

## Practice Problems Open Economy Loanable Funds Analysis

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1. Write the definition of private savings.
2. Write the definition of public savings.
3. Write the national income identity in terms of savings, investment and net exports/current account.
4. Use the national income identity as written in the above question to discuss the problems with a large and persistent current account deficit and current account surplus. In what ways are these CADs and CASs indications that the country will not be consumption smoothing?
5. Suppose the government decreases taxes.
  - a. Show the effects of this in the loanable funds market.
  - b. Does your answer depend on whether you started in an equilibrium where the government had a balanced budget, deficit or surplus?
6. Show the effects of a wave of consumer pessimism in the loanable funds market.
7. Show the effects of a wave of investor/ firm pessimism in the loanable funds market.
8. Suppose that a wave of general pessimism sweeps the nation. (This happens during recessions, but ignore the “recession” itself – that is, don’t lower income.)
9. Show the effects in a loanable funds market of a government proposal to lower taxes on businesses and investment to encourage firms to locate in the U.S. (i.e., not move to foreign countries).
10. Discuss reasons why reasonable trade surpluses or deficits are not a problem but large and persistent trade imbalances are.
11. Show two cases of the effects of a growing government deficit. First show a case where interest rates rise. Second show a case where interest rates do not rise.
12. Suppose the current account is zero. Draw the loanable funds diagram for a large open economy. Show what happens to the diagram if the economy moves to a trade deficit versus a trade surplus. Explain what happened to the real interest rate and why.
13. Suppose the current account is zero. Draw the loanable funds diagram for a small open economy. Suppose that initially the world real interest rate is less than the domestic market clearing rate. Next suppose that, without any warning, the world rate rises dramatically until it is above the domestic market clearing rate.

- a. Explain what happened to the real interest rate and why.
  - b. Explain what happens to the CA, FKA, and  $\Delta R$ .
  - c. Show the effects of this in an AS-AD diagram.
14. Use the loanable funds diagram to show what happens to the real interest rate during a sudden stop of capital flows. Is it different for a large open economy versus a small open economy? Show in diagrams and explain.
15. In years before the recession the United States was running increasingly large government deficits, but the real interest rate wasn't rising. Use the loanable fund diagram to show, first, why one would expect interest rates to rise and, second, explain what else might be changing in market that has allowed interest rates to stay constant (for simplicity, suppose they are constant).
16. What is the Twin Deficits Hypothesis? Is it true? Explain.
17. There is a lot of debate over Ricardian Equivalence. Those arguments tend to revolve around the degree to which we believe people behave as though they were perfectly rational. Instead, consider it a theory that is potentially useful as an organizing principle for thinking about such issues and consider the following:
  - a. One view argues it holds better in developed economies than emerging economies. Explain why this might or might not be the case.
  - b. Another view (not necessarily mutually exclusive from the view in (a) ) argues that the degree to which it holds depends on the level of the economy's debt. Explain why this might or might not be the case.
18. Traditionally US current account deficits are primarily financed by private capital flows. Recently, however, foreign central banks (mainly in Asia) have been financing our CADs. This has led many to worry about what will happen if those governments decide to stop buying our debt (i.e., lending us money). All else equal, analyze the effect of this on the real interest rate using the loanable funds diagram and on the domestic economy using Aggregate Supply – Aggregate Demand analysis.