

Note: If the question in the video is labeled with a number, i.e. 1,2,3, please ignore. Questions are labeled in the playlist by number and are in the same order in this pdf.

1. BCE has 7.60% (semiannual paying) coupon bonds outstanding, with a par value of \$1,000 each. The bonds have 5 years to maturity and sell for 90% of par and BCE's tax rate is 41%. What is the after-tax cost of debt?
 - a. 5.10%
 - b. 6.02%
 - c. 10.20%
 - d. 3.01%
 - e. 11.94%

2. What is the WACC for a firm with only debt and equity in its capital structure, a debt-to-equity-ratio of 1/3; a 5.30% before-tax cost of debt; a 10.00% cost of equity; and a 37% tax rate?
 - a. 7.78%
 - b. 10.33%
 - c. 8.83%
 - d. 6.76%
 - e. 8.33%

3. What is the WACC for a firm, using 50% equity with a required return of 13.00%, 25% debt with a required return of 5.50%, and 25% preferred stock with a required return of 7.40%? We assume a tax rate of 32%.
 - a. 6.61%
 - b. 9.29%
 - c. 8.69%
 - d. 9.73%
 - e. 7.21%

4. ABC Corp. wants to achieve a weighted average cost of capital of 10.90%. The firm has an after-tax cost of debt of 5.00%, a cost of equity of 12.40% and a corporate tax rate of 24%. What is its optimal debt-to-equity ratio to achieve its target weighted average cost of capital?
 - a. 1.02
 - b. 0.21
 - c. 0.13
 - d. 0.25
 - e. 0.36

5. Tree Tops Corp has asked you to calculate their weighted average cost of capital. The firm has only debt and equity in its capital structure, a debt-to-equity-ratio of 1/3; a 4.30% before-tax cost of debt; a 10.00% cost of equity; and a 40% tax rate. The firm's WACC is:

- a. 7.53%
- b. 8.58%
- c. 8.15%
- d. 10.03%
- e. 6.54%

6. You are provided with the following information about XYZ Corp. There are 1 million common shares outstanding with a beta of 1.3, a par value of \$1, and a market price of \$33.00/share. There are 10,000 bonds outstanding that mature in 22 years and have a 6.30% coupon rate (payable annually). Today the bonds sell at a 9.00% premium to their face value of \$1,000. The market risk premium is 4.10%, T-bills return 3.80% and the corporate tax rate is 34%. Based on the above, what is the weighted average cost of capital (WACC)?

- a. 9.95%
- b. 7.96%
- c. 5.52%
- d. 8.37%
- e. 7.58%

7. The total book value of equity of NextGen Corporation is \$5 million and book value per share is \$10. The stock currently sells for \$23.50 per share. The firm's bonds have a par value of \$2.35 million and currently sell at 110% of par. The yield to maturity on the bonds is 9.00% and the firm's tax rate is 38%. What proportion of the firm is financed with debt?

- a. 5.86%
- b. 6.85%
- c. 11.18%
- d. 18.03%
- e. 20.38%

8. What is the WACC for a firm using 55% equity with a required return of 12%, 35% debt with a required return of 8%, and 10% preferred stock with a required return of 10%, and a tax rate of 30%?

- A) 9.42%
- B) 9.56%
- C) 10.40%
- D) 12.05%
- E) 13.33%

9. What proportion of a firm is equity financed if the WACC is 14%, the after-tax cost of debt is 7.0%, the tax rate is 35%, and the required return on equity is 16%?

- A) 54.00%
- B) 63.64%
- C) 70.26%
- D) 77.78%
- E) 82.65%

10. A firm is considering a project that will generate cash flows of \$50,000 per year for ten years beginning immediately. The project has the same risk as the firm's overall operations. If the firm's debt-to-equity ratio is 0.75, its required return on equity is 8% and its required return on debt is 6%, what is the most it could pay (rounding to the nearest dollar) for the project?

Assume the firm pays no taxes.

- A) \$266,667
- B) \$348,918
- C) \$373,830
- D) \$454,167
- E) \$637,800

11. Argo Inc. has 2 million shares of common stock outstanding at a book value of \$2 per share. The stock trades for \$3.50 per share. It also has \$2 million in face value of debt that trades at 90% of par. What is its ratio of Debt to Equity for WACC purposes?

- A) 20.5%
- B) 25.7%
- C) 26.5%
- D) 33.3%
- E) 42.5%

12. YX Inc. has 1 million common shares outstanding that currently trade at \$40 per share. They also have 10,000 bonds with an 8% coupon rate with interest paid annually. Each bond has a face value of \$1,000 and mature in 22 years. The bonds are currently trading at \$1,101.23 per bond. The YX's market risk (beta) is 1.3; tax rate 34%; market risk premium 8.6% and the prevailing risk free rate is 4.5%. Based on the above, what is YX's weighted average cost of capital?

- A) 9.90%
- B) 12.19%
- C) 13.30%
- D) 14.00%
- E) 15.46%

13. Swazi Inc. has an average tax rate of 23% and has pre-tax cost of equity of 14% and after tax debt cost of 4%. The firm's Market Value of Debt to Equity is 0.8. Swazi is in the process of evaluating a project that will earn cash flows of \$15,000 per year (after tax) forever starting in one year. If the project has the same degree of risk as the firm then what is the most the firm can invest in the project today and still earn its required return?

- A) \$107,143
- B) \$156,904
- C) \$166,667
- D) \$187,500
- E) \$199,654

14. The Galveston Corp. wants to achieve a weighted average cost of capital (WACC) of 10%. The firm has an after tax cost of debt of 4% and a before tax cost of equity of 12% and a corporate tax rate of 40%. What is the optimal debt to equity ratio to achieve its target WACC?

- A) 0.19
- B) 0.33
- C) 0.50
- D) 0.67
- E) 0.75

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