The Fed and The U.S. Economic Outlook

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Disclaimer

These views are my own and do not necessarily represent the views of the Federal Reserve System.

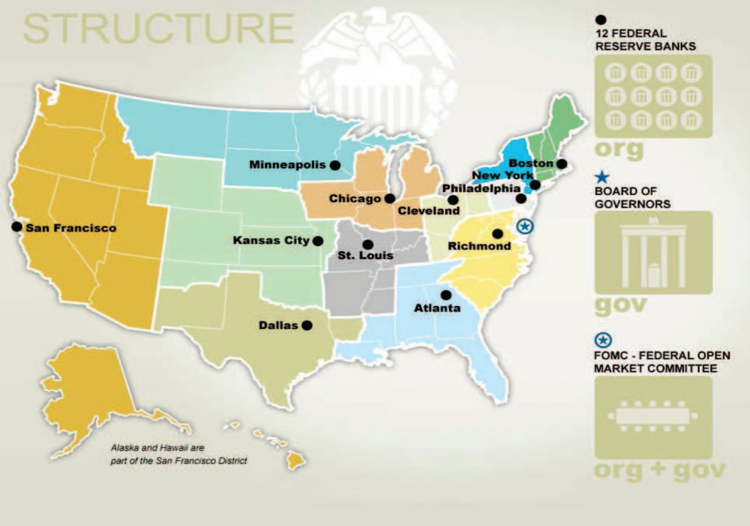
Outline

1. Background on the Federal Reserve and monetary policy.
2. Current U.S. economic indicators and the outlook.
3. The road ahead.

The Fed

The Federal Reserve System

The Federal Reserve is the U.S. Central Bank



The Federal Reserve System

- There are 12 Federal Reserve Banks that operate under the general supervision of the Board of Governors in Washington.
- The Fed is responsible for U.S. monetary policy which is set by the 12-member Federal Open Market Committee (FOMC).
    - 7 members of the Board of Governors (BOG) and 5 Federal Reserve Bank Presidents (rotating).
    - Current chairman Janet Yellen.
- Eight regularly scheduled meetings during the year, and other meetings as needed.

What does the Federal Reserve do?

The Federal Reserve is the central bank of the U.S. and has several responsibilities:

- Monetary policy
- Lender of last resort
- Bank regulation
- Payments system

What is Monetary Policy?

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  (Source: http://www.federalreserve.gov/monetarypolicy/fomc.htm)

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  - First two goals known as **"dual mandate."**
- More specifically:
  - *Price stability*: 2 percent per year inflation.
  - *Maximum sustainable employment*: Unemployment rate measured relative to the "NAIRU" (non-accelerating inflation rate of unemployment).

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- Other goals?
  - Output growth, financial stability.

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  Federal funds rate

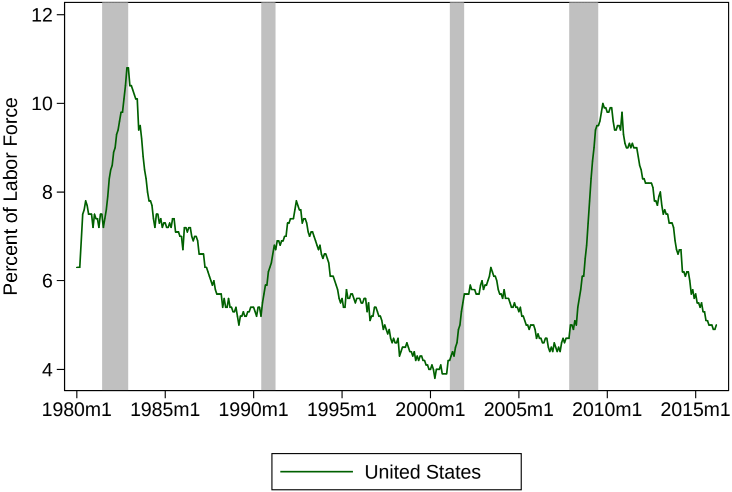
Implementing Monetary Policy (Normal Times)

- The Fed cannot force banks to alter their lending directly, BUT...
- The FOMC sets the overnight interest rate (price) used by banks to trade reserve balances—the Federal Funds Rate (FFR).
- Through open market operations, the FOMC manages the supply of reserve balances in the banking system and hence the price of reserves:
  - Fed purchases of bonds increase reserves (lowers FFR).
  - Fed sales of bonds remove reserves (raises FFR).
- Everything else equal, the less banks receive (pay) for lending (borrowing) reserves to (from) other banks, *the lower the opportunity cost of funds* and the more willing they are to lend funds to consumers and firms.

The Transmission of Monetary Policy

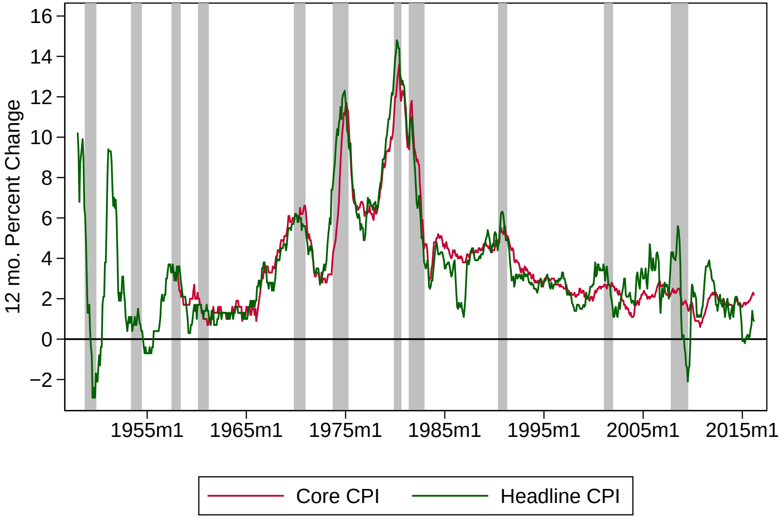
- Lower (higher) short-term interbank rates reduce (increase) other interest rates, including longer-term rates, in the economy.
- The stimulative effect of lower rates work through housing, consumer durables, and business investment.
- Removing reserves from the banking system raises the FFR and reduces consumer spending and business investment.

Unemployment Rate



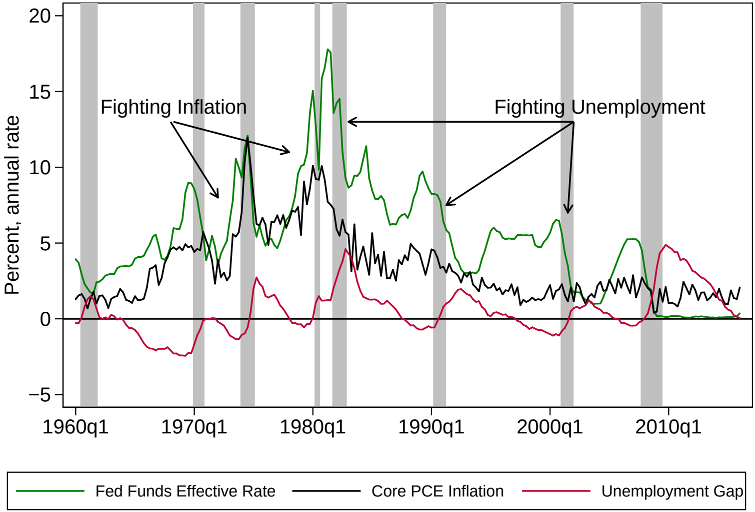
Source: Haver Analytics

Headline and Core Inflation



Source: BLS/Haver Analytics.

Monetary Policy in Different Periods



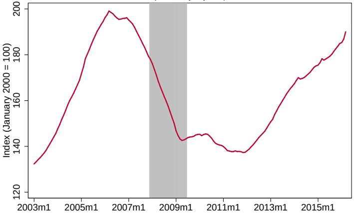
Source: Federal Reserve Board/CBO/BLS/Haver Analytics.

The Great Recession

- Deep recession and slow recovery.
- Recessions tend to be deeper and the recoveries slower when a recession is combined with a financial crisis.
- Required substantial monetary policy intervention.
  - (Aggressive) conventional policy response: lowering the FFR.
  - Alternative monetary policy at the Zero-Lower Bound.

National House Price Index

(Seasonally Adjusted)



Source: CoreLogic/Haver Analytics

Consumers with New Foreclosures

(%)

Source: FRBNY Consumer Credit Panel/Haver Analytics

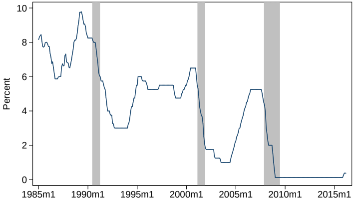
Long−Term Unemployment

(%, Seasonally Adjusted)

Source: Bureau of Labor Statistics /Haver Analytics

Federal Funds Rate

(%)



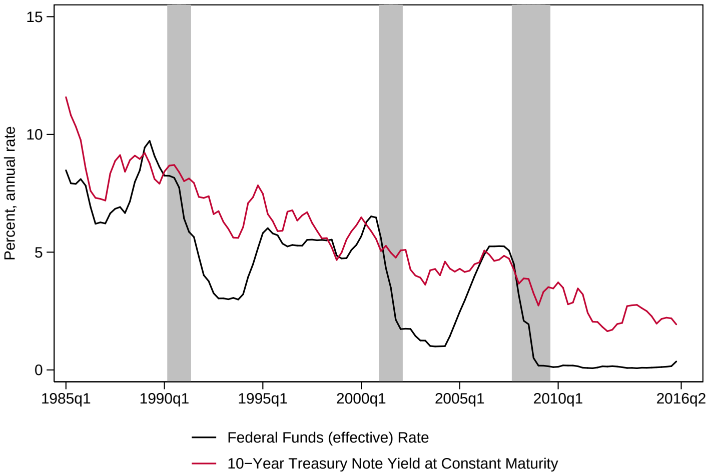
Source: Federal Reserve Board/Haver Analytics

Alternative Monetary Policy at the Zero-Lower Bound

In recent years, with the FFR near the zero lower bound (ZLB), the FOMC has relied on alternative (unconventional) tools for implementing monetary policy.

1. Asset Purchases: Large-scale purchases (LSAP) or Quantitative Easing (QE)
    - Increase the money supply and lower long-term interest rates
    - Improve liquidity for banks
    - Support asset prices
2. Alter the composition of Fed balance sheet (Operation Twist)
    - Buy long-term and sell short-term Treasury securities
    - Further push down long-term interest rates
3. Lender of Last Resort
4. Communication/Forward Guidance

Success? The Transmission of Monetary Policy in Action



Source: Federal Reserve Board/Haver Analytics

Challenges Facing Monetary Policy

- Monetary policy has long and variable lags.
- The FOMC makes a decision about the FFR or other monetary policy tools today based on current economic conditions, but also based on a forecast of future economic conditions and how they might be impacted by a rate change (given long and variable lags).
- Forecasts are a best guess of future conditions.
  - Our models and understanding of the economy are imperfect.
  - Shocks happen (e.g. U.S. Government shutdown, European instability, natural disasters, military conflicts).
- Much FOMC debate over the last 50 years has centered around the evolving model of the macroeconomy.

Federal Reserve Independence is Important

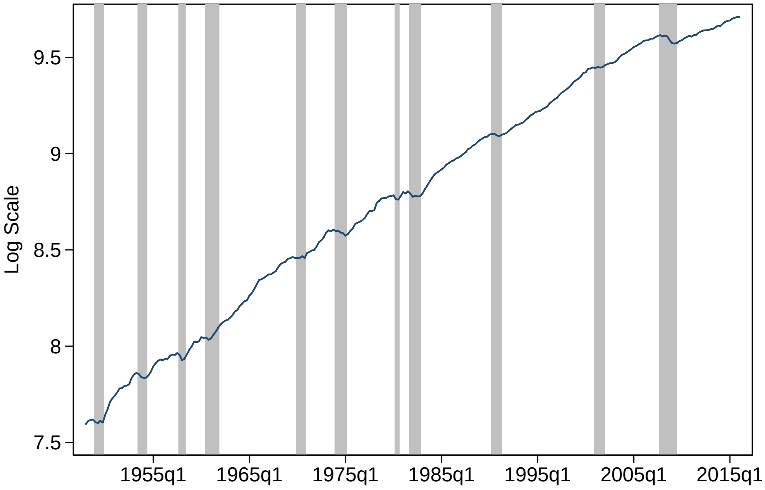
- The goal of monetary policy is determined by Congress (dual mandate), but the Fed has freedom on how to implement policy.
- "Implementation independence" allows flexibility for monetary policy to react quickly and not to be used as a bargaining chip for other political issues.
- Allows monetary policy to evolve with our understanding of the economy.
- Independence does NOT mean:
    - No effects of fiscal policy on monetary policy.
    - No accountability.

Recent Indicators and the Outlook

1. GDP and Consumption Growth

Real Gross Domestic Product

GDP=Consumption+Investment+Government Spending + Net Exports



Source: Haver Analytics

GDP growth slowed further in 2016:Q1.
The drag on output spread beyond net exports and changing inventories.

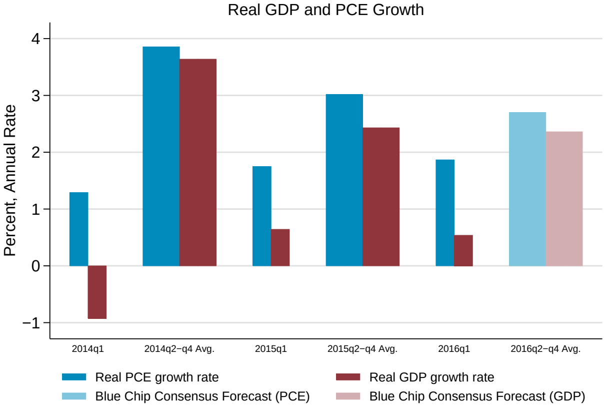
Key contributors: consumption and nonresidential investment.

Select Contributions to GDP growth						
	1995–2007	2008–2013	2014	2015:Q3	2015:Q4	2016:Q1
GDP Growth	3.2	0.8	2.4	2.0	1.4	0.5
Final Sales (Domestic)	3.5	0.4	2.5	2.9	1.7	1.2
Contribution of:						
Consumption	2.4	0.6	1.8	2.0	1.7	1.3
Goods	1.1	0.3	0.8	1.1	0.4	0.0
Services	1.3	0.4	1.1	1.0	1.3	1.2
Res. Investment	0.1	–0.2	0.1	0.3	0.3	0.5
NonRes Investment	0.7	0.1	0.8	0.3	–0.3	–0.8
Net Exports	–0.4	0.4	-0.2	–0.3	–0.1	–0.3
Chg. Inventories	–0.0	0.0	0.1	–0.7	–0.2	–0.3

Notes: Final sales data exclude inventories and exports. Numbers may not add due to rounding.

The first quarter continues a recent pattern of sluggish starts to the year.

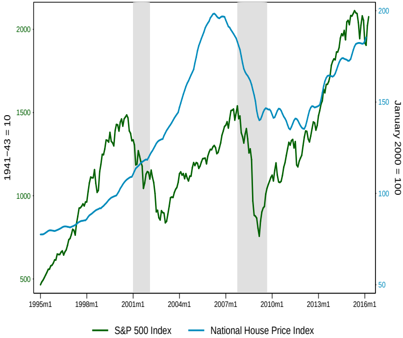
Little signal is being taken from the weak start, however, and growth is expected to increase over the remainder of the year.



Source: BEA/Aspen Publishers/Haver Analytics

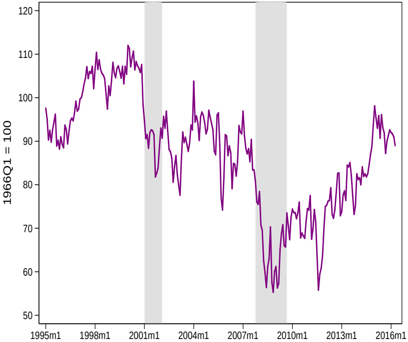
The stock market has rebounded significantly from its lows in February, house prices continue to rise, and consumer sentiment remains at a favorable level.

House and Stock Prices



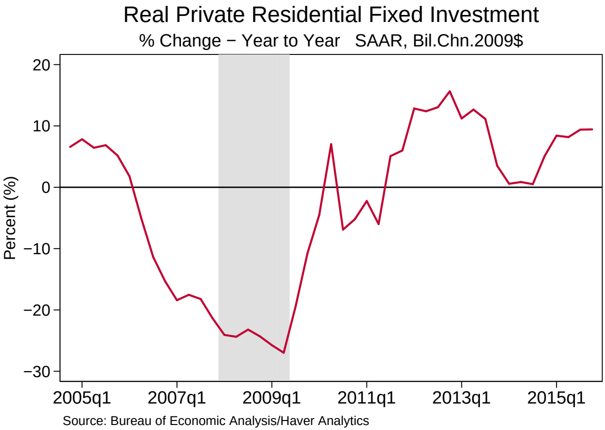
Source: Standard & Poor's/CoreLogic/Haver Analytics

Consumer Sentiment

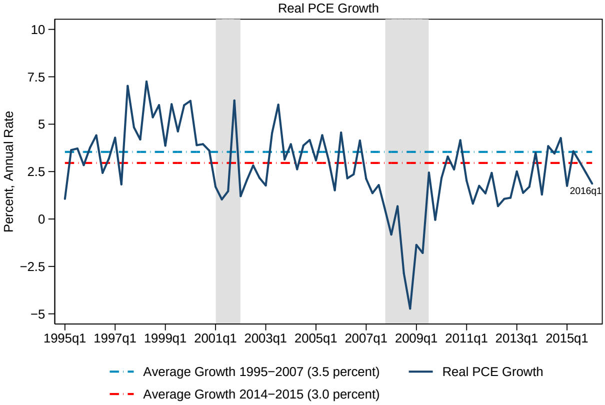


Source: University of Michigan/Haver Analytics

Residential investment has also been improving in recent quarters



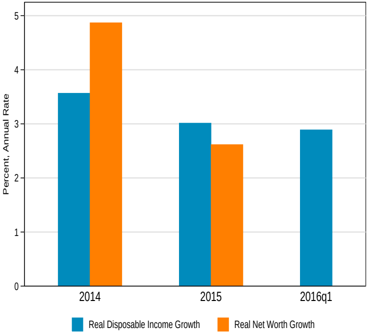
Slow spending growth has contributed to the slow output growth. Consumption growth was closer to its pre-recession mean, on average, in 2014 and 2015, but fell back noticeably in the first quarter.



Source: BEA/Haver Analytics

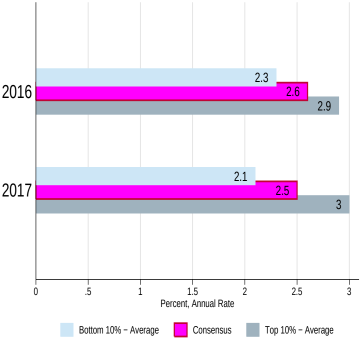
Private forecasters continue to anticipate that consumption growth will pick up as the fundamentals for household spending remain favorable.

Income and Wealth



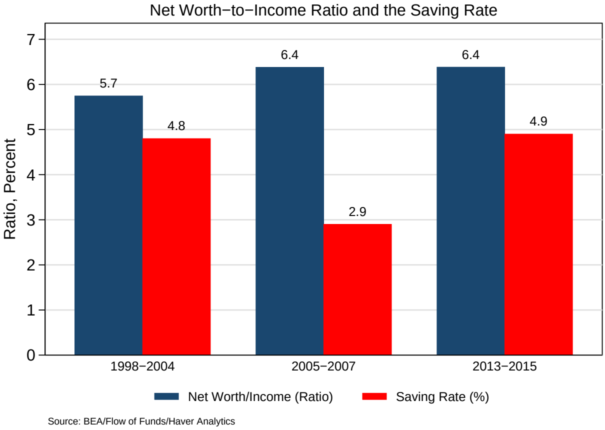
Source: BEA/Flow of Funds/Haver Analytics

Consumption Outlook

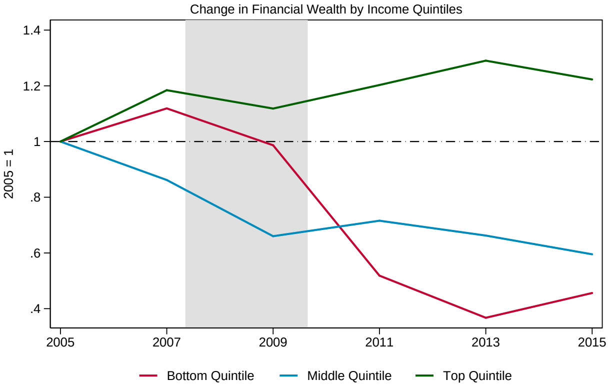


Source: Aspen Publishers/Haver Analytics

But, saving remains elevated (and spending low) relative to fundamentals. Given historical relationship between consumption (saving), income, and wealth we would expect more spending now than we are seeing.



Saving could be higher (and spending lower) to the extent that gains in income and wealth have accrued to the wealthy since the recession. These households' propensity to consume out of income and wealth changes is likely lower.



Note: All values are real. Income quintiles are based on average household (before−tax) income from 2005 − 2013.

Source: PSID and author's calculations

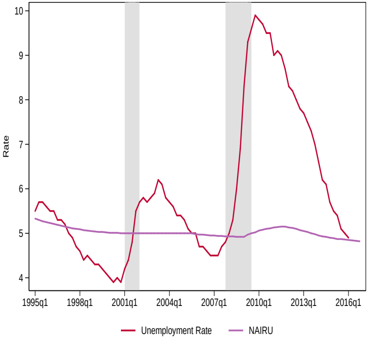
Recent Indicators and the Outlook

2. The Labor Market and Inflation

The labor market has improved substantially since the Great Recession.

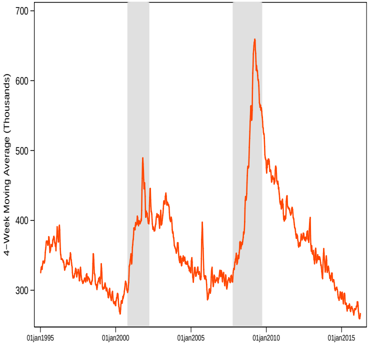
Unemployment is near the CBO's estimate of the natural rate and initial claims are near 42 year lows.

Unemployment Rate and NAIRU



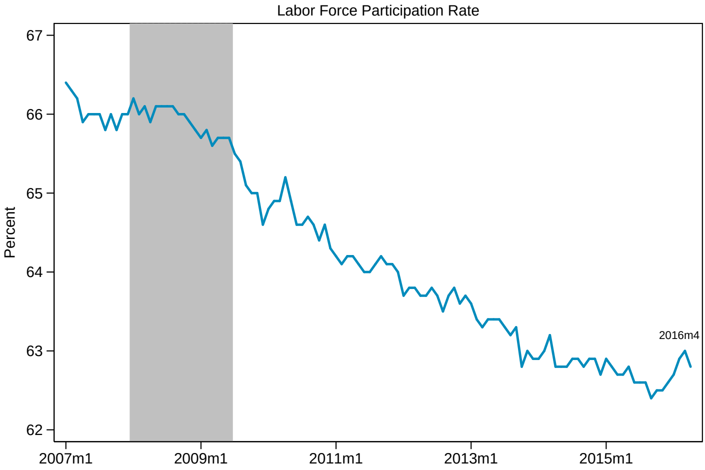
Source: Bureau of Labor Statistics/CBO/Haver Analytics

Unemployment Insurance Claims



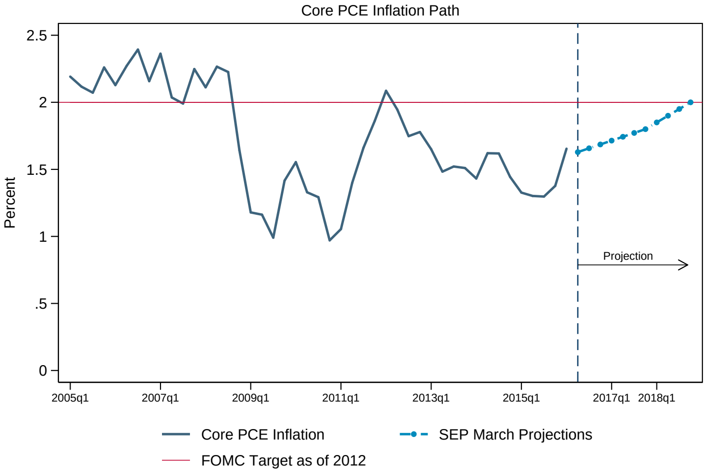
Source: Department of Labor/Haver Analytics

The labor force participation rate has rebounded recently. About 2.5 million people have entered the labor market since September.



Source: Bureau of Labor Statistics/Haver Analytics
Note: Seasonally Adjusted, 16 years−old and older

Core inflation remains relatively subdued, but is expected to rise toward the FOMC's 2 percent target.



Source: Bureau of Economic Analysis/Federal Reserve Board/Haver Analytics

Latest Employment Report (Friday May 6, 2016)

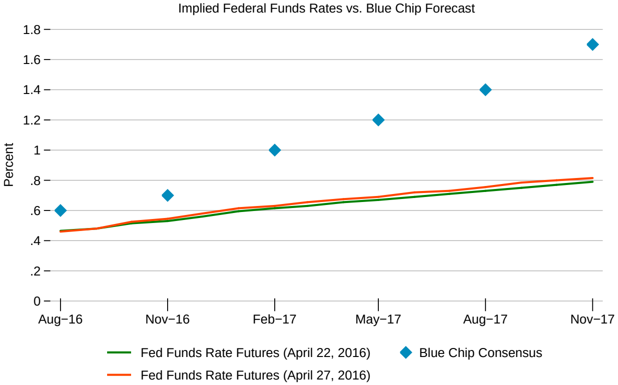
- The U.S. created 160,000 new jobs in April—expected increase of 203,000 nonfarm jobs; trend employment growth is 80,000 jobs per month.
- The unemployment rate was unchanged at 5% (people dropped out of the labor force).
- The labor-force participation fell for the first time since last fall to 62.8%.
- Good news, average wages climbed 0.3% to $25.53 an hour. Hourly pay rose 2.5% in the past 12 months, up from 2.3%.

Table 1: Economic Forecast

	2015	2016	2017	2018
Change in Real GDP				
FOMC (March Projections)		1.9 to 2.5	1.7 to 2.3	1.8 to 2.3
Consensus Forecast		2.8	2.7	2.6
Actual	2.4	–	–	–
Unemployment Rate				
FOMC (March Projections)		4.5 to 4.9	4.3 to 4.9	4.3 to 5.0
Consesus Forecast		4.9	4.9	5.0
Actual (Annual/December)	5.3/5.0	–	–	
PCE Inflation				
FOMC (March Projections)		1.0 to 1.6	1.6 to 2.0	1.8 to 2.0
Consesus Forecast		2.2	2.3	2.4
Actual (December)	0.7	–	–	
Federal Funds Rate				
FOMC (March Projections)		0.6 to 1.4	1.6 to 2.8	2.1 to 3.9
Actual (December)	0.25-0.50			

The Road Ahead

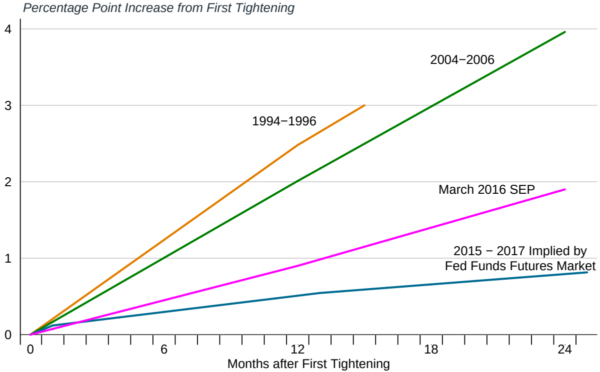
The current policy debate centers on whether the Fed will raise rates in June or whether the weak first quarter will lead to a further "pause." The financial markets have a different view than private forecasters.



Note: Blue Chip forecast is for the quatelry average of the 3−month Treasury Bill.

Source: Aspen Publishers/Bloomberg/Haver Analytics

Either way, the pace of rate tightening is expected to be very gradual.



Note: The interest rate paths have been smoothed so that the lines more clearly reflect the slope of the tightening in the rate−tightening cycles (1994−1995 and 2004−2006) following the last two recessions and the slope implied by the federal funds futures market over the 2015−2017 period and the SEP projections for 2016 and 2017.

Source: Federal Reserve Board/Bloomberg/Haver Analytics

If you want to learn more

- Keywords: fractional reserve banking system, federal funds rate, open market operations, dual mandate, Federal Reserve independence, zero lower bound.
- Some Links:
  - http://www.federalreserve.gov/
  - http://www.bostonfed.org
  - http://www.bostonfed.org/economic/research.htm