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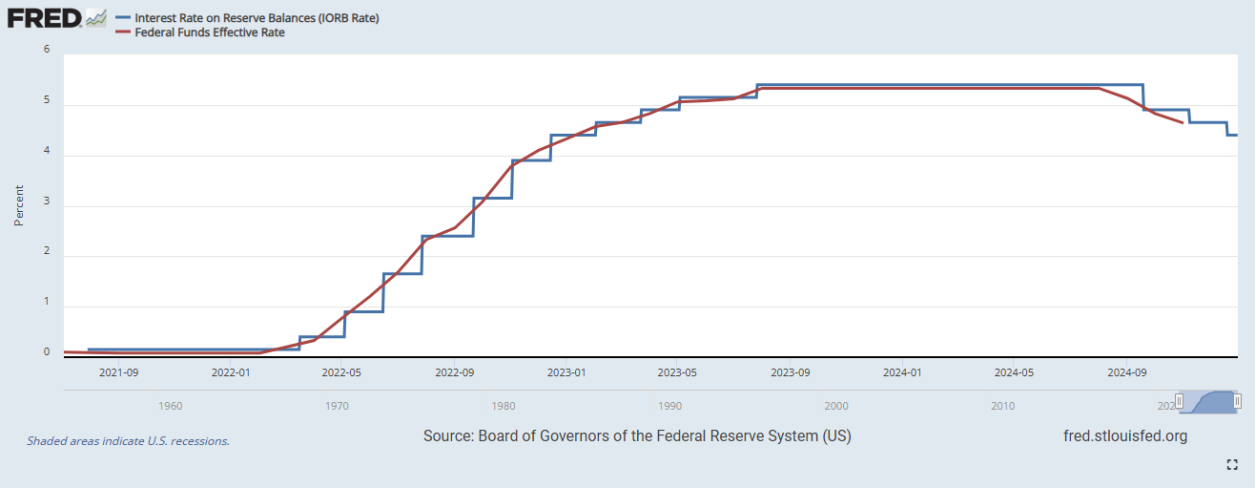
ECON 201—Montgomery College

LECTURE 37: MONETARY POLICY II

I. Types of interest rates
   a. The Fed operates by altering the interest rate through the money supply. But there are multiple interest rates: rates banks borrow from the Fed, rates banks borrow from each other, rates banks grant savers, rates bank charge lenders, and so on.
   b. The *federal funds rate (FFR)*—the interest rate which banks lend from one another.
      i. This is a short-term interest rate—banks get interest payments the next day.
      ii. It's called the federal funds rate because the money banks are lending to each other exist in accounts at the Federal Reserve. They are "federal funds."
      iii. The FFR is a market rate, determined by supply and demand. The Fed does not "set" this interest rate, but it does influence it.
   c. In addition to the federal funds rate, we should be made aware of the *discount rate*—the rate at which banks borrow from the Federal Reserve.
      i. This is a short-term interest rate—banks pay interest payments the next day.
      ii. Like IORB, the Fed sets this interest rate. It is not a market rate.
      iii. This rate effectively caps FFR because if a bank needed to borrow money for an overnight loan (perhaps to make sure it had enough deposits), it could always borrow from the Fed.

II. What Actually Happens
   a. The Fed establishes a target range for FFR. As a market rate, FFR reflects not just actions of the Fed, but also other market factors like the appetite for risk.
   b. Eight times a year, the Fed meets to discuss monetary policy. It's at these meetings that the Fed adjusts the IORB and the FFR adjusts with it. (If FFR adjusts before IORB changes, it's because market actors are anticipating a change in IORB. Note that when IORB is stable, FFR stays below it.)



i. Those steps you see in the blue line represent times the Fed met and decided to change IORB. When the news talks about the Fed changing interest rates, this is what they're talking about.
ii. Note that the blue line started in August 2021; the abundant reserves framework is a new approach.
iii. The Fed changes interest rates in quarter-point increments. A "basis point" is 0.01 percentage points so 25 basis points is 0.25, or a quarter of a point.
iv. "Effective" federal funds rate means that this is the average rate, adjusted for the size of the loan. It's calculated monthly.

c. Changes to the IORB (as well as the discount rate) change the FFR. Changing this short-term rate then changes long-term rates, including mortgage rates, student loan rates, business loan rates, etc. Changes in these rates change behavior, shifting AD right or left.
d. Note the Fed does ***not*** set interest rates. Interest rates are ultimately set by the market. The Fed merely influences interest rates.
e. Monetary policy, like fiscal policy, has its own challenges. Here we cover four of them: real shocks, lags, demand for cash, and liquidity trap.

III. <u>Challenge</u>: Real Shocks
a. Because monetary policy shifts AD, it also can't respond to recessions caused by real shocks. Only a real shock can fix a real shock.

IV. <u>Challenge</u>: Lags
a. The delay between problem and solution still exists here, but they are less severe because the Board's composed of a small number of economists who are largely insulated from political pressure.
i. Recognition lag—it still takes time to identify the problem.

ii. Effectiveness lag—it still takes time for investors to apply the new interest rates to investment and for that effect to be felt in real GDP.

V. Challenge: Demand for Cash
   a. The actual monetary multiplier is lower than the theory
      i. The equation for the monetary multiplier assumes everyone puts 100% of their money in the bank.
      ii. In fact, many people, when they take a loan, get at least some of it in cash. Thus, that portion never enters the banking system and is thus not multiplied.
      iii. This highlights the point made earlier: the Fed doesn't set interest rates and does not have direct control over the resulting price. It merely influences that price and is thus subject to other factors.
   b. You might remember from our conversation about the fiscal multiplier and how it's lower than the simple 1/MPS equation suggests. If the fiscal multiplier is also hard to estimate, why wasn't that mentioned as a challenge to fiscal policy?
      i. I didn't include it because the process of creating a stimulus package is so wrought with politics that it's hard to imagine estimations on the fiscal multiplier carry any weight. In contrast, the Board of Governors is completely composed of economists.

VI. Challenge: Liquidity Trap
   a. When expansionary monetary policy doesn't work anymore.
      i. The Fed's expansionary monetary policy is based on lowering interest rates. But interest rates have a floor; you can't have a negative interest rate.
      ii. A *liquidity trap* is when adding more liquidity has no positive effect on lending because interest rates are already at or near zero.
      iii. During the Great Recession (and in the Covid Recession), the Fed engaged in "quantitative easing" (QE) as a work around to the liquidity trap. QE involves buying assets from financial institutions, not just government bonds, freeing them from troubled investments and giving them yet more cash to lend out.
         1. QE makes the existence of a liquidity trap controversial among economists.
         2. But QE has its own problems—such as encouraging banks to take on risky investments knowing the Fed will

save them if things go wrong and the Fed now having to shoulder the risk of these troubled assets.

VII.