

Chapter 18

Monetary Policy: Using Interest Rates to Stabilize the Domestic Economy

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The Fed's Monetary Policy Toolbox

- The Federal Reserve has three monetary policy tools, also known as monetary policy instruments
- The target federal funds rate, or the interest rate at which banks make overnight loans to each other
- The discount rate, or the interest rate the Fed charges on the loans it makes to banks
- The reserve requirement, or the level of balances a bank is required to hold either as vault cash on deposit or at a Federal Reserve Bank

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The Fed's Monetary Policy Toolbox

The federal funds rate is the rate at which banks lend reserves to each other overnight, it is determined in the market, rather than being controlled by the Fed

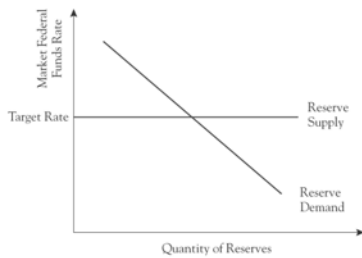
- Influence the Fed fund rate by changing the supply for reserves.
- Target Fed Funds Rate
- <http://www.federalreserve.gov/fomc/fundsrate.htm>

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The Fed's Monetary Policy Toolbox

Figure 18.1 The Market for Bank Reserves

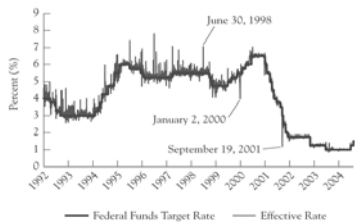


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Figure 18.2 Federal Funds Target Rate and Daily Market Rate, January 1992-August 2004



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The Fed's Monetary Policy Toolbox

Discount Lending – Lender of Last Resort Types of Loans

- Primary Credit
 - Short-term – primary discount rate
 - 100 basis points above target Fed Funds Rate
- Secondary Credit
 - For banks that qualify for primary credit
 - 150 basis points above target Fed Funds Rate.
- Seasonal Credit
 - Small banks with cyclical farm loans

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Reserve Requirements

- The Monetary Control Act 1980 changed the rules slightly, so that the Fed can now set the reserve requirement ratio between 8 percent and 14 percent of the transactions deposits.

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Table 18.1 The Tools of U.S. Monetary Policy

	What Is It?	How Is It Controlled?	What Is Its Impact?
Target Federal Funds Rate	Interest rate charged on overnight loans between banks.	Supply of reserves adjusted through open market operations to meet expected demand at the target rate.	Changes interest rates throughout the economy.
Discount Rate	Interest rate charged by the Federal Reserve on loans to commercial banks.	Set as a premium over the target federal funds rate.	Provides short-term liquidity to banks in times of crisis and aids in controlling the federal funds rate.
Reserve Requirement	Fraction of deposits that banks must keep either on deposit at the Federal Reserve or as cash in their vaults.	Set by the Federal Reserve Board within a legally imposed range.	Stabilizes the demand for reserves.

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Linking Tools to Objectives

Desirable Features of a Policy Instrument

- Easily observable by everyone
- Controllable and quickly changed
- Tightly linked to the policymakers' objectives

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Goals of Monetary Policy

Goals

1. High Employment
2. Economic Growth
3. Price Stability
4. Interest Rate Stability
5. Financial Market Stability
6. Foreign Exchange Market Stability

Goals often in conflict

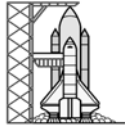
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Central Bank Strategy

Tools of the Central Bank

Open market operations
Discount policy
Reserve requirements



Operating (Instrument) Targets

Reserve aggregates
(reserves, nonborrowed
reserves, monetary base,
nonborrowed base)
Interest rates (short-term
such as federal funds rate)

Intermediate Targets

Monetary aggregates
(M1, M2, M3)
Interest rates (short-
and long-term)

Goals

High employment,
price stability,
financial market
stability, and so on.

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Linking Tools to Objectives

Targets and Instruments

- Operating Instruments (Direct Control)
 - Interest rates or Monetary base
- Intermediate targets
 - Monetary Aggregates (M1, M2)
- Objectives
 - Low Inflation, Growth, stable interest rates

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The Taylor Rule (Prof. John Taylor)

The Taylor Rule tracks the actual behavior of the target federal funds rate and relates it to the real interest rate, inflation, and output.

Target Fed Funds rate =

$2\frac{1}{2}$ + Current Inflation

+ $\frac{1}{2}$ (Inflation gap)

+ $\frac{1}{2}$ (Output gap)

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The Taylor Rule

When inflation rises above its target level, the response is to raise interest rates; when output falls below the target level, the response is to lower interest rates.

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The Taylor Rule

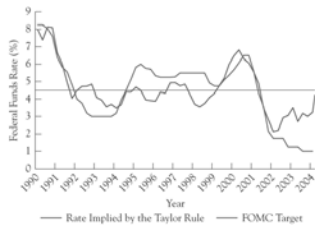
If inflation is currently on target and there is no output gap so that the current GDP equals potential GDP, then the target federal funds rate should be set at its neutral rate of the target inflation rate plus $2\frac{1}{2}$.

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The Taylor Rule

Figure 18.6 The Taylor Rule, 1990-2004



Chapter 18

End of Chapter
