**ASSIGNMENT QUESTIONS: “Midland Energy”**

**Quiz Questions**

1. what is the case about question?
   1. What’s a WACC and what is it used for?
2. What are some of the uses of the wacc?
   1. Share repurchase & performance evaluation
3. Which model does he use to calc equity?
   1. CAPM

Actual project

- 3 WACC

EVA= Economic value added= NOPAT – WACC (CAP Inv)

* Not used in this case but its good to learn.

Find Beta of petro chem

* Bc= W1B1 + W2B2 + W3B3
* Betas are levered, have to go back and make them unlevered.
* Weights? They use sales weighted approach, prof would use assets, whichever one we use (sales or assets) he will count it right.

For corporate; Given Beta corporate levered= 1.25 & (D/V)target=42.2%

* Cannot use both one is looking back and the other is looking forward e.g. leveraged current Beta and (D/V)target.
* (D/V)current=> calc this and you can use the levered corporate Beta
* Conversely you can compute the levered target beta if you are using the (D/V)target,

Net Debt= Current portion of long term debt + long term debt – cash & cash equivalents – restricted cash

1. How are Mortensen’s estimates of Midland’s cost of capital used? How, if at all, should these anticipated uses affect the calculations?

2. Calculate Midland’s corporate WACC. Be prepared to defend your specific assumptions about the various inputs to the calculations. Is Midland’s choice of EMRP appropriate? If not, what recommendations would you make and why?

3. Should Midland use a single corporate hurdle rate for evaluating investment opportunities in all of its divisions? Why or why not? No

4. Compute a separate cost of capital for the E&P and Marketing & Refining divisions. What causes them to differ from one another?

5. How would you compute a cost of capital for the Petrochemical division?

SUGGESTION: review topics such as the CAPM model, WACC, levered and unlevered betas, risk premiums and capital structure.