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The FRED® Blog

Fixing the “Textbook Lag” with FRED (Part II)

Monetary policy in a world of ample reserves



Posted on June 13, 2019



CPI +3.2 % Chg. from Yr.
Ago on Feb 2024

Civ. Unemploy. Rate 3.9 % on Feb 2024

10-Yr. Treas. Rate 4.22 % on 2024-03-22

Real GDP +3.2 %, Comp.
Annual Rate of Chg.
on Q4 2023

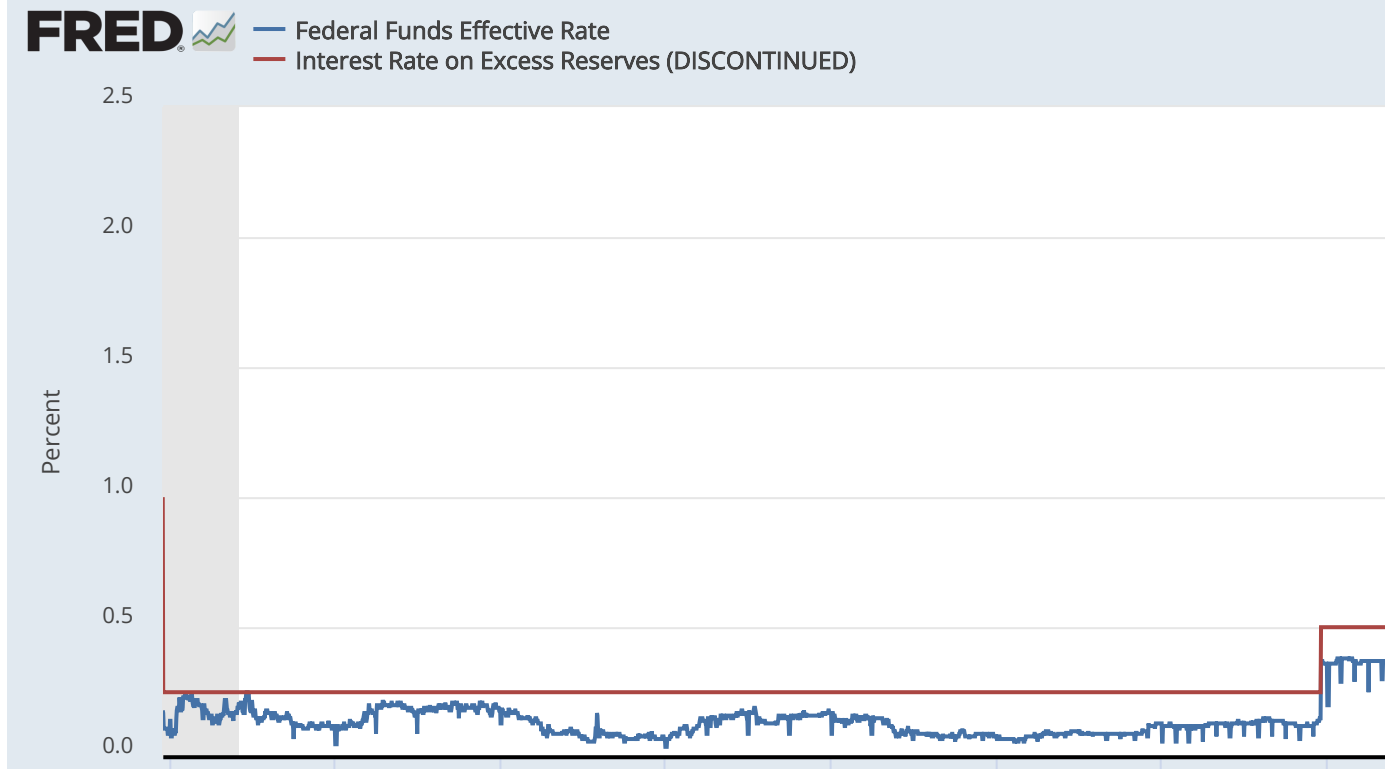
IP +0.1 % Chg.
on Feb 2024

Payroll Employment +275 Chg., Thous. of
Persons on Feb 2024

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Your economics textbook may still say the Federal Reserve uses open market operations to influence the federal funds rate. But in today's economy, the Fed uses different policy tools.

In simple terms, this is how monetary policy *currently* works: The FOMC sets a target range for the federal funds rate (FFR) and uses interest on excess reserves (IOER) and the overnight reverse repurchase agreement (ON RRP) facility to keep the FFR rate in the target range. (See our previous post for an introduction to this topic.)

The Fed pays IOER to banks holding reserves at the Fed, which offers those banks a safe, risk-free investment option. Arbitrage ensures that the FFR doesn't drift too far from the IOER rate. If the FFR drifts much below the IOER rate, banks then have an incentive to borrow in the federal funds market at the lower FFR and deposit those reserves at the Fed to earn the higher IOER rate.

- [By the Generations: Location Patterns of Different Cohorts](#)
- [Accounting for the Effects of Fiscal Policy Shocks on Exchange Rates through Markup Dynamics](#)

Archives

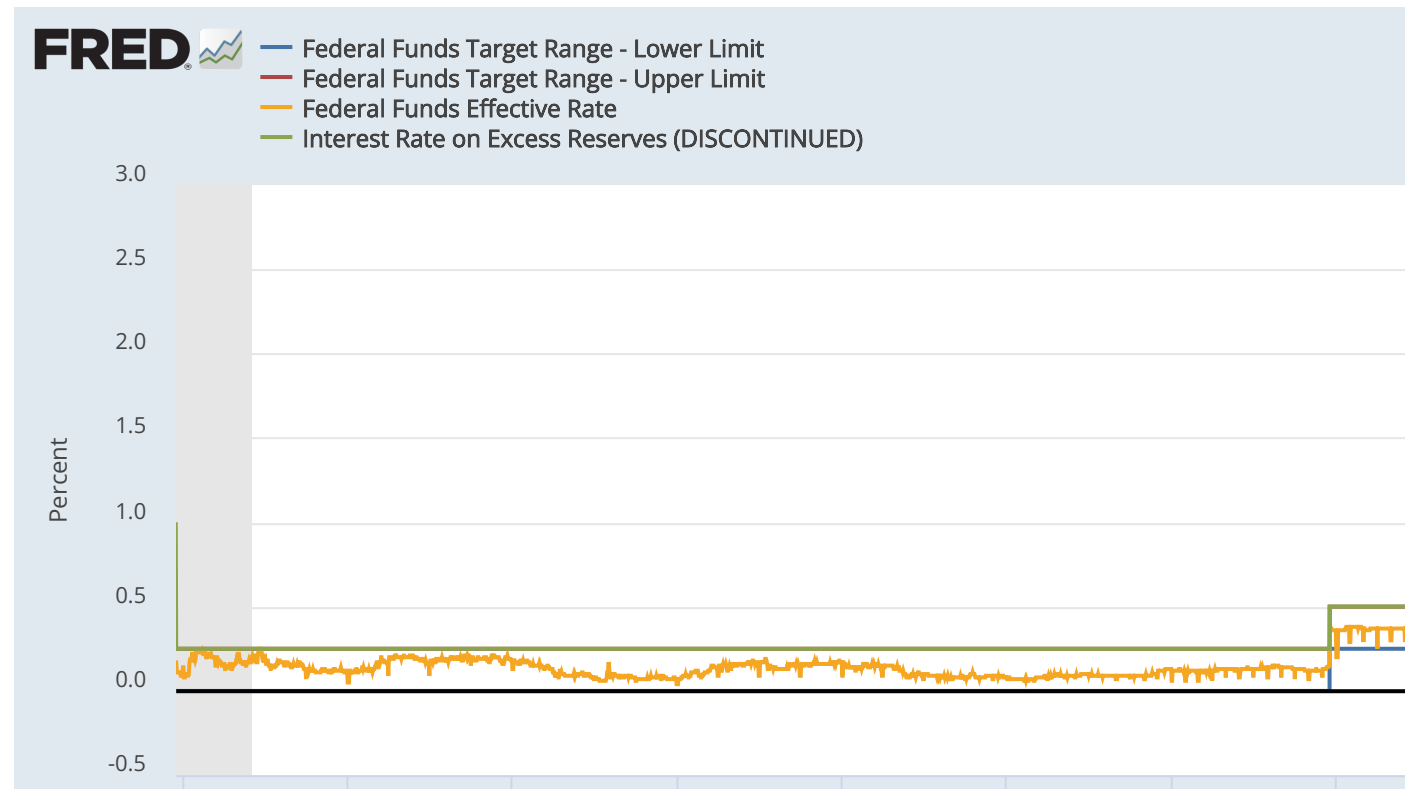
- [March 2024](#)
- [February 2024](#)
- [January 2024](#)
- [December 2023](#)
- [November 2023](#)
- [October 2023](#)
- [September 2023](#)
- [August 2023](#)
- [July 2023](#)
- [June 2023](#)
- [May 2023](#)
- [April 2023](#)
- [March 2023](#)
- [February 2023](#)
- [January 2023](#)
- [December 2022](#)
- [November 2022](#)
- [October 2022](#)
- [September 2022](#)
- [August 2022](#)
- [July 2022](#)
- [June 2022](#)
- [May 2022](#)
- [April 2022](#)
- [March 2022](#)
- [February 2022](#)
- [January 2022](#)
- [December 2021](#)
- [November 2021](#)
- [October 2021](#)

From December 16, 2008, to June 13, 2018, the IOER and ON RRP rates, respectively, served as the upper and lower limits of the FFR target range. The FFR moved between the two rates, but over time it has moved closer to the IOER—that is, the gap between the two has closed, as shown in the FRED graph above.

Again, because the IOER rate was set at the upper limit of the target range, as the FFR moved closer to the IOER rate, by definition it moved closer to the upper limit of the range. To ensure that the FFR remained within the range, the Fed has lowered the IOER rate by 5 basis points at three different times in the past year: June 13, 2018; December 19, 2018; and May 1, 2019. The IOER is now set 15 basis points below the upper limit of the target range.

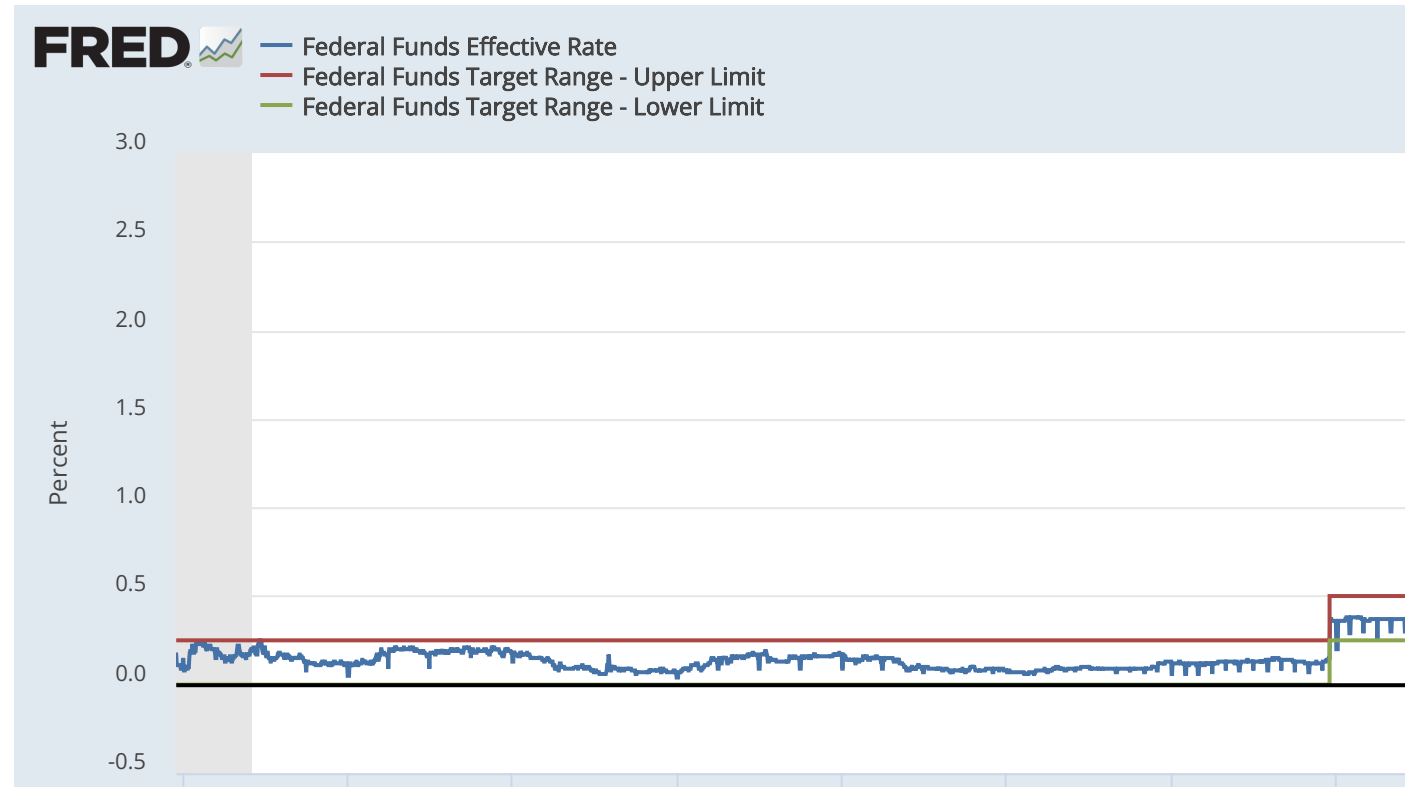
These changes weren’t changes in monetary policy (which affects the choice of target range), but rather were slight adjustments to where the FFR sits *within* the range. Chairman Jerome Powell explained that the adjustments were intended to “move the federal funds rate closer to the middle of the target range” in his [press conference on June 13, 2018](#). The changes can be seen on the FRED graph below: Prior to the June 13, 2018, adjustment, the upper limit of the FFR target range and the IOER rate were indistinguishable because IOER rate was set *at* the upper limit of the target range. After June 13, 2018, the IOER rate (green line) is below the upper limit of the FFR target range (red line).

- September 2021
- August 2021
- July 2021
- June 2021
- May 2021
- April 2021
- March 2021
- February 2021
- January 2021
- December 2020
- November 2020
- October 2020
- September 2020
- August 2020
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- August 2018
- July 2018



These changes have ensured that the FFR has remained between the upper and lower limits of the range throughout the period, as illustrated by the FRED graph below.

- June 2018
- May 2018
- April 2018
- March 2018
- February 2018
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- July 2017
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- July 2015
- June 2015
- May 2015
- April 2015



How these graphs were created: For the first graph: Search for “interest rate on excess reserves,” select “Effective Federal Funds Rate (daily)” and “Interest Rate on Excess Reserves,” and then click “Add to Graph.” Adjust the dates to reflect the indicated range: from December 16, 2008, to the current date. For the second graph: Search for “federal funds rate target” and select “Federal Funds Target Range – Upper Limit,” “Federal Funds Rate – Lower Limit,” and “Effective Federal Funds Rate (daily),” and then click “Add to Graph.” From the “Edit Graph” panel, use the “Add Line” option to search for “Interest Rate on Excess Reserves” and then select “Add data series.” Adjust the dates to reflect the indicated range: from January 1, 2018, to the current date. For the third graph: Search for “federal funds rate target” and select “Federal Funds Target Range – Upper Limit,” “Federal Funds Rate – Lower Limit,” and “Effective Federal Funds Rate (daily),” and then click “Add to Graph.” Adjust to date to show the entire period: from December 16, 2008, to the current date. In each case, you can adjust the colors to your liking by using the color palette in the “Edit Graph” panel’s “Format” tab.

For more information on this topic, see [“A New Frontier: Monetary Policy with Ample Reserves.”](#)