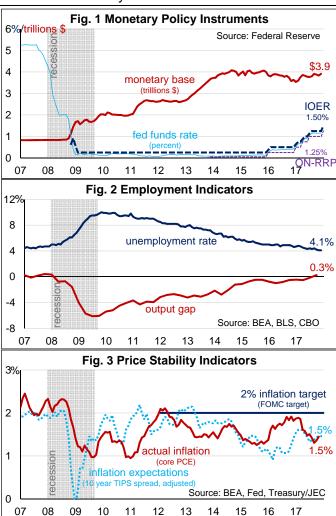
December 13, 2017

December FOMC Review

FOMC Review Snapshot

- The Fed raised its key monetary policy interest rate from 1.25% to 1.50% (see discussion on interest on excess reserves and the fed funds rate below).
- Inflation undershooting its 2% target previously led the Fed to pause interest rate hikes since June.
- This was likely Chair Yellen's final FOMC meeting.



Details

Before 2008, the Federal Reserve's (the Fed) key monetary policy interest rate was the market determined fed funds rate, which the Fed would influence by making small interventions in the fed funds market. Since 2008, an administratively determined interest on excess reserves (IOER) rate has <u>supplanted</u> the fed funds rate as the Fed's key monetary policy interest rate.¹ As some trading still occurs in the fed funds market² the Fed uses its overnight-reverse repurchase (ON-RRP) facility, to temporarily drain cash from the market on a rolling basis, which puts upward pressure on the federal funds rate.³ Nonetheless, the IOER rate is the Fed's key monetary policy interest rate.

The Federal Open Market Committee (FOMC) <u>decided</u> to raise the IOER rate from 1.25% to 1.50%. This change will lead the fed funds rate to trade in between 1.25% (ON-RRP rate) and 1.50% (IOER rate). The Fed pays IOER on funds banks keep on deposit with the Fed rather than lending to consumers, businesses, etc. All else equal, a higher IOER rate portends a tighter monetary policy, because it encourages banks to hold reserves rather than to make more loans, which should slow inflation.

Before the 2008-09 recession, the target for a marketdetermined fed funds rate was 5.25% and the monetary base (a large portion of the Fed's balance sheet) was \$0.8 trillion (Fig. 1). The Fed's current <u>normalization plans</u> include raising its IOER rate (which fell as low as 0.25% in December 2008)⁴ and gradually reducing the size of its

balance sheet. Details of the latter can be found in the JEC <u>July FOMC Review's</u> "Noteworthy" section. The Fed started raising the IOER rate in December 2015 and reducing its balance sheet in October 2017. Nevertheless, the monetary base remains enlarged at \$3.9 trillion.

The inflation rate (as measured by the year-over-year percentage change in the core personal consumption expenditures (PCE) price index) trended upward recently, however it remains below the Fed's 2% <u>inflation target</u> (Fig. 3). Market-based measures of expected inflation⁵ also imply the Fed will not achieve its inflation target in

the next 10 years. Although a low unemployment rate (Fig. 2) and closed output gap imply the economy is at full employment, persistent below-target inflation and a low employment-to-population ratio suggest significant untapped economic growth potential remains.

Context

The FOMC increased the IOER rate, as was anticipated, despite inflation remaining below the Fed's 2% inflation target. The FOMC's rationale is its projection that inflation will eventually rise to the target. The <u>fed funds futures market</u> anticipates the next Fed rate hike will occur in March 2018. The next FOMC meeting is scheduled for January 30-31.

The Federal Open Market Committee (FOMC)

The FOMC meets 8 times per year. It consists of the 7 governors from the Fed's Board of Governors in DC (3 seats are currently vacant), and 12 regional Fed bank presidents.

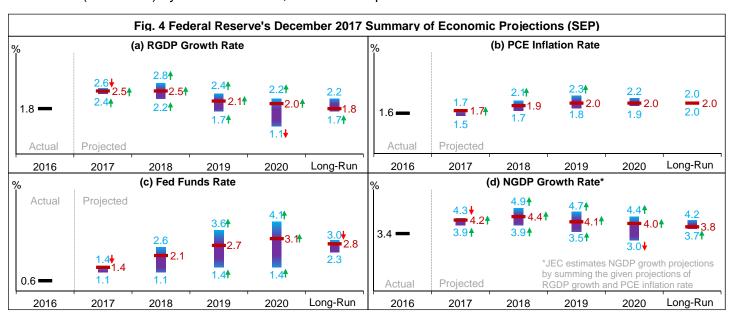
While all Fed governors have a vote on the FOMC, only 5 Fed bank presidents can vote. The NY Fed president is a permanent voting member, and 4 others can vote on a rotating basis.

Minutes of the FOMC meeting are released three weeks later.

Noteworthy

President Trump recently <u>nominated Marvin Goodfriend</u> to serve as a Federal Reserve governor and the Senate Banking Committee advanced Jay Powell's nomination to <u>the Senate</u>, which likely makes this Chair Yellen's final FOMC meeting.

Figure 4 shows the FOMC members' median year-end projection of real GDP (RGDP), inflation, the fed funds rate, and nominal GDP (NGDP). Numbers above (below) the bars represent the highest (lowest) projection. Green (red) arrows represent numbers that have increased (decreased) since the most <u>recent</u> Summary of Economic Projections (<u>SEP</u>).⁶ The most notable changes were upward revisions to projected RGDP growth for the coming years. Most FOMC members anticipate the fed funds rate will trade between 2.00% (ON-RRP rate) and 2.25% (IOER rate) by the end of 2018; which will require the Fed to raise the IOER rate 3 times.



¹ In principle, the IOER rate is supposed to be below the federal funds rate. Before October 2008, the Fed was not authorized to pay IOER and banks held few excess reserves because they preferred to lend these out to earn interest. When banks wanted more funds they would borrow from other banks at the fed funds rate. Since 2008, however, banks have substantial excess reserves, currently about \$2.2 trillion.

² Government-sponsored enterprises, such as Fannie Mae and Freddie Mac, which are ineligible to earn IOER, lend their extra cash to banks at the fed funds rate, which banks then deposit with the Fed to earn the higher IOER rate.

³ The Fed executes a reverse repurchase by temporarily selling some of its securities to financial institutions for their cash. This drains cash from the fed funds market and leads the fed funds rate to rise. The transaction is reversed the next day.

⁴ It is unclear whether the Fed intends to return to the old system in which the IOER rate is set below the fed funds rate. This will ultimately require the Fed's balance sheet to shrink in size so that reserves become scarcer.

⁵ The 10-year "TIPS spread" measures expected inflation by taking the difference between the market yields on 10-year U.S. Treasury notes and 10-year Treasury Inflation Protected Securities. "TIPS" compensate holders for changes in money's purchasing power as measured by the consumer price index, CPI. Historical data and the Congressional Budget Office (CBO)'s average projections of 2.4% CPI inflation and 2.0% personal consumption expenditures (PCE) inflation over the next 10 years indicate that CPI overstates inflation by 0.4 percentage point on average. JEC adjusted the TIPS spread by subtracting 0.4 percentage point to make the measures comparable to the Fed's preferred inflation indicator (PCE).

⁶ SEPs are only updated at FOMC meetings in March, June, September, and December; these do not contain projections of its balance sheet size.