



Chapter 18 Exercises

Self-Check Questions

1. In a country, private saving equals 600, the government budget surplus equals 200, and the trade surplus equals 100. What is the level of private investment in this economy?
2. Assume an economy has a budget surplus of 1,000, private saving of 4,000, and investment of 5,000.
 - a. Write out a national saving and investment identity for this economy.
 - b. What will be the balance of trade in this economy?
 - c. If the budget surplus changes to a budget deficit of 1,000, with private saving and investment unchanged, what is the new balance of trade in this economy?
3. Why have many education experts recently placed an emphasis on altering the incentives faced by U.S. schools rather than increasing their budgets? Without endorsing any of these proposals as especially good or bad, list some ways incentives for schools might be altered.
4. What are some steps the government can take to encourage research and development?
5. Imagine an economy in which Ricardian equivalence holds. This economy has a budget deficit of 50, a trade deficit of 20, private saving of 130, and investment of 100. If the budget deficit rises to 70, how are the other terms in the national saving and investment identity affected?
6. In the late 1990s, the U.S. government moved from a budget deficit to a budget surplus, and the trade deficit in the U.S. economy grew substantially. Using the national saving and investment identity, what can you say about the direction in which savings and/or investment must have changed in this economy?

Review Questions

7. Based on the national saving and investment identity, what are the three ways the macroeconomy might react to greater government budget deficits?
8. How would you expect larger budget deficits to affect private-sector investment in physical capital? Why?
9. What are some of the ways fiscal policy might encourage economic growth?
10. What are some fiscal policies for improving a society's human capital?
11. What are some fiscal policies for improving the technologies that the economy will have to draw upon in the future?
12. Explain how cuts in funding for programs like Head Start might affect the development of human capital in the United States.
13. What is the theory of Ricardian equivalence?
14. What does the concept of rationality have to do with Ricardian equivalence?
15. Under what conditions will a larger budget deficit cause a trade deficit?

Critical Thinking Questions

16. Assume there is no discretionary increase in government spending. Explain how an improving economy will affect the budget balance and, in turn, investment and the trade balance.
17. Explain how decreased domestic investments that occur due to a budget deficit will affect future economic growth.
18. The U.S. government has shut down multiple times in recent history. Explain how a government shutdown will affect the variables in the national saving and investment identity. Could the shutdown affect the government budget deficit?
19. Explain why the government might prefer to provide incentives to private firms to do investment or research and development rather than simply doing the spending itself.
20. Under what condition would increased government spending not inhibit long-run economic growth? Under what condition would government spending impede long-run economic growth?
21. What must take place for the government to run deficits without any crowding out?
22. Explain whether or not you agree with the premise of the Ricardian equivalence theory that rational people might reason, “Well, a higher budget deficit (surplus) means that I’m just going to owe more/less taxes in the future to pay off all that government borrowing, so I’ll start saving/spending now.” Why or why not?
23. Explain how a shift from a government budget deficit to a budget surplus might affect the exchange rate.
24. Describe how a plan for reducing the government deficit might affect a middle-income family, a young professional, and a college student.

Problems

25. During the Great Recession, some economists argued that the change in the interest rates, which is due to deficit spending implied in the demand and supply of financial capital graph, would not occur. A simple reason was that the government was stepping in to invest when private firms were not. Use a graph to explain how the deficit demand is offset by the use of government investment.
26. Illustrate the concept of Ricardian equivalence using the demand and supply of financial capital graph.
27. Sketch a diagram of how a budget deficit causes a trade deficit. (*Hint:* begin with what will happen to the exchange rate when foreigners demand more U.S. government debt.)
28. Sketch a diagram of how sustained budget deficits cause low economic growth.
29. Assume that you are employed by the government of Tanzania in 1964; at that time, it was a new nation recently independent from Britain. The Tanzanian parliament has decided that it will spend 10 million shillings on schools, roads, and health care for the year. You estimate that the net taxes for the year are 8 million shillings. The difference will be financed by selling 10-year government bonds at 12% interest per year. The interest on outstanding bonds must be added to government expenditure each year. Assume that additional taxes are added to finance this increase in government expenditure so that the gap between government spending is always 2 million. If the school, road, and health care budget is unchanged, compute the value of the accumulated debt in 10 years.