

Multiple Choice Questions

Q7.1. An analyst produces the following series of annual dividend forecasts for company A:

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 A's dividends will be zero after year $t+3$. Company A's cost of equity equals 10 percent. Under these assumptions, the analyst's estimate of company A's equity value at the end of year t is

- A. €31.16
- B. €33.13
- C. €36.36
- D. €40

Q7.2. An analyst predicts that company B's dividend at the end of year $t+1$ will equal €10. The analyst further expects that after year $t+1$ company B's dividends will grow indefinitely at a rate of 2 percent. Company B's cost of equity equals 7 percent. Under these assumptions, the analyst's estimate of company B's equity value at the end of year t is

- A. €100.00
- B. €111.11
- C. €142.86
- D. €200.00

Q7.3. An analyst produces the following set of forecasts for company C:

	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 C's book values of business assets and debt are €1,000 and €700, respectively. The analyst expects that after year $t+3$ profit or loss will be €0 and the book values of business assets and debt will remain constant (i.e., at their year $t+3$ levels). Company C's cost of equity is 10 percent. Under these assumptions, the analyst's estimate of company C's equity value at the end of year t is

- A. €228.17
- B. €321.94
- C. €307.96
- D. €345.45

Q7.4. An analyst produces the following set of forecasts for company D:

	Year $t+1$	Year $t+2$	Year $t+3$
NOPAT	€250	€220	€100
Ending book value of net operating assets	€800	€860	€800

At the end of year t , the book value of company D's net operating assets is €900 and the market value of its net debt is €300. Company D has no investment assets. The analyst expects that after year $t+3$ NOPAT will be €0 and the book value of net operating assets will remain constant (i.e., at its year $t+3$ level). Company D's WACC is 8 percent. Under these assumptions, the analyst's estimate of company D's equity value at the end of year t is

- A. €288.26
- B. €368.67
- C. €499.48
- D. €588.26

Q7.5. Consider the following statement: "The abnormal profit growth valuation model differs from the free cash flow and abnormal profits valuation models in that it is not mathematically equivalent to the dividend discount model." This statement is

- A. True
- B. False

Q7.6. Consider the following statement: "The discounted abnormal NOPAT growth model defines the value of net operating assets as the sum of the capitalized next-period NOPAT forecast and the present value of forecasted NOPAT beyond the next period." This statement is

- A. True
- B. False

Q7.7: Consider the following information about company E's performance and financial position in year t:

- Profit or loss = €50
- Beginning book value of business assets = €300
- Beginning book value of equity = €90
- Cost of equity = 10 percent

Company E's abnormal earnings in year t are

- A. €50
- B. €45
- C. €41
- D. €20

Q7.8. Consider the following statement: "A disadvantage of the abnormal profits valuation model is that it produces lower equity value estimates for firms that use conservative accounting policies (such as accelerated depreciation) than for firms that use aggressive accounting policies (such as straight-line depreciation)." This statement is

- A. True
- B. False

Q7.9. 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 year t+4, company F will liquidate all its assets at their book values and pay out the proceeds to its equity holders. Under these assumptions, the analyst's estimate of company F's equity value at the end of year t is

- A. €112.70
- B. €249.69

- C. €612.70
- D. €1056.66

Q7.10: 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

Company G's abnormal profit growth in year t+1 is

- A. (€70)
- B. €16
- C. €20
- D. €30

Q7.11. Company H's current return on (beginning) equity is 12 percent. An analyst assumes that the company's ROE will grow indefinitely at a rate of 2 percent. Company H's cost of equity is 10 percent. Under these assumptions, the analyst's estimate of company H's equity value-to-book multiple is

- A. 1.00
- B. 1.10
- C. 1.12
- D. 1.25

Q7.12. In the current year, company I's profit or loss is €20, its beginning book value of equity is €100, and its ending book value of equity is €110. An analyst predicts that company I's next year's profit or loss will be €50. The analyst further assumes that company I's cost of equity is 10 percent and its abnormal profit growth follows the following process:

Abnormal profit growth in year t+1 = 0.5 x abnormal profit growth in year t

Under these assumptions, the analyst's estimate of company I's equity value is

- A. 500.00
- B. 515.83
- C. 741.67
- D. 2590.00

Q7.13. Consider the following information about three industry peers:

	ROE	Price-to-book ratio	Price-earnings ratio
Peer 1	20%	0.2	5
Peer 2	10%	1	10
Peer 3	25%	1	5

Which of the following statements about these industry peers is correct?

- A. Investors expect that the return on equity of the currently best performing peer is not sustainable in the future.
- B. Investors expect that the return on equity of the currently worst performing peer will improve in the future.

- C. Investors expect that peer 1's future abnormal profit growth will be positive.
- D. Statements A and C are correct.
- E. None of the above statements is correct.

Q7.14. Consider the following statement: "The equity value-to-book ratio is a function of (a) future returns on equity, (b) future book value of equity growth rates, and (c) the cost of equity." This statement is

- A. True
- B. False

Answers:

- Q7.1: B,
- Q7.2: D,
- Q7.3: C,
- Q7.4: A,
- Q7.5: B,
- Q7.6: A,
- Q7.7: C,
- Q7.8: B,
- Q7.9: C,
- Q7.10: B,
- Q7.11: D,
- Q7.12: C,
- Q7.13: A,
- Q7.14: A