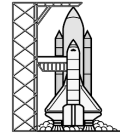
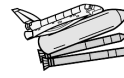


## Chapter 18

### Conduct of Monetary Policy: Goals and Targets

## 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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## Goals of Monetary Policy

### Goals

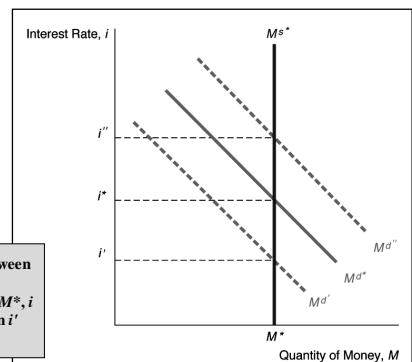
1. High Employment (up to *natural rate of unemployment*)
2. Economic Growth (e.g., supply-side policies)
3. Price Stability (low inflation)
4. Interest Rate Stability
5. Financial Market Stability
6. Foreign Exchange Market Stability

**Goals often in conflict** (e.g., price stability and high employment)

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## Money Supply Target

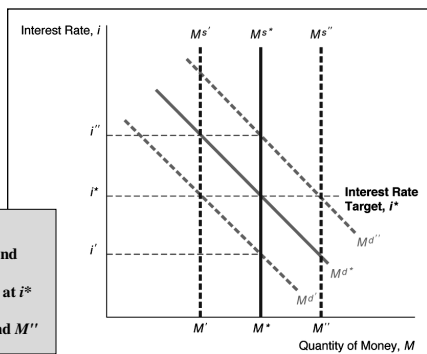


1.  $M^d$  fluctuates between  $M^d$  and  $M^{d''}$
2. With  $M$ -target at  $M^*$ ,  $i$  fluctuates between  $i'$  and  $i''$

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## Interest Rate Target



1.  $M^d$  fluctuates between  $M^d$  and  $M^{d''}$
2. To set  $i$ -target at  $i^*$   
 $M^s$  fluctuates between  $M'$  and  $M''$

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## History of Fed Policy Procedures

### Early Years: Discounting as Primary Tool

1. Real bills doctrine: discount loans not inflationary if for production
2. Rise in discount rates in 1920: recession 1920–21

### Discovery of Open Market Operations

1. Made discovery when purchased bonds to get income in 1920s

### Great Depression

1. Failure to prevent bank failures
2. Result: sharp drop in  $M^s$

### Reserve Requirements as Tool

1. Banking Act of 1935
2. Required reserves  $\uparrow$  in 1936, 1937 to reduce “idle” reserves:

**Result:**  $M^s \downarrow$  and severe recession in 1937–38

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## Criteria for Choosing Targets

### Criteria for Intermediate Targets

1. Measurability
2. Controllability
3. Ability to predictably affect goals

Interest rates aren't clearly better than  $M^s$  on criteria 1 and 2 because hard to measure and control real interest rates

### Criteria for Operating Targets

Same criteria as above

Reserve aggregates and interest rates about equal on criteria 1 and 2. For 3, if intermediate target is  $M^s$ , then reserve aggregate is better

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### Pegging of Interest Rates: 1942-51

1. To help finance war, T-bill at 3/8%, T-bond at 2 1/2%
2. Fed-Treasury Accord in March 1951

### Money Market Conditions: 1950s and 60s

1. Interest Rates
  - A. Procyclical  $M$ 

$$Y \uparrow \Rightarrow i \uparrow \Rightarrow MB \uparrow \Rightarrow M \uparrow$$

$$\pi \uparrow \Rightarrow \pi^e \uparrow \Rightarrow i \uparrow \Rightarrow MB \uparrow \Rightarrow M \uparrow$$

### Targeting Monetary Aggregates: 1970s

1. Fed funds rate as operating target with narrow band
2. Procyclical  $M$

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### New Operating Procedures: 1979–82

1. Deemphasis on fed funds rate
2. Nonborrowed reserves operating target
3. Fed still using interest rates to affect economy and inflation

### Deemphasis of Monetary Aggregates: 1982–Early 1990s

1. Borrowed reserves (*DL*) operating target

#### A. Procyclical *M*

$$Y \uparrow \Rightarrow i \uparrow \Rightarrow DL \uparrow \Rightarrow MB \uparrow \Rightarrow M \uparrow$$

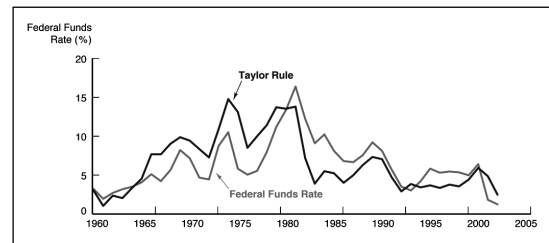
### Fed Funds Targeting Again: Early 1990s to the present

1. Fed funds target now announced

### International Considerations

1.  $M \uparrow$  in 1985 to lower exchange rate,  $M \downarrow$  in 1987 to raise it
2. International policy coordination

## Taylor Rule and Fed Funds Rate



## Taylor Rule, NAIRU and the Phillips Curve

### Taylor Rule

$$\begin{aligned} \text{Fed funds rate target} = & \text{inflation rate} + \\ & \text{equilibrium real fed funds rate} + \\ & 1/2 (\text{inflation gap}) + \\ & 1/2 (\text{output gap}) \end{aligned}$$

### Phillips Curve Theory

Change in inflation influenced by output relative to potential, and other factors

When unemployment rate < NAIRU (nonaccelerating inflation rate of unemployment), inflation rises

NAIRU thought to be 6%, but inflation falls with unemployment rate below 5%

Phillips curve theory highly controversial