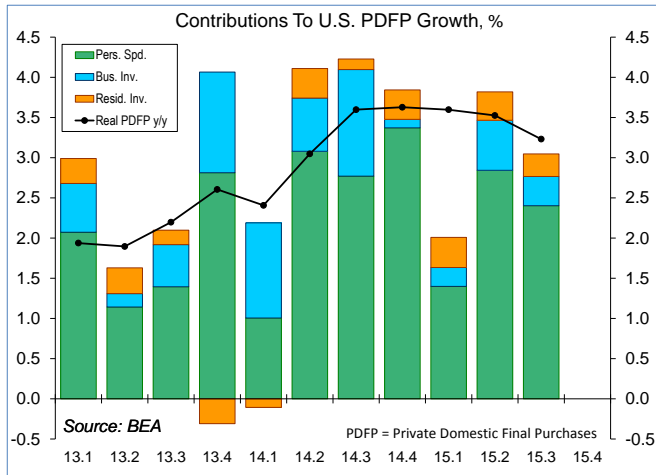


Monthly Economic Outlook

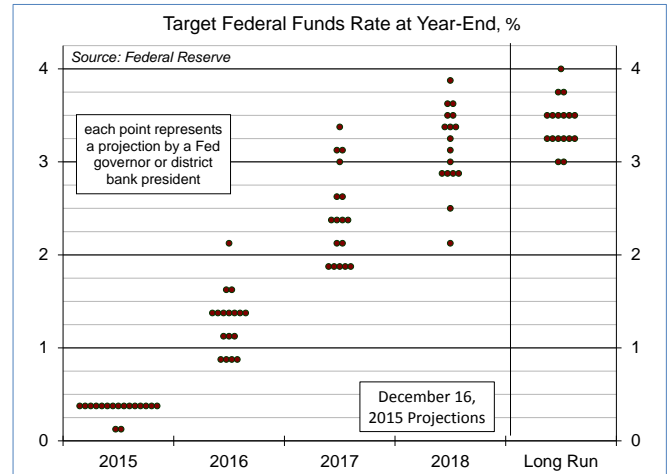
The 2016 Economic Outlook (Briefly)

- The theme of domestic strength and global weakness is expected to remain prevalent into the first half of the year. Job growth is expected to remain strong, but likely slower than in the last two years. The benefit to consumer spending from lower gasoline prices should fade as energy prices stabilize.
- The global outlook will be important. The advanced economies are expected to grow moderately, while emerging economies should be mixed. The Chinese currency is likely to depreciate a lot more, but gradually over the course of 2016.
- The Fed is expected to raise rates gradually (25 basis points at every other policy meeting), but policy action will be data-dependent and the risks are that it will be less aggressive.

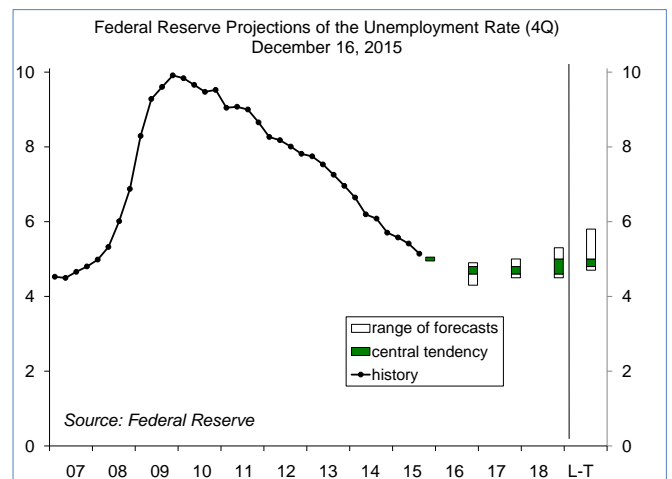
The Bureau of Economic Analysis began publishing a new output measure in 2015. Private Domestic Final Purchases (PDFP), about 85% of Gross Domestic Product, are made up of consumer spending, business fixed investment, and residential fixed investment. Alternatively, PDFP is GDP less net exports, the change in inventories, and government – three items that tend to be choppy from quarter to quarter. PDFP is less volatile than GDP and is a better measure of underlying domestic demand. Fed Chair Yellen mentioned the measure in recent speeches and we hope it catches on (and investors can finally stop fixating on the noise in the GDP headline figure). PDFP has been strong over the last couple of years, consistent with robust improvement in the labor market.



Nonfarm payrolls rose by three million in 2014 and appear to be on track to have risen by two and a half million in 2015. A pace of one and a half million would be consistent with the growth in the working-age population. Hence, we are reducing labor market slack at a relatively rapid pace. We currently still have slack in the job market, but eventually job growth will have to slow to a more sustainable pace.

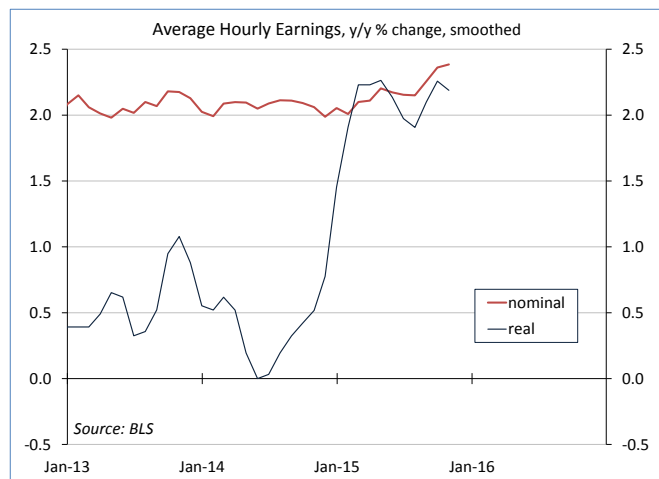


Labor market improvement was a key factor in the Fed's decision to begin raising short-term interest rates on December 16. Policymakers were more confident that inflation will move back toward the 2% goal. They also recognize that it takes time for policy changes to affect the economy. In the revised dot plot, Fed officials still differ in their expectations of the path of short-term interest rates, but the dispersion is now much less than in recent quarters. The median forecast of senior Fed officials is for another 100 basis points of rate increases over the course of 2016 (or a 25-basis-point hike at every other Fed policy meeting, most likely in March, June, September, and December). However, the risks are tilted toward the Fed being less aggressive (tightening only two or three times) next year.



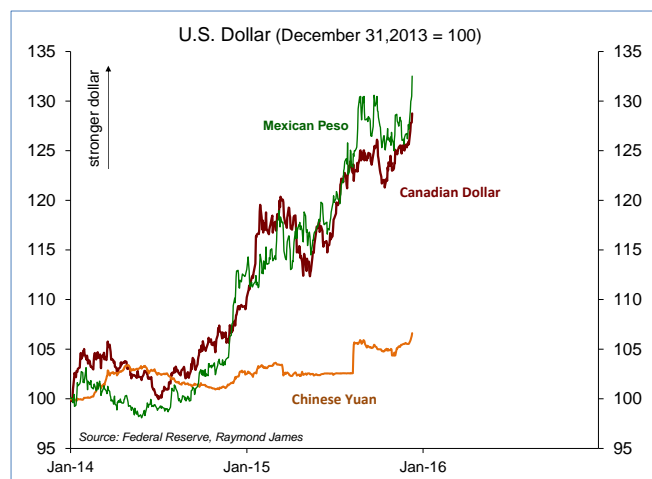
The Fed expects that the unemployment rate will drift a bit lower next year as slack is further reduced. Long-term unemployment and involuntary part-time employment are still higher than normal, but they have been falling significantly. The job market may not be at full employment at the end of next year, but we should be a lot closer than we are now.

Lackluster growth in average hourly earnings is taken as another sign of slack in the job market. Wage growth should pick up as the labor market tightens. However, there may be more slack in the job market than the Fed currently believes. Labor force participation has fallen, but many on the periphery (such as recent retirees and stay-at-home spouses) might be lured back into the workforce if offered a decent wage.



The drop in gasoline prices has boosted consumer purchasing power, but did not provide as much to consumer spending growth in 2015 as might have been expected. Consumers are spending more money on food away from home (part of that is a longer-term trend, not just low gasoline prices). Upper income households don't really care much about the price of gasoline, while lower income households tend to drive a lot less (not as likely to benefit from low gasoline prices). Middle income households are seeing other strains, including higher rents and healthcare costs. Gasoline prices won't fall forever, and we'll need to see a pickup in nominal wage growth as the impact of low gas prices fades.

The dollar has strengthened considerably since mid-2014, partly reflecting a shift in the central bank policy outlook (tighter Fed, easier outside the U.S.). The U.S. economy is still largely self-contained and the impact on foreign trade has appeared somewhat limited. However, trade data can be fickle and there may be significant lags (trade decisions don't turn on a dime). The strength of the dollar should be helpful for the economies of our largest trading partners. However, China's currency has been more in line with the U.S. dollar over the last several months, and China's decision to benchmark the yuan against a basket of global currencies (rather than against the dollar alone) suggests that a more significant depreciation of the yuan is likely in 2016 (although this is expected to occur gradually over the course of the year). In short, there is a risk of a larger drag on GDP growth from net exports.



Still, the consumer sector appears to be in good shape. Housing is expected to recover further. Domestic economic growth should remain relatively strong and we currently see few signs of imbalances in the overall economy.

	4Q14	1Q15	2Q15	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16	2014	2015	2016	2017
GDP (↓ contributions)	2.1	0.6	3.9	2.1	2.0	2.0	2.4	2.5	2.4	2.4	2.5	2.5	2.4
consumer durables	0.4	0.1	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.2
nondurables & services	2.4	1.0	1.9	1.6	1.4	1.5	1.5	1.5	1.4	1.4	1.7	1.6	1.4
bus. fixed investment	0.1	0.2	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.1	0.4	0.4	0.4
residential investment	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
Priv Dom Final Purchases	3.9	2.0	3.9	3.1	2.8	2.8	2.7	2.7	2.6	3.2	3.3	3.0	2.6
government	-0.3	0.0	0.5	0.3	0.2	0.2	0.2	0.3	0.2	-0.1	0.1	0.2	0.2
exports	0.7	-0.8	0.6	0.1	-0.3	-0.3	0.1	0.2	0.2	0.4	0.2	0.0	0.2
imports	-1.6	-1.1	-0.5	-0.3	-0.1	-0.3	-0.3	-0.3	-0.3	-0.6	-0.8	-0.3	-0.3
Final Sales	2.1	-0.2	3.9	2.7	2.3	2.0	2.4	2.5	2.4	2.4	2.3	2.4	2.4
ch. in bus. inventories	0.0	0.9	0.0	-0.6	-0.2	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	0.0
Unemployment, %	5.8	5.6	5.4	5.1	5.0	4.9	4.8	4.7	4.7	6.2	5.3	4.8	4.8
NF Payrolls, monthly, th.	324	195	231	171	185	185	185	180	175	260	196	181	163
Cons. Price Index (q/q)	-0.9	-3.1	3.0	1.6	0.6	1.6	1.8	1.9	1.9	1.6	0.1	1.6	1.9
excl. food & energy	1.5	1.7	2.5	1.7	2.2	1.9	1.8	1.8	1.9	1.7	1.8	1.9	1.9
PCE Price Index (q/q)	-0.4	-1.9	2.2	1.3	0.6	1.6	1.7	1.8	1.8	1.4	0.3	1.5	1.8
excl. food & energy	1.0	1.0	1.9	1.3	1.3	1.6	1.7	1.7	1.7	1.5	1.3	1.6	1.7
Fed Funds Rate, %	0.10	0.11	0.13	0.14	0.18	0.42	0.65	0.92	1.18	0.09	0.14	0.80	1.80
3-month T-Bill, (bond-eq.)	0.0	0.0	0.0	0.0	0.1	0.5	0.7	0.9	1.2	0.0	0.1	0.8	1.8
2-year Treasury Note	0.5	0.6	0.6	0.7	1.0	1.3	1.5	1.8	2.0	0.5	0.7	1.7	2.4
10-year Treasury Note	2.3	2.0	2.2	2.2	2.3	2.5	2.8	3.0	3.2	2.5	2.2	2.9	3.3