

CHAPTER 24

The Influence of Monetary and Fiscal Policy on Aggregate Demand

ESSENTIALS OF
Economics
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Premium PowerPoint Slides
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In this chapter, look for the answers to these questions:

- § How does the interest-rate effect help explain the slope of the aggregate-demand curve?
- § How can the central bank use monetary policy to shift the *AD* curve?
- § In what two ways does fiscal policy affect aggregate demand?
- § What are the arguments for and against using policy to try to stabilize the economy?

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Introduction

- § Earlier chapters covered:
 - § the long-run effects of fiscal policy on interest rates, investment, economic growth
 - § the long-run effects of monetary policy on the price level and inflation rate
- § This chapter focuses on

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Aggregate Demand

§ Recall, the *AD* curve slopes downward for three reasons:

- § The wealth effect
- § The interest-rate effect
- § The exchange-rate effect

§ Next:

A supply-demand model that helps explain the interest-rate effect and how monetary policy affects aggregate demand.

The Theory of Liquidity Preference

§ A simple theory of the interest rate (denoted r)

§ r adjusts to balance

§ Money supply:

The Theory of Liquidity Preference

§ Money demand

§ For simplicity, suppose household wealth includes only two assets:

- § Money – liquid but pays no interest
- § Bonds – pay interest but not as liquid

§ A household's "money demand" reflects its preference for *liquidity*.

§ The variables that influence money demand:

Money Demand

§ Suppose real income (Y) rises. Other things equal, what happens to money demand?

§ If Y rises:

§ *i.e.*, an increase in Y causes an increase in money demand, other things equal.

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ACTIVE LEARNING 1

The determinants of money demand

A. Suppose r rises, but Y and P are unchanged. What happens to money demand?

B. Suppose P rises, but Y and r are unchanged. What happens to money demand?

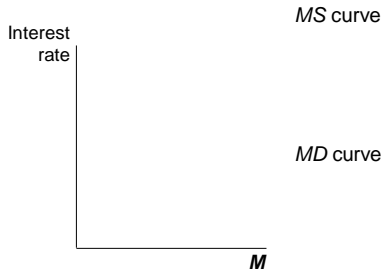
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ACTIVE LEARNING 1

Answers

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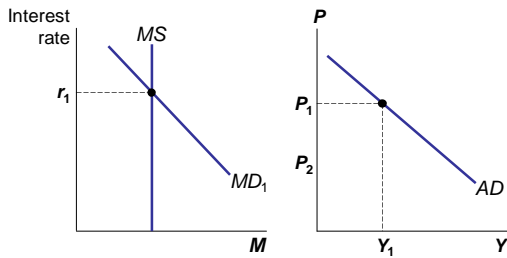
How r Is Determined



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How the Interest-Rate Effect Works



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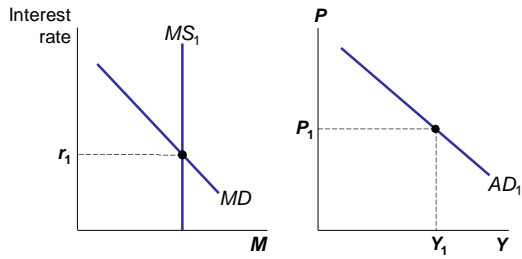
Monetary Policy and Aggregate Demand

- § To achieve macroeconomic goals, the Fed can use monetary policy to
- § The Fed's policy instrument is
- § The news often reports that the Fed targets the interest rate.
 - § More precisely,
- § To change the interest rate

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The Effects of Reducing the Money Supply



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ACTIVE LEARNING 2

Monetary policy

For each of the events below,

- determine the short-run effects on output
- determine how the Fed should adjust the money supply and interest rates to stabilize output

- A. Congress tries to balance the budget by cutting govt spending.
- B. A stock market boom increases household wealth.
- C. War breaks out in the Middle East, causing oil prices to soar.

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ACTIVE LEARNING 2

Answers

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Fiscal Policy and Aggregate Demand

§ **Fiscal policy:**

§ **Expansionary** fiscal policy

§ **Contractionary** fiscal policy

§ Fiscal policy has two effects on AD...

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1. The Multiplier Effect

§ If the govt buys \$20b of planes from Boeing, Boeing's revenue increases by \$20b.

§ This is distributed to Boeing's workers (as wages) and owners (as profits or stock dividends).

§ These people are also consumers

Multiplier effect:

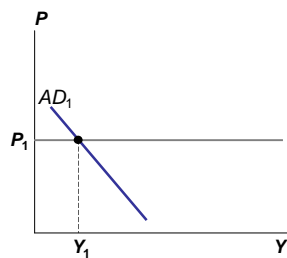
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1. The Multiplier Effect

A \$20b increase in **G** initially shifts **AD** to the right by \$20b.

The increase in **Y** causes



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Marginal Propensity to Consume

§ How big is the multiplier effect?
It depends on

§ Marginal propensity to consume (MPC):

E.g., if $MPC = 0.8$ and income rises \$100,
 C rises \$_____

A Formula for the Multiplier

Notation: DG is the change in G ,
 DY and DC are the ultimate changes in Y and C

$$Y = C + I + G + NX \quad \text{identity}$$

I and NX do not change

because $DC = MPC DY$

solved for DY

A Formula for the Multiplier

The size of the multiplier depends on MPC .

E.g., if $MPC = 0.5$ multiplier =
if $MPC = 0.75$ multiplier =
if $MPC = 0.9$ multiplier =

A bigger MPC means

$$DY = \frac{1}{1 - MPC} DG$$

The multiplier

Other Applications of the Multiplier Effect

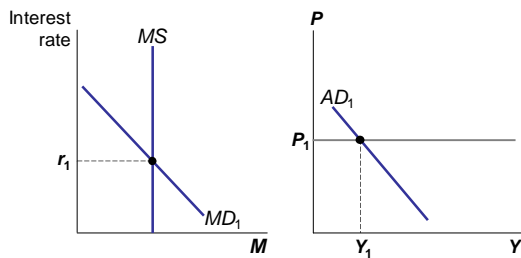
- § The multiplier effect:
Each \$1 increase in **G** can generate more than a \$1 increase in agg demand.
- § Also true for the other components of GDP.
Example:

2. The Crowding-Out Effect

- § Fiscal policy has another effect on *AD* that works in the opposite direction.
- § A fiscal expansion raises *r*,
- § So, the size of the *AD* shift may be _____ than the initial fiscal expansion.
- § This is called the **crowding-out effect**.

How the Crowding-Out Effect Works

A \$20b increase in **G**



Changes in Taxes

§ A tax cut increases households' take-home pay.

§ Households

§ The size of the shift is affected by the multiplier and crowding-out effects.

§ Another factor: whether households perceive the tax cut to be

ACTIVE LEARNING 3

Exercise

The economy is in recession.
Shifting the *AD* curve rightward by \$200b would end the recession.

- A. If $MPC = .8$ and there is no crowding out, how much should Congress increase **G** to end the recession?
- B. If there is crowding out, will Congress need to increase **G** more or less than this amount?

ACTIVE LEARNING 3

Answers

Fiscal Policy and Aggregate Supply

§ Most economists believe the short-run effects of fiscal policy mainly work through agg demand.

§ But

§ Recall one of the Ten Principles from Chap 1:
People respond to incentives.

§

§ People who believe this effect is large are called

Fiscal Policy and Aggregate Supply

§ Govt purchases might affect agg supply.
Example:

§ This effect is probably more relevant in the long run: it takes time to build the new roads and put them into use.

Using Policy to Stabilize the Economy

§ Since the Employment Act of 1946, economic stabilization has been a goal of U.S. policy.

§ Economists debate how active a role the govt should take to stabilize the economy.

The Case for Active Stabilization Policy

§ Keynes:

among households and firms, leading to shifts in aggregate demand and fluctuations in output and employment.

§ Also, other factors cause fluctuations, e.g.,

§ If policymakers do nothing, these fluctuations are destabilizing to businesses, workers, consumers.

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The Case for Active Stabilization Policy

§ Proponents of active stabilization policy believe the govt should use policy to reduce these fluctuations:

§ When GDP falls below its natural rate,

§ When GDP rises above its natural rate,

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Keynesians in the White House

1961:

John F Kennedy pushed for a tax cut to stimulate agg demand. Several of his economic advisors were followers of Keynes.



2001:

George W Bush pushed for a tax cut that helped the economy recover from a recession that had just begun.

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The Case Against Active Stabilization Policy

§ Monetary policy

§ Firms make investment plans in advance, so

§ Most economists believe it takes at least _____ for mon policy to affect output and employment.

§ Fiscal policy

§ Changes in **G** and **T** require Acts of Congress.

§ The legislative process can take months or years.

The Case Against Active Stabilization Policy

§ Due to these long lags, critics of active policy argue that

§ These critics contend that policymakers should focus on long-run goals like economic growth and low inflation.

Automatic Stabilizers

§ **Automatic stabilizers:**

Automatic Stabilizers: Examples

§ The tax system

§ Govt spending

§

§ Govt spending on these programs automatically rises, which stimulates agg demand.

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CONCLUSION

§ Policymakers need to consider all the effects of their actions. For example,

§ When Congress cuts taxes, it should consider

§ When the Fed reduces the rate of money growth, it must take into account not only

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