

## Chapter 13: Fiscal Policy

**Fiscal Policy:** Changes in federal taxes or government expenditures used to achieve macroeconomic policy objectives (note: Fiscal Policy refers to **federal** policy only: not state or local policy).

### **Two Types of Fiscal Policy**

- 1) **Automatic Stabilizers:** Government expenditures that automatically change with the business cycle: the changes occur without any action from the government (i.e: unemployment)
- 2) **Discretionary Fiscal Policy:** Government taking direct actions to change expenditures or taxes

**Cyclically Adjusted Budget Deficit:** an estimate of what the budget deficit would be if GDP were exactly equal to potential GDP

### Fiscal Policy and Real GDP

Recalling the AD-AS model, when the economy is not in a long run equilibrium, the government can use fiscal policy to return the economy to a long run equilibrium by shifting the AD curve

**Expansionary Fiscal Policy:** Increases in government expenditures or reductions in taxes that shift AD right. This leads to higher GDP and price level

**Contractionary Fiscal Policy:** Decreases in government expenditures or increases in taxes that shift AD left. This leads to lower GDP and price level

### Limitations of Fiscal Policy

**Policy Lags:** It can take a significant amount of time to enact fiscal policy (data collection, bill writing/debate, enacting approved policy), which can reduce the immediate effectiveness of discretionary fiscal policy

**Crowding Out:** If the government pursues expansionary fiscal policy when the economy is not depressed, this can lead to a reduction in private investment in the long run

### Fiscal Policy and the Multiplier

Increases in government expenditure lead to increases in GDP via the multiplier. However, increases in transfer payments do not directly increase GDP. **Only changes in government purchases lead to direct changes in AD.**

Increases in transfers increase GDP by increasing income for consumers. However, consumers will not spend all of their additional income. They will increase spending based on the MPC. As a result, **the net result on GDP is higher with a change in government spending than with a change in transfers**

$$\text{Government Spending Multiplier} = \frac{\Delta Y}{\Delta G} = \frac{1}{1-MPC}$$

$$\text{Multiplier with Tax Rate} = \frac{1}{1-(1-t)MPC}$$

$$\text{Lump Sum Tax Multiplier} = \frac{\Delta Y}{\Delta T}$$

## Week 9 Exercises

### Examples

- 1) State whether the following scenarios are describing automatic stabilizers, discretionary fiscal policy or neither.
  - i. In an expansion, fewer workers file for unemployment insurance benefits and government spending falls.
  - ii. In a recession, asset prices (on houses, stocks, etc.) fall and the government collects less money on property taxes and capital gains taxes.
  - iii. The Federal Reserve raises interest rates in an attempt to lower inflation.
  - iv. Congress votes for a tax cut in an attempt to increase the level of output.
  
- 2) Suppose that there was a federal budget surplus of \$100 billion and that the economic output was above potential. If the economy had been at potential, it is estimated that tax revenues would have been \$80 billion lower and that government spending would have been \$70 billion higher. Using these estimates, what is the cyclically adjusted budget deficit or surplus?
  - a. \$100 billion surplus
  - b. \$30 billion surplus
  - c. \$20 billion surplus
  - d. \$50 billion deficit
  - e. \$100 billion deficit
  
- 3) If the economy is rising above potential real GDP, which of the following would be an appropriate fiscal policy to bring the economy back to long-run aggregate supply? An increase in
  - a. money supply
  - b. government spending on infrastructure
  - c. taxes
  - d. gold prices
  
- 4) Suppose the tax multiplier is -1.5. When the government cuts taxes by \$60 billion, what is change in GDP?
  - a. a decrease of \$90 billion
  - b. an increase of \$90 billion
  - c. a decrease of \$40 billion
  - d. an increase of \$40 billion
  
- 5) If policy makers are concerned that the economy is in danger of rising inflation because aggregate demand is increasing faster than aggregate supply, the appropriate fiscal policy response is to:
  - a. Use expansionary fiscal policy
  - b) Decrease government spending
  - c) Increase interest rates
  - d) Decrease taxes
  
- 6) If crowding out occurs, an increase in government spending:
  - a) Increases the interest rate and consumption and investment spending rise
  - b) Decreases the interest rate and consumption and investment spending rise

## Week 9 Exercises

- c) Increases the interest rate and consumption and investment spending decline  
d) Decreases the interest rate and consumption and investment spending decline
- 7) If the economy suffers a negative supply shock, and the government responds with expansionary fiscal policy, this will \_\_\_\_\_ inflation and \_\_\_\_\_ unemployment  
a) Decrease, decrease  
b) Decrease, increase  
c) Increase, increase  
d) Increase, decrease
- 8) A cut in tax rates affects equilibrium real GDP through two channels: \_\_\_\_\_ disposable income and consumer spending, and \_\_\_\_\_ the size of the multiplier effect.  
a) Increasing; increasing  
b) Decreasing; decreasing  
c) Decreasing; increasing  
d) Increasing; decreasing
- 9) Crowding out will be greater:  
a) The less sensitive consumption is to changes in the interest rate  
b) If the economy is in recession, rather than at full employment  
c) The more sensitive investment spending is to changes in the interest rate  
d) The further equilibrium GDP is below potential GDP
- 10) The cyclically adjusted budget deficit calculates budget surplus or deficit  
a) If the economy was producing below potential GDP  
b) If the economy were at potential GDP  
c) If the economy were in recession  
d) If the economy was producing above potential GDP
- 11) Expansionary fiscal policy \_\_\_\_\_ the price level and \_\_\_\_\_ equilibrium real GDP  
a) Decreases; increases  
b) Decreases; decreases  
c) Increases; decreases  
d) Increases; increases
12. All other variables unchanged, a reduction in the tax rate:  
a) Causes a parallel shift upwards in the aggregate expenditures curve  
b) Decreases the slope of the aggregate expenditures curve  
c) Increases the slope of the aggregate expenditures curve  
d) Causes a parallel shift downwards of the aggregate expenditures curve
- 13) Given a consumption function  $C = \$5000 + 0.8(Y_D)$  and an income tax rate of  $t = 0.25$ , by how much would the government have to change spending in order to close an output gap of 10% given that potential GDP is \$5 trillion (remember: the sign of the output gap matters)?  
a) \$300 billion      b) -\$250 billion      c) \$250 billion      d) -\$200 billion

## Week 9 Exercises

### Review Questions

14. When Julie Ann's disposable income is \$10,000, she spends \$10,000, and when her disposable income is \$15,000, her spending is \$12,500. Julie Ann's autonomous consumption is \_\_\_\_\_ and her \_\_\_\_\_.

- A) \$5000;  $MPS = .5$
- B) \$0;  $MPC = .5$
- C) \$0;  $MPS = 0$
- D) \$10000;  $MPS = 0$

15. If disposable income falls by \$50 billion and consumption falls by \$40 billion, then the slope of the consumption function is

- A) 1.20
- B) 0.80
- C) 0.70
- D) 0.10

16. If the marginal propensity of save is .25, then a \$10000 decrease in disposable income will

- A) Increase consumption by \$2,500
- B) Decrease consumption by \$2,500
- C) Increase consumption by \$7,500
- D) Decrease consumption by \$7,500

17. On the 45-degree line diagram, the 45-degree line shows points such that

- a) Real aggregate output equals the quantity produced
- b) Real aggregate expenditure equals real GDP
- c) Real aggregate expenditure equals  $C + I$
- d) Real income equals real GDP

18. Financial intermediary's main function is to match \_\_\_\_\_ with excess funds to \_\_\_\_\_ who want to borrow funds.

- a) Households; firms
- b) Households; households
- c) Firms; households
- d) Firms; firms

19. The international trade effect states that

- a) An increase in the price level will lower net exports
- b) An increase in the price level will raise exports
- c) An increase in the price level will raise net exports
- d) An increase in the price level will lower imports

20. An increase in aggregate demand causes an increase in \_\_\_\_\_ only in the short run, but causes an increase in \_\_\_\_\_ in both the short run and long run

- a) Real GDP; real GDP
- b) The price level; real GDP
- c) The price level; the price level
- d) Real GDP; the price level