.0	1.7	1.5	1.5	1.6	1.6	0.2	1.7	1.4	1.6
<i>excl. food &amp; energy</i>	2.1	1.2	1.0	0.8	0.5	0.9	1.0	1.2	1.3	1.5	1.3	0.9	1.4
Fed Funds Rate, %	0.12	0.13	0.19	0.19	0.20	0.21	0.24	0.25	0.25	0.16	0.18	0.23	1.01
3-month T-Bill, (bond- <i>eq.</i> )	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	1.1
2-year Treasury Note	0.9	0.9	0.9	0.5	0.4	0.8	1.4	1.8	2.1	1.0	0.7	1.5	2.3
10-year Treasury Note	3.5	3.7	3.5	2.8	2.7	2.8	3.0	3.4	3.7	3.3	3.2	3.2	4.0



U.S. imports and exports fell sharply during the global recession, but continued to recover in 2010 (combined with an inventory correction, exports added to early improvement in the manufacturing sector). However, growth in imports and exports appeared to moderate in the second half of 2010 and are not expected to be a major factor in 2011.

The European debt crisis is not going to go away anytime soon, and is likely to be a recurring concern for U.S. investors in 2011. Emerging economies are expected to remain strong in the near term, but many are fearful of a possible bubble.

Inventory growth was unsustainably strong in 3Q10. A slower pace of accumulation is expected to subtract from GDP growth in 4Q10 and in 1Q11, and manufacturing activity may be a bit soft in the near term. Domestic Final Sales should be moderately strong, improving in the second half and in 2012. The unemployment rate is likely to decline, grudgingly at first. Short-term interest rates are unlikely to start rising until early 2012, as the Fed begins normalizing monetary policy. The risks to growth and inflation remain mostly to the downside.