

Problem Sets 6

1. Financial institutions in the U.S. economy

Suppose Jaylan decides to use \$4,500 currently held as savings to make a financial investment. One method of making a financial investment is the purchase of stock or bonds from a private company.

1) Suppose Warm Breeze, a cloud computing firm, is selling bonds to raise money for a new lab. This practice is called _____ finance. Buying a bond issued by Warm Breeze would give Jaylan _____ from the firm. In the event that Warm Breeze runs into financial difficulty, _____ will be paid first.

2) Suppose instead Jaylan chooses to buy 250 shares of Warm Breeze stock. Which of the following statements are correct?

- A. The Dow Jones Industrial Average is an example of a stock exchange where he can purchase Warm Breeze stock.
- B. Expectations of a recession that will reduce economywide corporate profits will likely cause the value of Jaylan's shares to decline.
- C. An increase in the perceived profitability of Warm Breeze will likely cause the value of Jaylan's shares to rise.

3) Alternatively, Jaylan could undertake their financial investment by purchasing bonds issued by the U.S. government. Assuming that everything else is equal, a U.S. government bond that matures 10 years from now most likely pays a _____ interest rate than a U.S. government bond that matures 30 years from now.

2. Saving and investment in the national income accounts

The following table contains data for a hypothetical closed economy that uses the dollar as its currency. Suppose GDP in this country is \$1,170 million. Enter the amount for consumption.

National Income Account	Value (Millions of dollars)
Government Purchases (GG)	300
Taxes minus Transfer Payments (TT)	390
Consumption (CC)	
Investment (II)	420

Use national income accounting identities to calculate national saving, private and public savings. In your calculations, use data from the preceding table.

National saving =

Private saving =

Public saving =

Based on your calculations, the government is running a budget _____.

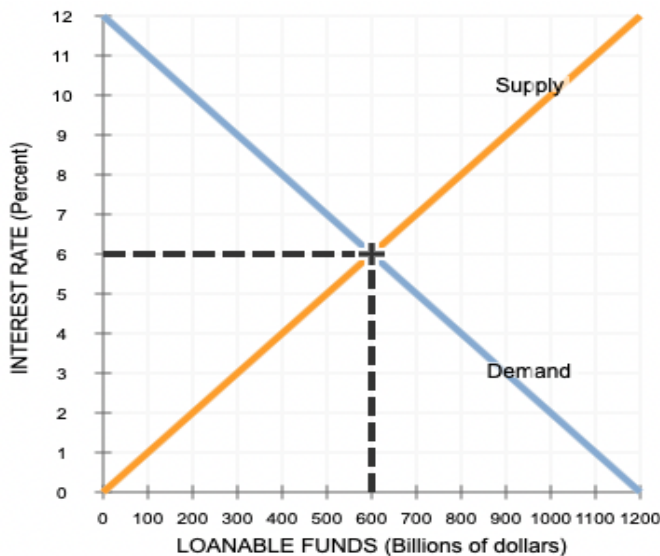
3. The meaning of saving and investment

Classify each of the following scenarios listed in the table below using the macroeconomic definitions of saving and investment.

- 1) Charles purchases a certificate of deposit at his bank.
- 2) Gilberto takes out a loan and uses it to build a new cabin in Idaho.
- 3) Dina borrows money to build an addition to a lab owned by her engineering firm.
- 4) Juanita purchases shares of stock in Warm Breeze, a cloud computing company.

4. Supply and demand for loanable funds

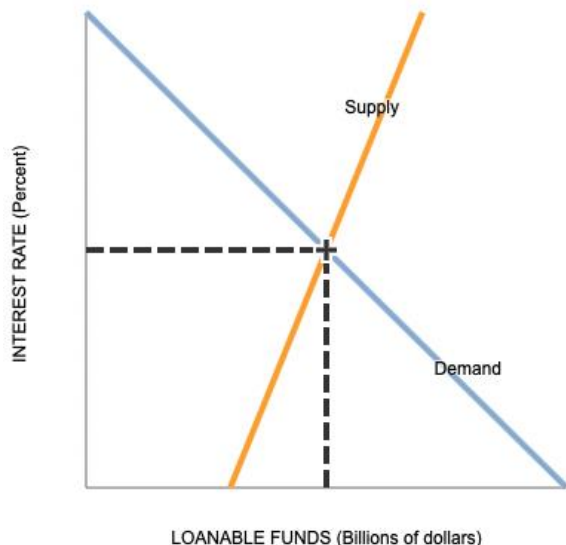
The following graph shows the market for loanable funds in a closed economy. The upward-sloping orange line represents the supply of loanable funds, and the downward-sloping blue line represents the demand for loanable funds.



- 1) What is the source of the demand for loanable funds. As the interest rate falls, what would happen to the quantity of loanable funds demanded?
- 2) Suppose the interest rate is 5.5%. Based on the previous graph, the quantity of loanable funds supplied is _____ than the quantity of loans demanded, resulting in a _____ of loanable funds. This would encourage lenders to _____ the interest rates they charge, thereby _____ the quantity of loanable funds supplied and _____ the quantity of loanable funds demanded, moving the market toward the equilibrium interest rate of _____.

5. The market for loanable funds and government policy

The following graph shows the loanable funds market. For each of the given scenarios, adjust the appropriate curve on the graph to help you complete the questions that follow. Consider each scenario separately by returning the graph to its starting position when moving from one scenario to the next.



Scenario 1: Suppose savers either buy bonds or make deposits in savings accounts at banks. Initially, the interest income earned on bonds or deposits is taxed at a rate of 18%. Now suppose there is an increase in the tax rate on interest income, from 18% to 22%. Shift the appropriate curve on the graph to reflect this change. This change in the tax treatment of interest income from saving causes the equilibrium interest rate in the market for loanable funds to _____ and the level of investment spending to _____.

Scenario 2: An investment tax credit effectively lowers the tax bill of any firm that purchases new capital within some relevant time period. Suppose the government implements a new investment tax credit. Shift the appropriate curve on the graph to reflect this change. The implementation of the new tax credit causes the interest rate to _____ and the level of investment to _____.

Scenario 3: Initially, the government's budget is balanced; then the government significantly increases spending on national defense without changing taxes. This change in spending causes the government to run a budget _____, which _____ national saving. Shift the appropriate curve on the graph to reflect this change. This causes the interest rate to _____, _____ the level of investment spending.