CHAPTER FIVE

Money, Banking, and the Real Economy

Benchmarks and Targets

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Benchmarks and Targets

The Fed Funds Rate
The interest rate that the FOMC decides that lending institutions charge to borrow reserves from each other.

The benchmark rate that the ability to lend money is based upon.

The Fed uses the demand in the reserve market to control the benchmark rate.

Benchmarks and Targets

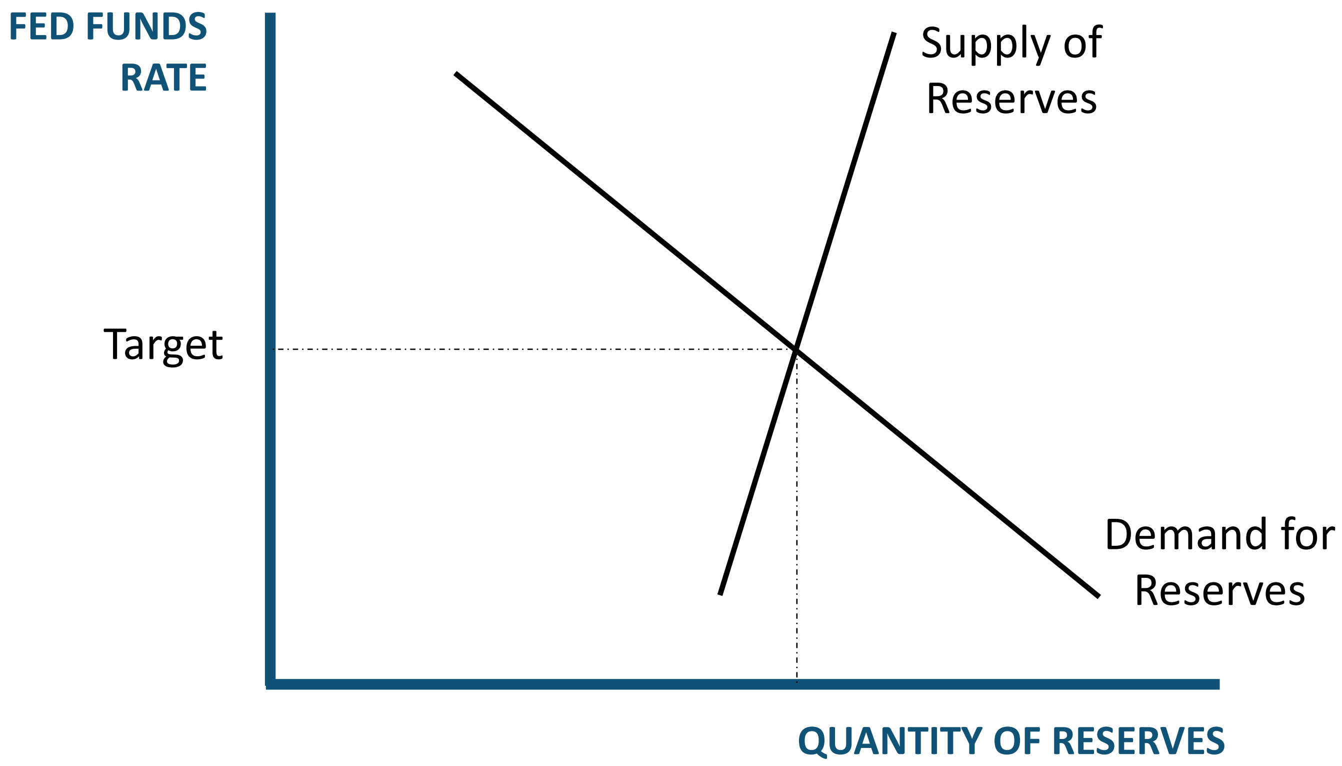
Target Rate
A rate at which the system will achieve the ideal balance to encourage moderate inflation.

The Fed implements its target rate by using open market operations to nudge the rate towards its target and looks at the reserve pool for overall implementation.

- *If the reserve pool is too small…*
  The demand from banks pushes the interest rate up

- *If the reserve pool is too large…*
  Rates shift down due to a deceased demand for borrowing

Figure 5.1: Supply and Demand of Federal Funds



Term Structure of Interest Rates

Interest rates such as, the 3-month bond rate, the 10-year bond rate, and the mortgage rate, are all linked by the term structure of interest rates.

Term Structure of Interest Rates
The relationship between interest rates of different maturities.

Shows correlation in how a short-term rate is related to longer-term rates:

$$R_n(Yr1) = 1/N[R_1(t) + ER_1(t+1) + \ldots. + ER_1(t+N-1)] + Premium_n$$

Graphed by plotting the Yield Curve
A graphical representation of yields on bonds of similar type but different maturities.

Interest on Reserves

The Federal Reserve must pay interest to commercial banks on excess reserve balances.

- Establishes a lower bound on the federal funds rate
- Helps the Fed fine tune its target

By paying interest on reserves, the Fed is converting excess reserves into income producing assets for the banks.

Interest on Reserves

Quantitative Easing (QE)
A type of unconventional monetary policy whereby the central bank buys longer-term securities using open market operations in order to raise money supply and stimulate lending and investment.

- Gives the Federal Reserve the ability to control the federal funds rate
- QE is an asset swap in which the Fed provides liquid reserves to banks in exchange for less-liquid securities

The Fed uses the federal funds rate as a base rate upon which other lending rates are built.

Allows the Fed to maintain economic equilibrium.

Inflation

Inflation
The percentage change in aggregate prices from one time period to the next.

Friedman's idea of inflation (partially correct)

- Too much money will create inflation, and too little money may cause deflation
- Quantity theory of money - theory that shows that changes in money supply feed through to change in prices

$$MV = PY$$

(M = Money Supply, V = The Velocity of Money, P = The Price Level, Y = GDP)

Inflation

In reality, Inflation is caused by:

- the demand for new loans that leads to increases in the money supply
- confidence

Inflation is not only a function of money supply, but also a reaction to economic confidence and demand.

The Phillips Curve
A representation of inflation; a theory stating that inflation is negatively related to cyclical unemployment.

Inflation

Inflation is crucial for the health of the economy and growth in GDP

Over-inflation can cause a decline of GDP and a loss of confidence.

A stable inflation rate is proven to be the most ideal for a thriving economy.

The key to inflation is stability and balance and the catalyst is confidence.

Economic Indicators

The labor force impact:

- The labor market and confidence are the heartbeat of the economy
- If the labor force participation rate decreases, the economy decreases as well

Measures of economic interest:

- **Velocity**
  Impacts and gauges the overall health of the economy;
  - Velocity is evidentiary of the turnover rate of each dollar in the economy
- **Capacity Utilization**
  An indicator of efficiency representing the amount of output being produced relative to the total output possible at a given cost of production

Asset Bubbles

Asset Bubble
A dramatic surge in prices not in keeping with the asset's true underlying value.

Artificially created values are unsustainable in the long-term and prices will correct.

Borrowers cannot support the higher loan payments and the falling collateral values are insufficient to meet bank loan to value ratios, causing banks to call loans

The outcome is economic downfall.