Liberty High School

AP Macroeconomics

Mr. Lopez

Chapter 26 Savings and Investment

Study Guide

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

Part 1 – Key terms

1. Financial systems:
2. Financial markets:
3. Financial intermediaries:
4. Bank:
5. Medium of Exchange:
6. Bond:
7. Stock:
8. Mutual fund:
9. Closed economy:
10. National savings (savings):
11. Private savings:
12. Public savings:
13. Budget surplus:
14. Budget deficit:
15. Government debt:
16. Investment:
17. Market for loanable funds:
18. Demand for loanable funds:
19. Supply of loanable funds:
20. Crowding out:

Part 2 – Problems and short answers

1. Fly by Night Corporation is in need of capital funds to expand its production capacity. It is selling short and long term bonds and issuing stock. You are considering the prospect of helping to finance their expansion.
   1. If you are to buy both short and long terms bonds from Fly by Night, from which bond would you demand a higher rate of return: the short or long term and why?
   2. If Standard & Poor lowered the creditworthiness of fly by Night, would this affect the rate of return you would demand when buying their bonds? Why or why not?
   3. If Fly by Night has exactly the same creditworthiness as Deadbeat City and each is issuing the same term to maturity bonds, which issuer must pay the higher rate on its bonds and why?
   4. If Fly by Night is issuing both stock and bonds, from which would you expect to earn a higher rate of return over the longer term? Why?
   5. Which would be safer: putting all of your personal savings into Fly by Night stock or putting all your personal savings into a mutual fund that has some Fly By Night stock in its portfolio? Why?
2. Use the saving and investment identities from the national income accounts to answer the following questions. Suppose the following values are from the national income accounts of a accounts of a country with a closed economy (all values are in billions).

Y = $6,000

T=$1,000

C=$4,000

G=$1,200

* 1. What is the value of saving and investment in this country?
  2. What is the value of private savings?
  3. What is the value of public savings?
  4. In the government’s budget policy contributing to growth in this country or harming it? Why?

1. The following information describes a loanable funds market. Values are in billions.

|  |  |  |
| --- | --- | --- |
| Real Interest Rate | Quantity of Loanable  Funds Supplied | Quantity of Loanable  Funds Demanded |
| 6 | $1,300 | $700 |
| 5 | 1,200 | 800 |
| 4 | 1,000 | 1,000 |
| 3 | 800 | 1,200 |
| 2 | 600 | 1,500 |

* 1. Plot the supply and demand for loanable funds on the graph below. What is the equilibrium real interest rate and equilibrium level of saving and investment? Label the Y axis “Real Interest Rate” and Label the X axis “Quantity of loanable funds”



* 1. What “market forces” will not allow 2% to be the real interest rate?
  2. Suppose the government suddenly increases its budget deficit by $400 billion. What is the new equilibrium real interest rate and equilibrium level of savings and investment? Show this graphically below. ? Label the Y axis “Real Interest Rate” and Label the X axis “Quantity of loanable funds”



* 1. Starting at the original equilibrium, suppose the government enacts an investment tax credit that stimulates the demand for loanable funds for capital investment by $400 billion at any real interest rate. What is the new equilibrium real interest rate and equilibrium level of savings and investment? Show this graphically below. Label the Y axis “Real Interest Rate” and Label the X axis “Quantity of loanable funds”



* 1. With regards to questions c and d above, which policy is most likely to increase growth? Why?

1. Explain why a mutual fund is likely to be less risky than an individual stock.
2. Which is likely to give you a greater rate of return: a checking deposit at a bank or the purchase of a corporate bond? Why?
3. What is the difference between debt finance and equity finance?
4. What is meant by the words “savings” and “investment” in the national income accounts, and how does that use of the words differ from the casual use of the words?
5. In a closed economy, why can’t investment ever exceed savings?
6. What is private savings? What is public savings?
7. Utilizing national income identities, if government purchases were to rise, and if output, taxes, and consumption were to remain unchanged, what would happen to national savings, investment, and growth?
8. Suppose Americans become more frugal. That is, they consume a smaller percent of their income and save a larger percent. Describe the changes in the loanable funds market. What would likely happen to growth?
9. Suppose the government runs a smaller deficit. Describe the changes in the loanable funds market. What would likely happen to growth?
10. An increase in the government’s budget deficit forces the government to borrow more. Why doesn’t an increase in the deficit increase the demand for loanable funds in the loanable funds market?
11. What is the fundamental differences between financial markets and financial intermediaries?

Part 3 – True or false

1. \_\_\_\_\_\_\_When a business firm sells a bond, it has engaged in equity financing.
2. \_\_\_\_\_\_\_People who buy stock in a firm have loaned money to the firm.
3. \_\_\_\_\_\_\_Mutual funds reduce a shareholders risk by purchasing a diversified portfolio.
4. \_\_\_\_\_\_\_Municipal bonds pay less interest than comparable risk corporate bonds because the interest payments are tax exempt to the bondholder.
5. \_\_\_\_\_\_\_In a closed economy, savings is what remains after consumption expenditures and government purchases.
6. \_\_\_\_\_\_\_The financial crisis of 2008 and 2009 began with a sharp economic downturn and a reduction in the overall demand for output.
7. \_\_\_\_\_\_\_In a closed economy, investment is always equal to savings regardless of where the savings came from, public or private sources.
8. \_\_\_\_\_\_\_Investment is the purchase of capital equipment and structures.
9. \_\_\_\_\_\_\_If you save money this week and lend it to your roommate to buy food for consumption, your act of personal saving has increased national saving.
10. \_\_\_\_\_\_\_The quantity supplied of loanable funds is greater if real interest rates are higher.
11. \_\_\_\_\_\_\_If the real interest rate in the loanable funds market is temporarily held above the equilibrium rate, desired borrowing will exceed desired lending and the real interest rate will fall.
12. \_\_\_\_\_\_\_A reduction in the budget deficit should shift the supply of loanable funds to the right, lower the real interest rate, and increase the quantity demanded of loanable funds.
13. \_\_\_\_\_\_\_Public savings and the government’s budget surplus are the same thing.

If the government

1. \_\_\_\_\_\_\_If the government wanted to increase the rate of growth, it should raise taxes on interest and dividends to shift the supply of loanable funds to the right.
2. \_\_\_\_\_\_\_An increase in the budget deficit that causes the government to increase its borrowing shifts the demand for loanable funds to the right.

Part 4 –Additional critical thinking

1. You are watching a presidential debate. When a candidate is questioned about his position on economic growth, the presidential candidate steps forward and says , “We need to get this country growing again. We need to use tax incentives to stimulate savings and investment, and we need to get that budget deficit down so that the government stops absorbing our nation’s savings.”
   1. If government spending remains unchanged, what inconsistency is implied by the presidential candidate’s statement?
   2. If the presidential candidate truly wishes to decrease taxes and decrease the budget deficit, what has the candidate implied about his plans for government spending?
   3. If policymakers want to increase growth, and if policymakers have to choose between tax incentives to stimulate savings and investment incentives to stimulate investment, what might they want to know about supply and demand in the loanable funds market before making their decision? Explain.