Session 33: Post Class tests

1. Publicly traded companies often accumulate cash that is usually invested in riskless, liquid securities that yield low returns. Which of the following is a good reason for punishing companies that hold cash (by discounting the cash)?
    a. The cash earns a lower rate of return than the cost of equity
    b. The cash earns a lower rate of return than investments in operating assets
    c. Investors can earn a higher return on the cash, if it was returned to them.
    d. The company has a good track record on operating investments and you are afraid that the company will not invest the cash
    e. The company has a bad track record on operating investments and you are afraid that the company will invest the cash
2. Pagano Holdings is a publicly traded company with a 10% minority holding in Gigante Enterprises. You have discounted Pagano's free cash to the firm back at Pagano's cost of capital and arrived at a value of $250 million for Pagano's equity. Assume that Gigante Holdings has an aggregate book value of equity of $100 million and that you estimate the "intrinsic" value of its equity to be $200 million. Estimate the value of equity for Pagano Holdings.
    a. $250 million
    b. $260 million
    c. $240 million
    d. $270 million
    e. $230 million
3. Nowitzki Inc. is a publicly traded company that owns 60% of Bowden Inc, another publicly traded firm. You have valued the operating assets of Nowitzki by discounting the cash flows (from Pagano's consolidated financials) at the cost of capital to arrive at a value of $1 billion for the operating assets. Nowitzki reports debt of $200 million and cash of $100 million on its consolidated balance sheet. While Nowitzki also shows a minority interest of $120 million on the balance sheet, you believe that the intrinsic value of all of Bowden's equity is closer to $500 million. Estimate the value of equity for Nowitzki.
    a. $700 million
    b. $1.1 billion
    c. $880 million
    d. $1,120 million
    e. $ 600 million
4. You have finished a discounted cash flow valuation of a company, discounting free cash flows to the firm at the cost of capital to arrive at a value of $ 2 billion. You have also valued individual assets on the company's balance sheet. Which of the following assets would you add to your estimated value to arrive at the value of the overall business?
    a. Goodwill of $500 million
    b. Brand name value of $ 300 million
    c. Value of property, plant & equipment (manufacturing facilities) of $ 600 million

    d. Value of real estate (headquarters building) of $200 million
    e. None of the above
5. You have just completed a discounted cash flow valuation of Rallye Inc. a publicly traded company, and have estimated a value of $500 million for the equity in the company. The company has 100 million shares trading at $5 a share, and 25 million employee options with an exercise price of $5/share. You value the employee options in Rallye Inc., using an option-pricing model and arrive at a value of $1.00 for each option. What is the value of equity per share, if you decide to use the "option value" approach?
    a. $5/share
    b. $4.75/share
    c. $3.80/share
    d. $4.20/share
    e. None of the above

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1. **d. The company has a bad track record on operating investments and you are afraid that the company will invest the cash.** Cash earns a low rate of return, but it is a fair rate of return. So, it is neither a value destroyer not does it create value. It is your concern that it may be "wasted" by investing a project/business where you earn less than the cost of capital that triggers the discount..
2. **d. $270 million.** Since this is a minority holding, it is not reflected in your current operating income, cash flow or value of $250 million. You have to add the estimated market value of this holding to your value:
    - Estimated market value of holding = 10% of $200 m = $20 m
    - Estimated value of Pagano = $250 m + $20 m = $270 m
3. **a. $700 million.** To get to the value of equity, you need to add cash, subtract out debt and subtract out the estimated market value of the "minority" interest in the consolidated subsidiary.
    - Value of equity = 1000+ 100 – 200 - .4(500) = $ 700 m
    - Optimally, you would have liked to value the parent company as a stand-alone entity but you don't have that information.
4. **e. None of the above.** All of these assets contribute to generating the cash flows that you have discounted to arrive at your value of $ 2 billion. Adding them on to that value would be double counting.
5. **b. $4.75.** To compute the value per share, you first net out the option value of the employee options from the DCF value of equity, and then divide by the actual number of shares outstanding.
   Value per share = (500 – 25*$1)/ 100 = $4.75/share