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
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 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
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 measures of the US labor market

- Labor Force Participation Rate (Left Axis)
- Unemployment Rate (Right Axis)
- Employment to Population Ratio (Left Axis)

Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.
Total and core PCE inflation

Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.
Projections vs goals: March 2016 SEP

- Unemployment rate
- PCE inflation
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?**
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.
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.
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
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
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

Source: Bureau of Economic Analysis

Note: Shading shows NBER recessions.
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.
When the next move? Ask the “dots”

Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant’s judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run.

Source: Summary of Economic Projections, March 16th 2016
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