



EMBARGOED UNTIL MONDAY, APRIL 18, 2016 AT 7:15 P.M. EASTERN TIME OR UPON DELIVERY

# Are Financial Markets Too Pessimistic About the Economy?

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Central Connecticut State University  
New Britain, Connecticut

[bostonfed.org](http://bostonfed.org)



## Recent Economic Data

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- ▶ First quarter real GDP likely to be disappointing
    - ▶ Well below potential rate, estimated at approximately 2 percent
    - ▶ Follows a recent trend of weak first quarters and more strength in subsequent quarters
  - ▶ Employment gains suggest optimism
    - ▶ 215,000 jobs created in March
    - ▶ Labor force participation rose to 63 percent
  - ▶ Core PCE inflation rate at 1.7 percent, much closer to the 2 percent target than 2015 readings
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## Financial Market Data

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- ▶ Financial markets turbulent over first quarter, reflecting concerns over:
    - ▶ Weak growth abroad
    - ▶ Low inflation in many developed countries
  - ▶ Financial market futures indicate considerably fewer increases in U.S. interest rates than in previous recoveries
  - ▶ Federal funds futures now reflect the expectation of one-quarter of a percentage point increase in each of the next three years
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## Futures Market Expectation: Extremely Shallow Path for Interest Rates

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- ▶ At odds with private forecasts of solid growth
  - ▶ At odds with SEP which projects real GDP to grow above potential and the unemployment rate to fall further
  - ▶ My own forecast is consistent with these forecasts
  - ▶ I do not see that the risks are so elevated, nor the outlook so pessimistic as to justify the exceptionally shallow interest rate path currently reflected in financial futures markets
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## Gradual Federal Funds Rate Increases are Absolutely Appropriate

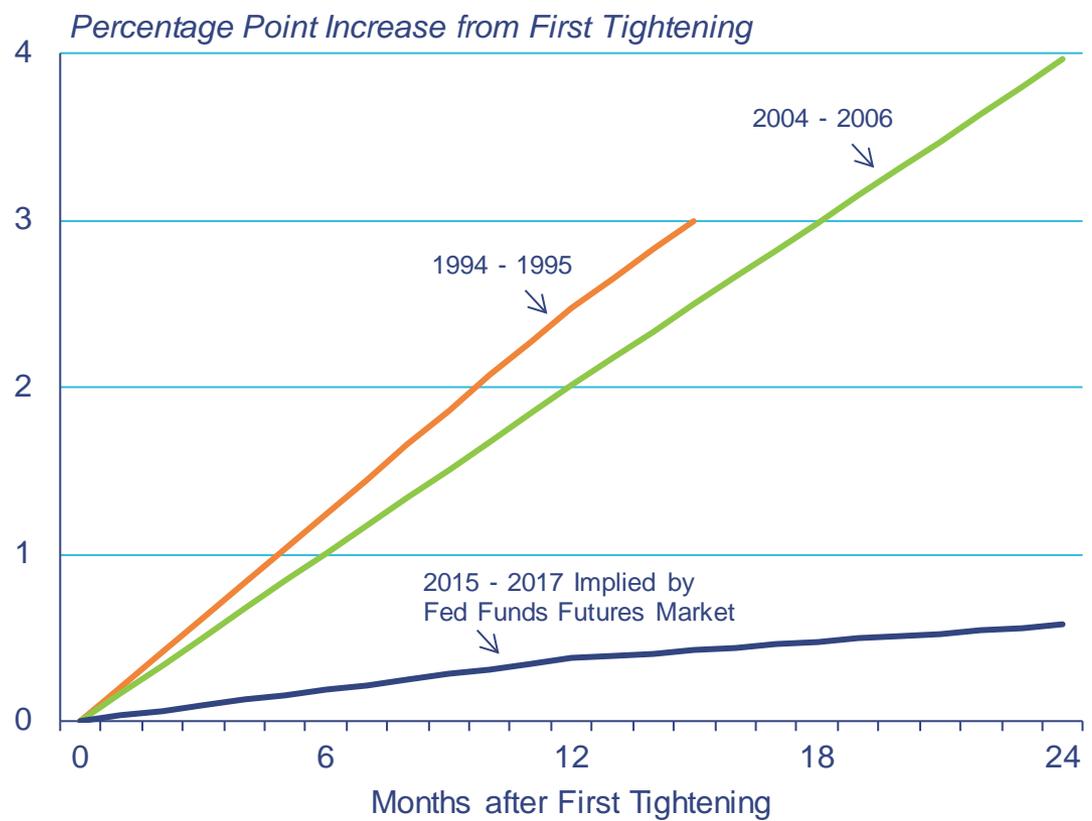
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- ▶ Probing just how low the unemployment rate can fall is beneficial
    - ▶ Encourages workers to reenter the work force
    - ▶ Allows workers to move from part-time to full-time
  - ▶ Too shallow a path has risks – of falling below the natural rate of unemployment
    - ▶ Overheating the economy
    - ▶ Eventually needing to tighten more quickly than desirable
    - ▶ Risking the ongoing recovery
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# Figure 1: Interest Rate Path: Federal Funds Effective Rate

1994 - 1995, 2004 - 2006, and 2015 - 2017

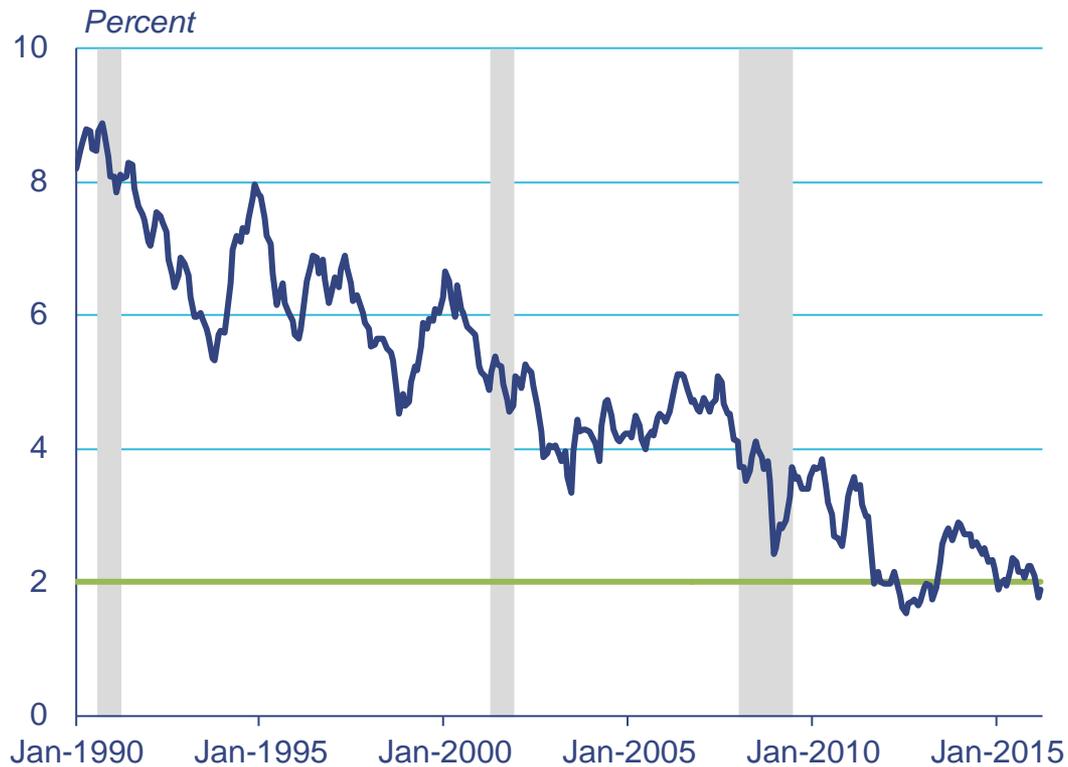


Note: The interest rate paths have been smoothed so that the lines more clearly reflect the slope of the tightening in the rate-tightening cycles – 1994-1995 and 2004-2006 – following the last two recessions and the slope implied by the federal funds futures market over the 2015-2017 period.

Source: Federal Reserve Board, Bloomberg, Haver Analytics



Figure 2: Ten-Year Treasury Yield  
January 1990 - March 2016





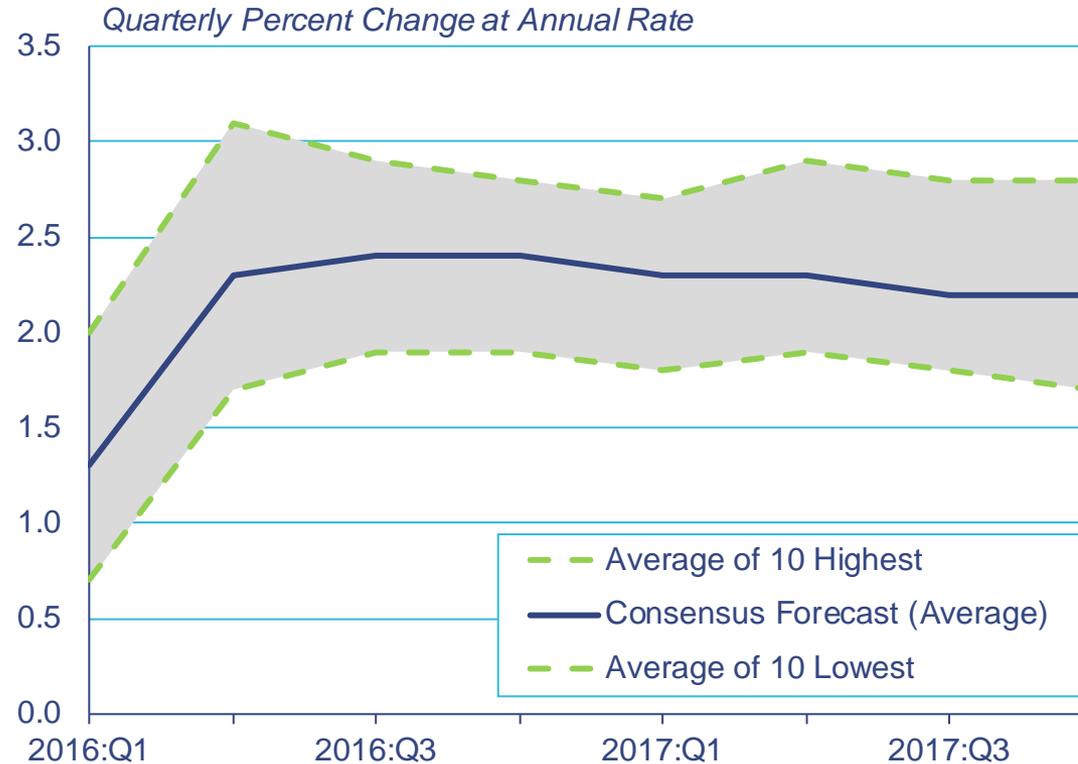
## Pricing on Both Short- and Long-Term Securities Seems Too Pessimistic

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- ▶ Implies fairly weak best guess for the economy's prospects
  - ▶ *Or*, concern about an unusually large “tail” risk
  - ▶ Neither are consistent with forecasts by private-sector economists and by financial firms that serve as counterparties to the Federal Reserve
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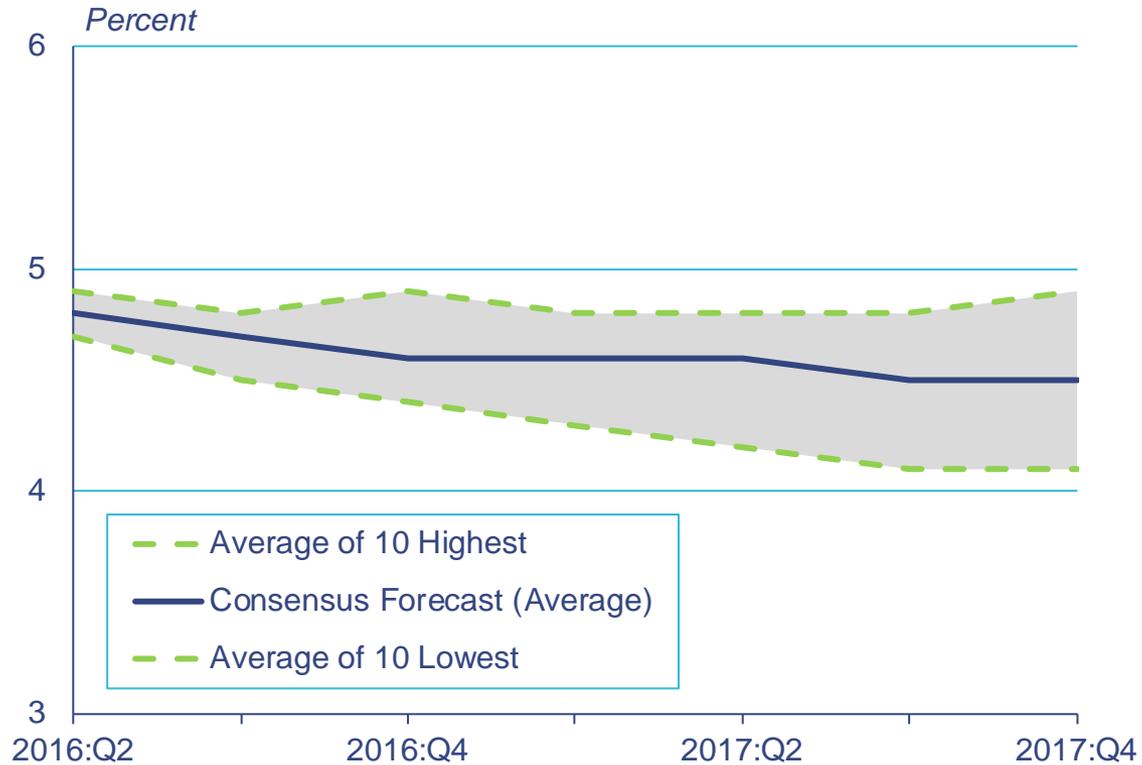
## Figure 3: Blue Chip Forecast for Real GDP Growth Forecast as of April 2016





# Figure 4: Blue Chip Forecast for the Unemployment Rate

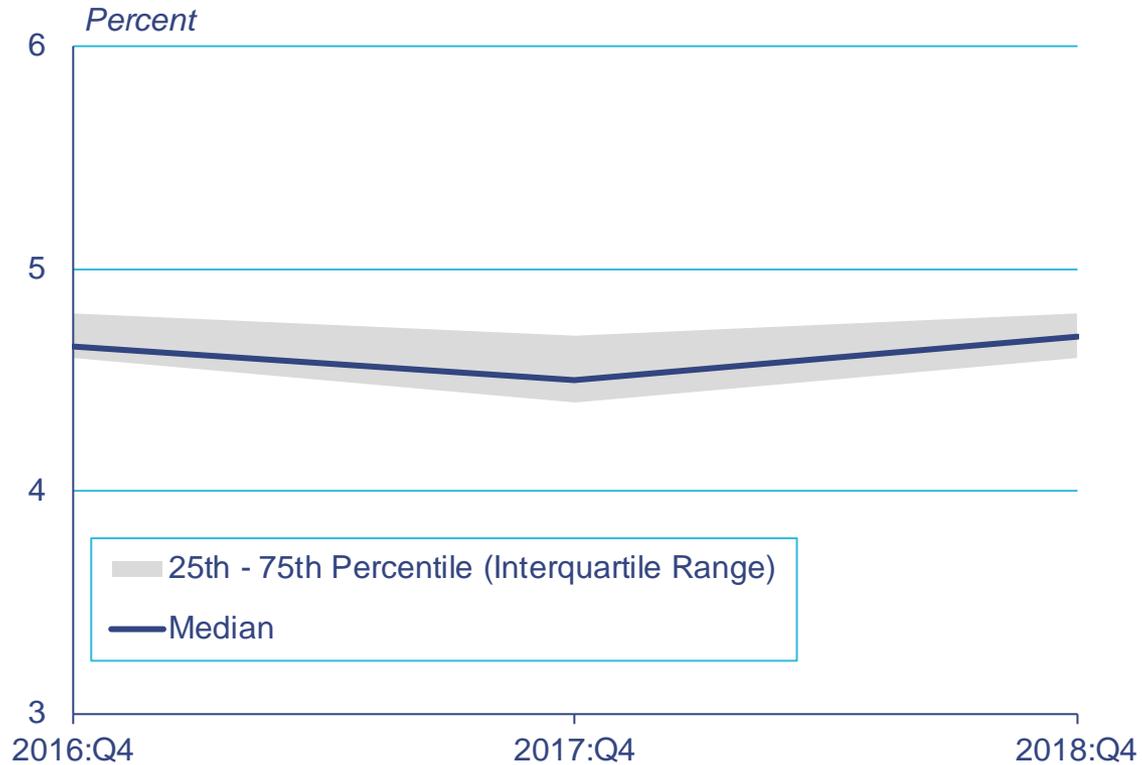
Forecast as of April 2016





# Figure 5: Most Likely Outcome for the Unemployment Rate

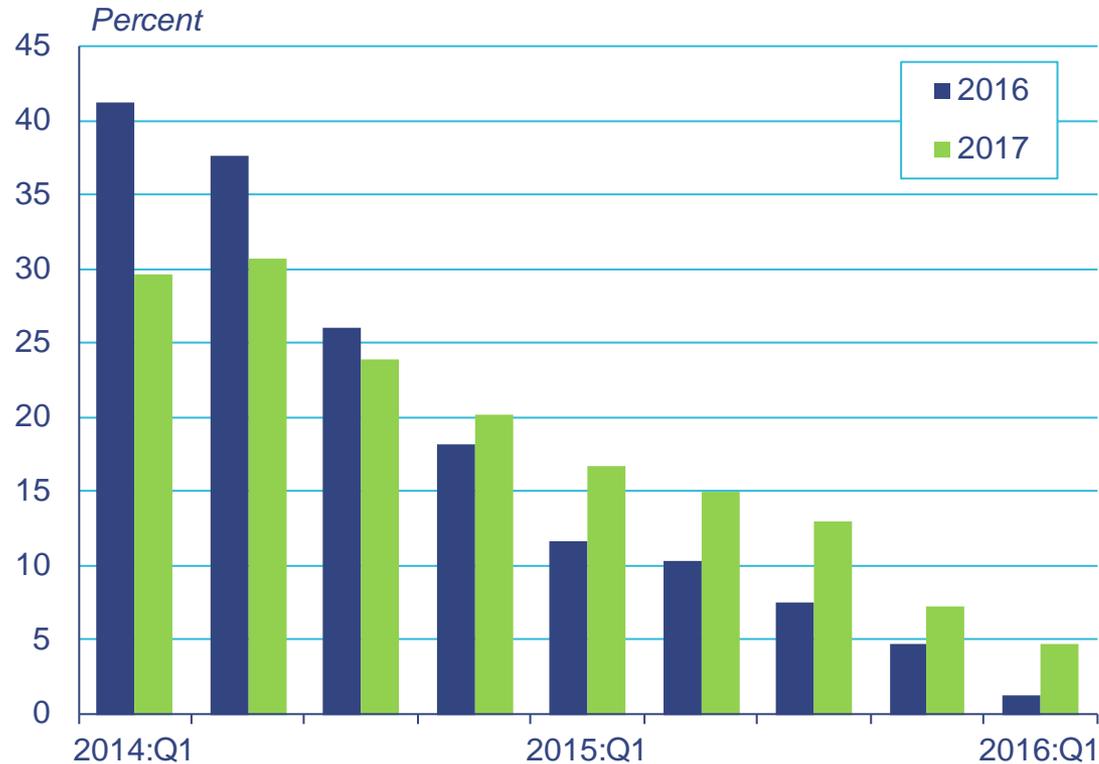
Forecast as of March 2016





## Figure 6: Mean Probability of an Unemployment Rate of 6% or Higher in 2016 or 2017

Forecast as of 2014:Q1 - 2016:Q1



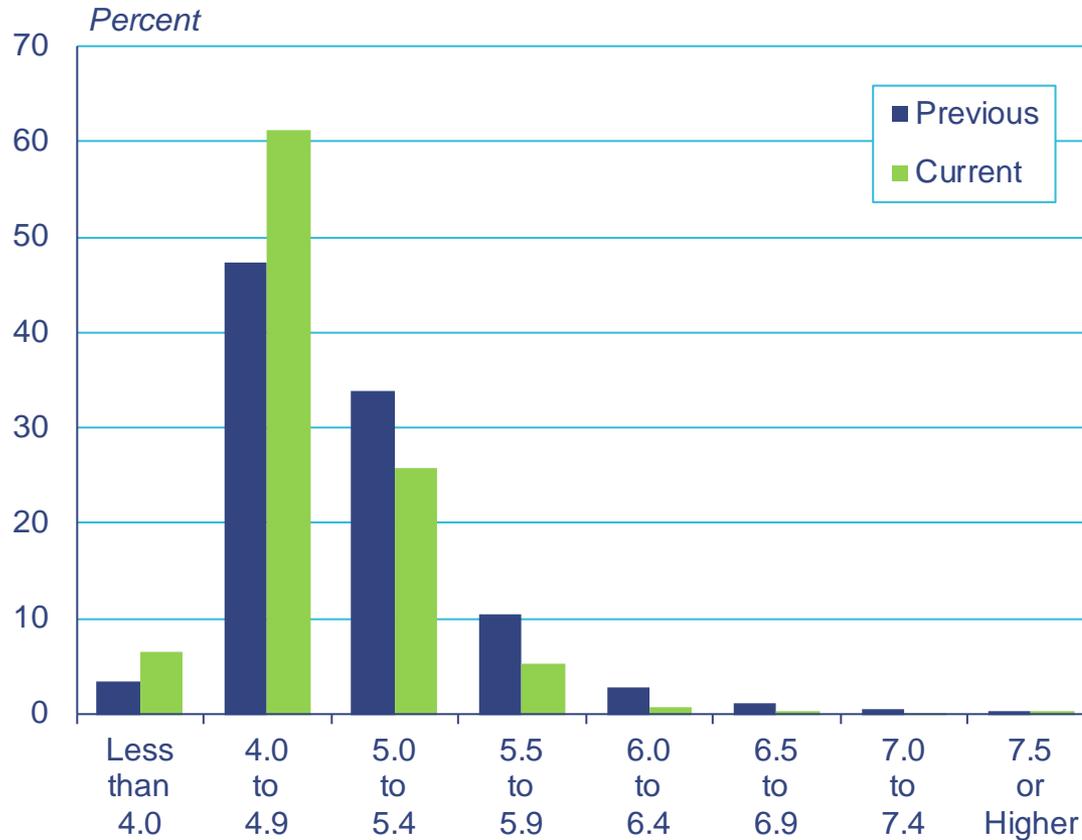
Note: The unemployment rate is the annual average unemployment rate.

Source: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters



## Figure 7: Mean Probabilities for the Unemployment Rate in 2016

Forecast as of 2015:Q4 and 2016:Q1



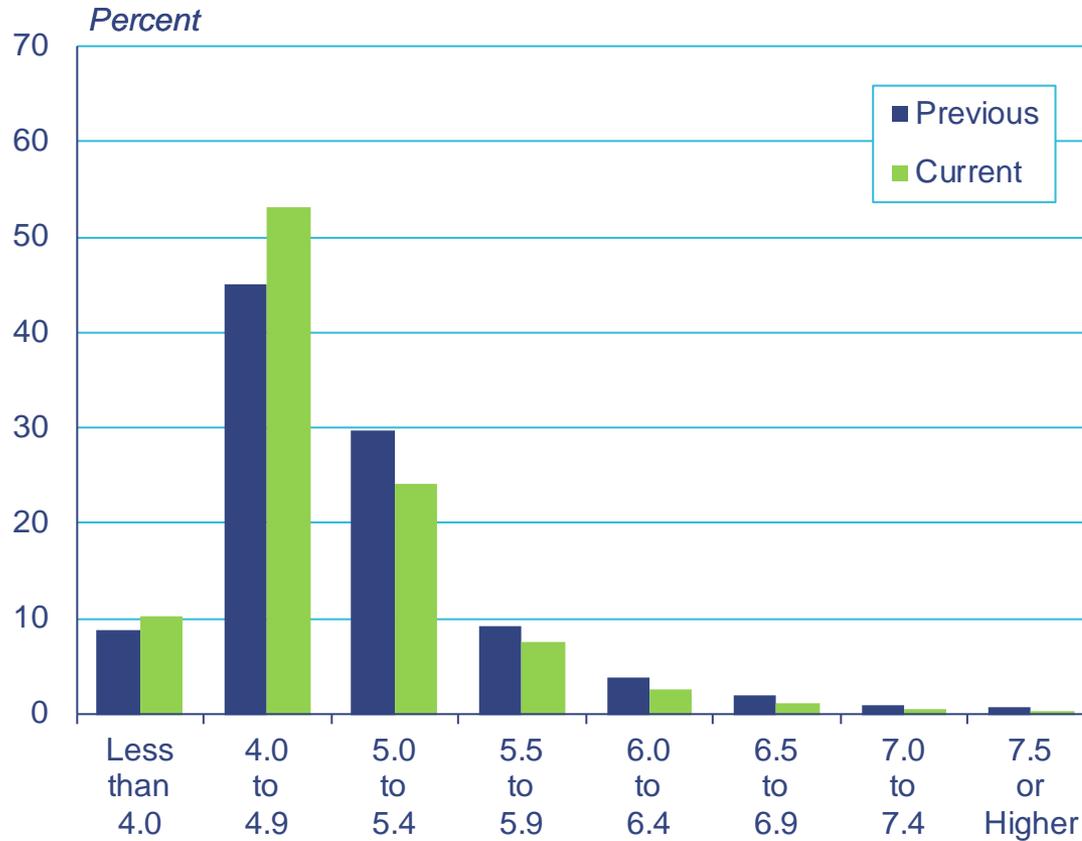
Note: The unemployment rate is the annual average unemployment rate.

Source: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters



## Figure 8: Mean Probabilities for the Unemployment Rate in 2017

Forecast as of 2015:Q4 and 2016:Q1

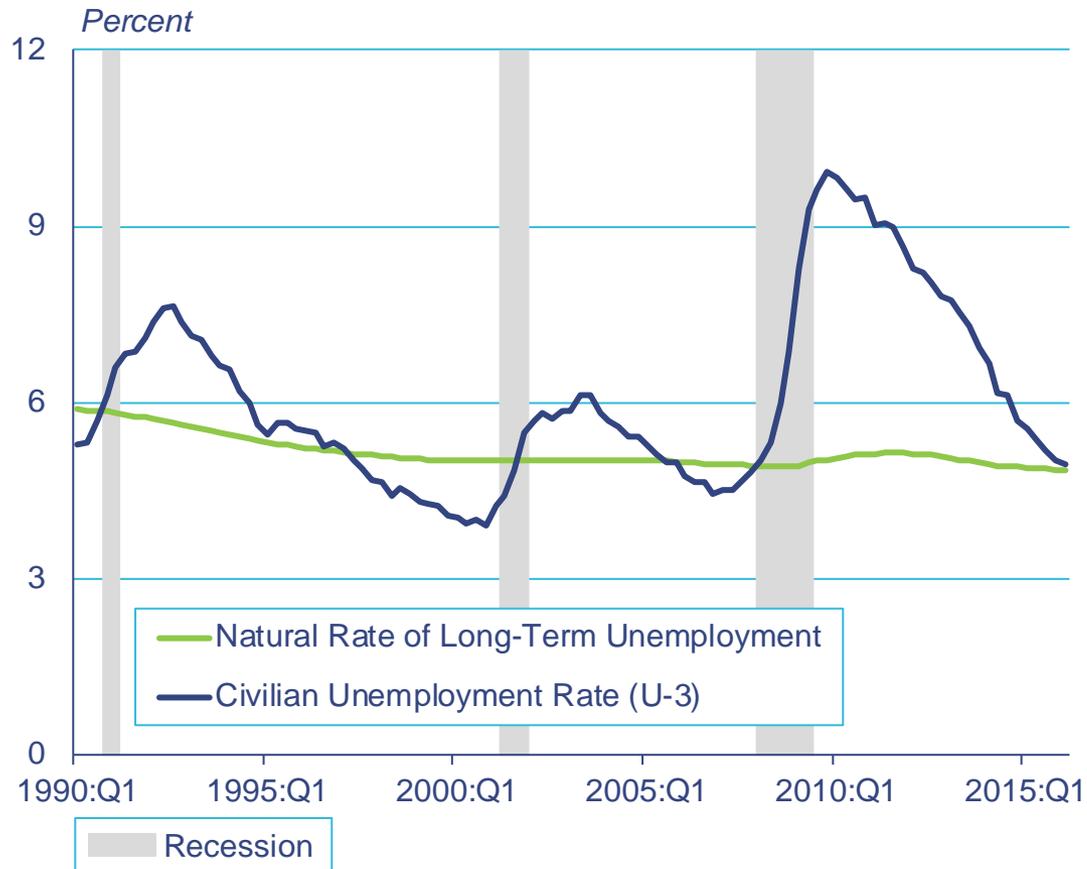


Note: The unemployment rate is the annual average unemployment rate.

Source: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters



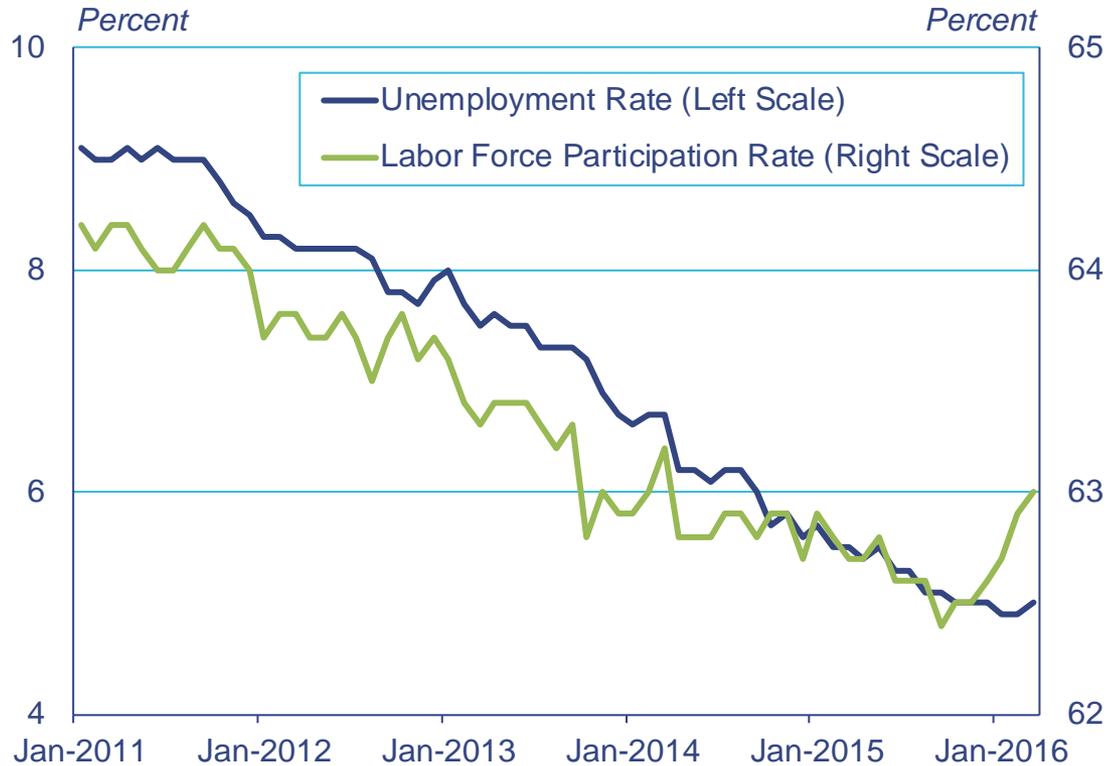
Figure 9: Civilian Unemployment Rate and the Natural Rate of Long-Term Unemployment  
1990:Q1 - 2016:Q1





# Figure 10: Civilian Unemployment Rate and Labor Force Participation Rate

January 2011 - March 2016





## Labor Market Observations

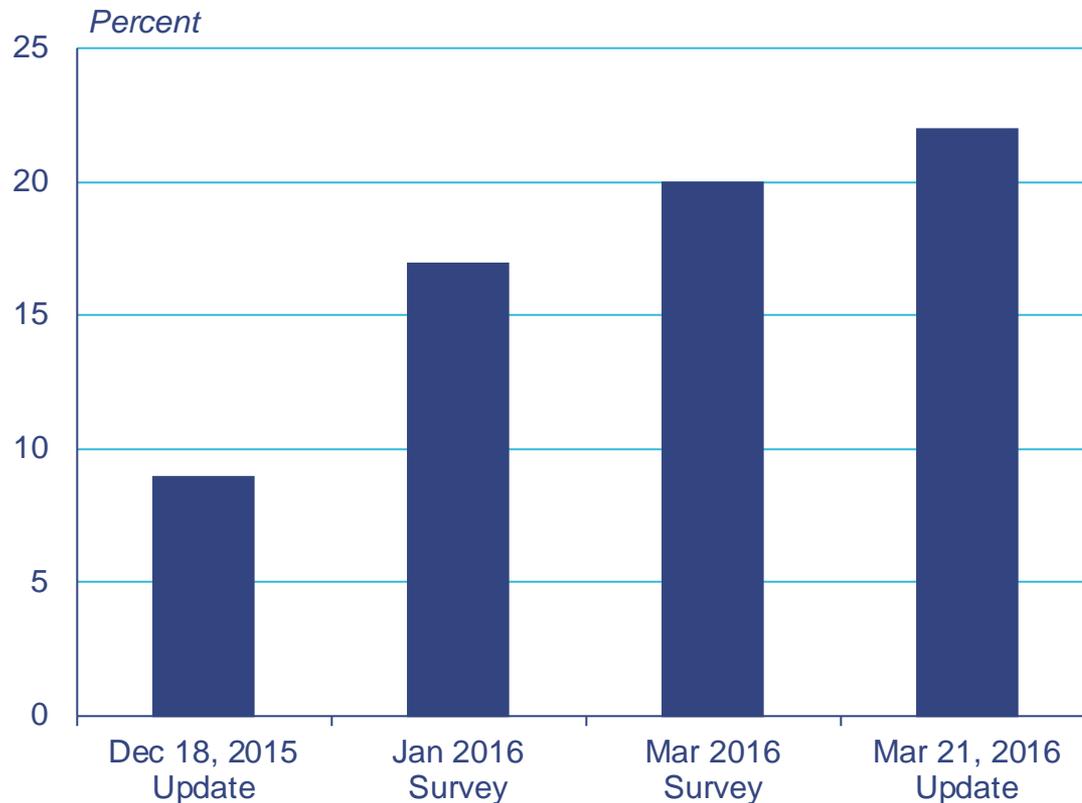
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- ▶ Labor force participation rate decline:
    - ▶ Demographic changes as baby boomers age
    - ▶ Poor job prospects of discouraged workers
  - ▶ Probing on unemployment helps job prospects
  - ▶ Advantages need to be weighed against risk that the labor force does not grow (the labor force participation rate does not continue to rise) and the unemployment rate falls well below natural rate
  - ▶ Boston Fed expects growth above 2 percent and gradual decline in unemployment
    - ▶ Some increase in labor force participation
    - ▶ Gradual normalization of interest rates
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## Figure 11: Percent Chance of No Change in Federal Funds Target Rate or Range in 2016

Forecast as of December 2015, January 2016 and March 2016





## Concluding Observations

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- ▶ While growth in the first quarter is less than hoped, most forecasters expect growth to pick up
  - ▶ I view the U.S. economy as fundamentally sound and the outlook strong enough to engender further decline in unemployment, even with gradual normalization of interest rates
  - ▶ Pricing in the federal funds futures market implies roughly three-quarters of a percentage point in increases by the end of 2018
  - ▶ That seems inconsistent with the assessment of continued moderate growth in the U.S. economy
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