30 Cost of Capital Foundational Topics

1. A company's outstanding 20-year, annual-pay 6% coupon bonds are selling for $894. At a tax rate of 40%, the company's after-tax cost of debt capital is closest to:
   (A) 4.2%.
   (B) 5.10%
   (C) 7.00%

2. The cost of capital for preferred stock is estimated as:
   (A) the preferred stock dividend divided by its par value.
   (B) the preferred stock dividend divided by its market price.
   (C) the after-tax preferred stock dividend divided by its market price.

3. A firm has $4 million in outstanding bonds that mature in four years, with a fixed rate of 7.5% (assume annual payments). The bonds trade at a price of $98 in the open market. The firm's marginal tax rate is 35%. Using the bond-yield plus method, what is the firm's cost of equity risk assuming an add-on of 4%?
   (A) 11.50%.
   (B) 13.34%.
   (C) 12.11%.

4. The cost of preferred stock is most appropriately estimated as the preferred dividend divided by the preferred stock's:
   (A) estimated price in the next period.
   (B) current market price.
   (C) par value.

5. The Garden and Home Store recently issued preferred stock paying $2 annual dividends. The price of its preferred stock is $20. The after-tax cost of fixed-rate debt capital is 6% and the cost of common stock equity is 12%. The cost of preferred stock is closest to:
   (A) 11%.
   (B) 9%.
   (C) 10%.

6. Ferryville Radar Technologies has five-year, 7.5% notes outstanding that trade at a yield to maturity of 6.8%. The company's marginal tax rate is 35%. Ferryville plans to issue new five-year notes to finance an expansion. Ferryville's cost of debt capital is closest to:
   (A) 4.9%.
   (B) 4.4%.
   (C) 2.4%.

7. Assume that a company has equal amounts of debt, common stock, and preferred stock. An increase in the corporate tax rate of a firm will cause its weighted average cost of capital (WACC) to:
   (A) rise.
   (B) fall.
   (C) more information is needed.

8. A $100 par, 8% preferred stock is currently selling for $80. What is the cost of preferred equity?
   (A) 8.0%.
   (B) 10.0%.
   (C) 10.8%.

9. A company is planning a $50 million expansion. The expansion is to be financed by selling $20 million in new debt and $30 million in new common stock. The before-tax required return on debt is 9% and the required return for equity is 14%. If the company is in the 40% tax bracket, the weighted average cost of capital is closest to:
   (A) 10.0%
   (B) 10.6%.
   (C) 9.0%.

10. An analyst gathered the following information for ABC Company, which has a target capital structure of 70% common equity and 30% debt:

Expected market return	9.00%
Risk-free rate	4.00%
Tax rate	40%
Beta	0.90
Bond yield-to-maturity	8.00%

ABC's weighted-average cost of capital is closest to:
   (A) 6.9%.
   (B) 7.4%.
   (C) 8.4%.

11. A publicly traded company has a beta of 1.2, a debt/equity ratio of 1.5, ROE of 8.1 %, and a marginal tax rate of 40%. The unlevered beta for this company is closest to:
   (A) 0.632.
   (B) 1.071.
   (C) 0.832.

12. A company has $5 million in debt outstanding with a coupon rate of 12%. Currently the YTM on these bonds is 14%. If the tax rate is 40%, what is the after tax cost of debt?
   (A) 5.6%.
   (B) 7.2%.
   (C) 8.4%.

13. Elenore Rice, CFA, is asked to determine the appropriate weighted average cost of capital for Samson Brick Company. Rice is provided with the following data:
   - Debt outstanding, market value $10 million
   - Common stock outstanding, market value $30 million
   - Marginal tax rate 40%
   - Cost of common equity 12%
   - Cost of debt 8%

   Samson has no preferred stock. Assuming Samson's ratios reflect the firm's target capital structure, Samson's weighted average cost of capital is closest to:
   (A) 10.2%.
   (B) 10.4%.
   (C) 9.8%.

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14. Assume a firm uses a constant WACC to select investment projects rather than adjusting the projects for risk. If so, the firm will tend to:
   (A) accept profitable, low-risk projects and reject unprofitable, high-risk projects.
   (B) accept profitable, low-risk projects and accept unprofitable, high-risk projects.
   (C) reject profitable, low-risk projects and accept unprofitable, high-risk projects.

15. The most accurate way to account for flotation costs when issuing new equity to finance a project is to:
   (A) increase the cost of equity capital by multiplying it by (1 + flotation cost).
   (B) increase the cost of equity capital by dividing it by (1 - flotation cost).
   (C) adjust cash flows in the computation of the project NPV by the dollar amount of the flotation costs.

16. A firm has one actively traded bond issue outstanding, with a 6% coupon and a yield to maturity of 5%. When estimating the firm's weighted average cost of capital (WACC), the appropriate after-tax cost of debt capital should most likely be:
   (A) less than 5%.
   (B) equal to 6%.
   (C) between 5% and 6%.

17. To finance a proposed project, Youngham Corporation would need to issue £25 million in common equity. Youngham would receive £23 million in net proceeds from the equity issuance. When analyzing the project, analysts at Youngham should:
    (A) add the £2 million flotation cost to the project's initial cash outflow.
    (B) not consider the flotation cost because it is a sunk cost.
    (C) increase the cost of equity capital to account for the 8% flotation cost.

18. Which of the following is the least appropriate method for estimating a firm's before-tax cost of debt capital?
    (A) Use the market yield on bonds with a rating and maturity similar to the firm's existing debt.
    (B) Use the coupon rate on the firm's most recently issued debt.
    (C) Assume the firm's cost of debt capital is equal to the yield to maturity on its publicly traded debt.

19. Given the following information about a company's capital structure:

Type of Capital	Percent of Capital Structure	Before-Tax Component Cost
Debt	40%	7.5%
Preferred	5%	11.0%
Common Stock	55%	15.0%

If the company's tax rate is 40%, its weighted average cost of capital is closestto:
    (A) 10.6%.
    (B) 13.3%.
    (C) 7.1%.

20. A firm is planning a $25 million expansion project. The project will be financed with $10 million in debt and $15 million in equity stock (equal to the company's current capital structure). The before-tax required return on debt is 10% and 15% for equity. If the company's tax rate is 35%, what cost of capital should the firm use to determine the project's net present value?
    (A) 12.5%.
    (B) 9.6%.
    (C) 11.6%.

21. When calculating the weighted average cost of capital (WACC) an adjustment is made for taxes because:
    (A) interest on debt is tax deductible.
    (B) dividends paid are taxable to the shareholder..
    (C) dividends paid are tax deductible.

22. DeSoto Corp. 8% coupon bonds have a yield to maturity of 7.5%. The firm's tax rate is 30%. The after-tax cost of debt is closest to:
    (A) 5.3%.
    (B) 5.6%.
    (C) 7.5%.

23. Which of the following statements is most accurate regarding a firm's cost of preferred shares? A firm's cost of preferred stock is:
    (A) the dividend yield on the firm's newly-issued preferred stock.
    (B) the market price of the preferred shares as a percentage of its issuance price.
    (C) approximately equal to the market price of the firm's debt as a percentage of the market price of its common shares.

24. An analyst gathered the following data about a company:

Capital Structure	Required Rate of Return
30% debt	10% for debt
20% preferred stock	11% for preferred stock
50% common stock	18% for common stock

Assuming a 40% tax rate, what is the minimum rate of return the company should require a project to generate?
    (A) 14.2%.
    (B) 10.0%.
    (C) 13.0%.

25. Which of the following is least likely to be useful to an analyst when estimating the cost of raising capital through the issuance of non-callable, nonconvertible preferred stock?
    (A) The firm's corporate tax rate.
    (B) The stated par value of the preferred issue.
    (C) The preferred stock's dividend rate.

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26. A financial analyst is estimating the effect on the cost of capital for a company of a decrease in the marginal tax rate. The company is financed with debt and common equity. A decrease in the firm's marginal tax rate would:
    (A) decrease the cost of capital because of a lower after-tax cost of debt and equity.
    (B) increase the cost of capital because of a higher after-tax cost of debt and equity.
    (C) increase the cost of capital because of a higher after-tax cost of debt.

27. Which of the following is least likely to be useful to an analyst who is estimating the pretax cost of a firm's fixed-rate debt?
    (A) The coupon rate on the firm's existing debt.
    (B) The yield to maturity of the firm's existing debt.
    (C) Seniority and any special covenants of the firm's anticipated debt.

28. The after-tax cost of preferred stock is always:
    (A) higher than the cost of common shares.
    (B) equal to the before-tax cost of preferred stock.
    (C) less than the before-tax cost of preferred stock.