

FN 201 Business Finance

Semester 2/2014 Saturday, 1.00 – 4.00 PM

Quiz 3: Stock valuation and investment rules

Name.....Student ID.....

1. Nielson Motors has a share price of \$25 today. If Nielson Motors is expected to pay a dividend of \$0.75 this year, and its stock price is expected to grow to \$26.75 at the end of the year, then Nielson's dividend yield and equity cost of capital (return on stock) are:
 - a. 3.0% and 7.0% respectively.
 - b. 3.0% and 10.0% respectively.
 - c. 4.0% and 6.0% respectively.
 - d. 4.0% and 10.0% respectively.

2. JRN Enterprises just announced that it plans to cut its dividend from \$2.50 to \$1.50 per share and use the extra funds to expand its operations. Prior to this announcement, JRN's dividends were expected to grow at 4% per year and JRN's stock was trading at \$25.00 per share. With the new expansion, JRN's dividends are expected to grow at 8% per year indefinitely. Assuming that JRN's risk is unchanged by the expansion, the value of a share of JRN after the announcement is closest to (round up to the nearest dollar):
 - a. \$16
 - b. \$25
 - c. \$28
 - d. \$31

3. Use the following information

Company	Price per Share	EPS	Book Value per Share
Abbott Labs	54.35	3.69	13.79
Bristol-Myers-Squibb	25.45	1.93	7.33
GlaxoSmithKline	41.3	3.15	6.03
Johnson & Johnson	62.6	4.58	18.27
Merck	36.25	3.81	10.86
Pfizer	\$18.30	\$1.20	8.19

- Assuming that Novartis AG (NVS) has an EPS of \$3.35, based upon the average P/E ratio for its competitors, Novartis' stock price is closest to:
- a. \$13.00
 - b. \$31.86
 - c. \$43.47
 - d. \$44.35

4. Suppose that Texas Trucking (TT) has earnings per share of \$3.45 and EBITDA of \$45 million. TT also has 5 million shares outstanding and debt of \$150 million (net of cash). You believe that Oklahoma Logistics and Transport (OLT) is comparable to TT in terms of its underlying business, but OLT has no debt. OLT has a P/E of 12.5 and an enterprise value to EBITDA multiple of 7.

Based upon the enterprise value to EBITDA ratio, the value of a share of Texas Trucking is closest to:

- a. \$33.00
 - b. \$82.50
 - c. \$43.10
 - d. \$21.25
5. Sarah Palin reportedly was paid \$11 million in advance to write her book *Going Rogue*. The book took one year to write. In the time she spent writing, Palin could have been paid to give speeches and appear on TV news as a political commentator. Given her popularity, assume that she could have earned \$8 million over the year (paid at the end of the year) she spent writing the book. Assume that she was unable to fulfill her media commitments of appearing on TV news as a political commentator or give speeches while she was writing the book.

Assume that once her book is finished, it is expected to generate royalties of \$5 million in the first year (paid at the end of the year) and these royalties are expected to decrease by 40% per year in perpetuity. Assuming that Palin's cost of capital is 10% and given these royalties payments, the NPV of Palin's book deal is closest to:

- a. \$3.73 million
 - b. \$12.20 million
 - c. \$13.00 million
 - d. \$13.73 million
6. You are considering investing in a start up project at a cost of \$100,000. You expect the project to return \$500,000 to you in seven years. Given the risk of this project, your cost of capital is 20%. The IRR for this project is closest to:
- a. 15.60%
 - b. 18.95%
 - c. 20.00%
 - d. 25.85%

7. Use the following information for question 7 and 8:

Project	Year 0 CF	Year 1 CF	Year 2 CF	Year 3 CF	Year 4 CF	Discount Rate
A	-100	40	50	60	N/A	.15
B	-73	30	30	30	30	.15

Which of the following statements is correct?

- You should accept project A since its IRR > 15%.
 - You should reject project B since its NPV > 0.
 - You should accept project A since its NPV < 0.
 - You should accept project B since its IRR < 15%.
8. Use the information of Project A and B from question 7
- The profitability index for project A is closest to:
- 0.12
 - 21.65
 - 0.17
 - 1.12
9. Which of the following statements is FALSE?
- The profitability index measures the value created in terms of PV per unit of resource consumed.
 - The profitability index is the ratio of value created to resources consumed.
 - When there is a conflict between IRR and NPV, IRR decision rules should be followed.
 - MIRR overcomes the shortcoming of multiple IRRs.
10. Indicate True/False and give a short explanation on the following statement
- NPV is positive only for discount rates greater than the internal rate of return.
 - In accordance to Profitability Index (PI) rule, firm should accept the project when PI is greater than zero.