

## Exam SFM 15-01-2015

**Deel Jongbloed:** 

#### True/False:

- Williams Act enables a long, protracted takeover battle (True)
- Sherman Act prohibits mergers that tend to create monopoly/market control (True)
- Hart-Scott-Rodino Act, regulates antitrust after a merger (False, premerger notification)
- For targets, the CAR cash is lower than the CAR stock (False, the other way around because of tax advantages).

#### Multiple Choice: (3grds-correction)

- Colar can exist out of
- a) Cash & stock
- b) Cash
- c) Stock
- d) Cash, Stock & Debt
- Takeover of Unrelated activities most likely in
- a) U-form
- b) H-form
- c) M-form
- d) V-form
- Management entrenchment
- a) Increases target's return, increases bidder's return
- b) Increases target's return, decreases bidder's return
- c) Decreases target's return, increases bidder's return
- d) Decreases target's return, decreases bidder's return

#### Open questions:

• If you were company X and you would like to takeover company Y (related activity high-tech optical sensors), what would be the best strategy if you know that Y already has indicated that it wants to stay independent and company Z has also showed some interest. Plus you know that the industry you are active in is one with large growth perspectives.

?

• Similar valuation exercise as in class concerning Wacc

Given: Revenue 2015- 6 mio, 2016- 8 mio, 2017- 10 mio, perpetuity 11 mio > no growth Cost 70% revenue - Depreciation 0% - Tax 40% - Investment 10% for the first three years. B/VI =0.3 beta levered=1.5 rf=0,03 rm=0.08 kb=0.06 - 1 MIO shares outstanding

Calculate the current stock price.

Calculate FCF as if 100% equity financed (so not looking for interest payments nor adding a tax shield), then calculate NPV at Wacc (this will include tax advantages).
Do not forget to calculate your terminal value AND discount it at Wacc !



#### Deel Dewaelehyns:

### True/False: (9grds – 6 questions)

- Debtholders have the residual claim on a firm's cashflows (False, shareholders)
- A problem with tracking stocks is that it increases the conglomerate discount (False, advantage decreases conglomerate discount)
- Because LBO(or lev recap) increases the involvement of debtholders, the agency costs will increase. (False, more insider ownership so increased performance > results in more alignment and less agency costs)
- If the parent company has bad financial health then a spin-off will be more likely than a carve-out. (False, carve out might increase external cash funds through IPO)
- Voluntary liquidation is more likely when insiders own a large stake in shares. (True)
- After LBO(or lev recap), a great part of wealth is created because much less taxes have to be payed to the government.

Not sure of the answer > interest tax shield after LBO BUT after SIPO (or other exit) there are lots of taxes on capital gains.

#### Multiple Choice: (5grds ? not sure)

- What is the smallest threath to your credit risk ?
- a) Leveraged recap
- b) Dual stock recap
- c) Open market repurchase
- d) Leveraged buy-out
- With a FTPO, which statement is correct?
- a) Non-tendering shareholders create most wealth but tendering shareholders get more return.
- b) Non-tendering shareholders create most wealth therefore get most return.
- c) Tendering shareholders create most wealth therefore get most return.
- d) Tendering shareholders create most wealth but non-tendering shareholders get more return.

# Not sure, I think it is the first... otherwise, why would shareholders even consider tendering if their return is higher when not tendering?

- Which company is less likely to become a take-over target (LBO/lev recap/...)?
- a) A high-tech company in Italy (risky + civil law)
- b) A high-tech company in Sweden
- c) A burger restaurant in Italy
- d) A burger restaurant in Sweden
- Which company is less likely to become a take-over target?
- a) A firm with low leverage ratio
- b) A firm with high growth of sales
- c) A firm with low valuation
- d) A small firm



- Merger arbitrageurs will decide to take on a deal when his:
- a) Probability of failure bigger than market concensus
- b) Probability of failure equal to market concensus
- c) Probability of failure lower than market concensus
- d) Probability of failure does not matter.

#### Open questions: (Texaco 3 grds, Wacc? grds)

- A 100% equity financed firm has a freecashflow of 400 MIO with an equity cost of 11%. It's current stocks are trading at a 25% discount on the market. There are 140 MIO shares, insiders (management and family) own about 35% of the shares, the rest is for outsiders (personel).
  - a) What is the current market price of a share?

# Calculate the firm value without discount = intrinsic value. Deduct the discount and divide by number of shares.

b) What is, according to the undervaluation model, the maximum price at which the firm will be willing to repurchase its shares.

#### Ke/1-undervaluation = return on share price > return \* value of shares.

c) Suppose the firm is willing to repurchase 20MIO by issuing TPR. How many of these rights will the insiders receive and how many will the outsiders receive? What is the percentage of insider ownership after the repurchase if the insiders sell none of their shares.

### (20/140) = 1/7, 1 TPR per 7 shares

- Texaco has the following returns for an [-3;+3] window, as does the FTSE 100 stock price index. (table given with returns precalculated). Texaco is planning an exchange offer where it offers debt for preferred stock.
  - a) If the average return of Texaco in the clean period is -0.06% with a standard deviation (given but don't remember). The estimated alpha is 0.002 and the beta is 1.210. Calculate the abnormal return using the mean adjusted method and the market model method.
  - b) Calculate the CAR for a [-1;+1] event window, using the market model method.
  - c) Are your calculations as you expected do they measure up to the empirical evidence about abnormal returns?

According to the theories, when someone trades "equity" for debt, the AR should be negative because the investors might perceive this as weak and are afraid this might cause a FCFproblem.