Monetary Policy and the Fed

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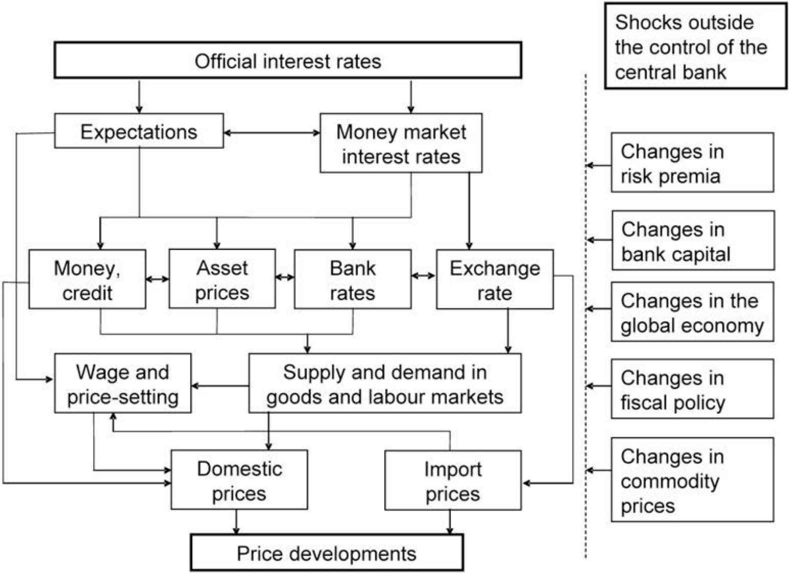
Econ520

August 19, 2021

Topics

How does the Fed operate in reality?

Traditional Monetary Policy



Source: ECB, Transmission mechanism of monetary policy

The Fed Funds Rate

Traditionally, the Fed's main policy tool is the **Federal Funds Rate** (FFR).

- Banks borrow from each other over night
  - moving excess liquidity around
  - the FFR is the interest rate charged for this borrowing
- The Fed controls the FFR by adjusting the liquidity available to banks
  - e.g., by buying and selling bonds in exchange for reserves held with the Fed

Key point

The Fed directly only controls a very short term (overnight) interest rate.

Monetary Transmission

Aggregate demand depends on **long-term** interest rates

- mortgages and consumer loans
- bank loans to firms

The Fed has **no direct control** over these rates.

Monetary transmission means:

- How do Fed actions (e.g., changes in the FFR) translate into changes in aggregate demand?
- There are several channels.

Monetary Transmission: Channels

1. Interest rates
   by setting the FFR, the Fed directly affects all interest rates
   higher FFR $\implies$ investors hold more short term reserves $\implies$ investors sell long-term bonds $\implies$ bond prices fall $\implies$ bond interest rates rise
2. Asset prices
   lower FFR typically increases stock prices
   lower return on competing assets
   lower cost of capital $\implies$ higher investment
   wealth effects stimulate consumption
3. Credit supply
   higher FFR $\implies$ higher cost of funds for banks $\implies$ less credit creation
4. Inflation expectations
   "loose" monetary policy $\implies$ higher expected inflation $\implies$ lower real interest rates

Problems

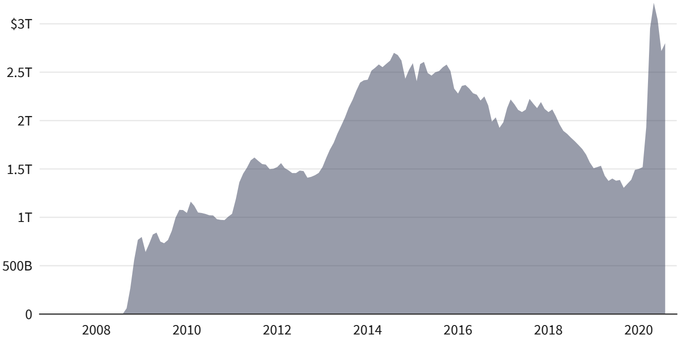
Transmission is quite indirect

- The Fed directly controls only the FFR
- Aggregate demand depends on longer interest rates
- Long rates may not move as expected

Example: The Great Financial Crisis

- Banks soaked up all of the liquidity generated by the Fed as excess reserves
- Essentially no credit creation

Excess Reserves of Depository Institutions: 2007—Present



Source: St. Louis Fed

Digression: How do Banks Work?

The main function of commercial banks:

- take in deposits
- give out loans (to finance investment and consumption)

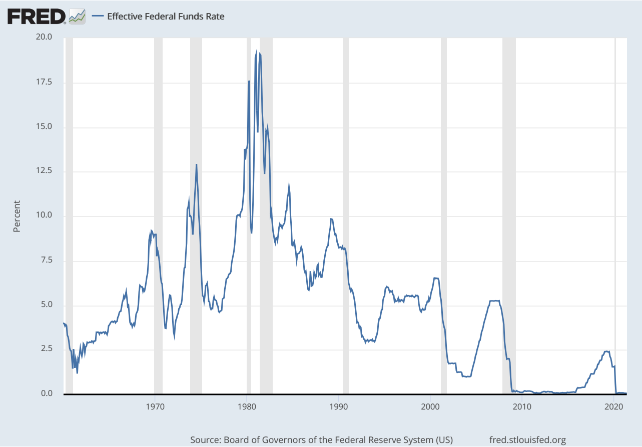
Profit: the spread between loan rates and deposit rates.

Fed reserves:

- banks must hold a certain fraction of their deposits in low interest Fed accounts
  (reserve requirement)
- when banks fear uncertainty, they hold **excess reserves** instead of giving out loans

Excess reserves indicate that banks do not lend as much.

The Zero-Lower Bound



The FFR has trended down.

In recessions, it hits the zero lower bound – now what?

Quantitative Easing

The Fed directly changes long-term interest rate by buying **long-term bonds**.

How does it work?

1. Inflation expectations $\implies$ lower real interest rates
2. Liquidity (similar to traditional monetary policy)
3. Policy signalling: the Fed is serious about keeping inflation low for a while

QE Risks

1. Inflation may rise (lots of liquidity in the system)
2. At some point, the Fed has to unwind its asset positions.
3. Distributional effects; see NY Times Opinion, July 12, 2021

Reading

- Investopedia article on the Federal Reserve.
- ECB article on the "Transmission Mechanism of Monetary Policy"
- Johnson, Manuel (2002). "Federal Reserve System." The Library of Economics and Liberty: a very brief overview of how the Fed operates.
- Monetary Policy Basics: a brief summary of fed operations.
- Labonte and Makinen (2017): A more detailed description (including unconventional monetary policy).

References

Labonte, M. and G. E. Makinen (2017): "Monetary policy and the Federal Reserve: current policy and conditions," Congressional Research Service, Library of Congress.