Multiple Choice Questions

Q8.1. A large European, debt-free company has an estimated equity beta of 1.4. The risk-free rate and the market risk premium in the company's home country are 4 percent and 5 percent, respectively. This company's cost of equity is

A. 5 percent
B. 9 percent
C. 11 percent
D. 12 percent

Q8.2. Some researchers argue that the firm size effect on the cost of equity capital has disappeared. This would imply that

A. The cost of equity capital of small firms is no longer systematically lower than that of large firms.
B. The equity beta of small firms is no longer systematically greater than that of large firms.
C. The equity beta of small firms is no longer systematically lower than that of large firms.
D. None of the above

Q8.3. Company A's market values of debt and equity are €150 and €200, respectively. The company has a statutory and effective tax rate of 30 percent, an equity beta of 1.5 and an infinitely low probability of bankruptcy. Based on this information, company A's business asset beta is

A. 0.86
B. 0.98
C. 1.01
D. 2.29

Q8.4. Company B's current equity beta, debt beta, and cost of equity are 1.6, 0 and 12 percent, respectively. The current (and expected future) tax rate and risk-free rate are 35 percent and 4 percent, respectively. Company B currently has a debt-to-equity ratio of 50 percent. The company plans to increase its debt-to-equity ratio to 100 percent (leaving its debt beta unchanged). After this increase in leverage, company B's cost of equity will be

A. 10.04 percent
B. 12.00 percent
C. 13.96 percent
D. 20.00 percent

Q8.5. Company C's cost of equity and cost of debt are 12 and 8 percent, respectively. The current tax rate is 40 percent. Company C has a debt-to-equity ratio of 50 percent. Company C's weighted average cost of capital is

A. 8.40 percent
B. 9.60 percent
C. 10.00 percent
D. 10.67 percent

Q8.6. An analyst produces the following series of annual dividend forecasts for company D: Expected dividend (end of) year t+1 = €10; Expected dividend (end of) year t+2 = €20; Expected dividend (end of) year t+3 = €10. The analyst further expects that company D's dividends will grow indefinitely at a rate of 2 percent after year t+3. Company D's cost of equity equals 10 percent. Under these assumptions, the analyst's estimate of company D's equity value at the end of year t is

A. €128.93
B. €120.22
C. €108.26
D. €36.36

Q8.7. An analyst produces the following set of forecasts for company E:

	Year t+1	Year t+2	Year t+3
Profit or loss	€100	€120	€60
Ending book value of business assets	€1,030	€1,060	€1,000
Ending book value of debt	€720	€740	€800

At the end of year t, company E's book values of business assets and debt are €1,000 and €700, respectively. The analyst expects that after year t+3, company E will reach a competitive equilibrium, i.e., will earn zero abnormal profit. Company E's cost of equity is 10 percent. Under these assumptions, the analyst's estimate of company E's equity value at the end of year t is

A. €307.96
B. €443.20
C. €458.23
D. €507.96

Q8.8. An analyst produces the following set of forecasts for company F:

	Year t+1	Year t+2	Year t+3
Profit or loss	€100	€100	€100
Dividend payout ratio	50%	50%	50%

At the end of year t, the book value of company F's equity is €500. Company F has no debt and its cost of equity is 10 percent. The analyst expects that in and after year t+4, company F will earn abnormal profits on the revenue it had in year t+3, but earn zero abnormal profit on incremental revenues beyond that level. Under these assumptions, the analyst's estimate of company F's equity value at the end of year t is

A. €642.75
B. €885.90
C. €913.22
D. €1,012.70

Q8.9: Consider the following information about company G's performance and financial position in year t and t+1:

- Profit or loss year t = €60; profit or loss year t+1 = €80
- Beginning book value of equity year t = €900
- Dividend year t = €20; dividend year t+1 = €50
- Cost of equity = 10 percent

The valuation date is the first day of year t+1. If an analyst assumes that company G's abnormal profits will be zero in year t+2 and beyond, her estimate of the company's terminal (equity) value (measured at the end of year t+2) under the abnormal profit growth valuation method is

A. €0
B. €14
C. (€140)
D. €140

Q8.10: Consider the following information about company G's performance and financial position in year t and t+1:

- Profit or loss year t = €60; profit or loss year t+1 = €80
- Beginning book value of equity year t = €900
- Dividend year t = €20; dividend year t+1 = €50
- Cost of equity = 10 percent

The valuation date is the first day of year t+1. If an analyst assumes that company G's abnormal profits will remain constant in year t+2 and beyond, her estimate of the company's terminal (equity) value under the abnormal profit growth valuation method is

A. €0
B. €14
C. (€140)
D. €140

Q8.11: The value of Company K's net operating assets equals €545 million, the value of its investment assets equals €45 million, the present value of its tax shield on debt equals €64 million, and the value of its debt equals €245 million. This implies that the value of Company K's equity is

A. €899 million
B. €409 million
C. €345 million
D. €300 million

Q8.12: Consider the following statements:

Statement I: "An (indirect) asset-based approach to valuing equity always produces the same equity value estimate as a (direct) equity-based approach to valuing equity."

Statement II: "An (indirect) asset-based approach to valuing equity is more accurate than the equity-based approach if (a) discount rates are held constant but (b) leverage is expected to change significantly over the forecast horizon."

A. Only statement I is true
B. Only statement II is true
C. Both statements are false

Answers:

Q8.1: C,
Q8.2: D,
Q8.3: B,
Q8.4: C,
Q8.5: B,
Q8.6: A,
Q8.7: C,
Q8.8: C,
Q8.9: D,
Q8.10: A,
Q8.11: B,
Q8.12: B