Federal Funds Market

by Sophia Tutorial

WHAT'S COVERED

This tutorial will cover the federal funds market, identifying how the federal funds target rate is used to manage the money supply.

Our discussion breaks down as follows:

1. FOMC
2. Fractional Reserve System
3. Reserve Requirement
4. Fed Funds Target Rate
    a. Use as a Fed Tool

1. FOMC

The FOMC, or the Federal Open Market Committee, is part of the Fed. They meet eight times a year to manage our nation's money supply.

The FOMC has various tools that they use to control these various parts of our money supply, M0, M1, and M2:

- The reserve requirement (amount of money banks must keep on hand)
- Open market operations (buying and selling of U.S. treasuries)
- Fed funds market
- Discount rate

Today's tutorial will focus on the fed funds market.

2. Fractional Reserve System

We know that the U.S. has a fractional reserve system, because of how banks make money. If banks simply stored money, they would not profit at all.

When we deposit money into a checking account in a bank, we can demand that money at any time. We can write a check on it or swipe our debit card on it. For this reason, checking accounts are sometimes called demand deposits.

However, banks make money by lending out at least a portion of customer deposits and charging interest on these loans. This fractional reserve system, the idea that they can loan out a portion of our deposits, allows for the creation of money in our economy, and it works well most the time.

However, if banks lend out too much money or if many people show up demanding the cash in their accounts, then the bank cannot meet these demands.

This used to happen a lot before the Fed was created, and banks would fail or go bankrupt, which was not good for our overall economy.

When people heard of banks failing or going bankrupt, bank runs and panics were common--a panic situation occurring when a lot of people would run to the banks and demand their money en masse. This happened anytime people lost their confidence that banks would have enough money to meet their demands.

Because this became such a major problem, the Fed now regulates how much of these reserves the banks must hold in their vaults or at the regional Fed bank.

3. Reserve Requirement

The Fed regulates bank reserves by setting a reserve requirement, usually expressed as a percentage (e.g., 10%).

So, what happens if a bank cannot meet their reserve requirement for the day, if, for some reason, more people than usual came demanding their money? In this case, that bank is not permitted to close until they have met their reserve requirement.

They would have to get their hands on more money overnight. They have two options:

1. Borrow from another (Fed member) bank
2. Borrow from the Fed (usually a last resort)

This tutorial is focusing on the first option, borrowing from another Fed member bank.

4. Fed Funds Target Rate

So the **fed funds target rate** is the rate that Fed member banks charge other member banks for overnight loans, typically made to meet reserve requirements.

Although sometimes there are banks which will need to borrow money to meet their reserve requirement, there are also going to be banks who have not loaned out the full amount permitted--either because they do not want to, or because customers have not demanded loans. They simply have not made as many loans as they are allowed to make.

When this is the case, we say that these banks have excess reserves, because they have reserves over and above what they are required to hold onto.

When a bank with excess reserves lends some of these to another bank, usually overnight, they charge this fed funds rate.

In this case, we have a supply and demand situation. Supply, or the banks with excess reserves, and demand, the banks needing to meet reserve requirement, create a market for these funds.

Remember, when we put supply and demand together, we usually get a market price, correct? Therefore, this is creating a market, and the market price in this situation--the price to borrow money--is an interest rate. This market sets the fed funds rate.

4a. Use as a Fed Tool

So, if it is a market that is setting the rate, how is the fed funds target rate used as a Fed tool? Well, even though the Fed does not directly set this rate, the FOMC does meet several times a year to set a target range for this rate.
The idea is that the greater the supply of loanable funds, the greater the ability to make loans and increase our money supply, or get money circulating in our economy instead of being tied up in the bank.

If the Fed wants to increase the amount of loanable funds and the money supply, they lower the fed funds target rate.

If they want to decrease the amount of loanable funds and contract the money supply, they raise the fed funds target rate.

> Let's explore two different types of monetary policy.
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> Expansionary monetary policy, sometimes known as easy money policy, is used when the Fed wants to get money into circulation. Lowering the target fed funds rate means that banks can borrow from one another at lower rates.
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> This, in turn, makes it easier for them to loan us money. When it is easier for us to get loans, this has an expansionary effect on the economy.
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> The opposite situation is contractionary monetary policy, sometimes called tight money policy, making it more difficult to get our hands on money.
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> Raising the target fed funds rate means that banks have to pay higher rates to borrow from one another.
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> In turn, this makes it slightly more difficult for them to loan us money. When it is harder or more expensive for us to get loans, this has a contractionary effect on the economy.

BIG IDEA

To expand the economy, the Fed can lower the fed funds target rate, which is expansionary policy. To contract the economy, the Fed can raise this target rate, which is known as contractionary policy, or tight money policy.

TERM TO KNOW

Fed Funds Target Rate
The rate that Fed member banks charge other member banks for overnight loans— typically made to meet reserve requirements

SUMMARY

Today we reviewed the role of the Federal Open Market Committee, or **FOMC**, which is the organization in our country who manages and makes decisions about the supply of money. We also reviewed how banks make money by lending out a portion of customer deposits and charging interest, known as a **fractional reserve system**. We discussed several **tools** that the Fed has to manage our nation's money supply, focusing on the **fed funds target rate** and how it involves the rate that banks pay to borrow from one another in order to meet their **reserve requirement** overnight.

The big idea in the tutorial is that to expand the economy, the Fed can lower this target rate, known as an expansionary policy. To contract the economy, the Fed can raise this target rate, which is contractionary policy, or tight money policy.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

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