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# Monetary Policy Strategies & Accountability

*Sixth Annual Rocky Mountain Economic Summit*

*Hosted by the Global Interdependence Center (GIC), Jon M. Huntsman Business School at Utah State University and the Bronze Buffalo Foundation*

*Jackson Hole, Wyoming*

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*The views I express here are my own and do not necessarily reflect the views of the Federal Reserve Bank of Chicago, my colleagues on the Federal Open Market Committee (FOMC) or within the Federal Reserve System.*

# Three Big Events in Fed History

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## ■ **The Great Depression (1929-1938)**

- “Inept monetary policy” failed to adequately combat credit contraction, deflation, and depression

## ■ **The Great Inflation (1965-1980)**

- Monetary policy failed to recognize structural changes and expectational dynamics that led to double-digit inflation

## ■ **The Treasury Accord (1951)**

- An example highlighting the importance of central bank independence

# Long-Run Strategy for Monetary Policy

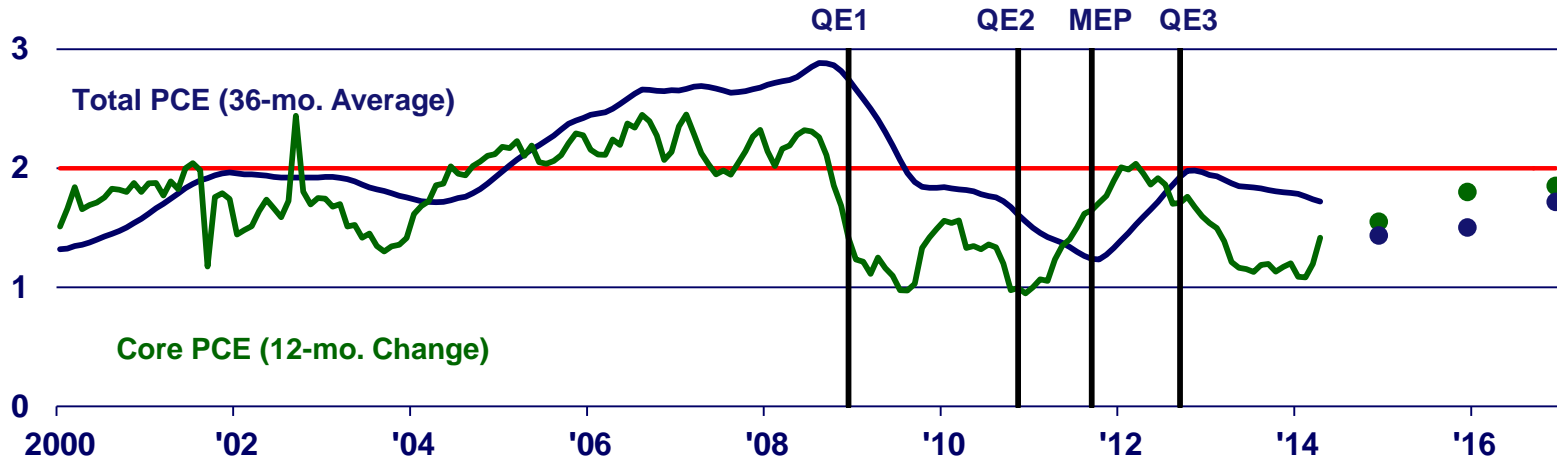
(January 2012, reaffirmed thereafter every January)

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- $\pi^* = 2\%$  PCE inflation
  
- $u_t^n \sim 5.2\% - 5.5\%$                       **time-varying**
  - Central tendency of long-run sustainable level from the Summary of Economic Projections (SEP)
  
- Balanced approach to reducing deviations of inflation and employment from long-run objectives

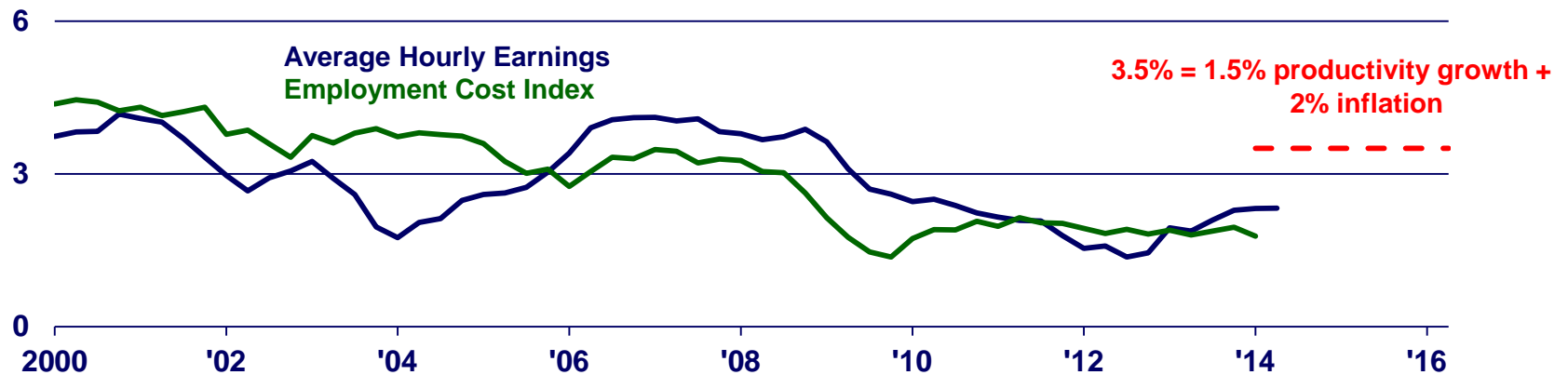
# Persistently Low Inflation and Wage Growth

## PCE Inflation (%)



## Wage and Compensation Growth

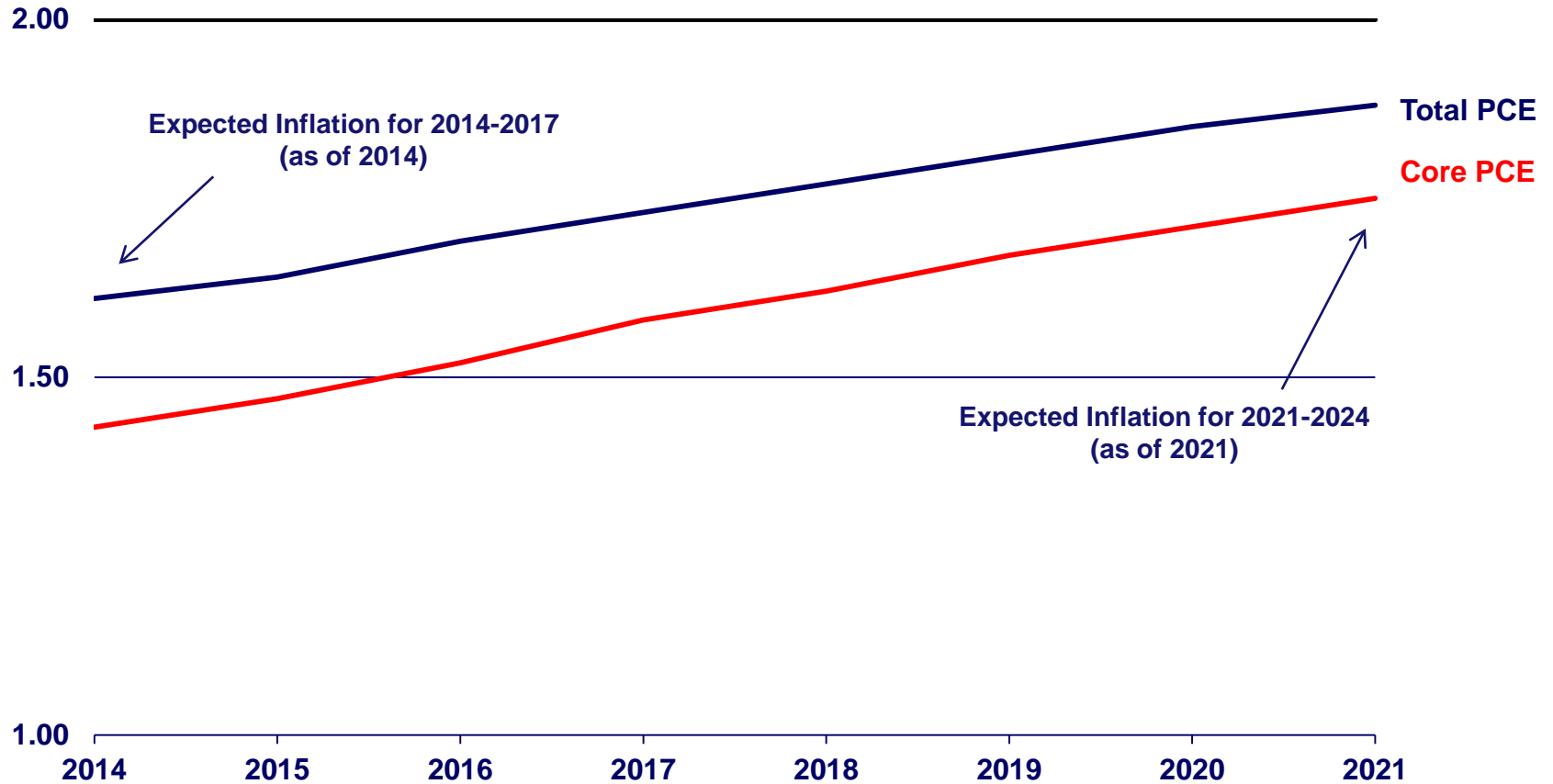
(percent change, year-over-year)



Source: Inflation forecasts are from the June 18, 2014 FOMC Summary of Economic Projections

# Inflation Expectations

## Expected Future Three-Year Ahead Inflation (percent)

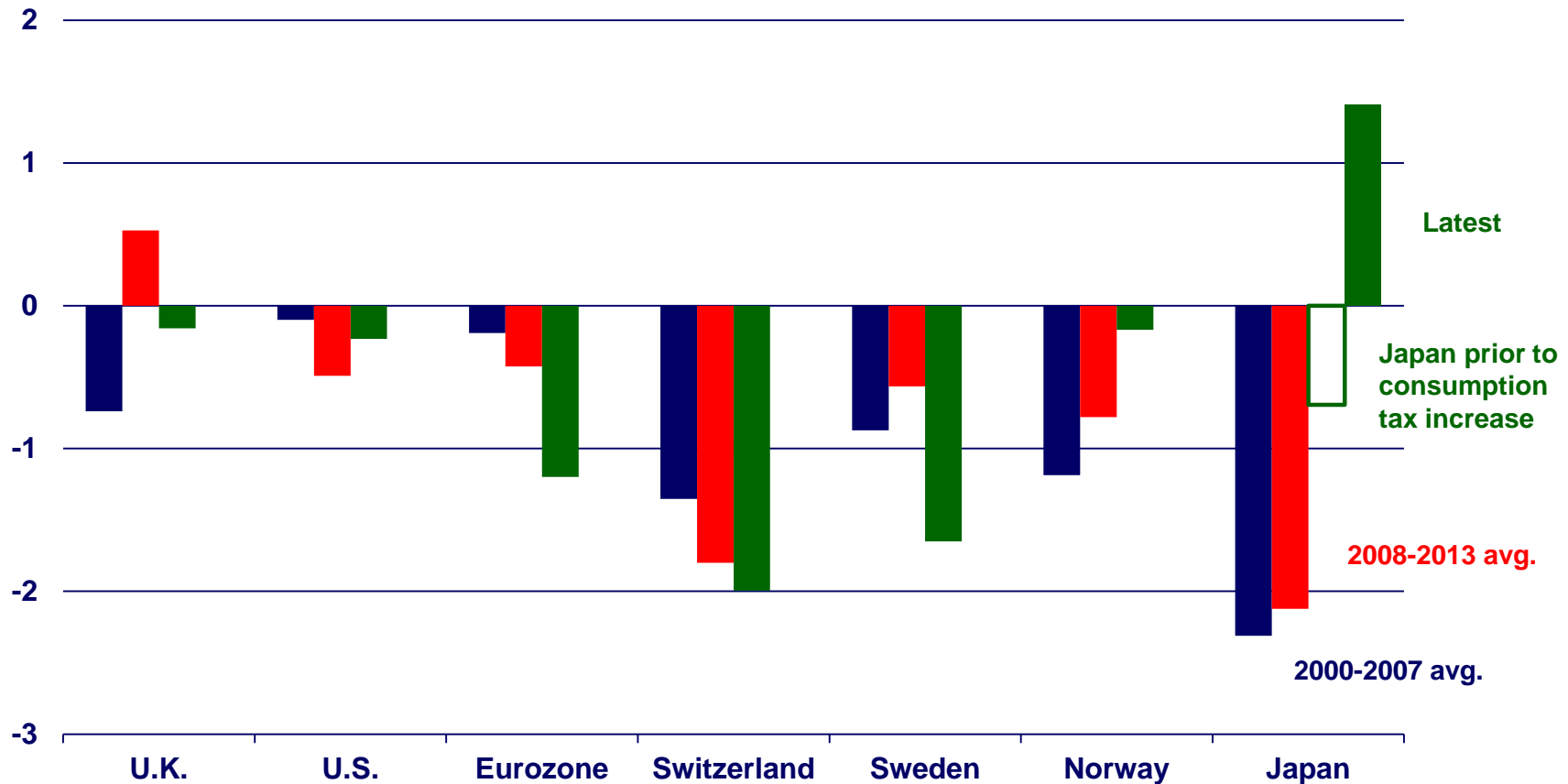


Source: FRB-Chicago Staff Models

# Inflation is Low Globally

## Consumer Inflation

(year-over-year percent change, deviation from target)



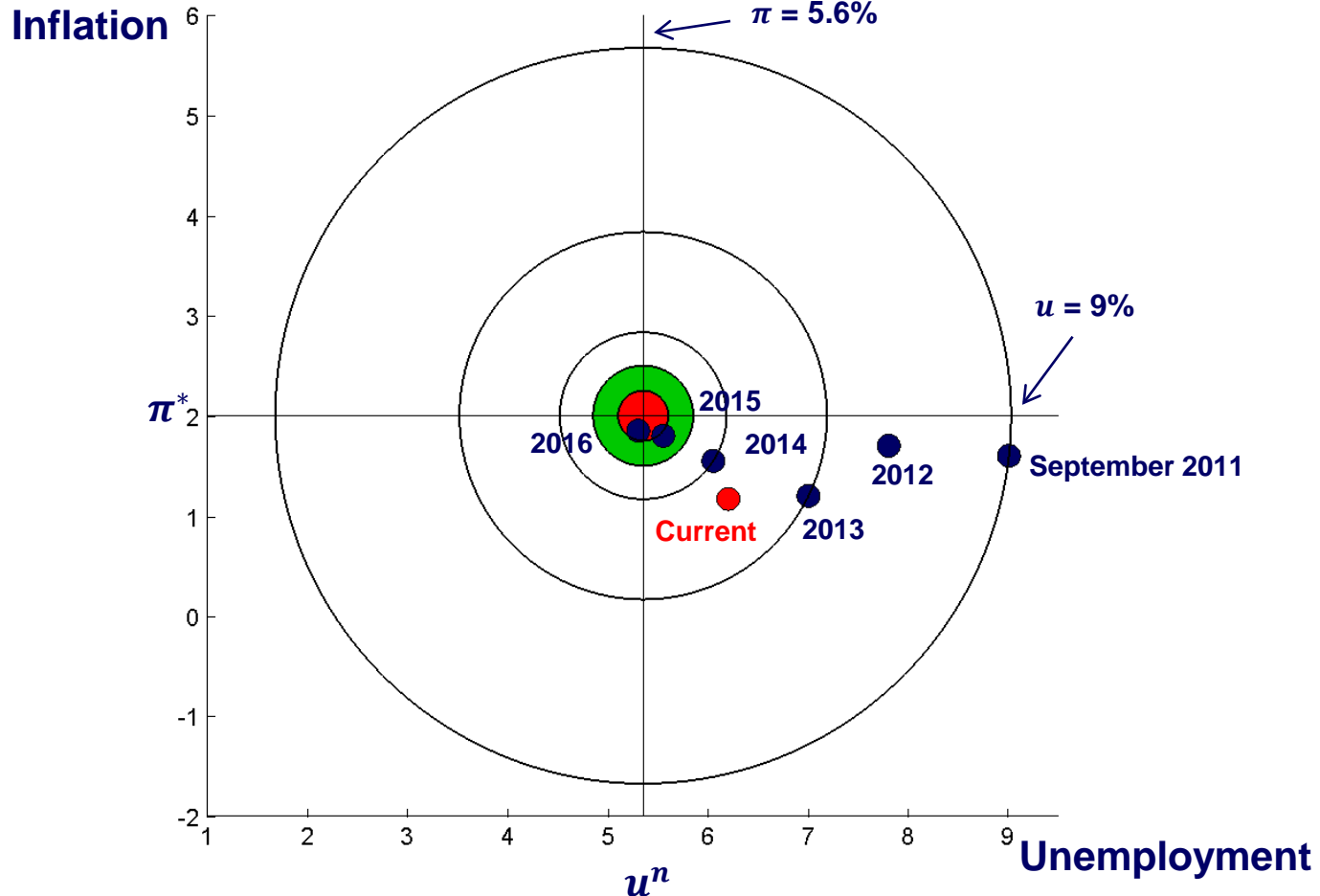
*Consumer inflation in the U.S. is as measured by the total price index for Personal Consumption Expenditures; in other countries, it is measured by the Consumer Price Index. Latest data are year-over-year changes in the most recently published monthly price index.*

# Bull's-Eye Accountability for Fed's Dual Mandate

**Loss Function**  
(percent)

$$L = (\pi - \pi^*)^2 + 0.25(y - y^*)^2$$

$$L = (\pi - 2)^2 + (u - u^n)^2$$

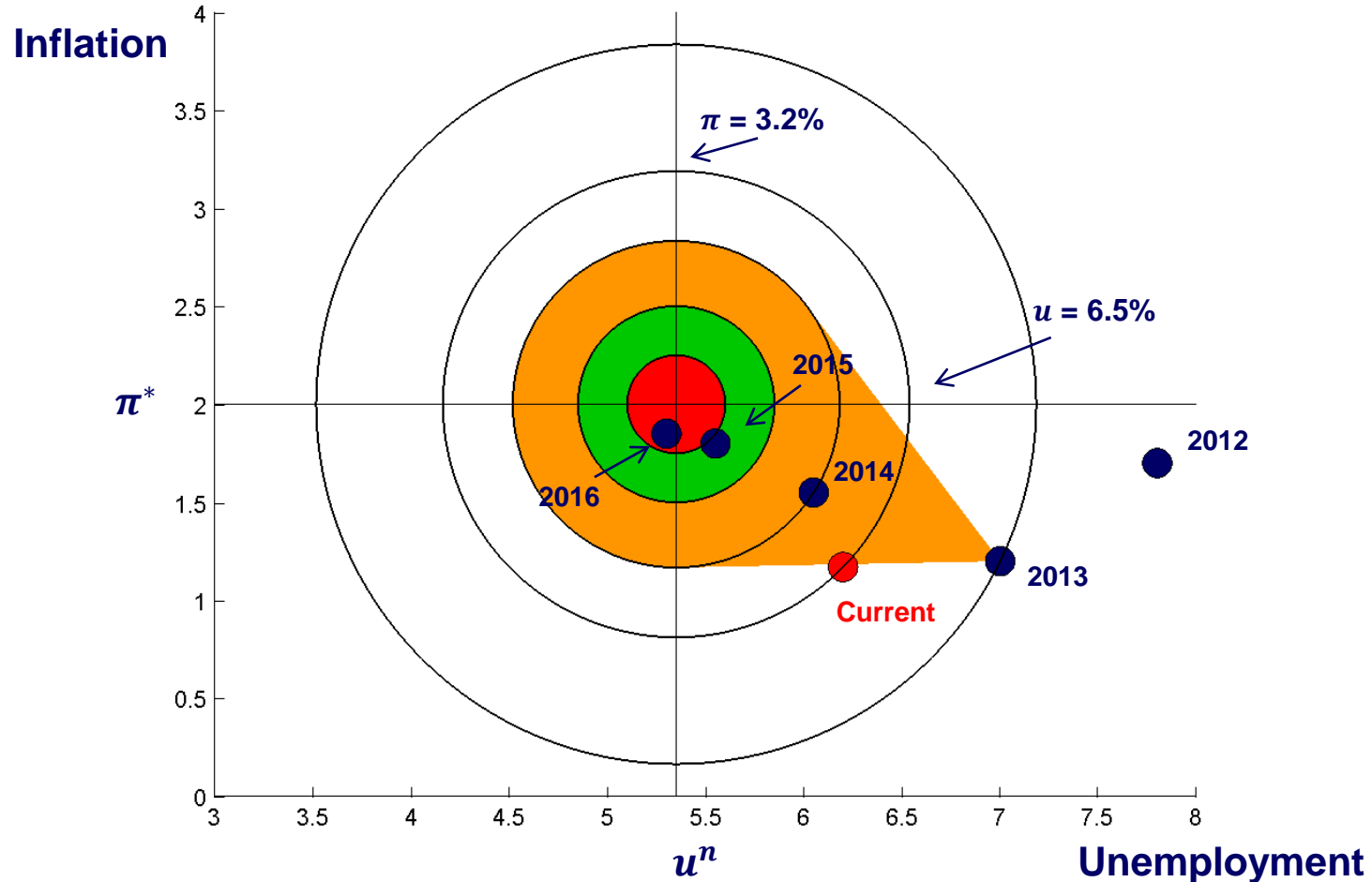


2014 – 2016 values are midpoints of FOMC participants' Summary of Economic Projections as of June 18, 2014. The current dot shows the three-month average of the unemployment rate and year-over-year change in the three-month average of core PCE prices.

# Bull's-Eye Accountability for Fed's Dual Mandate

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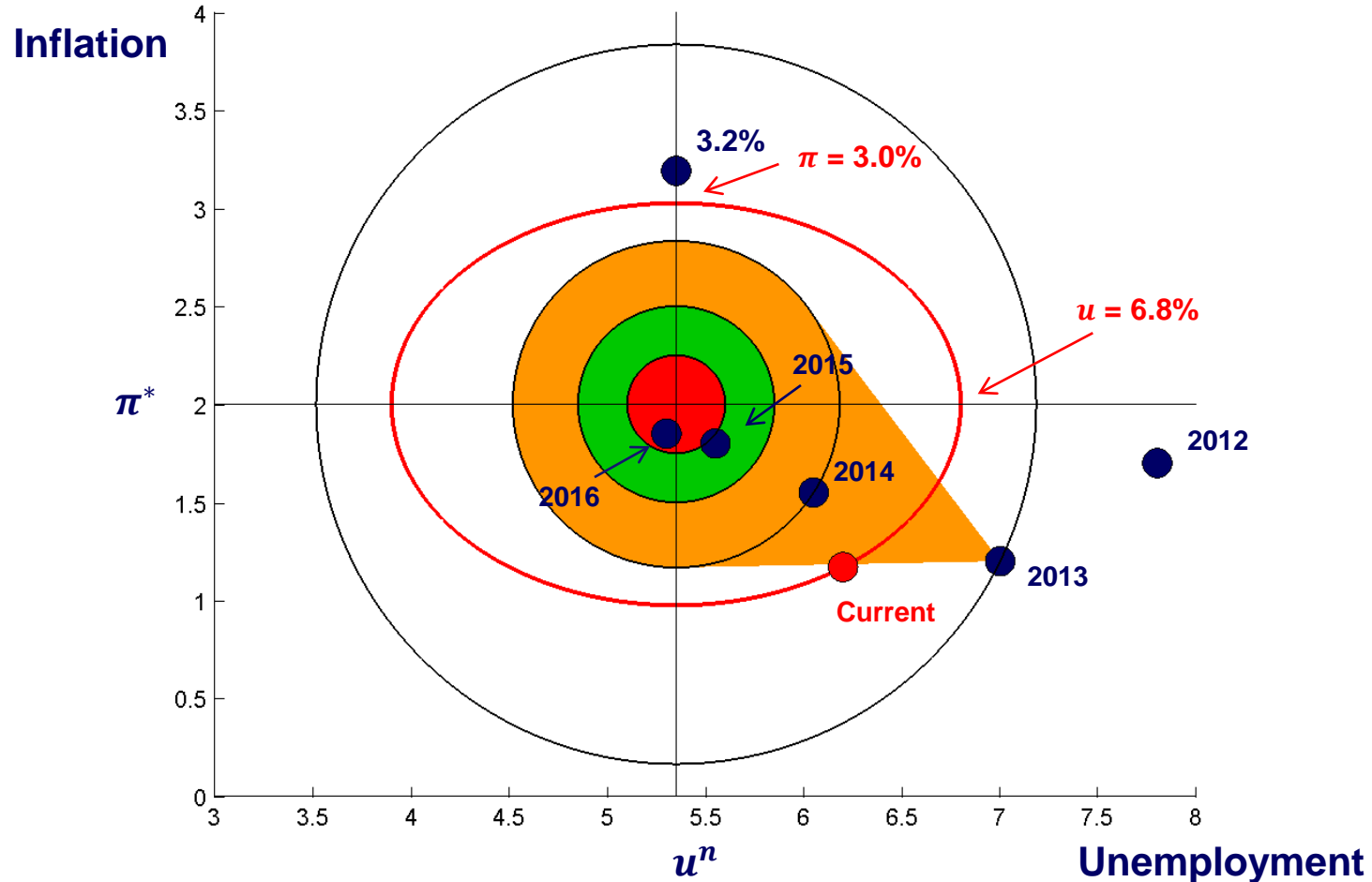


# Bull's-Eye Accountability for Fed's Dual Mandate

**Loss Function**  
(percent)

$$L = (\pi - 2)^2 + (u - u^n)^2$$

$$L = 2(\pi - 2)^2 + (u - u^n)^2$$



2014 – 2016 values are midpoints of FOMC participants' Summary of Economic Projections as of June 18, 2014.  
The current dot shows the three-month average of the unemployment rate and year-over-year change in the three-month average of core PCE prices.

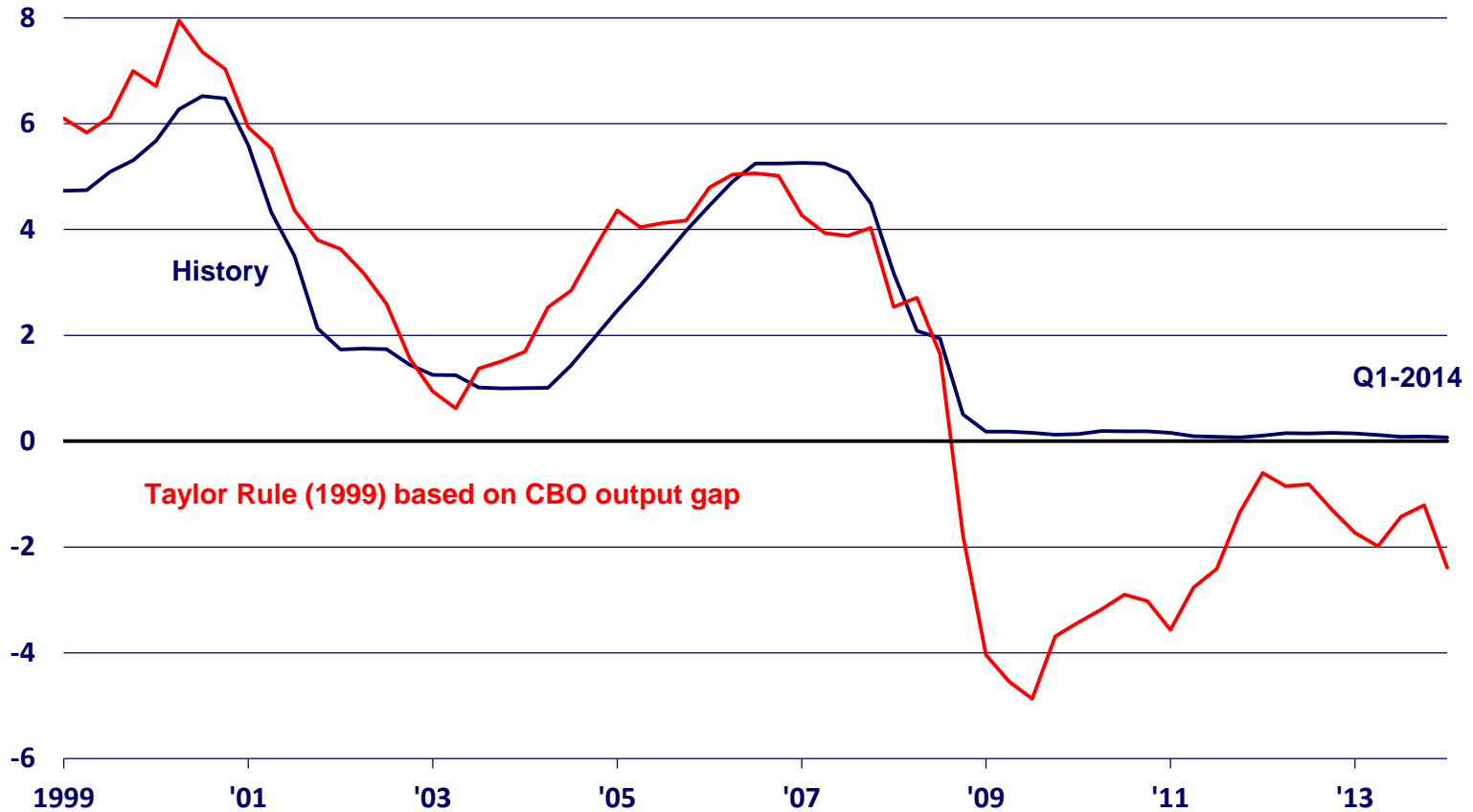
# Why Has Achieving Dual Mandate Been So Hard?

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- **Deleveraging in the aftermath of the financial crisis**
- **Global risks**
- **Unusually restrictive fiscal policy**
- **Monetary policy constrained by zero lower bound**

# Policy Rate Constrained by Zero Lower Bound

## Fed Funds Rate (percent)



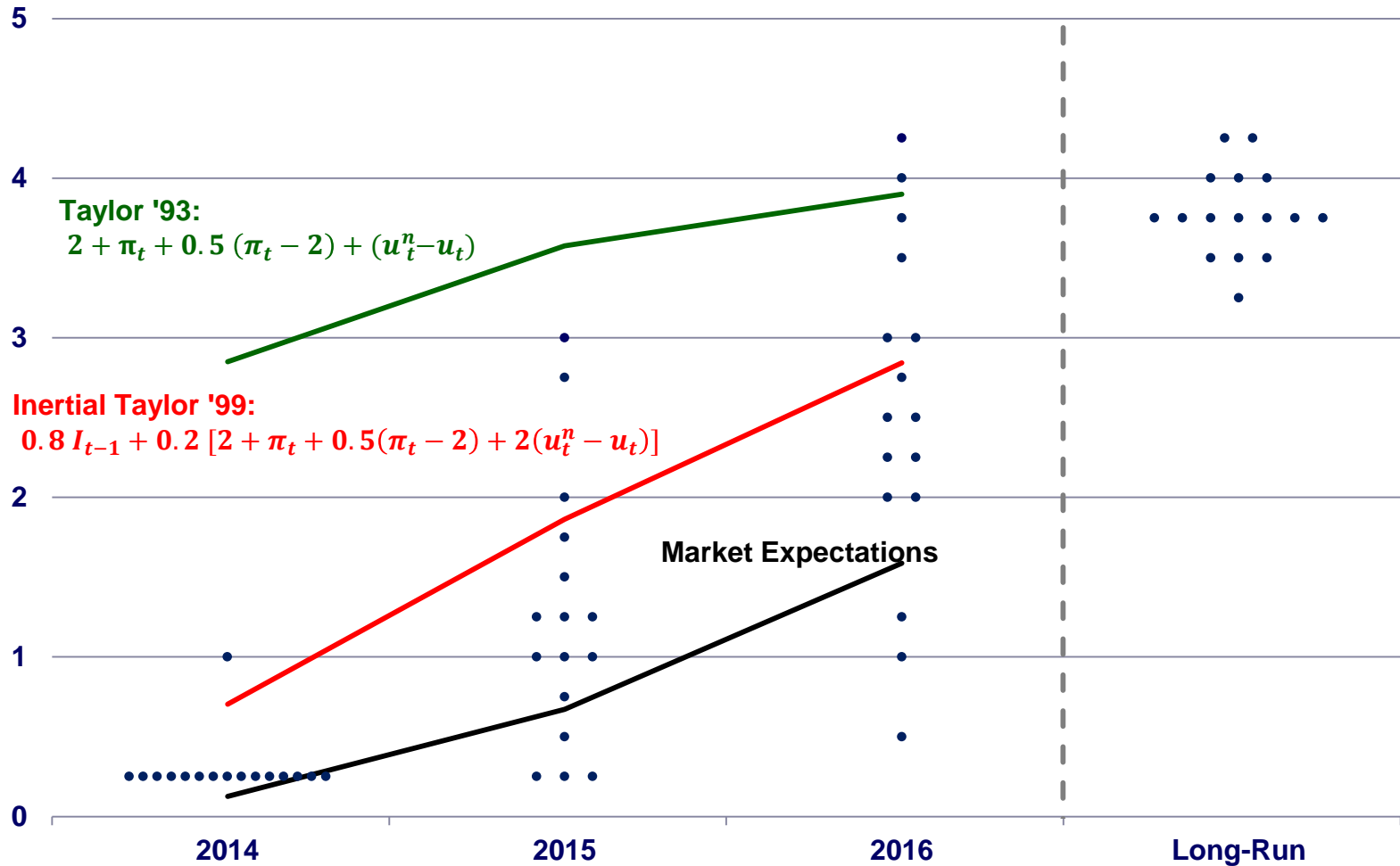
*In the period prior to the explicit inflation target set by the FOMC, the Taylor Rule is constructed using long-run inflation forecasts from the Survey of Professional Forecasters, or when available, from the Summary of Economic Projections. After 2012, the Taylor Rule is constructed using the FOMC's 2 percent long-run inflation target.*

# Policy Tools at the Zero Lower Bound

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- **Constrained optimal policy approach (Taylor 1979)**
  
- **Two ways to approximate optimal policy at the ZLB**
  - **LSAPs**
  
  - **Forward guidance and inertial policy rule**

# FG and FOMC “Appropriate” Policy Rates



Source: Interest rate forecasts are from the June 18, 2014 FOMC Summary of Economic Projections.  
 Market expectations are from OIS futures as of July 7, 2014

# Interest Rates are Low Globally

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## 10-year Government Bond Yield (percent)

