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# Monetary Policy: Lessons from the Past and Looking Forward to the Future

*The Federal Reserve at 100*  
*Loyola University Chicago*  
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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

# Academic Foundations of Modern Central Banking

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- **Great Depression: Central banks must address nominal crises**
  - Friedman and Schwartz (1963)
  - Bernanke (1983, 1985)
  
- **Great Inflation: Central banks must distinguish real from nominal cycles**
  - Friedman (1968)
  - Lucas (1972)
  - Kydland and Prescott (1982)
  
- **Central bank independence: Central banks must be able to act as necessary**
  - Kydland and Prescott (1977)
  - Barro and Gordon (1983)
  - Rogoff (1985)

# Long-Run Strategy for Monetary Policy

(January 2012 and January 2013)

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■  $\pi^* = 2\%$  PCE inflation

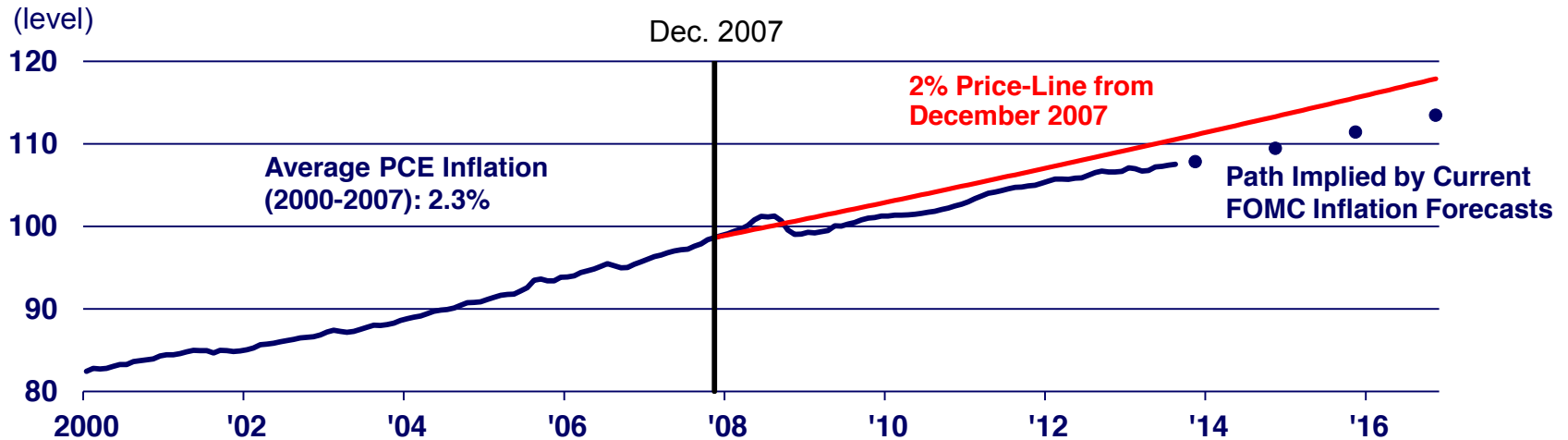
■  $U_t^* \sim 5\frac{1}{4}\% - 6\%$  time-varying

SEP long-run sustainable range

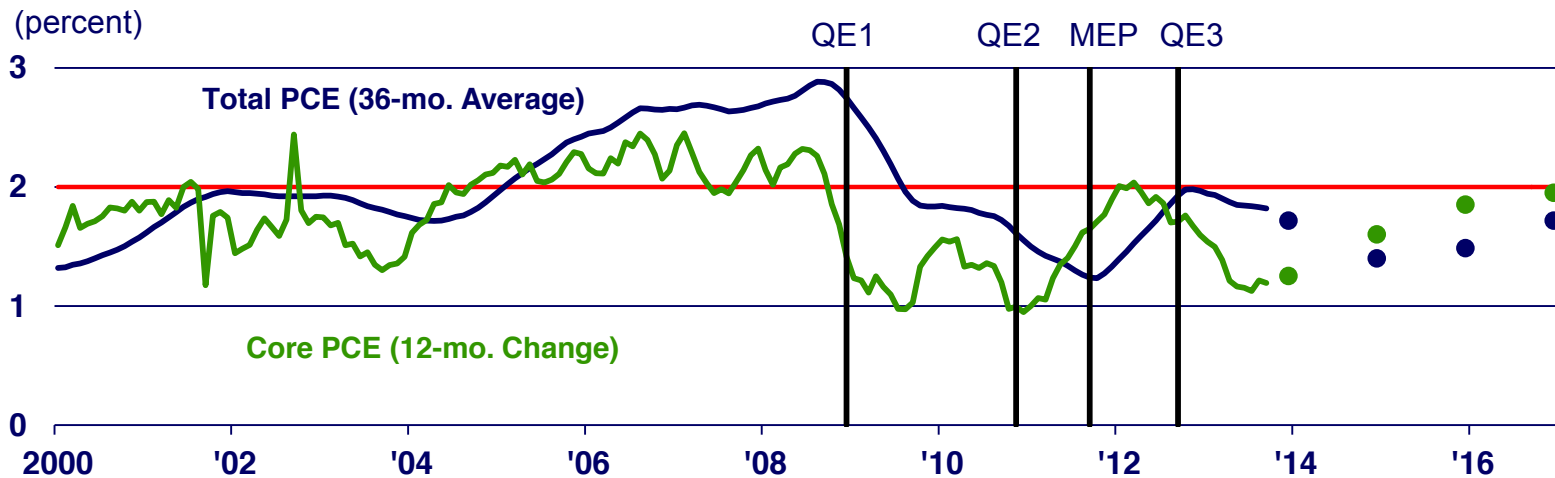
■ Balanced approach to reducing deviations of inflation and employment from long-run objectives

# Would Today's Dilemma Be Different under a Single Mandate?

## Total PCE Price Index



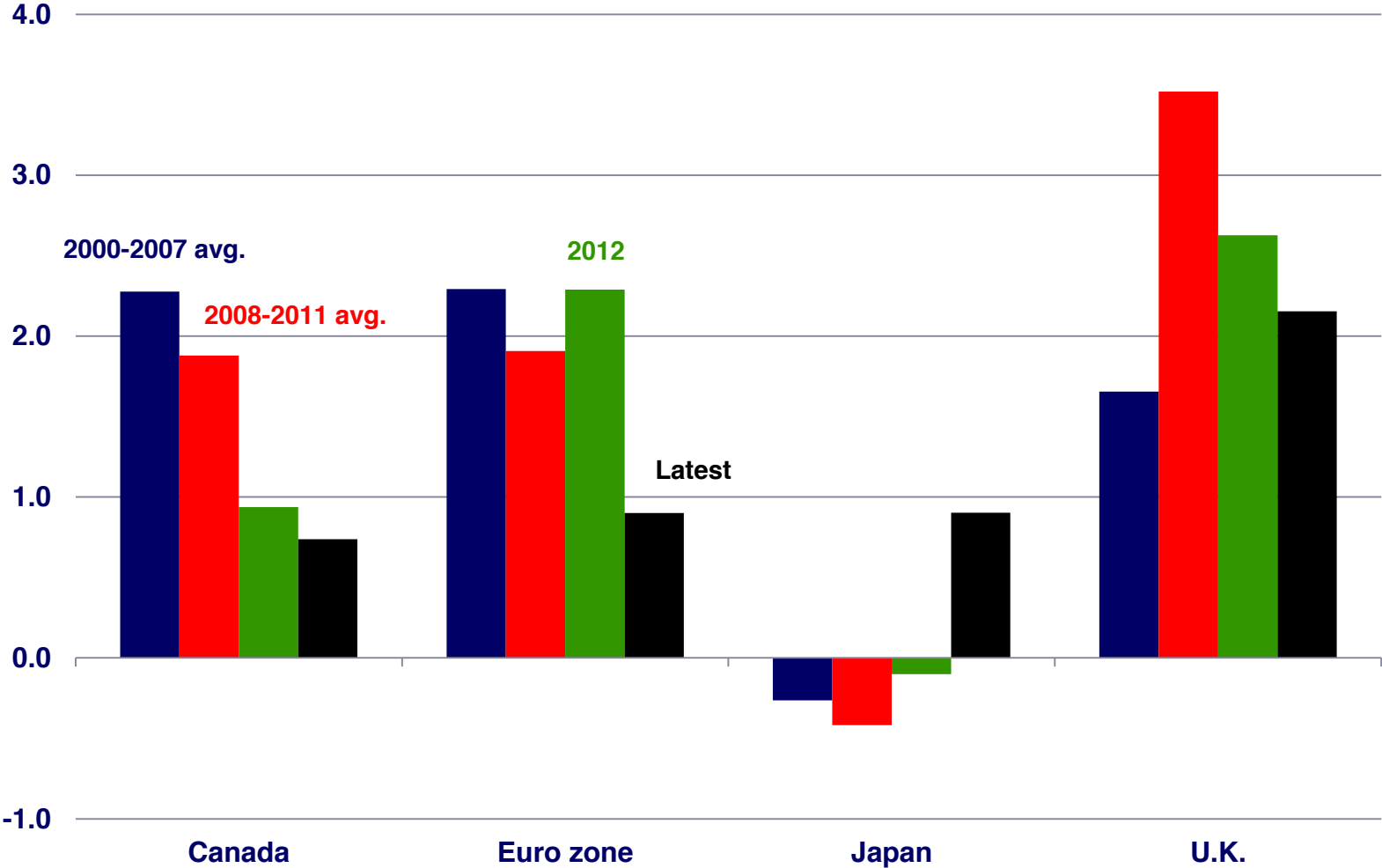
## Inflation



Source: Inflation forecasts are from the September 18, 2013 FOMC Summary of Economic Projections

# Inflation is Low Globally

**Consumer Price Index**  
(Q4/Q4 percent change)

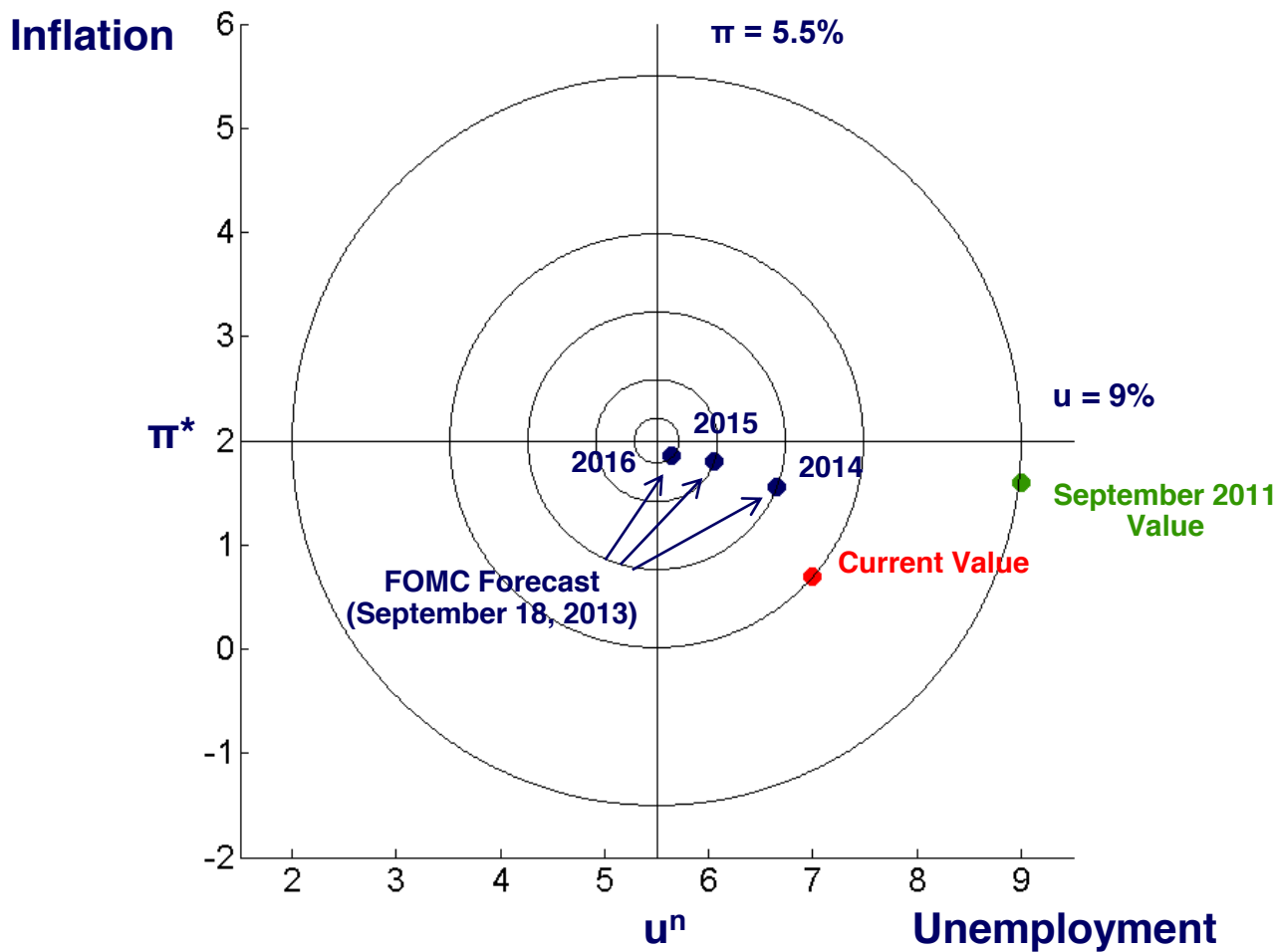


# Balanced Approach to the Dual Mandate Is Consistent with Mainstream Macroeconomics

**Loss Function**  
(percent)

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

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



# Why Has Achieving Dual Mandate Been So Hard?

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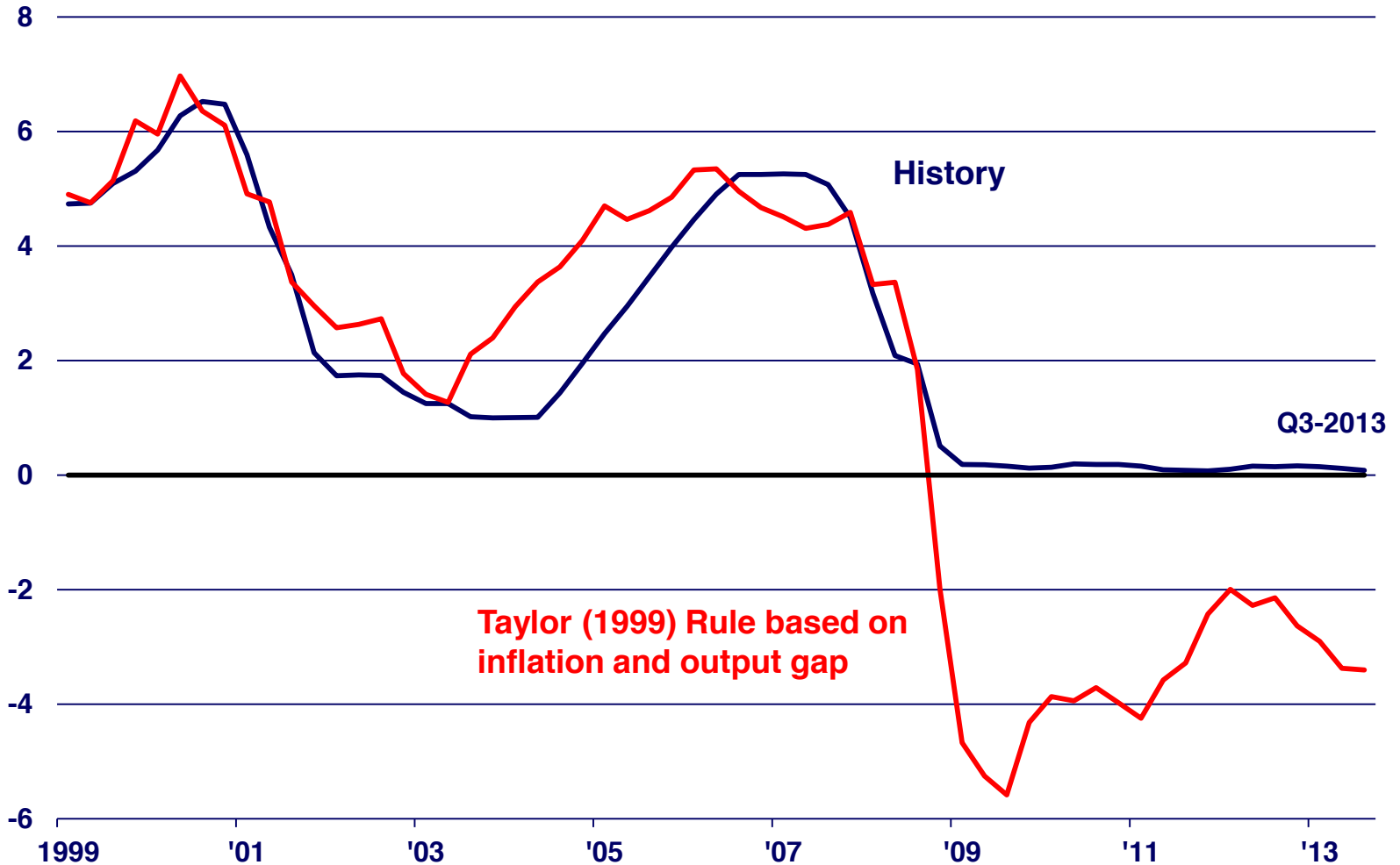
- Deleveraging in the aftermath of the financial crisis
- Global risks
- Unusually restrictive fiscal policy
- Monetary policy constrained by zero lower bound



# Policy Rate Constrained by Zero Lower Bound

## Fed Funds Rate

(percent)



# Policy Tools at the Zero Lower Bound

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## ■ Large Scale Asset Purchases

- \$45 bil. in Treasuries & \$40 bil. in agency MBS per month until substantial improvement in labor market outlook

## ■ Forward Guidance

- Zero interest rate at least until  $U < 6.5\%$  or  $\pi > 2.5\%$

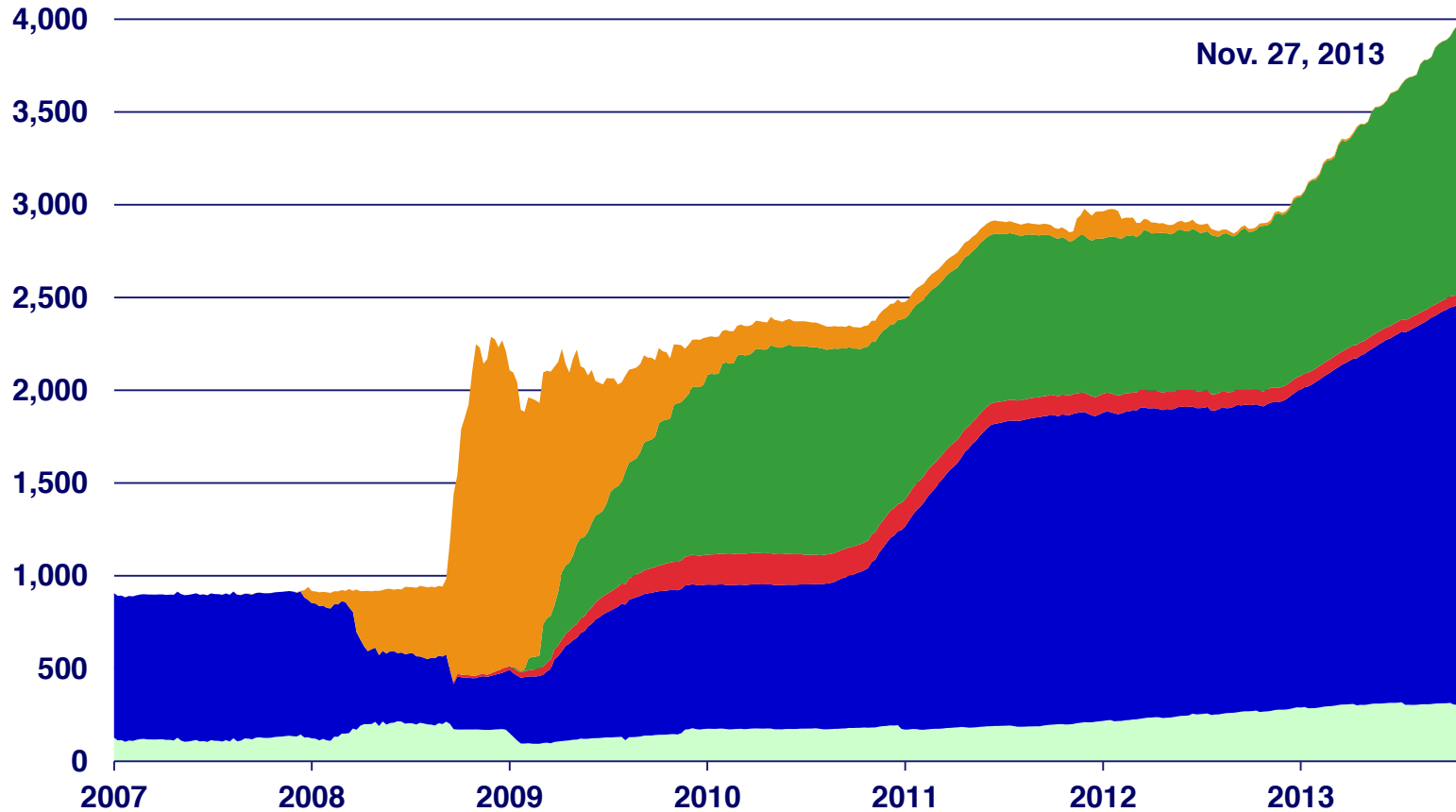
## ■ Features of both unconventional tools

- Lower long-term interest rates
- Disciplined by economic conditionality

# Asset Purchases: The Fed's Balance Sheet

## Federal Reserve Assets

(Bil. \$)



- All Other Assets (\$305.1 bil.)
- Agency Debt (\$58.4 bil.)
- Lending and Liquidity Facilities (\$2.1 bil.)
- Treas. Sec (\$2,158.5 bil.)
- Agency MBS (\$1,443.7 bil.)

# Forward Guidance on the Federal Funds Rate

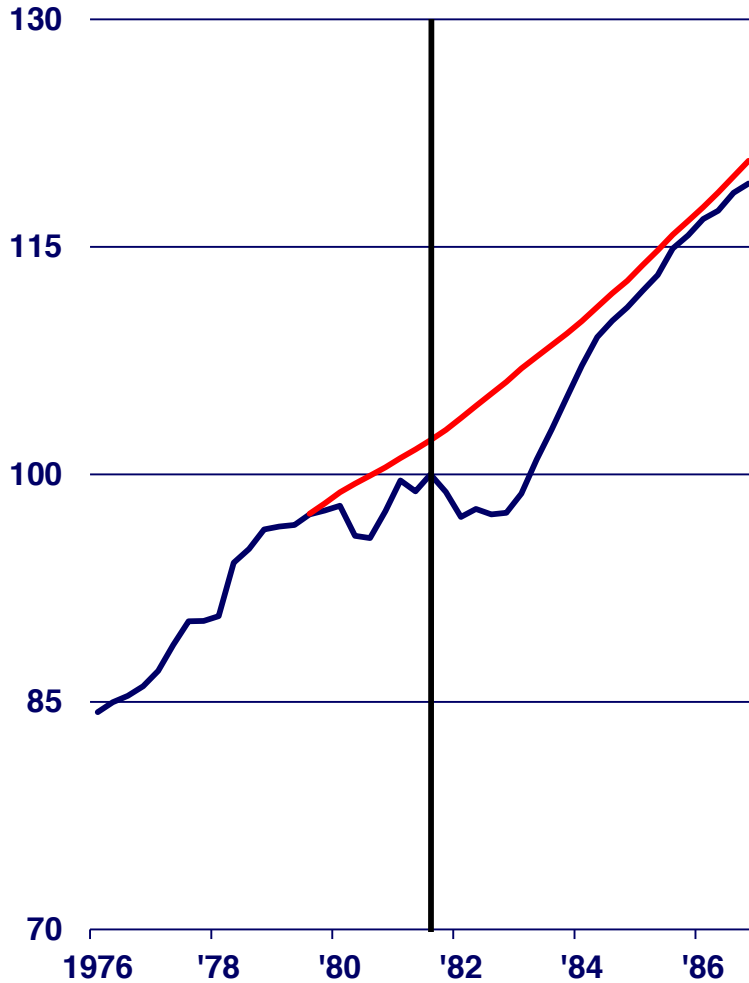
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- Zero interest rate at least until  $U < 6.5\%$  or  $\pi > 2.5\%$
- Thresholds
- December 2012: “Economic conditions likely to warrant exceptionally low level of the funds rate **at least as long as** the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half of a percentage point above the Committee’s 2 percent long-run goal, and longer-term inflation expectations continue to be well-anchored.”

# Output Gap: 1982 Recovery vs. Today

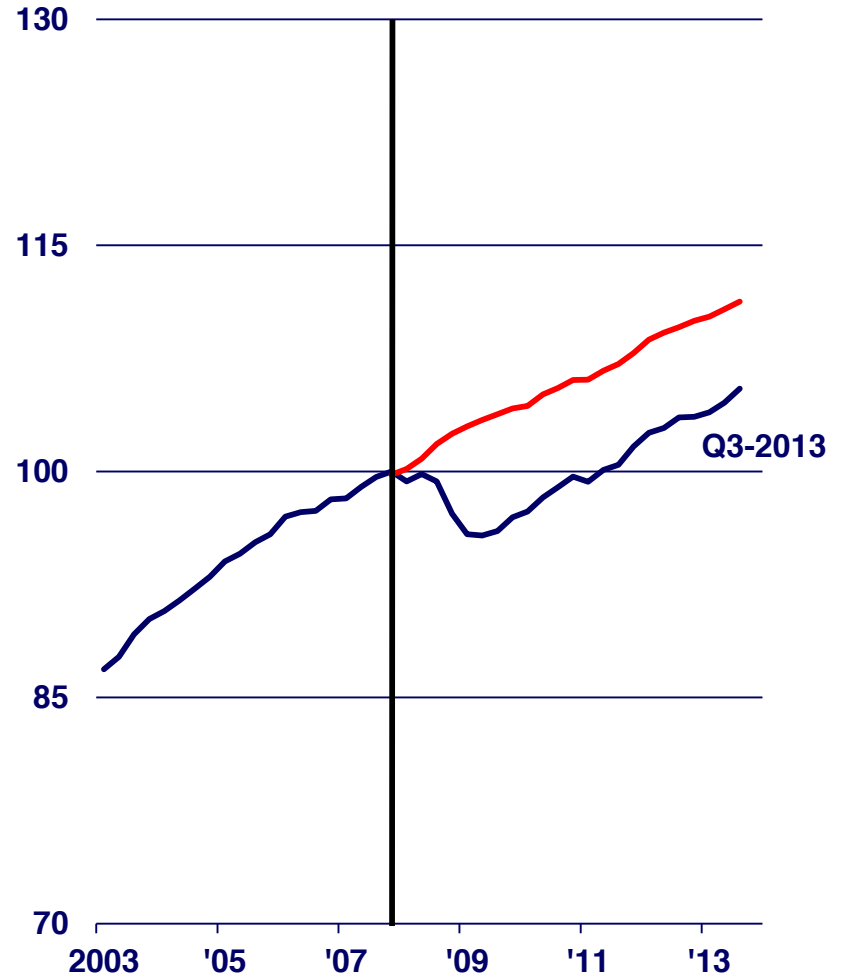
**Actual and Potential GDP: 1982**

(1981 Q3 = 100)



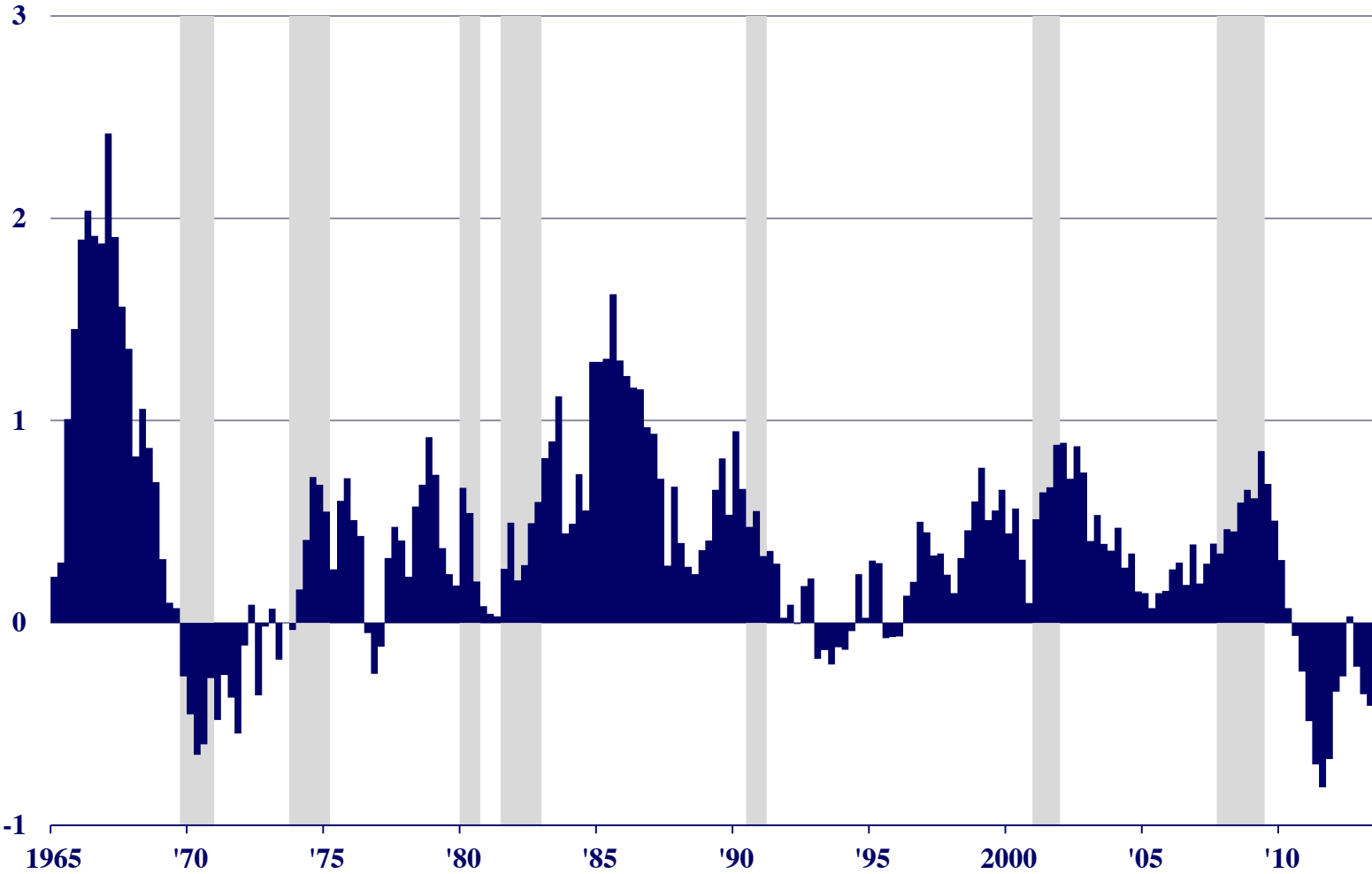
**Actual and Potential GDP: 2007**

(2007 Q4 = 100)



# Fiscal Policy: Historically Unusual

**Contributions of Government Purchases to Real GDP Growth**  
(percent)



# Looking Ahead: Exit Principles (June 2011 Minutes)

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## ■ Balance sheet size

- Smallest level consistent with efficient monetary policy operation

## ■ Balance sheet composition

- Treasury only

## ■ Likely normalization sequence

- Taper, then end LSAPs
- Cease reinvestment of maturing securities
- Begin raising rates and drain reserves

## ■ New tools: IOER, RRP Facility, term deposits

# Looking Ahead to the Future

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- **Balanced approach to deviations from goals**
- **Inflation preferences should be symmetric**
- **Must recognize limitations of monetary policy during episodes in which real cycles dominate**