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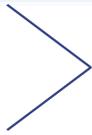
# Estimating Key Economic Variables: The Policy Implications

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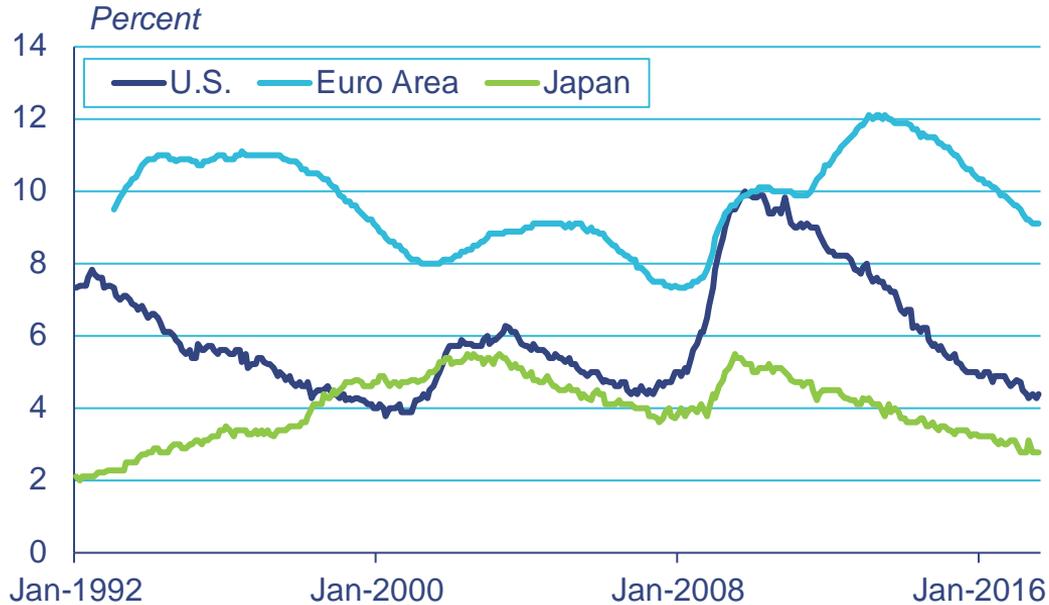
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84th International Atlantic Economic Conference  
International Atlantic Economic Society  
Montreal, Canada

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



# Figure 1: Unemployment Rates in the United States, the Euro Area and Japan January 1992 - August 2017

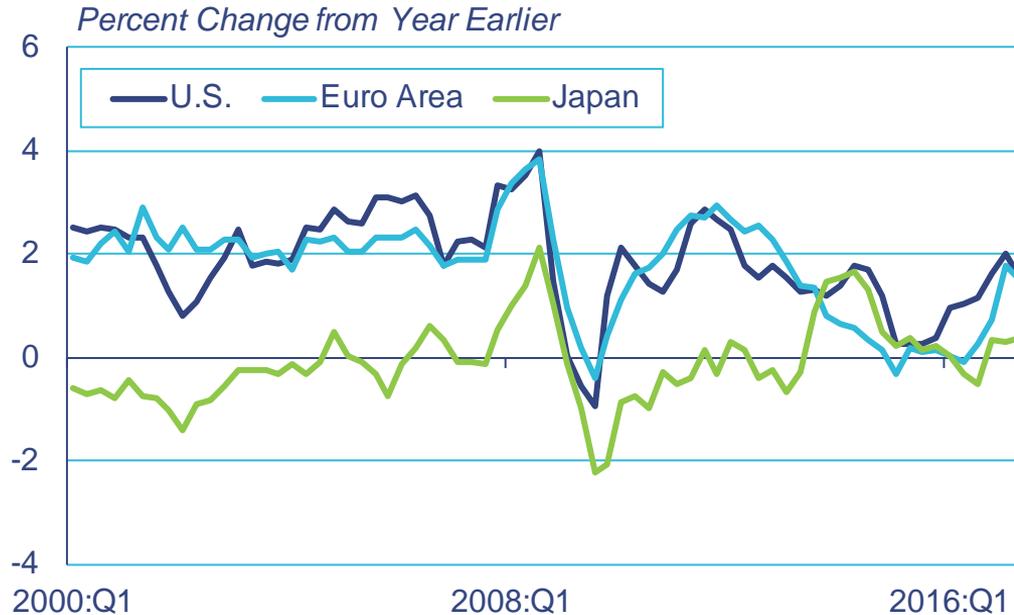


Note: For consistency across countries, we have not included the recently-released U.S. unemployment rate for September.

Source: BLS, Eurostat, Japan's Ministry of Internal Affairs and Communications, Haver Analytics



## Figure 2: Inflation Rates in the United States, the Euro Area and Japan 2000:Q1 - 2017:Q2



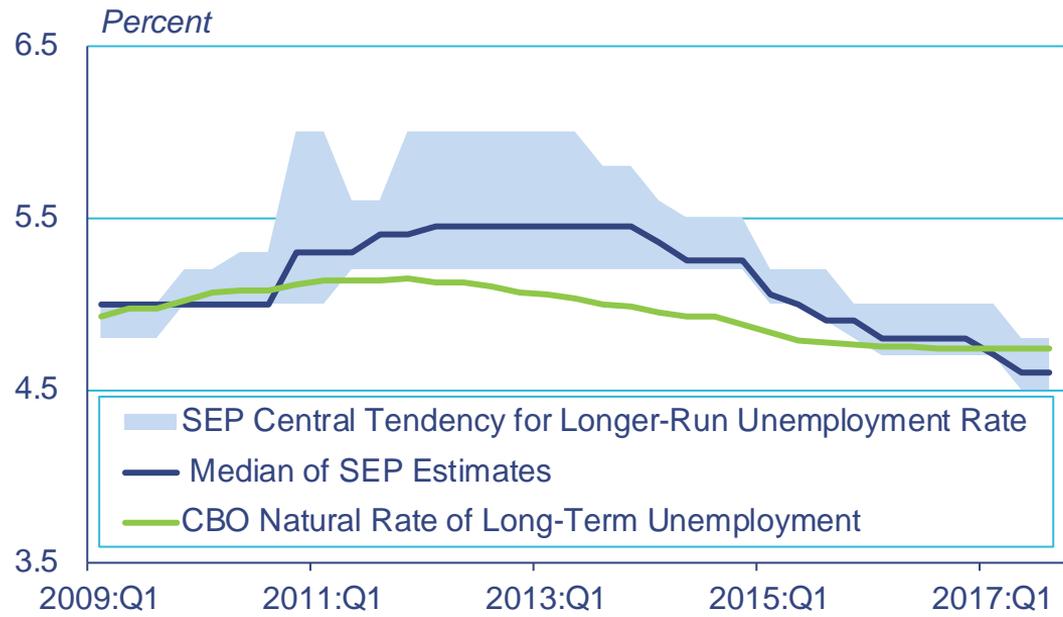
Note: Japan's inflation series is adjusted for an April 2014 consumption tax increase. For Japan and the Euro Area, the inflation measure is the change in the consumer price index. For the U.S., the measure is the change in the personal consumption expenditures price index.

Source: BEA, Eurostat, Japan's Ministry of Internal Affairs and Communications, Bank of Japan, Haver Analytics



# Figure 3: Estimates of the Natural Rate of Unemployment

2009:Q1 - 2017:Q3

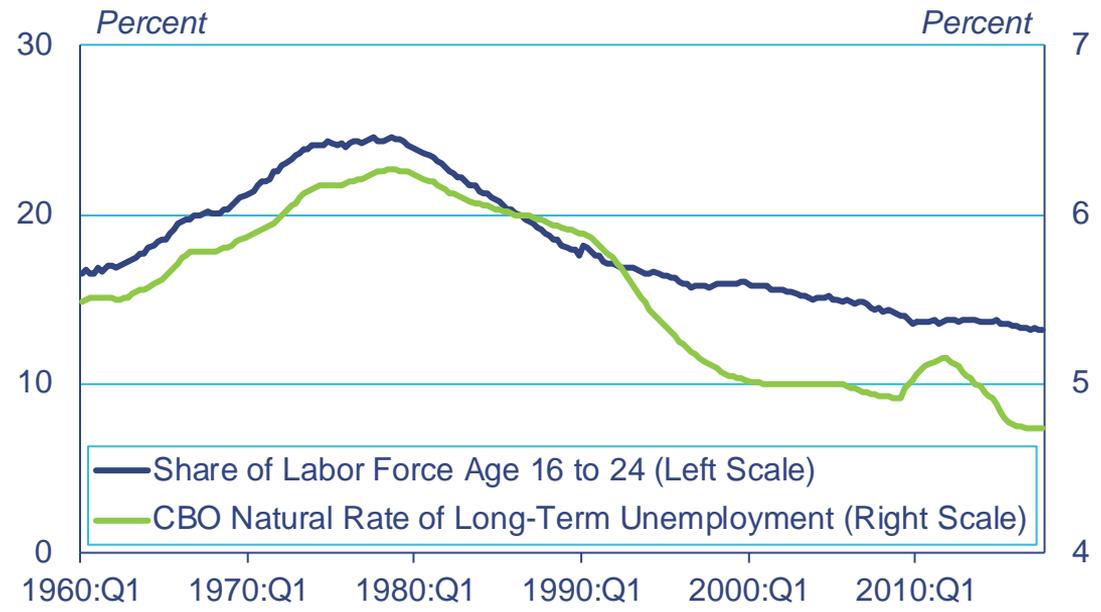


Note: Prior to the June 2015 median, SEP median unemployment rates are publicly available only with a five-year lag. Proxies for the medians for 2012 - March 2015 are calculated from the distribution of participants' projections reported in ranges of tenths in the meeting minutes.

Source: FOMC, Summary of Economic Projections (SEP); BLS; CBO; Haver Analytics



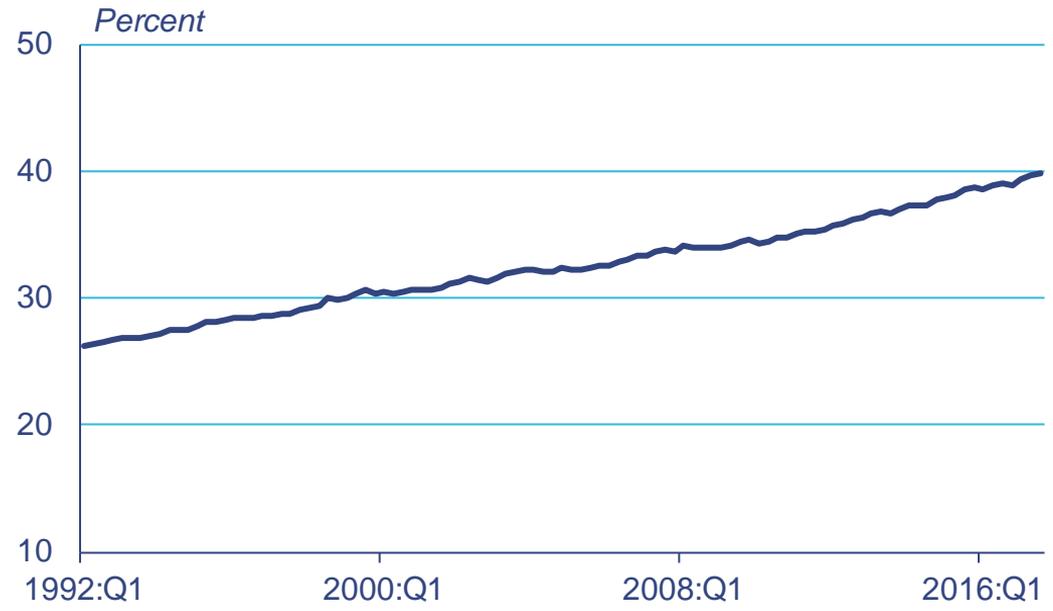
Figure 4: Share of the Civilian Labor Force  
Age 16 to 24  
1960:Q1 - 2017:Q3



Source: BLS, CBO, Haver Analytics



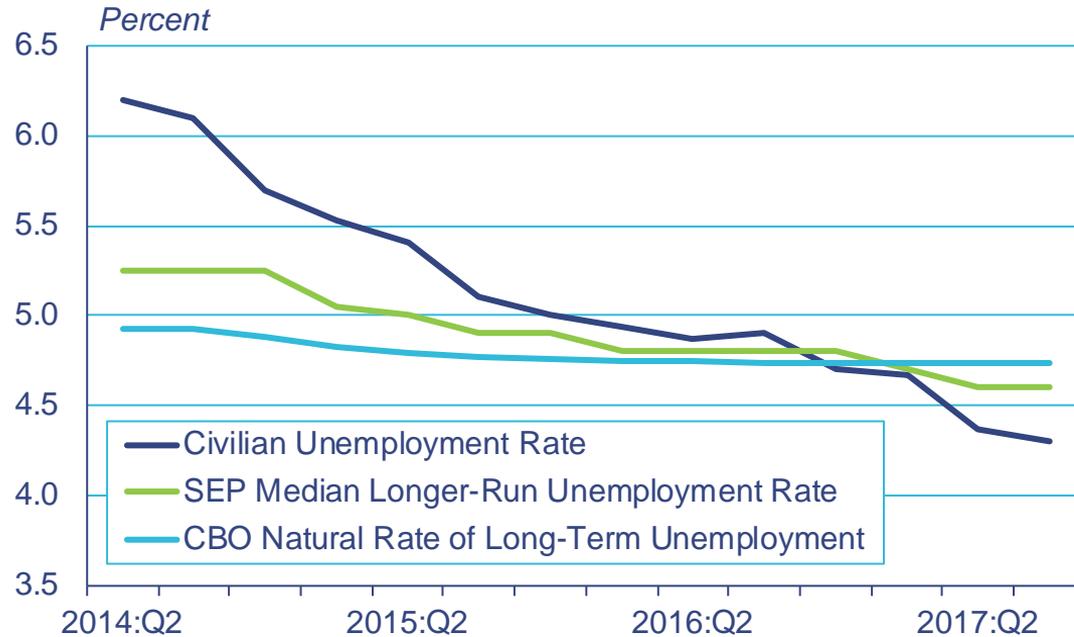
Figure 5: Share of the Civilian Labor Force, Age 25 Years and Older, with a College Degree or Higher  
1992:Q1 - 2017:Q3



Source: BLS, Haver Analytics



Figure 6: Actual Civilian Unemployment Rate and Estimates of the Longer-Run Unemployment Rate  
2014:Q2 - 2017:Q3

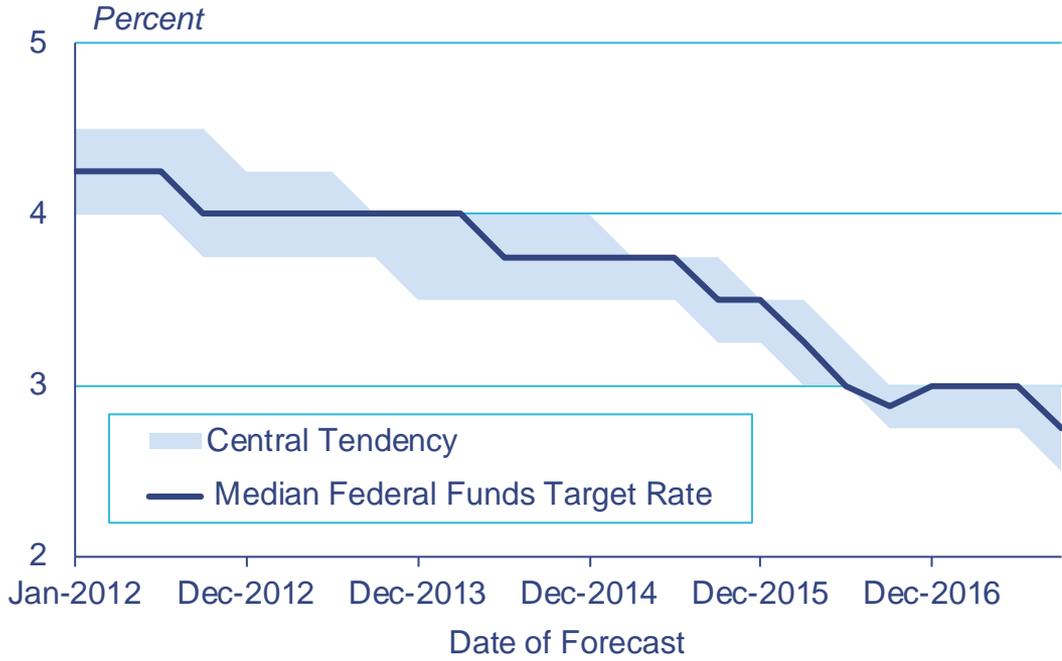


Note: Prior to the June 2015 median, SEP median unemployment rates are publicly available only with a five-year lag. Proxies for the medians are calculated from the distribution of participants' projections reported in ranges of tenths in the meeting minutes.

Source: FOMC, Summary of Economic Projections (SEP); BLS; CBO; Haver Analytics



# Figure 7: Forecasts for the Longer-Run Federal Funds Rate from the Summary of Economic Projections January 2012 - September 2017



Note: The central tendency excludes the three highest and three lowest observations.  
Source: FOMC, Summary of Economic Projections (SEP)