**Topic 9 Knowledge Check**

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| Points: | 28 |

Started on Jun 21 at 22:14

Your Submission:

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1. Bookmark question for later

A company has 100,000 $1,000 face value bonds outstanding that are currently priced at $925 each.  These bonds have 25 years until maturity and pay a 6% annual coupon rate (coupons are paid semiannually).  If the company has a marginal tax rate that is 34%, what is the company’s after tax cost of debt? (Round to the nearest hundredth: .00)



1. Bookmark question for later

If market interest rates increase, then a firm’s cost of capital will likely increase.

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| TrueFalse |
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1. Bookmark question for later

Suppose a company is valued by the market at $135 billion and is financed with both debt and equity.  Currently, the company has a market value of equity of $47 billion.  The company also has a market value of short-term debt of $40 billion and a market value of long-term debt of $48 billion.  The cost of equity is 13.4%, the cost of short-term debt is 6.8% and the cost of long-term debt is 8.2%.  If the marginal tax rate is 40%, what is the weighted average cost of capital? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a firm is looking to calculate the cost of common equity using the Capital Asset Pricing Model.  The company has a beta of 1.3. Market returns are expected to be 14.5% and the risk free rate is 3%.  Given this information, what is the cost of common equity in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a small company is determining whether to invest in new computing equipment to enhance R&D.  The total cost of the investment is $7 million.  The market value of common equity makes up 45% of the total market value of the firm.  The market value of preferred equity makes up 15% of the total market value of the firm.  The market value of debt makes up 40% of the total market value of the firm. The company has a marginal tax rate of 34%.

* + **Bonds:**  The current trading price of the companies bonds is $857.  They expect to issue 10-year, $1,000 face value bonds that have an annual coupon rate of 7.5%.
  + **Common Stock:**  The company’s beta is 1.5.  The market risk premium is 11% and the expected return on the market is 15%.
  + **Preferred Stock:** The company anticipates issuing new shares of preferred stock that pays a perpetual dividend yield of 10.5% per year.

Given this information, what is the WACC? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A firm just announced a new preferred stock issue.  The preferred dividend, which will be paid in perpetuity, is expected to be $2.  The return required by shareholders is 9.5%.  What is the cost of preferred equity in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A company is planning to issue a new $1,000 face value bond that will mature in 15 years.  The bond will be priced at 101% of face value and the annual coupon rate is 8%.  Flotation costs are expected to sum to 3%.  What is the before-tax cost of debt in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a company is valued by the market at $60 million and is financed with both debt and equity.  Currently, the company has a market value of equity of $10 million.  The company also has a market value of short-term debt of $15 million and a market value of long-term debt of $35 million.  The cost of equity is 17%, the cost of short-term debt is 9% and the cost of long-term debt is 11%.  If the marginal tax rate is 34%, what is the weighted average cost of capital? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a company is valued by the market at $100 million and is financed with both debt and common equity.  Currently, the company has a market value of equity of $50 million, of which the company is financed with $10 million of internal equity and $40 million of external equity.  The company also has a market value of short-term debt of $25 million and a market value of long-term debt of $25 million.  The cost of equity is 15%, the cost of short-term debt is 7% and the cost of long-term debt is 8%.  Further, flotation costs on the external equity have summed to 4%.  If the marginal tax rate is 40%, what is the weighted average cost of capital? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a firm is looking to calculate the cost of common equity using the arithmetic mean return for the company’s stock over the past six years.  The company reported returns of 13.5%, 15.4%, 8.4%, 19.1%, 22.1%, and 4.3% over the last six years.  Given this information, what is the cost of common equity in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A company has 100,000 $1,000 face value bonds outstanding that are currently priced at 95% of face value.  What is the market value of the company’s debt?



1. Bookmark question for later

Suppose a company is valued by the market at $60 million and is financed with both debt and common equity.  Currently, the company has a market value of equity of $20 million, of which the company is financed with $7 million of external equity and $13 million of internal equity.  The company also has a market value of short-term debt of $15 million and a market value of long-term debt of $25 million.  The cost of equity is 14%, the cost of short-term debt is 9% and the cost of long-term debt is 10.5%.  Further, flotation costs on the external equity have summed to 3%.  If the marginal tax rate is 34%, what is the weighted average cost of capital? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A firm that has greater volatility in its stock price is likely to have a lower cost of capital.

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| TrueFalse |
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1. Bookmark question for later

Suppose a company has a before tax cost of debt of 10%, cost of common equity of 22%, cost of preferred equity of 15%, and a marginal tax rate of 40%.  Also assume that the fraction of the firm’s total market value that is made up from debt is .45, made up from common equity is .35, and made up from preferred equity is .20.  What is the firm’s WACC? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a company is financed with 100% debt.  Of the company’s debt, 67% is made up of long-term debt.  The yield on the company’s short-term debt is 8% and the yield on the long-term debt is 10.2%.  If the marginal tax rate is 34%, what is the weighted average cost of capital? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A firm just announced a new preferred stock issue.  The preferred dividend, which will be paid in perpetuity, is expected to be $4.10.  The price per share of preferred stock is expected to be $37.  Given this information, cost of preferred equity in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A company is planning to issue new equity in order to raise capital.  The company has a beta of 1.5.  Returns on the market are expected to be 14% and the market risk premium is expected to be 11%.  If flotation costs sum to 4%, what is the cost of common equity? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A company has 50,000 $1,000 face value bonds outstanding that are currently priced at 92% of face value.  These bonds have 10 years until maturity and pay a 9% annual coupon rate.  If the company has a marginal tax rate that is 34%, what is the company’s after tax cost of debt? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A firm just announced a new preferred stock issue.  The preferred dividend, which will be paid in perpetuity, is expected to be $10.  The price per share of preferred stock is expected to be $94.  Given this information, what is the cost of preferred equity in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A company is planning to issue a new $1,000 face value bond that will mature in 20 years.  The price of the bond is expected to be equal to the face value and the annual coupon rate is 7.5%.  Flotation costs are $12 per bond. How much higher is the before tax cost of debt when accounting for flotation costs? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Suppose a firm is looking to calculate the cost of common equity using the Capital Asset Pricing Model.  The company has a beta of 1.6. Market returns are expected to be 12% and the risk free rate is 3.5%.  Given this information, what is the cost of common equity in percent? (Round to the nearest hundredth: .00)



1. Bookmark question for later

A company doesn’t carry any debt on its balance sheet.  The company is completely financed with common equity.  The company has a beta of 1.5.  Expected returns on the market are 15%, and the risk free rate is 3.5%.  Given this information, what is the WACC? (Round to the nearest hundredth: .00)



1. Bookmark question for later

Common stock is valued at $400,000; long-term debt is valued at $250,000; and preferred stock is valued at $50,000. What is the WACC where common stock costs .16, long-term debt costs .08, and preferred stock costs .07?  The tax rate is 40%.

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| * + .1495   + .0942   + .1135   + .1275 |
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1. Bookmark question for later

Common stock is valued at $1,000,000 and costs .20. Bonds are valued at $850,000 and cost .04. Preferred stock is valued at $500,000 and costs .06. The tax rate is 40%. What is the pre-tax WACC?

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| * + .1229   + .1015   + .1124   + .1404 |
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1. Bookmark question for later

Capital is valued at $3,000,000 consisting of $1,600,000 of common stock, $1,000,000 of bonds, and $400,000 of short-term debt. CAPM expected return is .135. Bonds before tax are .045. Short term debt costs .065. What is the after tax WACC if the tax rate is 35%?

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| * + .0991   + .0874   + .1007   + .0784 |
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1. Bookmark question for later

If a company has a capital structure of $100,000 common stock, $50,000 bonds, and $10,000 preferred stock, and the respective rates are 15% common stock, 3% bonds (after tax), and 4% preferred stock, what is the weighted average cost of capital?

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| * + .1057   + .1128   + .2200   + .0733 |
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1. Bookmark question for later

If a company has a capital structure of $5,000,000 common stock with a cost of 17%, $2,000,000 bonds at 4%, $1,000,000 of short term debt with a cost of 7%, and $2,000,000 preferred stock with a cost of 3%, what is the weighted average cost of Capital? The company has a 40% tax rate.

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| * + .1000   + .1196   + .1322   + .0899 |
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1. Bookmark question for later

If a company has a capital structure of internal equity of $15,000,000 at 15%, a new offering of external equity of $5,000,000 at 17% with flotation costs of 3%, and $10,000,000 of bonds at 5% after tax, what is the weighted average cost of capital?

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| * + .1209   + .1250   + .1632   + .1025 |
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