Fiscal Policy

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Chapter Objectives

- What is fiscal policy?
- In what two ways does fiscal policy affect aggregate demand?
- What are the arguments for and against using active policy to try to stabilize the economy?
- Is government budget deficit always bad or good?

Fiscal Policy and Aggregate Demand

- ***Fiscal policy***: is the setting of the level of govt spending and taxation by govt policymakers. Recall: $Y = C + I + G + NX$
- ***Expansionary fiscal policy***: is one that shifts AD to the right such as anincrease in G, TR and/or decrease in T
- ***Contractionary fiscal policy***: is one that shifts AD to the left such as adecrease in G, TR and/or increase in T
- Fiscal policy two effects: Multiplier effect and crowding-out effect

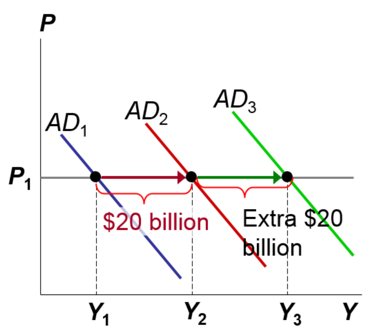
First Effect: The Multiplier Effect

- is the notion that Expansionary fiscal policy leads to an increase in real GDP larger than the initial rise in aggregate spending caused by the policy.
- Example: 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.

First Effect: 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.



Marginal Propensity to Consume, MPC

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

$$MPC = \Delta C / \Delta Y$$

The Multiplier Effect: How large is this effect

Initial spending	$= \Delta G$	=\$20
2nd round of spending	$= 0.5 \times \$20$	=\$10
3rd round of spending	$= 0.5 \times \$10$	=\$5
		$\vdots$
Total Income increase	$\vdots$	= ?

Formula for the Govt Purchase Multiplier

- A simple formula to get the above result is to calculate the ***Government Purchase multiplier,*** m_G:

$$m_G = \frac{1}{(1 - MPC)}$$

  Where MPC is the marginal propensity to consume.

- Hence the total change of income due to change in G is:

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

- Examples:

Tax cut and Govt Transfer Multiplier

- However, the government transfers or tax multiplier is:

$$m_T = \frac{MPC}{(1 - MPC)} = MPC * m_G$$

- Since $MPC < 1$, $m_T < m_G$

Why different results?

Effect of \$100 billion government purchases and \$100 tax cut or transfers with .5 MPC

Spending rounds	ΔY due to ΔG	ΔY due to ΔT
First round	\$100	\$50
Second round	\$50	\$25
Third round	\$25	\$12.5
⋮	⋮	⋮
Total ΔY	\$200	\$100

ACTIVE LEARNING: Expenditure Multipliers

Suppose that an economy has a MPC of 0.8

a. If income increases by \$100 billion, by how much does C increase? What is the govt purchase multiplier for the economy?

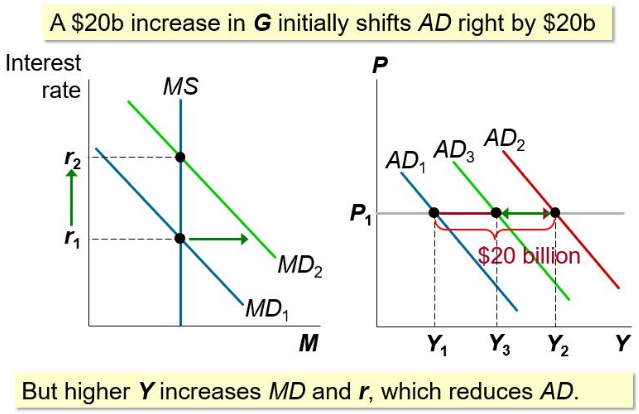
b. The economy is now in recession. Shifting the AD curve rightward by \$200b would end the recession. The *MPC* remains unchanged.

1. how much should Congress increase G to end the recession?
2. How much tax cut would accomplish the same objective as in (1)?

Second Effect of govt spending: the Crowding-Out Effect

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

How the Crowding-Out Effect Works



Changes in Taxes, again

- 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.

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.
- Recall one of the core principles of economics: ***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.
- People who believe this effect is large are called "Supply-siders."

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.

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: "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.,
  - booms and recessions abroad
  - stock market booms and crashes
- If policymakers do nothing, these fluctuations are destabilizing to businesses, workers, consumers.

The Case Against Active Stabilization Policy

- Monetary policy affects economy with a long lag:
  - Firms make investment plans in advance, so it 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.

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.

Automatic Stabilizers

- ***Automatic stabilizers***: changes in fiscal policy that stimulate agg demand when economy goes into recession, without policymakers having to take any deliberate action. Two Examples:

1. The tax system: in recession, taxes fall automatically, which stimulates agg. demand.
2. Govt spending: in recession, more people apply for public assistance (welfare, unemployment insurance), which automatically rises govt spending, which stimulates agg demand.

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.