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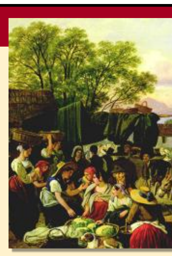
Principles of
Economics
Sixth Edition

34



The Influence of Monetary and Fiscal Policy on Aggregate Demand

Premium PowerPoint Slides by Ron Cronovich

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?

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

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.

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?

ACTIVE LEARNING 1

Answers

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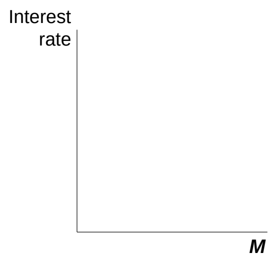
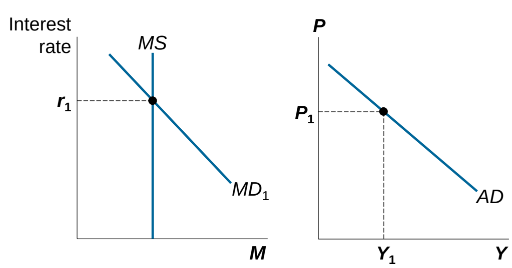
How *r* Is Determined



MS curve

MD curve

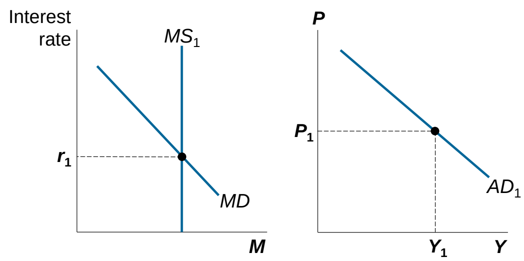
How the Interest-Rate Effect Works



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

The Effects of Reducing the Money Supply



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.

ACTIVE LEARNING 2

Answers

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Liquidity traps

- Monetary policy stimulates aggregate demand by reducing the interest rate.
- **Liquidity trap**:
- In a liquidity trap,
- However, central bank can
- Also, central bank can

The Fed pursued this option in 2008–2009.

Fiscal Policy and Aggregate Demand

- **Fiscal policy**:
- **Expansionary** fiscal policy
- **Contractionary** fiscal policy
- Fiscal policy has two effects on *AD*...

1. The Multiplier Effect

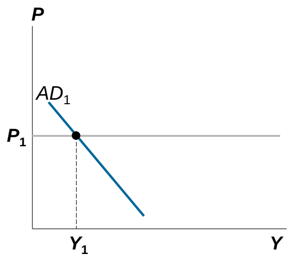
- If the govt buys $20b of planes from Boeing, Boeing's revenue increases by $20b.
- This is distributed to Boeing's workers (as wages) and owners (as profits or stock dividends).
- These people are also consumers and

Multiplier effect:

1. The Multiplier Effect

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

The increase in ***Y*** causes



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: ΔG is the change in ***G***,
ΔY and ΔC are the ultimate changes in ***Y*** and ***C***

$Y = C + I + G + NX$	identity
	I and ***NX*** do not change
	because $\Delta C = MPC\ \Delta Y$
	solved for ΔY

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

$$\Delta Y = \boxed{\frac{1}{1 - MPC}} \Delta G$$

The multiplier

Other Applications of the Multiplier Effect

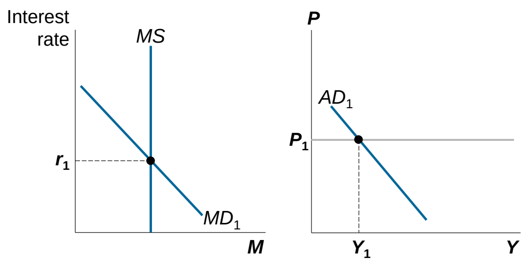
- The multiplier effect:
  Each $1 increase in ***G*** can generate more than a $1 increase in agg demand.
- Also true for the other components of GDP.

  Example:

2. The Crowding-Out Effect

- Fiscal policy has another effect on *AD*
- 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



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
Fiscal policy effects

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 Chapter 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.

34

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.

35

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,

36

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.

2009:
Barack Obama pushed for spending increases and tax cuts to increase agg demand in the face of a deep recession.

The Case Against Active Stabilization Policy

- Monetary policy affects economy with a long lag:
  - 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.

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