Chapter 13:
Understanding Risk and Return
1. 3rd Edition: p. 285, Problems and Applications, Q1
4th Edition: p. 290, Problems and Applications, Q1
   a. The bond of an eastern European government would pay a higher interest rate than the bond of the U.S. government because there would be a greater risk of default.
   b. A bond that repays the principal in 2025 would pay a higher interest rate than a bond that repays the principal in 2005 because it has a longer term to maturity, so there is more risk to the principal.
   c. A bond from a software company you run in your garage would pay a higher interest rate than a bond from Coca-Cola because your software company has more credit risk.
   d. A bond issued by the federal government would pay a higher interest rate than a bond issued by New York state because an investor does not have to pay federal income tax on the bond from New York state.

Understanding Risk and Return
2. 3rd Edition: p. 285, Problems and Applications, Q6
4th Edition: p. 290, Problems and Applications, Q4

Companies encourage their employees to hold stock in the company because it gives the employees the incentive to care about the firm’s profits, not just their own salary. Then, if employees see waste or see areas in which the firm can improve, they will take actions that benefit the company because they know the value of their stock will rise as a result. And it also gives employees an additional incentive to work hard, knowing that if the firm does well, they will profit.

But from an employee’s point of view, owning stock in the company for which she or he works can be risky. The employee’s wages or salary is already tied to how well the firm performs. If the firm has trouble, the employee could be laid off or have her or his salary reduced. If the employee owns stock in the firm, then there is a double whammy—the employee is unemployed or gets a lower salary and the value of the stock falls as well. So owning stock in your own company is a very risky proposition. Most employees would be better off diversifying—owning stock or bonds in other companies—so their fortunes wouldn’t depend so much on the firm for which they work.

Saving and Investment in the National Account
3. 3rd Edition: p. 285, Problems and Applications, Q8
4th Edition: p. 290, Problems and Applications, Q6

Given that \( Y = 8 \), \( T = 1.5 \), \( S_{\text{private}} = 0.5 = Y - T - C \), \( S_{\text{public}} = 0.2 = T - G \).

Since \( S_{\text{private}} = Y - T - C \), then rearranging gives \( C = Y - T - S_{\text{private}} = 8 - 1.5 - 0.5 = 6 \). Since \( S_{\text{public}} = T - G \), then rearranging gives \( G = T - S_{\text{public}} = 1.5 - 0.2 = 1.3 \). Since \( S = \text{national saving} = S_{\text{private}} + S_{\text{public}} = 0.5 + 0.2 = 0.7 \). Finally, since \( I = \text{investment} = S, I = 0.7 \).

Chapter 14:
Comparing Future and Present Values
If the interest rate is 7 percent, the present value of $200 to be received in 10 years is $200/(1.07)^{10} = $101.67. If the interest rate is 7 percent, the present value of $300 to be received 20 years from now is $300/(1.07)^{20} = $77.53.

Moral Hazard & Stock identification

5. 3rd Edition: p. 301, Problems and Applications, Q3  

a. Adverse Selection: A sick person is more likely to apply for health insurance than is a well person. Moral Hazard: Once a person has health insurance, he may be less likely to take good care of himself.

b. Adverse Selection: A risky driver is more likely than a safe driver to apply for car insurance. Moral Hazard: Once a driver has insurance, he may drive more recklessly.

Chapter 15:

6. 3rd Edition: p. 326, Problems and Applications, Q10  
4th Edition: p. 333, Problems and Applications, Q9

a. When the Japanese developed a strong auto industry, U.S. auto demand became more elastic as a result of increased competition. With more elastic demand for autos, the elasticity of demand for American autoworkers increased.

b. Since the rise in auto imports made the demand for autoworkers more elastic, to maintain a higher-than-competitive wage rate requires a greater reduction in the quantity of labor demanded. So the union had to choose between allowing the union wage to decline or facing the loss of many jobs.

c. Given the tradeoff faced by the union, the growth of the Japanese auto industry forced the union wage to move closer to the competitive wage.