

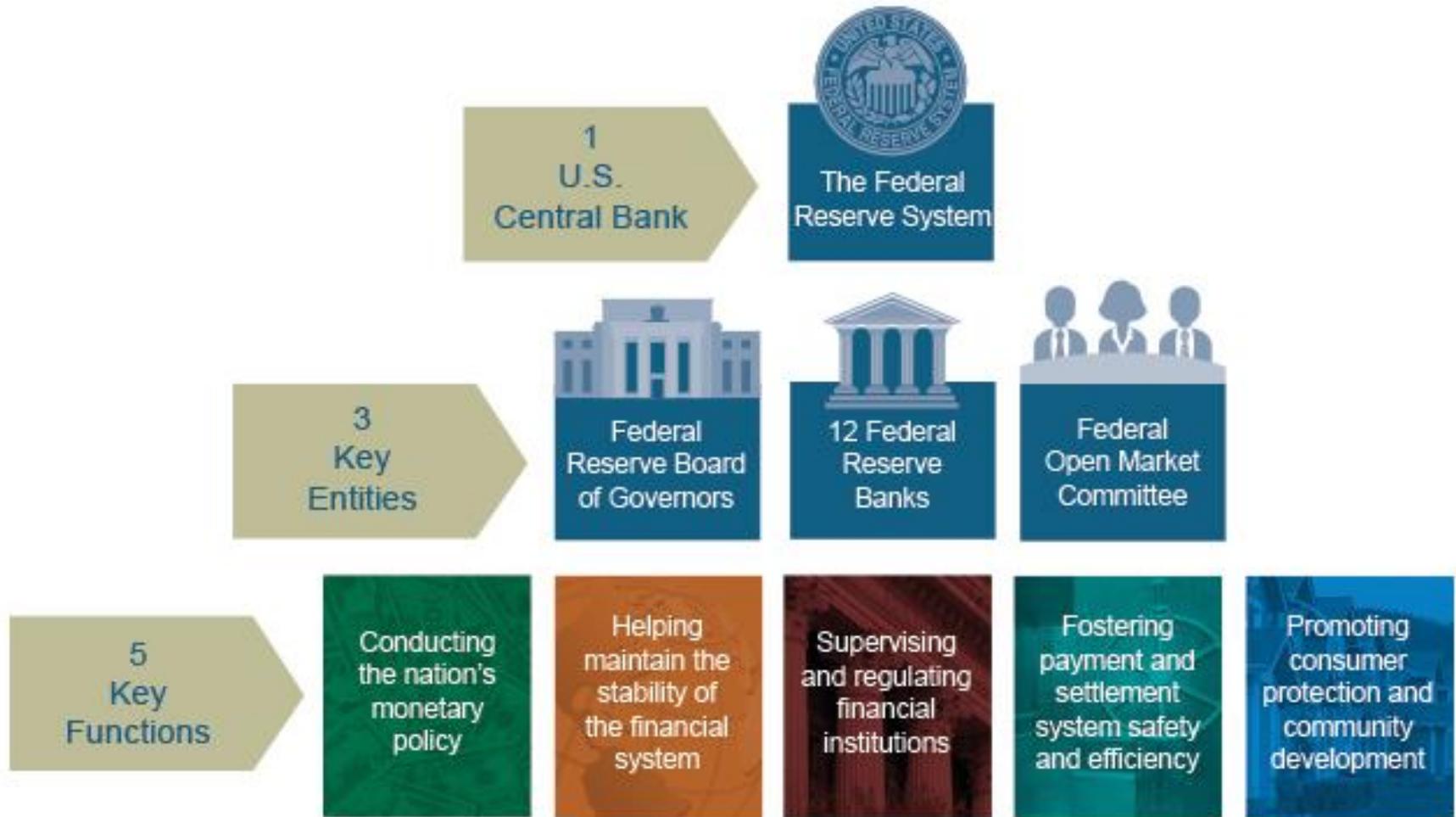


February 21, 2019

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The views expressed are my own and not those of the Federal Reserve Bank of Chicago or the Federal Reserve System.

The Federal Reserve System



Goals of Monetary Policy

- **Price stability**
 - Symmetric 2% PCE inflation
- **Full employment**
 - May change over time for nonmonetary reasons
 - December 2018 FOMC median estimate: 4.4%
- **Balanced approach**
 - Take balanced approach if goals in conflict

How Do We Achieve These Goals?

- **Try to balance aggregate demand and aggregate supply**
- **If aggregate demand less than aggregate supply**
 - Underutilized productive resources => miss on full employ.
 - Downward pressure on inflation => could have inflation below 2%
- **If aggregate demand greater than aggregate supply**
 - Overutilized productive resources
 - Upward pressure on inflation => could have inflation above 2%
- **Use interest rate tools to align aggregate demand and supply**

What Monetary Policy Can And Cannot Affect

Aggregate Supply: Not very Sensitive to Monetary Policy

- **Available labor**
 - Demographics and skills
- **Capital stock**
 - Plant, equipment, software, housing, etc.
- **Productivity**
 - Technology, institutions, regulations

Aggregate Demand: Sensitive to Monetary Policy

- **Household spending**
 - Incentives to save and consume, wealth effects
- **Business investment**
 - Cost of capital, product demand
- **Net exports**
 - Effects on dollar

Balancing Aggregate Demand and Supply

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- Capital stock
- Productivity

Aggregate Demand: Sensitive to Monetary Policy

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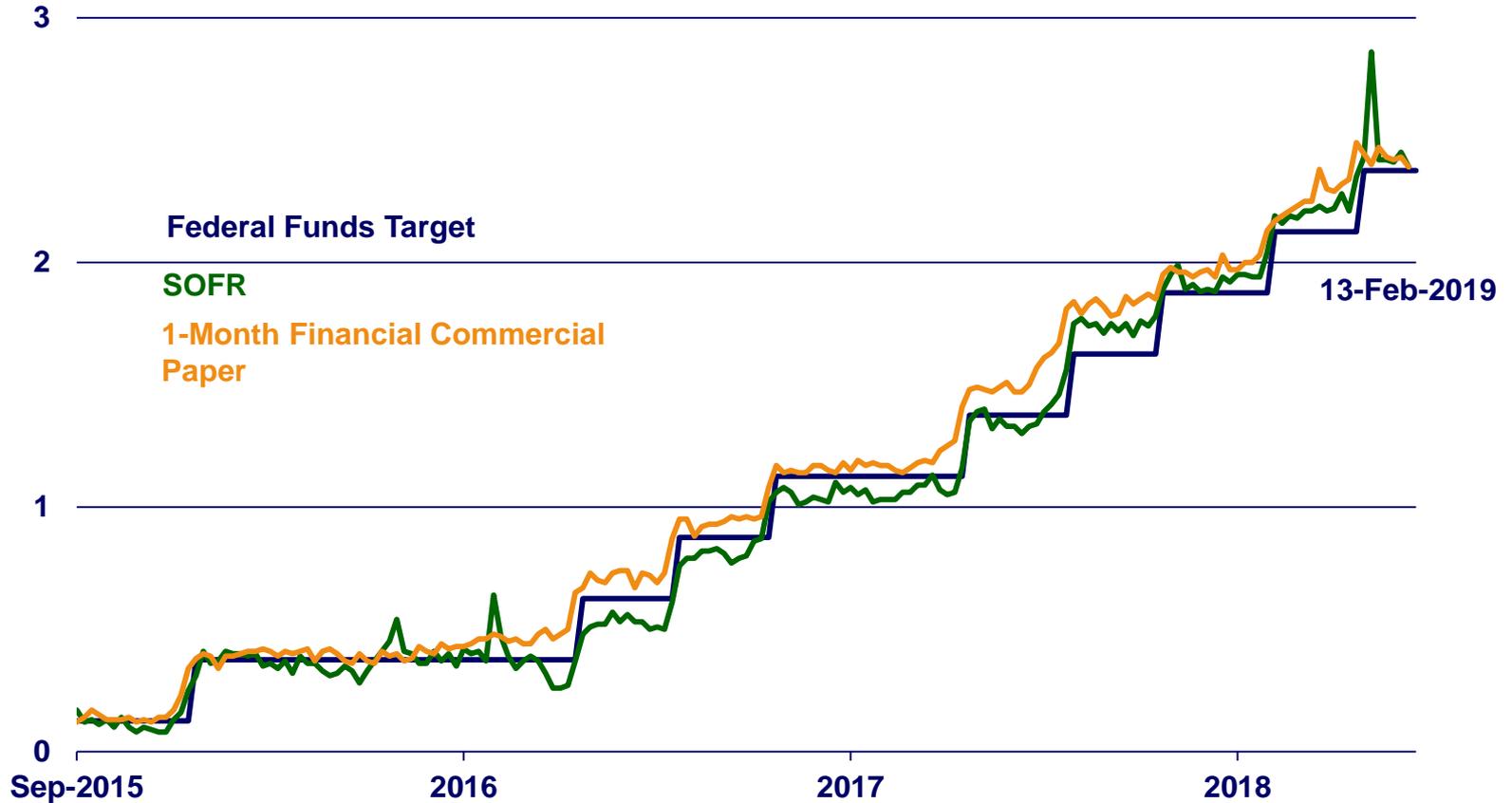
- Use interest rates to align aggregate demand with supply:
 - Lower rates => higher aggregate demand
 - Higher rates => lower aggregate demand

Primary Policy Tool: Federal Funds Rate

- **Interest rate on overnight transactions between banks and a few other select players**
- **Transmits quickly to other short-term interest rates**
- **Federal Open Market Committee (FOMC) sets a target range for the federal funds rate**
 - Use administered rates to help control funds rate (primary interest on excess reserves – IOER)

Money Market Rates In Sync with Policy Rates

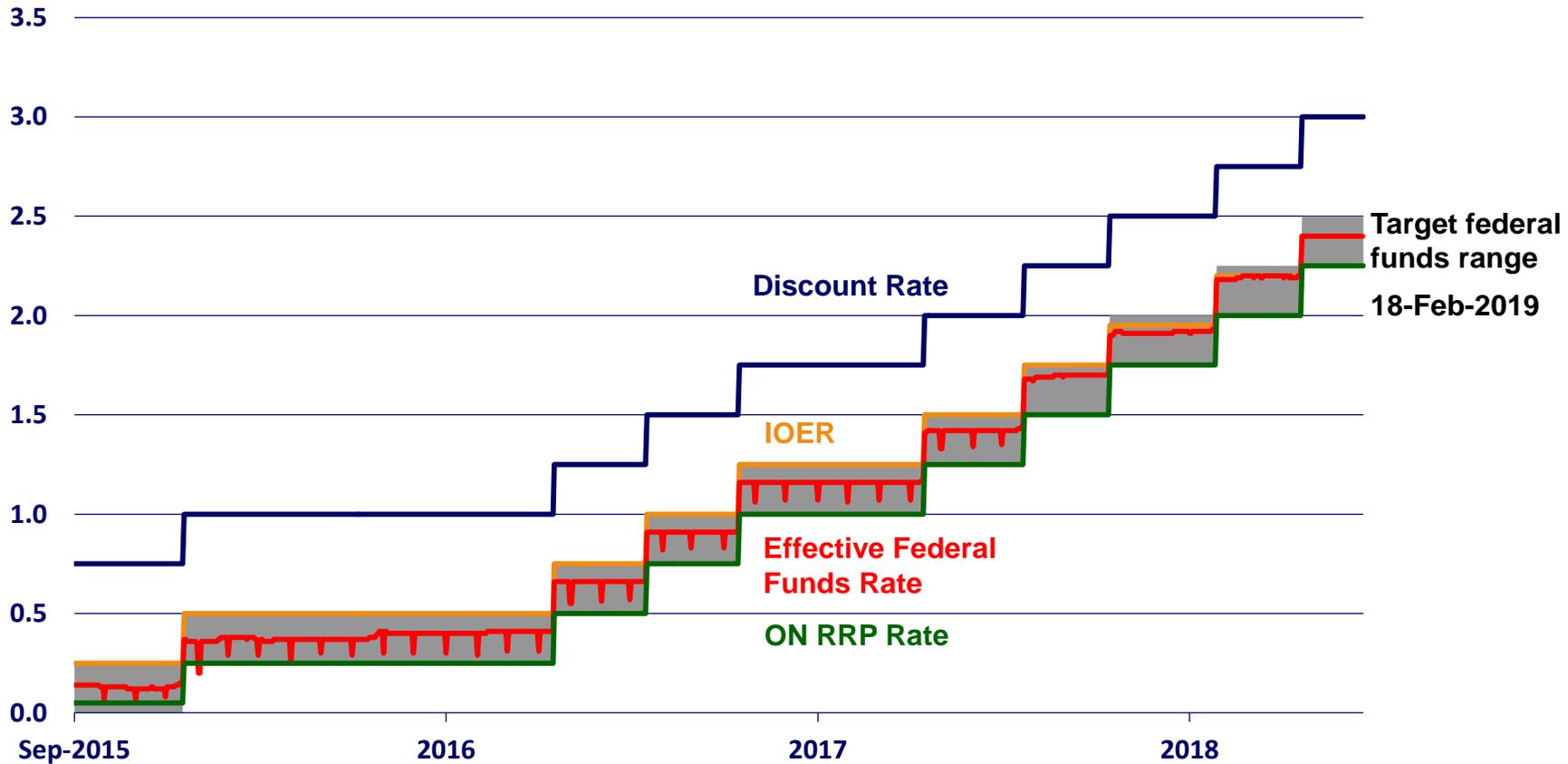
Monetary Policy Rates (percent)



Policy Rates

Federal Funds and Administered Rates

(percent)



Balancing Aggregate Demand And Supply

- **More relevant rates for demand: medium and longer-run real interest rates faced by households and businesses:**

expected average short-term nominal rates

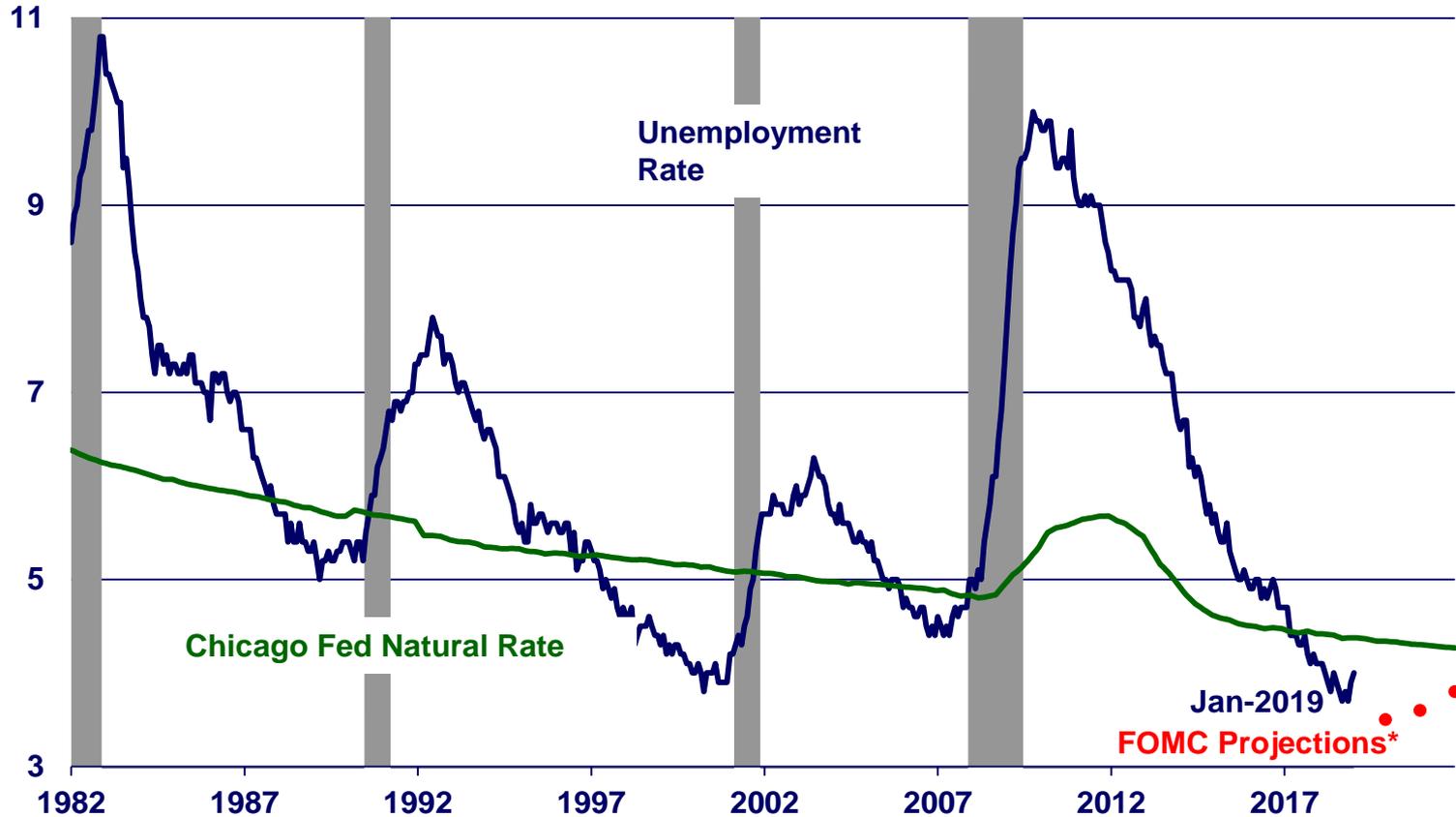
minus expected average inflation rate

plus risk premia (duration, credit, inflation uncertainty)

- **In addition to setting target range for current federal funds rate, FOMC *may at times*:**
 - Give guidance about future short term rates
 - Use its balance sheet to influence risk premia

Unemployment Historically Low

Unemployment Rate
(percent)

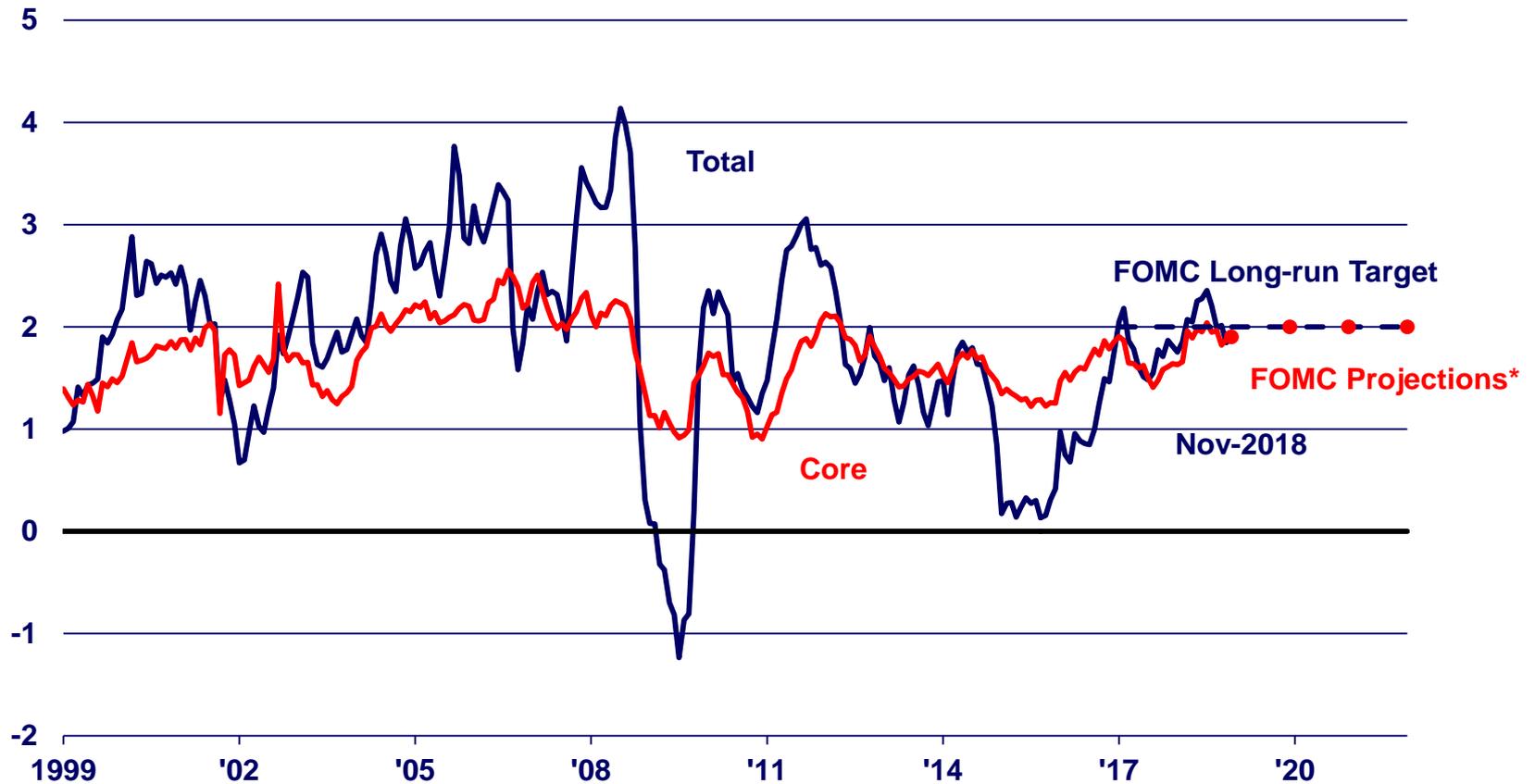


* Median of the projections made by FOMC participants as of December 19, 2018.

Inflation (Finally) Near Target

PCE Price Index

(12-month percent change)



**Median of the forecasts made by FOMC participants as of December 19, 2018*

The Federal Open Market Committee (FOMC)

- **Who are the players?**
- **What do they do?**

The Federal Reserve Board of Governors*



Jerome Powell



Richard Clarida



Randal Quarles



Michelle Bowman



Lael Brainard

** Two seats currently vacant*

Presidents of the District Reserve Banks

* 2019 voting FOMC member



Eric S. Rosengren*
First District - Boston



John C. Williams*
Second District - New York



Patrick T. Harker
Third District - Philadelphia



Loretta J. Mester
Fourth District - Cleveland



Thomas I. Barkin
Fifth District - Richmond



Raphael W. Bostic
Sixth District - Atlanta



Charles L. Evans*
Seventh District - Chicago



James B. Bullard*
Eighth District - St. Louis



Neil Kashkari
Ninth District - Minneapolis



Esther L. George*
Tenth District - Kansas City



Robert S. Kaplan
Eleventh District - Dallas



Mary C. Daly
Twelfth District - San Francisco

Reserve Bank Rotation on the FOMC

<u>2020</u>	<u>2021</u>	<u>2022</u>
New York	New York	New York
Cleveland	Chicago	Cleveland
Philadelphia	Richmond	Boston
Dallas	Atlanta	St. Louis
Minneapolis	San Francisco	Kansas City

January 2019 FOMC Calendar

Sun	Mon	Tues	Wed	Thur	Fri	Sat
6	7 Beige Book inputs submitted	8 FRBC special memos assigned	9 Tealbook process begins at BoG	10	11	12
13	14	15	16 Beige Book published	17	18 FRBC Dept. meeting; Tealbook part A and BoG special memos distr.	19 Blackout starts
20	21 FRBC forecast completed	22 FRBC memos due	23 Big group briefing for Charlie	24 Small group meeting wt. Charlie; TB Part B distr.	25 Small group meeting wt. Charlie; SEP submission.	26 Editing statements
27 Editing statements	28 Small group editing meeting (no Charlie)	29 FOMC meeting	30 FOMC meeting	31	1 Blackout ends; Class I group FOMC review	2

What Happens Before the FOMC Meeting?

- **Board of Gov. staff prepare materials for entire FOMC:**
 - **Economic forecast (Tealbook Part A)**
 - **Monetary policy alternatives (Tealbook Part B)**
 - **Other analyses (sometimes with Reserve bank input)**

What Happens Before the FOMC Meeting?

- **Regional bank staffs prepare their bank presidents:**
 - **Collect anecdotal information from business contacts**
 - **Independent forecasts and analyses**
 - **Analyze Board staff documents**
 - **Help bank president prepare:**
 - ◆ **Commentary on Board staff materials**
 - ◆ **Statements on economic outlook and monetary policy**
 - ◆ **Summary of Economic Projections (SEP)**

Collecting Anecdotal Information

- **Information on activity, wages, prices, financial conditions, sentiment**
- **Sources:**
 - Beige Book
 - FRBC financial markets contacts
 - Directors' commentary
 - Other contacts (many directly by Charlie)
- **Convey information at the FOMC meeting**

FRBC Preparation with Charlie

- **Big Group Meeting: 2-4 hours of quality time with the boss**
 - All Research economists and some S&R staff
 - Brief on forecast, special topics
 - Have a policy discussion

- **Small Group Meetings: endless quality time with the boss**
 - Folks with access to confidential FOMC information
 - ◆ Charlie, Ellen plus 7 Class I and 11 Class II
 - Discuss Tealbook, BoG special topics
 - Formulate SEP
 - Work on Charlie's economic and policy statements

Nice Marble

Board of Governors



The Board Room





Day 1 at the FOMC Meeting

- **Preliminaries**

- **Presentation on special topic**
 - Q&A and/or “go around”

- **FRBNY and BoG Staff Presentations**
 - FRBNY Markets Group (“The Desk”) financial markets report
 - Tealbook Part A economic outlook presentation
 - Financial stability report (quarterly)
 - SEP presentation (quarterly)
 - Q&A

- **“First Go-Around”: Participants’ views on regional and national outlook**

Day 1 at the FOMC Meeting – FOMC Humor

- **WSJ 1/11/2019. “*Nineteen Central Bankers Walk Into a Bar...*”**

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Oct 29-30, 2013 *Economists are known for being long-winded.*

CHAIRMAN BERNANKE: I would just get the Committee’s sense.

If we went to 6:00 and left whatever remained for tomorrow

morning, would that be okay with everybody? So another hour,

and let me turn to President Williams.

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MR. WILLIAMS: Do I have a whole hour?

Day 2 at the FOMC Meeting

- **Finish any leftovers from day 1**
- **Tealbook Part B presentation: The policy options**
- **“Second Go-Around”: Policy discussion**
 - Participants give views of appropriate policy
- **The Vote: The Chairman gives sense of the consensus**
 - Possible wordsmithing of FOMC statement or other communications discussions
 - Only members vote
- **Post-decision activities**
 - Sometimes presentation on a special topic
 - Lunch if end late

Post-Meeting Communications

- **Immediately following meeting:**
 - Committee statement
 - Press conference
 - Summary of Economic Projections (quarterly)
- **Minutes (3 weeks after meeting)**
- **Monetary policy and financial stability reports (biannually)**
- **Speeches, testimony**
- **Tealbook, transcripts made public (5 year delay)**

January FOMC Statement

Information received since the Federal Open Market Committee met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Job gains have been strong, on average, in recent months, and the unemployment rate has remained low. Household spending has continued to grow strongly, while growth of business fixed investment has moderated from its rapid pace earlier last year. On a 12-month basis, both overall inflation and inflation for items other than food and energy remain near 2 percent. Although market-based measures of inflation compensation have moved lower in recent months, survey-based measures of longer-term inflation expectations are little changed.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. In support of these goals, the Committee decided to maintain the target range for the federal funds rate at 2-1/4 to 2-1/2 percent. The Committee continues to view sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective as the most likely outcomes. In light of global economic and financial developments and muted inflation pressures, the Committee will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate to support these outcomes.

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 maximum employment objective and its symmetric 2 percent inflation objective. 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.

Voting for the FOMC monetary policy action were: Jerome H. Powell, Chairman; John C. Williams, Vice Chairman; Michelle W. Bowman; Lael Brainard; James Bullard; Richard H. Clarida; Charles L. Evans; Esther L. George; Randal K. Quarles; and Eric S. Rosengren.

January Statement Compared to December

December 2018

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. **The Committee judges that some further gradual increases in the target range for the federal funds rate will be consistent with** sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective over the medium term. **The Committee judges that risks to the economic outlook are roughly balanced, but will continue to monitor global economic and financial developments and assess their implications for the economic outlook.**

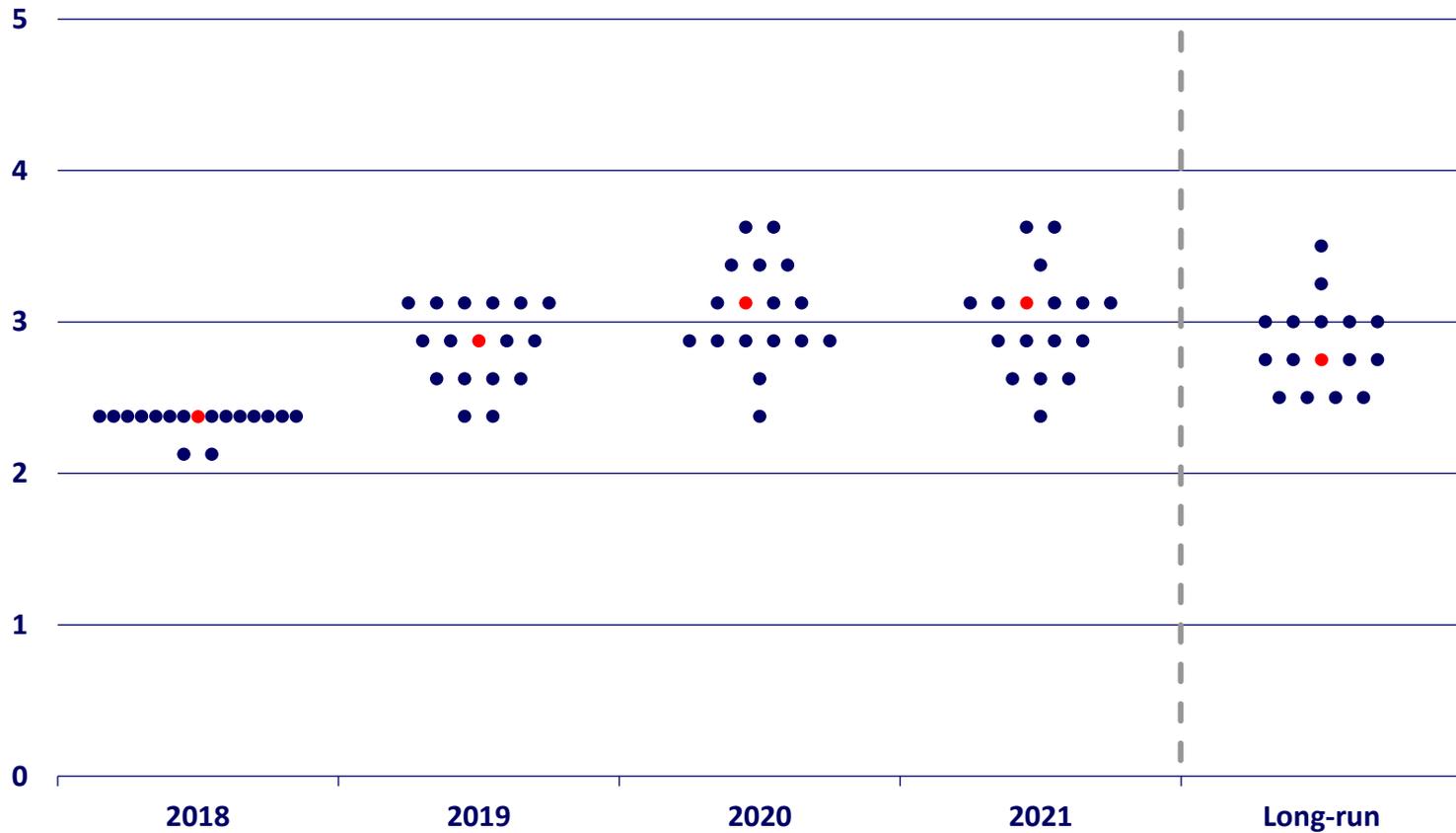
In view of realized and expected labor market conditions and inflation, **the Committee decided to raise the target range for the federal funds rate to 2-1/4 to 2-1/2 percent.**

January 2019

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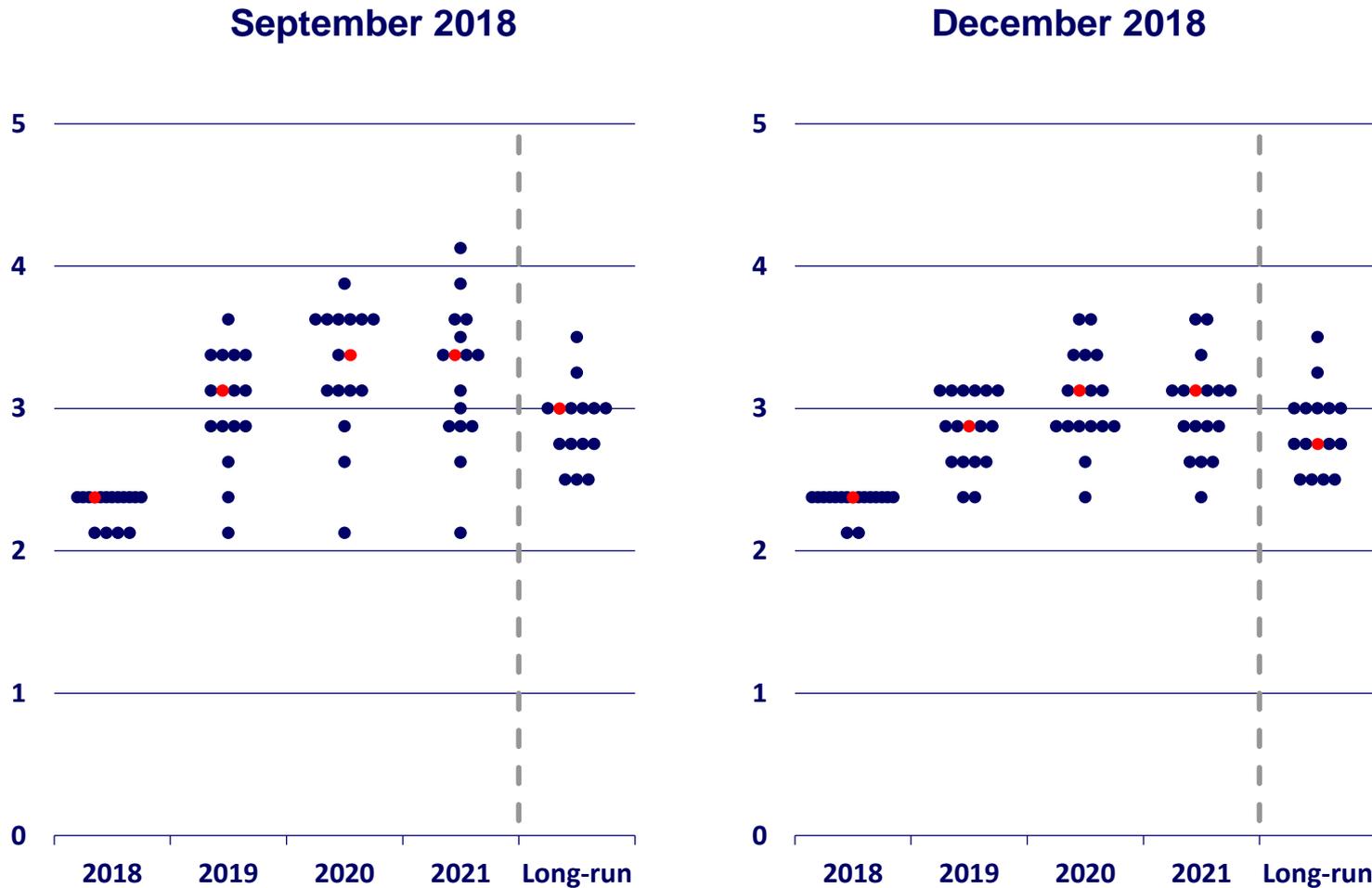
Monetary Policy

Target Federal Funds Rate at Year-End (percent)



Source: Interest rate forecasts are from the December 2018 Summary of Economic Projections.

FOMC's Expected Monetary Policy Path



Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run. Red dots indicate the median projection.