

FEDERAL RESERVE BANK *of* NEW YORK

The Federal Reserve in the 21st Century
Monetary Policy Decision Making

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The views expressed in this presentation are those of the presenter and not necessarily those of the Federal Reserve Bank of New York or the Federal Reserve System

Outline

- **Monetary policy** refers to the **actions** undertaken by a **central bank** to influence the availability and cost of money and credit to help promote **national economic goals**
- In what follows we will review
 - the institutional framework and organization of the **Federal Reserve System (“the Fed”)**, the *central bank* of the U.S.
 - the Fed’s *goals and objectives* (the so-called **dual mandate**)
- We will focus on how the Fed chooses its *actions* to fulfill its dual mandate
- And close with an assessment of issues and concerns in the current policy debate, as reflected in recent FOMC communication



The Federal Reserve System

- 12 **Federal Reserve Banks**, the “regional Feds”
 - part private, part government institutions
 - each with a Board of Directors (9 members)
 - who appoint the president and officers of the FRB subject to approval by the Board of Governors
- **Board of Governors** of the Federal Reserve System, “the Board”
 - in Washington DC
 - up to seven members appointed by POTUS and confirmed by the Senate
 - currently (March 2016) five members, two vacancies
- **Federal Open Market Committee**, the FOMC
- Around 2900 member commercial banks

Depending on the context, the shorthand “**Fed**” can refer to the whole system, or the Board in Washington, or the FOMC...



The 12 Fed Districts

The Federal Reserve System



The FOMC

- The Federal Open Market Committee has twelve members
 - the (up to) seven **members of the Board** in Washington DC
 - Board Chair = FOMC Chair, currently Janet Yellen
 - the **president of the Federal Reserve Bank of New York**
 - FOMC Vice Chair
 - **four** of the remaining eleven **FRB presidents**, serving one-year terms on a rotating basis
 - Currently Jim Bullard, Esther George, Loretta Mester, and Eric Rosengren
 - the other presidents attend the meetings of the Committee, participate in the discussions, but do not vote
- The FOMC holds **eight** regularly scheduled **meetings per year** to
 - review economic and financial conditions,
 - assess the risks to its long-run goals, and
 - determine the appropriate stance of monetary policy
 - decisions are explained in a **statement** released after each meeting



How FOMC meetings look like (March 2014)



The Fed's dual mandate

- The Federal Reserve Act of 1913 provides the statutory basis for monetary policy
- The goals of monetary policy, as amended in 1977
 - “The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates **commensurate with the economy's long run potential to increase production**, so as to promote effectively the goals of **maximum employment, stable prices**, and moderate long-term interest rates”

Maximum employment and stable prices



The dual mandate



Interpreting the dual mandate: Price Stability

- The “Statement on Longer-Run Goals and Monetary Policy Strategy” provides the FOMC’s interpretation of the dual mandate
 - Adopted in 2012, and reaffirmed/adjusted every January
- Price stability → longer-run goal for inflation
 - “inflation at the rate of 2 percent is most consistent over the longer run with the Federal Reserve’s statutory mandate”
 - measured by the annual change in the price index for personal consumption expenditures (PCE), a comprehensive measure of prices faced by US households
 - **Symmetric**: “The Committee would be concerned if inflation were running persistently above or below this objective”
 - Clarification introduced in January 2016



Interpreting the dual mandate: Maximum Employment

- Maximum employment → no fixed goal
 - policy decisions must be informed by assessments of the maximum level of employment, based on a wide range of indicators, recognizing that such assessments are necessarily **uncertain and subject to revision**
 - **estimates of the longer-run rate of unemployment** are published four times per year in the FOMC's Summary of Economic Projections (SEP)
 - according to the latest SEP, longer-run normal rate of unemployment is between 4.7 and 5.8 percent, with a central tendency between 4.7 and 5.0 percent, and a **median of 4.8 percent**
 - The median was 4.9 percent in December



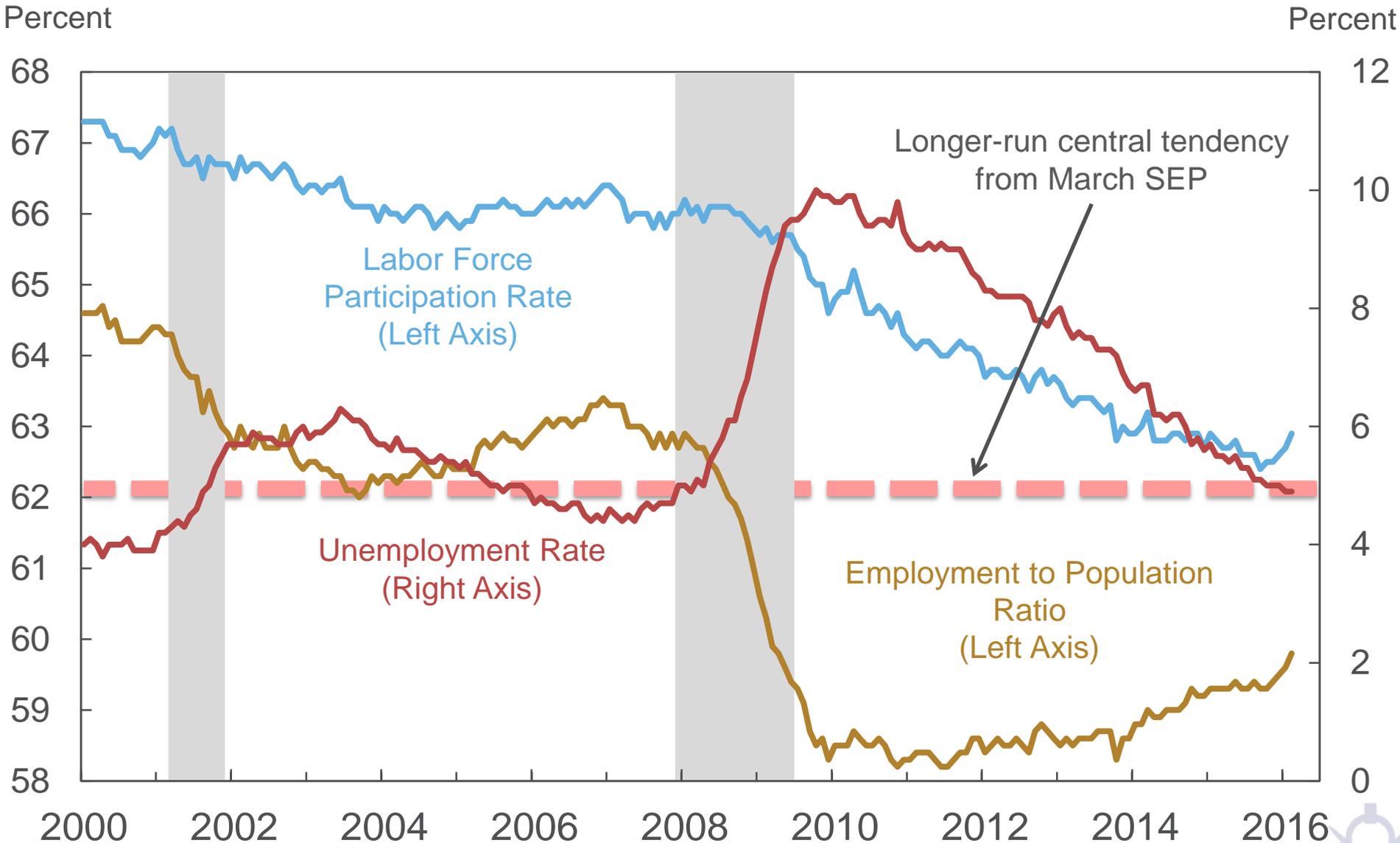
Why the asymmetry?

- The **inflation rate** over the longer run is primarily determined by **monetary policy**, and hence the Committee has the ability to specify a longer-run goal for inflation.
 - A modern version of the idea that “inflation is always and everywhere a monetary phenomenon” (M. Friedman, 1970)
 - **Communicating** this symmetric inflation goal clearly to the public helps keep **longer-term inflation expectations firmly anchored**, thereby fostering price stability (...) and enhancing the Committee’s ability to promote maximum employment
- The **maximum level of employment** is largely determined by **nonmonetary factors** that affect the structure and dynamics of the labor market. These factors **may change over time** and may not be directly measurable.



Recent and Projected Performance on the Dual Mandate Objectives

Three measure of the US labor market



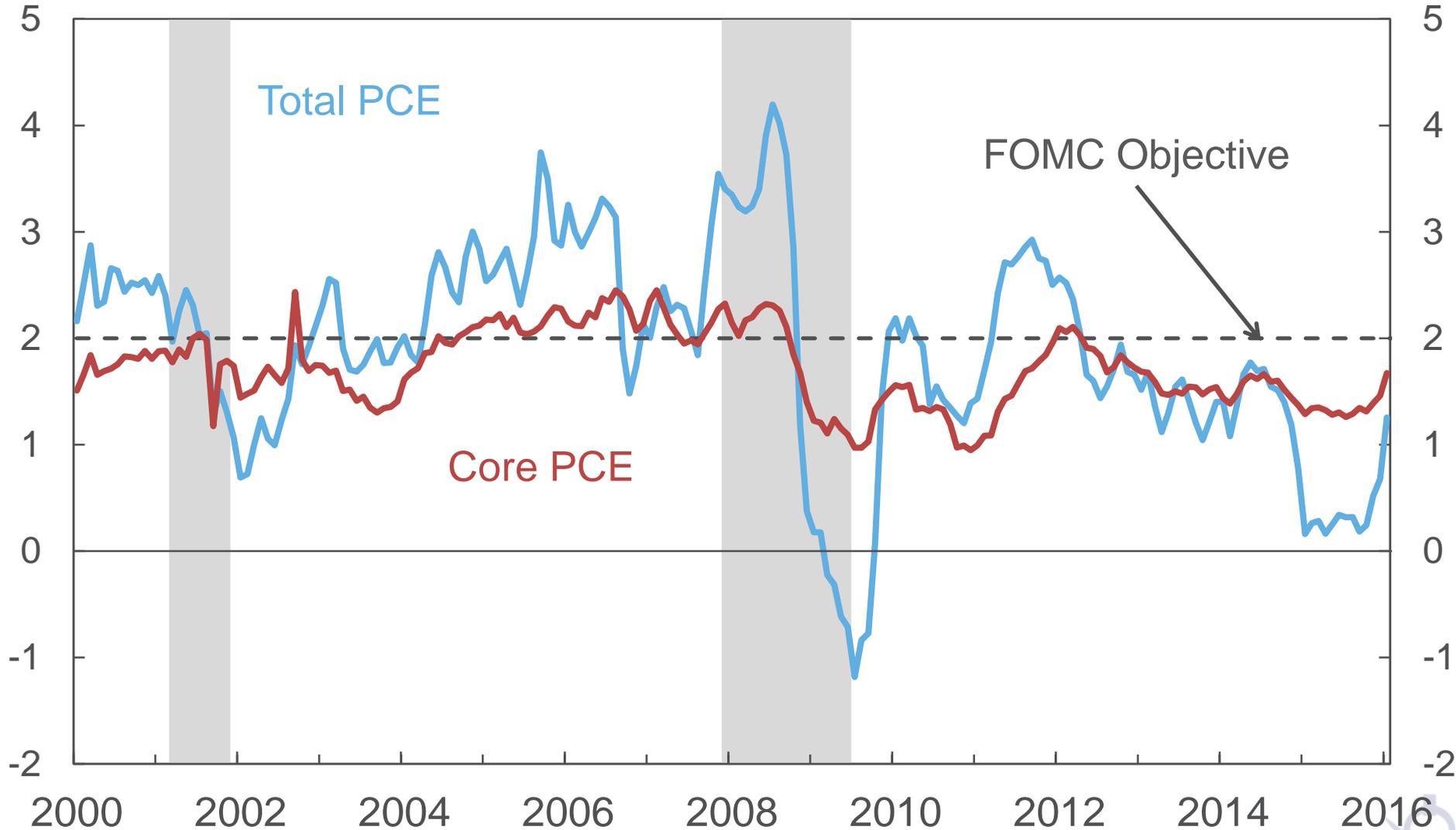
Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

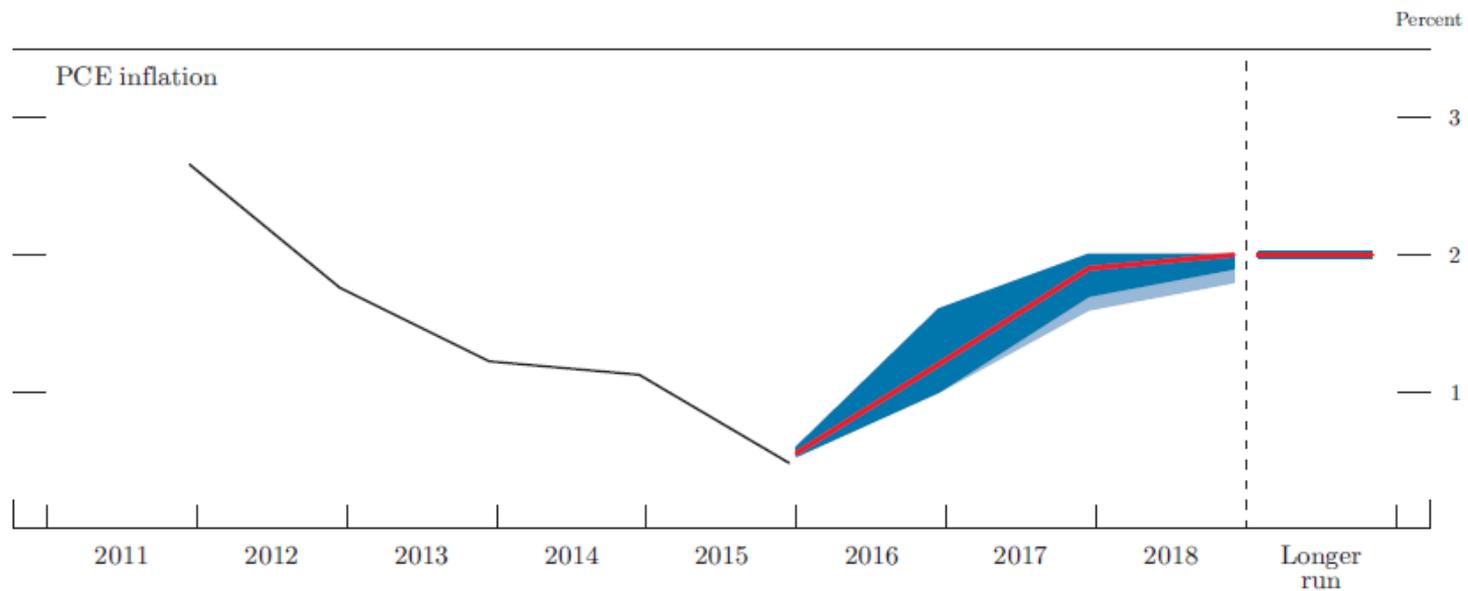
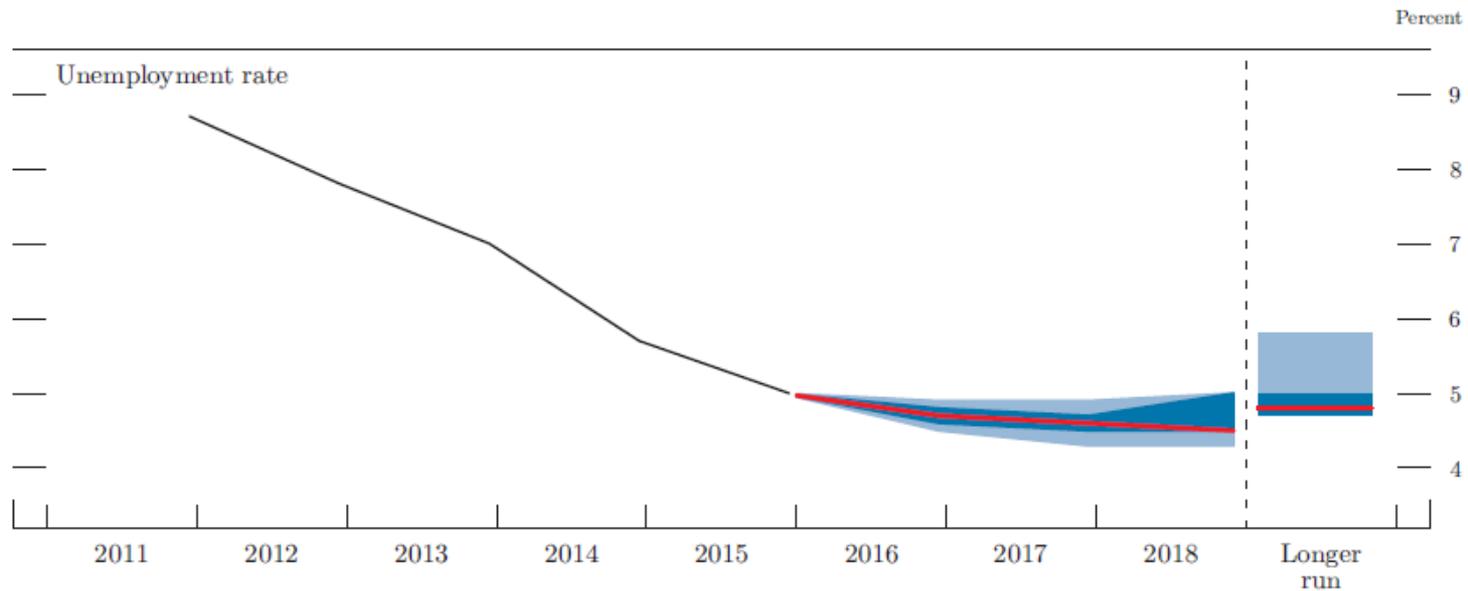
Total and core PCE inflation

12 Month % Change

12 Month % Change



Projections vs goals: March 2016 SEP



In the FOMC's own words (March Statement)

- The Committee currently expects that, with **gradual adjustments in the stance of monetary policy**, economic **activity** will expand at a moderate pace and labor market indicators will continue to strengthen.
- **Inflation** is expected to remain low in the near term, (...) but to **rise to 2 percent over the medium term** as the transitory effects of declines in energy and import prices dissipate and the labor market strengthens further.
- The **stance of monetary policy remains accommodative**, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation.

FOMC expectations of achieving its objectives are predicated on monetary policy remaining **accommodative**.

What does this mean?



The stance of monetary policy

- Monetary policy cannot directly affect employment or inflation (the *ultimate objectives*)
 - But it can affect the **flow of credit** to the economy by influencing **financial conditions**
 - The **flow of credit** in turn affects aggregate demand and **economic activity**
- **Accommodation**: Higher availability and lower cost of credit provides economic stimulus, boosts demand and spending, and puts upward pressure on prices
- **Tightening**: Lower availability and higher cost of credit reduces economic stimulus, contracts demand and spending, and contains risk of inflation

OK, but how?

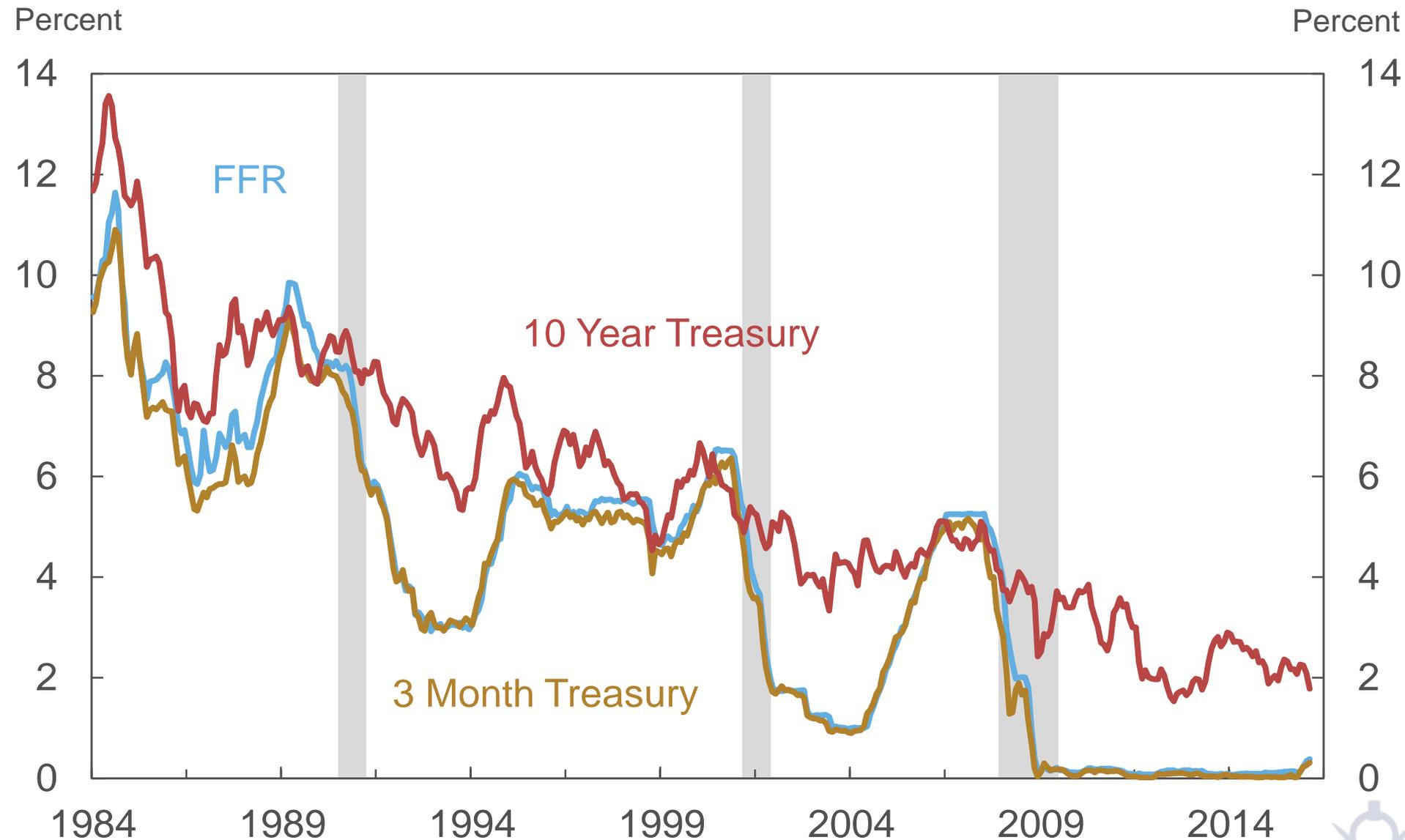


The federal funds rate (FFR)

- The **FFR** is the Fed's **main tool** to affect the flow of credit, and hence financial conditions
- The FFR is the rate at which banks borrow and lend reserves **overnight** in the federal funds market
 - Reserves are deposits that banks hold in their accounts at the Federal Reserve
- The FFR is controlled fairly well by the Fed, and **it influences** other interest rates and **financial conditions** more broadly
- To increase (reduce) accommodation, FOMC lowers (hikes) FFR
 - FFR affects other interest rates, the stock market, exchange rates, and ultimately a range of economic variables, including employment, output, and prices (the **transmission mechanism**)



FFR, 3-month and 10-year Treasury rates



Source: Federal Reserve Board

Note: Shading shows NBER recessions.

A balanced approach to the dual mandate

- How does the FOMC choose the appropriate stance of policy?
- In setting monetary policy, the Committee seeks to **mitigate deviations** of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level
- These **objectives are generally complementary**
 - A stance of policy that helps closing the employment gap also helps closing the inflation gap, like in the current situation
 - But sometime there may be policy trade-offs: a policy that helps with employment might make inflation worse, and vice versa
- Under circumstances in which the Committee judges that the objectives are not complementary, it follows a **balanced approach** in promoting them



Decision-making at the FOMC

At each meeting, the Committee

- **assesses** how current and projected economic conditions stand relative to its long-run goals
 - Summarized in the first and second paragraphs of the FOMC statement
- accounts for the potential trade-offs in closing projected inflation and employment/unemployment gaps
- **debates** extensively pros and cons of alternative **choices**
 - A summary of these debates appears in the minutes of the meetings, published with a three week delay
- **votes** on a specific **action**
 - Voters in favor and against are identified in the FOMC statement



From actions to communication

- Once an action has been taken, **communication** of the decision and of its rationale sets off the “transmission mechanism”
- “The Committee seeks to **explain** its monetary policy decisions to the public as **clearly** as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, **increases the effectiveness** of monetary policy, and enhances **transparency** and **accountability**”
- Communication’s main objective is to clarify the Fed’s **reaction function**: its response to developments in the economy
 - Crucial piece of information to form expectations, which in turn feed back on current behavior



Channels of FOMC communication

- The FOMC **statement**
 - Issued at the end of each meeting
 - Includes the Committee's view on economic outlook, the policy decision and an assessment of risks
- The **minutes**
 - Published three weeks after the meeting
 - Summarize the discussion and the rationale of the policy decision
- **Summary of Economic Projections (SEP)**
 - Projections by FOMC participants for output, inflation and unemployment, as well as FFR
- **Press conferences**
 - 4 times a year, after every other meeting
 - Chair discusses statement and answers questions
- Speeches, testimonies and other communication

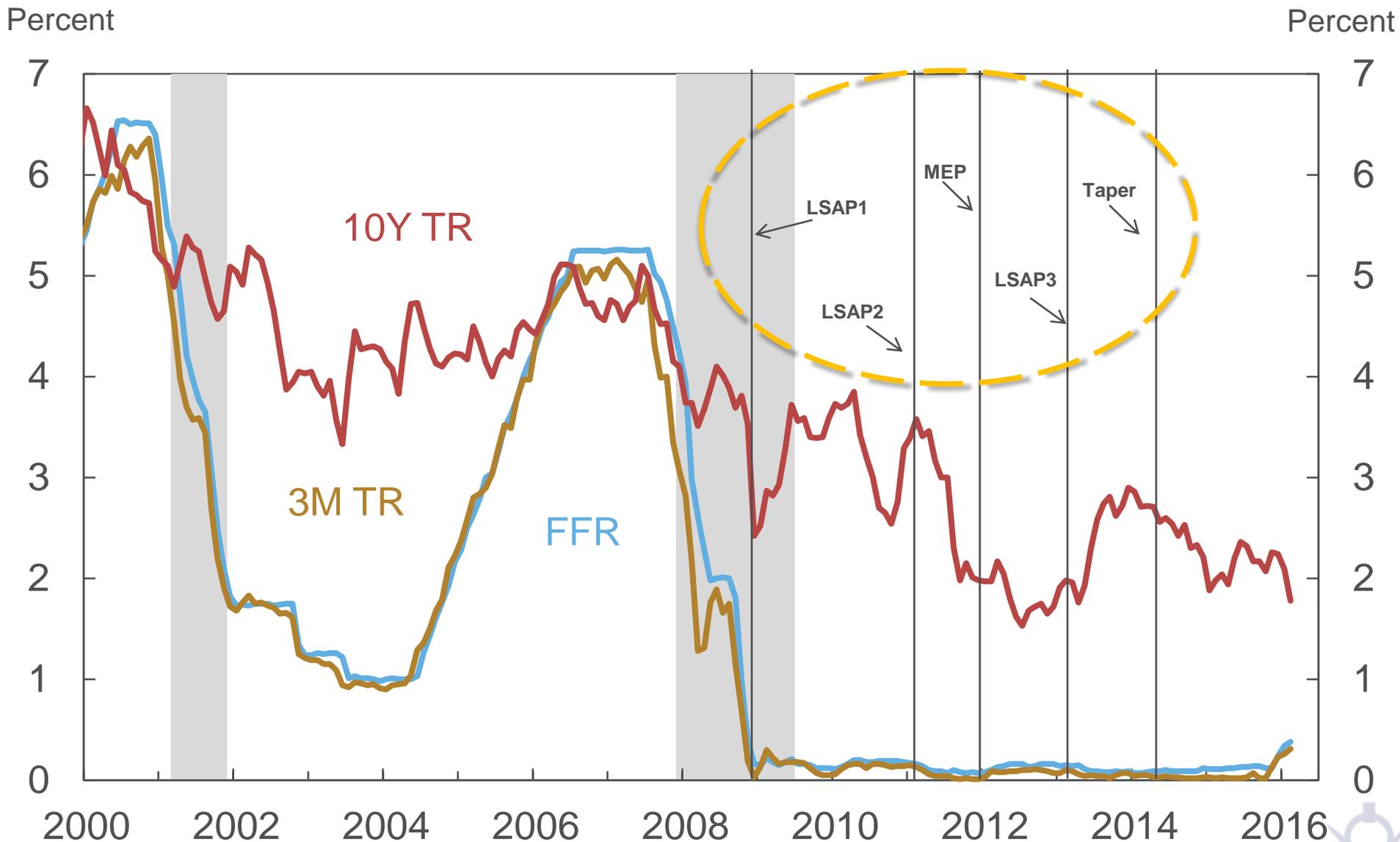
Unconventional monetary policy

- Traditionally, the FFR has been the main instrument of monetary policy
- But during the Great Recession the FFR hit “zero”
 - 0 to 0.25 percent range, aka the effective lower bound (ELB)
 - Recent international experience suggests that the ELB might be lower than “zero”
- What then? So-called “unconventional” monetary policy
 - **Forward guidance** on the future path of the FFR, or “low for long”
 - Large scale asset purchases (**LSAPs**), or quantitative easing (QE)

Accommodation at the zero bound

- Even when the FFR and **short-term rates** cannot go further down, monetary policy can still lower **long-term rates**
- Return on long-term securities depends on two elements:
 - **expectations** about future short-term interest rates
 - uncertainty about future events, so called risk premium
- If you want to provide more accommodation by lowering long-term returns, you can
 - **use communication** about keeping the FFR low for long (**forward guidance**)
 - **purchase long-term securities** to drive down the term premium (**quantitative easing**)

QE1, 2, 3, and the taper



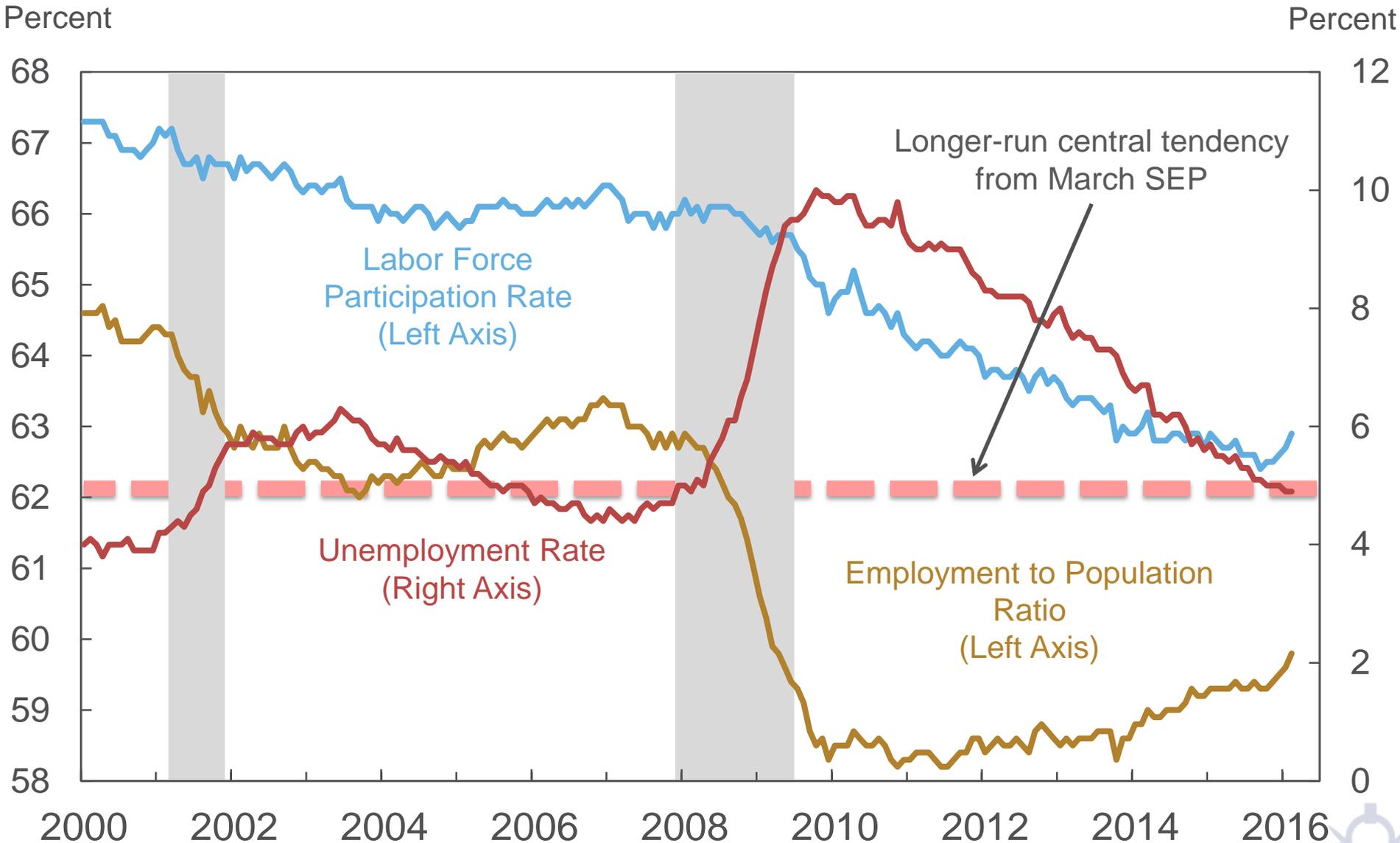
Source: Federal Reserve Board

Note: Shading shows NBER recessions.

Where are we now?

- “Lift-off” in December 2015, with FFR to 0.25-0.5 percent
- From the December 2015 FOMC statement
 - The Committee judges that there has been considerable improvement in **labor market conditions** this year, and it is **reasonably confident** that **inflation** will rise, over the medium term, to its 2 percent objective.
 - Given the economic outlook, and **recognizing the time it takes for policy actions to affect future economic outcomes**, the Committee decided to raise the target range for the federal funds rate to 1/4 to 1/2 percent.
 - The stance of monetary policy remains **accommodative** after this increase, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation.
- No further move since

Three measure of the US labor market



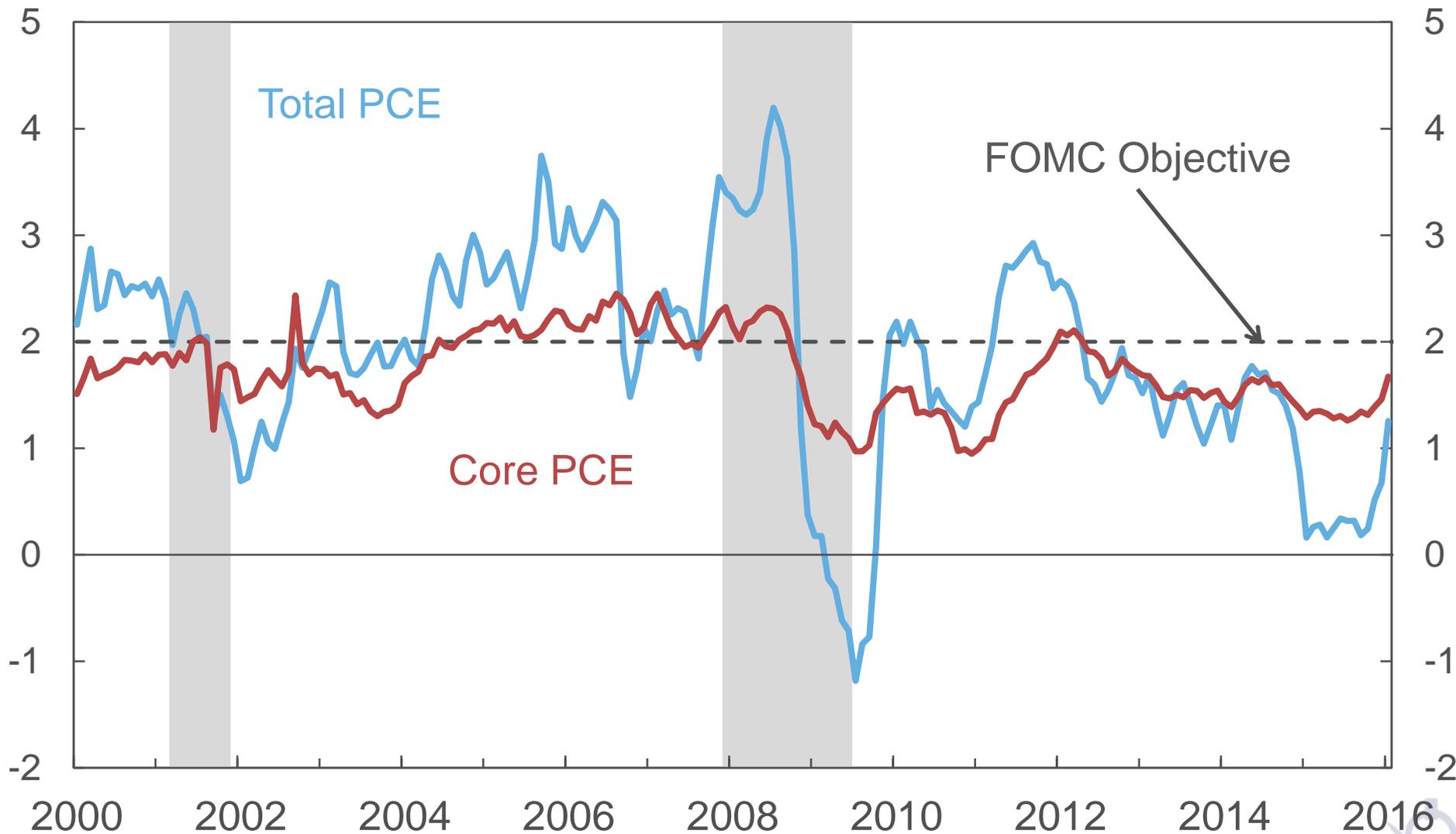
Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

Total and core PCE inflation

12 Month % Change

12 Month % Change



Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.

When the next move? From the March FOMC statement

- In determining the timing and size of **future adjustments** to the target range for the federal funds rate, the Committee will assess **realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation**. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.
- In light of the **current shortfall of inflation** from 2 percent, the Committee will **carefully monitor** actual and expected progress toward its inflation goal.
- The Committee expects that economic conditions will evolve in a manner that will warrant only **gradual increases** in the federal funds rate; the federal funds rate is likely to remain, for some time, **below levels that are expected to prevail in the longer run**.
- However, the actual path of the federal funds rate will **depend on the economic outlook** as informed by incoming data.

Conclusion

- The US economy is closer to the Fed's dual mandate objectives (2 percent inflation and "maximum" employment) than at any time since the Great Recession
- The labor market has improved substantially, even though there is still room for further sustainable improvement
- Inflation is expected to remain low in the near term, but it is expected to rise to its 2 percent objective over the medium term
- However, global economic and financial developments continue to pose risks, as illustrated by the recent turbulence on global financial markets

