

Quiz

1. The appropriate discount rate to be used when analyzing an investment project is the:

- A. rate of return that will result in an NPV of zero.
- B. firm's current cost of capital.
- C. project's internal rate of return.
- D. rate of return financial markets offer on investments of similar risk.**
- E. rate of interest the firm receives on its excess cash investments.

The appropriate discount rate is the market rate offered on investments of similar risk.

2. The cost of equity capital for an all-equity firm:

- I. depends on the use of the funds, not the source.
 - II. can be applied only to company project's whose risk level is comparable to that of the existing firm.
 - III. will vary directly with the risk-free rate of return assuming that the market risk premium is constant.
 - IV. is dependent upon both the firm's beta and the market risk premium.
- A. I, II, and III only
 - B. I, II, and IV only
 - C. II, III, and IV only
 - D. I, III, and IV only

E. I, II, III, and IV

The cost of equity is dependent on the firm's beta and the market risk premium.

3. The common stock of The Holiday Express sells for \$46.50. The firm's beta is 1.6, the risk-free rate is 3.8 percent, and the market risk premium is 8.2 percent. What is the cost of equity for The Holiday Express?

- A. 84 percent
- B. 49 percent
- C. 16.92 percent**
- D. 37 percent
- E. 11 percent

The market risk premium, not the market rate of return, is 8.2 percent.

4. Which one of the following formulas correctly describes the cost of equity capital?

- A. $R_S = R_M - \beta \times (R_F - R_M)$
- B. $R_S = R_M + \beta \times (R_F - R_M)$
- C. $R_S = R_F - \beta \times (R_M - R_F)$
- D. $R_S = R_F + \beta \times (R_F - R_M)$

E. $R_S = R_F + \beta \times (R_M - R_F)$

$R_S = R_F + \beta \times (R_M - R_F)$.

5. All else constant, which of the following will always decrease a firm's cost of equity as computed using the Capital Asset Pricing Model? Assume beta is positive.

- I. a decrease in the risk-free rate of return
- II. a decrease in a firm's level of systematic risk
- III. a decrease in the market risk premium
- IV. a decrease in the market rate of return

- A. I and IV only
- B. II and III only
- C. I, II, and III only

D. II, III, and IV only

E. I, II, III, and IV

A decrease in the risk-free rate may either increase or decrease the cost of equity, depending on the beta.

6. U.S. Treasury bills are currently yielding 4.15 percent and the market rate of return is 13.28 percent. Glasgo Glass has a beta of 1.18. The firm is considering expanding its current operations. This expansion will not affect the risk level of the firm. What is the required rate of return on the expansion project if both the firm and the project are totally financed with equity capital?

A. 98 percent

B. 14.92 percent

C. 23 percent

D. 19 percent

E. 82 percent

The required return is 14.92 percent.

7. The Carpenter's Hut is considering an all-equity project that is equally as risky as the firm. The project has an internal rate of return of 14.89 percent. The company has a beta of 1.34, the risk free rate is 4.33 percent, and the market risk premium is 8.71 percent. This project _____ be accepted because the cost of equity capital is _____ percent.

A. should; 10.20

B. should; 14.85

C. should; 16.00

D. should not; 10.20

E. should not; 16.00

The cost of capital is 16.00 percent.

8. An all-equity firm should accept any independent all-equity project which has

A. risk similar to the current operations of the firm.

B. less risk than the firm's current operations.

C. an internal rate of return that is less than the cost of equity capital.

D. an internal rate of return that is greater than the cost of equity capital.

E. a rate of return which exceeds the risk-free rate.

The project's internal rate of return must exceed the cost of equity capital.

9. The beta of security i is equal to the _____ divided by the:

A. covariance of the security with the market; variance of the market.

B. covariance of the security with the market; beta of the market.

C. standard deviation of the security; variance of the market.

D. variance of the security; variance of the market.

E. covariance of the security with the market; standard deviation of the market.

The beta of security i is equal to the covariance of the security with the market divided by the variance of the market.

10. Beta is the _____ of the characteristic line for a security which is developed when the returns of the security are plotted against the returns of a(n) _____.

A. intercept; risk-free security

B. intercept; market index

C. slope; risk-free security

D. slope; market index

E. slope; industrial sector

The security returns are plotted against the returns of the overall market.