


Macroeconomic Policies




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MACROECONOMICS

- National income accounts
- Aggregate demand and Aggregate Supply
- Inflation and Unemployment
- Financial, Money and Banking system
- **Macroeconomic policies**

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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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Monetary Policy

- Objectives: Price stabilization
- The Central Bank controls over the **supply of money** is the key mechanism to **monetary policy**.
  - **Monetary policy** is the use of money and credit controls to influence macroeconomic activity.
  - Monetary policy involves change in the rate of growth of the money supply (M1 and M2) and short-term interest rates
- **Expansionary monetary policy**: Increase the growth rate of M
- **Contractionary monetary policy**: Decrease the growth rate of M

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Monetary Policy

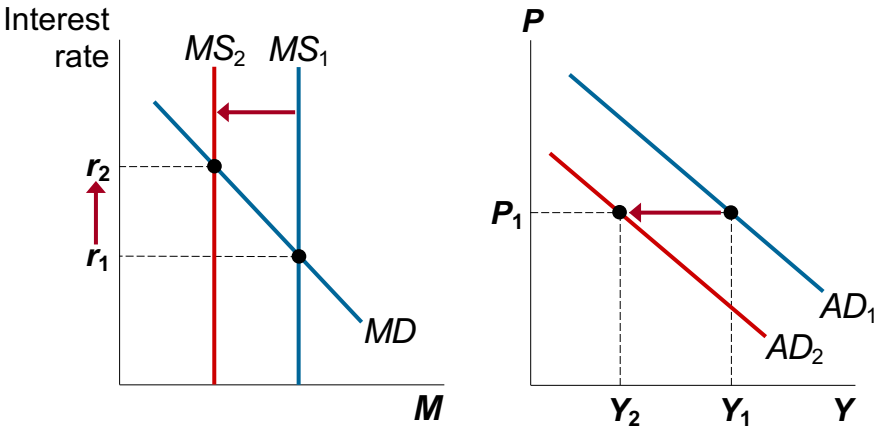
- Policy decision: usually made by the central bank
- Tools
  - Discount rate – credit policies
  - Open market operation
  - Reserved ratio
- Lags in fiscal policies:
  - Recognition lag: 3 – 6 months
  - Decision lag: generally very short
  - Implementation lag: generally very short
  - Impact lag: usually 12 – 18 months

Discount rate: lãi suất ngân hàng trung ương đánh vào các ngân hàng thương mại

Credit Policy: các quy định của ngân hàng về hoạt động tín dụng cho khách hàng

The Effects of Reducing the Money Supply

The Fed can raise ***r*** by reducing the money supply.



An increase in ***r*** reduces the quantity of g&s demanded.

Fiscal Policy

- **Objectives**:
  - Stimulate the economy
  - Stabilize the price level
- **Outcomes**: Investment, Consumption, Government spending
- The use of **government taxes** and **spending** to alter macroeconomic outcomes.
  - Expansionary fiscal policy: Increase G, decrease T
  - Contractionary fiscal policy: Decrease G, increase T
- **Policy decision**: usually made by the politicians

Fiscal Policy

- Problems
  - Inflation
  - Crowding out
- Lags in fiscal policies:
  - Recognition lag: 3 – 6 months
  - Decision lag: can be long depending on the nature of the political system
  - Implementation lag: can be either short or long
  - Impact lag: usually 3 – 6 months

Fiscal Policy and Aggregate Demand

- **Fiscal policy**: the setting of the level of govt spending and taxation by govt policymakers
- **Expansionary** fiscal policy
  - an increase in ***G*** and/or decrease in ***T***, shifts *AD* right
- **Contractionary** fiscal policy
  - a decrease in ***G*** and/or increase in ***T***, shifts *AD* left

G==C nhưng dành cho gov
nên giảm G-->giảm demand

- Fiscal policy has two effects on *AD*...

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1. The Multiplier Effect

Gov consumption (G) tăng dẫn đến consumption của người dân (C) tăng --> AD shift right

- 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 will spend a portion of the extra income.
- This extra consumption causes further increases in aggregate demand.

Multiplier effect: the additional shifts in *AD* that result when fiscal policy increases income and thereby increases consumer spending

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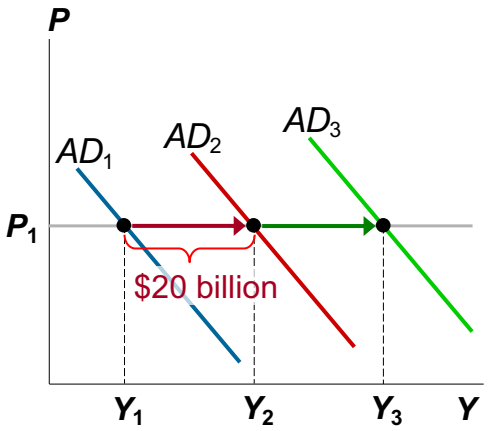
1. The Multiplier Effect

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

The increase in ***Y*** causes ***C*** to rise, which shifts *AD* further to the right.



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Marginal Propensity to Consume

- How big is the multiplier effect?
  It depends on how much consumers respond to increases in income.
- **Marginal propensity to consume (MPC)**:
  the fraction of extra income that households consume rather than save

  E.g., if *MPC* = 0.8 and income rises $100,
  C rises $80.

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A Formula for the Multiplier

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

C: consumption, I: investment, G: government consumption

$Y = C + I + G + NX$ identity

$\Delta Y = \Delta C + \Delta G$ I and NX do not change

$\Delta Y = MPC\,\Delta Y + \Delta G$ because $\Delta C = MPC\,\Delta Y$

$$\Delta Y = \frac{1}{1 - MPC}\Delta G$$ solved for ΔY

The multiplier

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A Formula for the Multiplier

The size of the multiplier depends on *MPC*.

E.g., if *MPC* = 0.5 multiplier = 2
if *MPC* = 0.75 multiplier = 4
if *MPC* = 0.9 multiplier = 10

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

The multiplier

A bigger *MPC* means changes in Y cause bigger changes in C, which in turn cause bigger changes in Y.

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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: Suppose a recession overseas reduces demand for U.S. net exports by $10b.

  Initially, agg demand falls by $10b.

  The fall in ***Y*** causes ***C*** to fall, which further reduces agg demand and income.

export giảm

--> demand giảm

--> Y giảm (theo ct multiplier)

--> C giảm-->demand giảm

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2. The Crowding-Out Effect

- Fiscal policy has another effect on *AD* that works in the opposite direction.
- A fiscal expansion raises ***r***, tăng lãi suất
  which reduces investment, -->giảm đầu tư
  which reduces the net increase in agg demand. --> giảm demand
- So, the size of the *AD* shift may be smaller than the initial fiscal expansion.
- This is called the **crowding-out effect**.

Gov chi tiêu/giảm thuế-->mở rộng thị trường-->tăng lãi suất-->giảm đầu tư-->giảm demand

AD vẫn tăng nhưng không tăng nhiều như Multiplier Effect miêu tả

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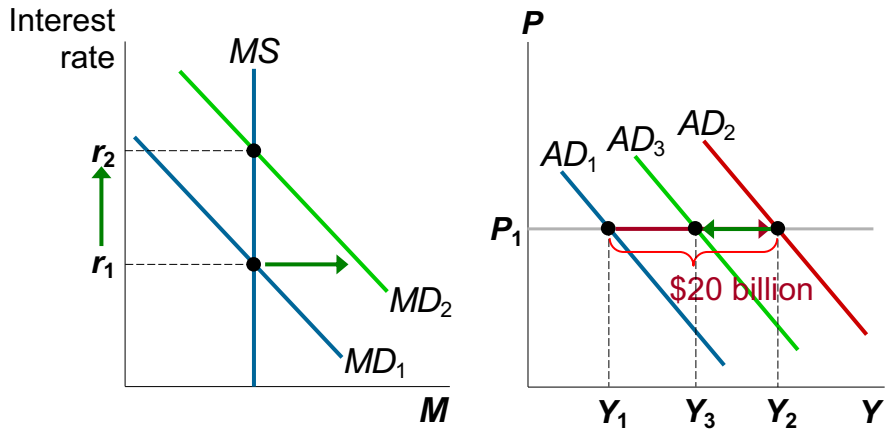
How the Crowding-Out Effect Works

A $20b increase in ***G*** initially shifts *AD* right by $20b



But higher ***Y*** increases *MD* and ***r***, which reduces *AD*.

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Changes in Taxes

- A tax cut increases households' take-home pay.
- Households respond by spending a portion of this extra income, shifting *AD* to the right.
- The size of the shift is affected by the multiplier and crowding-out effects.
- Another factor: whether households perceive the tax cut to be temporary or permanent.
  - A permanent tax cut causes a bigger increase in ***C***—and a bigger shift in the *AD* curve—than a temporary tax cut.

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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?

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ACTIVE LEARNING 3

Answers

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?

Multiplier = 1/(1 – .8) = 5

Increase ***G*** by $40b
to shift agg demand by 5 x $40b = $200b.

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ACTIVE LEARNING 3

Answers

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

B. If there is crowding out, will Congress need to increase ***G*** more or less than this amount?

Crowding out reduces the impact of ***G*** on *AD*.

To offset this, Congress should increase ***G*** by a larger amount.

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Fiscal Policy and Aggregate Supply

- Most economists believe the short-run effects of fiscal policy mainly work through agg demand.
- But fiscal policy might also affect agg supply. Cũng ảnh hưởng AS
- Recall one of the Ten Principles from Chapter 1:
  People respond to incentives.
- A cut in the tax rate gives workers incentive to work more, so it might increase the quantity of g&s supplied and shift *AS* to the right. Khuyến khích công nhân làm việc
- People who believe this effect is large are called "Supply-siders."

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Fiscal Policy and Aggregate Supply

- Govt purchases might affect agg supply. Example:
  - Govt increases spending on roads.
  - Better roads may increase business productivity, which increases the quantity of g&s supplied, shifts *AS* to the right.
- This effect is probably more relevant in the long run: it takes time to build the new roads and put them into use.

Gov spending-->Tăng Investment, Education, Research, Development, etc.-->Supply tăng

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The Case for Active Stabilization Policy

- Keynes: "Animal spirits" cause waves of pessimism and optimism among households and firms, leading to shifts in aggregate demand and fluctuations in output and employment.
- Also, other factors cause fluctuations, e.g., Có nhiều yếu tố gây biến động
  - booms and recessions abroad
  - stock market booms and crashes
- If policymakers do nothing, these fluctuations are destabilizing to businesses, workers, consumers. Nếu không làm gì-->Biến động làm bất ổn đến mng

boom: sự tăng vọt, phất lên

Animal spirit: Khuynh hướng đầu tư dựa trên cảm xúc

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The Case Against Active Stabilization Policy

- Monetary policy affects economy with a long lag:
  - Firms make investment plans in advance, so ***I*** takes time to respond to changes in ***r***.
  - Most economists believe it takes at least 6 months for mon policy to affect output and employment.
- Fiscal policy also works with a long lag:
  - Changes in ***G*** and ***T*** require acts of Congress.
  - The legislative process can take months or years.

Monetary và Fiscal policy bị lag

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The Case Against Active Stabilization Policy

- Due to these long lags, critics of active policy argue that such policies may destabilize the economy rather than help it:

  By the time the policies affect agg demand, the economy's condition may have changed.
- These critics contend that policymakers should focus on long-run goals like economic growth and low inflation.

contend (v): chiến đấu, đâu tranh cho lí lẽ j đó

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Automatic Stabilizers

- **Automatic stabilizers**: sự thay đổi tự động trong chính sách tài khoán
  changes in fiscal policy that stimulate aggregate demand when economy goes into recession, without policymakers having to take any deliberate action

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Automatic Stabilizers: Examples

- The tax system
  - In recession, taxes fall automatically, which stimulates aggregate demand.

suy thoái-->tự động giảm thuế-->kích cầu

- Government spending
  - In recession, more people apply for public assistance (welfare, unemployment insurance).
  - Government spending on these programs automatically rises, which stimulates aggregate demand.

suy thoái-->cần bảo hiểm thất nghiệp, phúc lợi-->chi tiền

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CONCLUSION

- Policymakers need to consider all the effects of their actions. For example,
  - When Congress cuts taxes, it should consider the short-run effects on agg demand and employment, and the long-run effects on saving and growth.
  - When the Fed reduces the rate of money growth, it must take into account not only the long-run effects on inflation but the short-run effects on output and employment.

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1. If taxes

a. increase, consumption increases, and aggregate demand shifts to the right.
b. increase, consumption decreases, and aggregate demand shifts to the left.
c. decrease, consumption increases, and aggregate demand shifts to the left.
d. decrease, consumption decreases, and aggregate demand shifts to the right.

2. The multiplier effect

a. and the crowding-out effect both amplify the effects of an increase in government expenditures.
b. and the crowding-out effect both diminish the effects of an increase in government expenditures.
c. diminishes the effects of an increase in government expenditures, while the crowding-out effect amplifies the effects.
d. amplifies the effects of an increase in government expenditures, while the crowding-out effect diminishes the effects.

3. An increase in the MPC

a. increases the multiplier, so that changes in government expenditures have a larger effect on aggregate demand.
b. increases the multiplier, so that changes in government expenditures have a smaller effect on aggregate demand.
c. decreases the multiplier, so that changes in government expenditures have a larger effect on aggregate demand.
d. decreases the multiplier, so that changes in government expenditures have a smaller effect on aggregate demand.

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4. **If the marginal propensity to consume is 2/3, and there is no investment accelerator or crowding out, a $20 billion increase in government expenditures would shift the aggregate demand curve to the right by**

a. $30 billion, but the effect would be larger if there was an investment accelerator.
b. $30 billion, but the effect would be smaller if there was an investment accelerator.
c. $60 billion, but the effect would be larger if there was an investment accelerator.
d. $60 billion, but the effect would be smaller if there was an investment accelerator.

5. **According to the crowding-out effect, an increase in government spending**

a. increases the interest rate and so increases investment spending.
b. increases the interest rate and so decreases investment spending.
c. decreases the interest rate and so increases investment spending.
d. decreases the interest rate and so decreases investment spending.

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6. **In a simple Macroeconomic model, if the Mpc=3/5, closing a $60 billion GDP gap could be accomplished through new government spending of:**

a. $15 billion.
b. $24 billion.
c. $36 billion.
d. $40 billion.

8. **The AD curve shifts by $40 billion to the left. The government wants to change its spending to offset this decrease in demand. The MPC is 0.60. What should the government do if it wants to offset the decrease in real GDP?**

a. Raise both taxes and expenditures by $40 billion dollars.
b. Raise both taxes and expenditures by $40 billion dollars.
c. Reduce both taxes and expenditures by $10 billion dollars.
d. Reduce both taxes and expenditures by $10 billion dollars.

7. **In a simple Macroeconomic model with mpc=.80, a $100 billion autonomous tax hike will:**

a. raise equilibrium income by $500 billion.
b. provide corporate executives with incentives to work harder.
c. lower equilibrium income by $500 billion.
d. reduce equilibrium income by $400 billion.

9. **Suppose the MPC is .75. There are no crowding out or investment accelerator effects. If the government increases expenditures by $200 billion, how far does aggregate demand shift? If the government decreases taxes by $200 billion, how far does aggregate demand shift?**

a. $800 billion and $800 billion
b. $800 billion and $600 billion
c. $600 billion and $600 billion
d. $600 billion and $450 billion

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10. Aggregate demand shifts to the left and policymakers want to stabilize output. What can they do?

a. repeal an investment tax credit or increase the money supply
b. repeal an investment tax credit or decrease the money supply
c. institute an investment tax credit or increase the money supply
d. institute an investment tax credit or decrease the money supply

11. Suppose there were a large increase in net exports. If the Fed wanted to stabilize output, it could

a. buy bonds to increase the money supply.
b. buy bonds to decrease the money supply.
c. sell bonds to increase the money supply.
d. sell bonds to decrease the money supply.

12. When the Fed buys government bonds, the reserves of the banking system

a. increase, so the money supply increases.
b. increase, so the money supply decreases.
c. decrease, so the money supply increases.
d. decrease, so the money supply decreases.

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13. Suppose stock prices rise. To offset the resulting change in output the Federal Reserve could

a. increase the money supply. This increase would also move the price level closer to its value before the rise in stock prices.
b. increase the money supply. However, this increase would move the price level farther from its value before the rise in stock prices.
c. decrease the money supply. This decrease would also move the price level closer to its value before the rise in stock prices.
d. decrease the money supply. However, this decrease would move the price level farther from its value before the rise in stock prices.

14. The primary argument against active monetary and fiscal policy is that

a. attempts to stabilize the economy do not constitute a proper role for government in a democratic society.
b. these policies affect the economy with a long lag.
c. these policies affect the economy too quickly and with too much impact.
d. history demonstrates that interest rates respond unpredictably to active policies, leading to unpredictable effects on income.

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