Corporate Financial Policies (GBUS 842)

Corporate Financial Policies extends the corporate finance topics that were introduced in the first year course: Financial Management and Policies. The objective of the course is to become familiar with the various aspects normally attributed to a chief financial officer of a corporation. Topics include: enterprise risk management, resource allocation, dividend policy, raising external funds, determination of the cost of capital, evaluating investment opportunities and the design of management compensation.

A summary of the enterprise risk management module follows.

1. Risk Management Warm-up Exercises

As we begin thinking about risk management tactics and strategies for the enterprise, you will need to refresh your technical skills in financial instruments used for hedging (futures and options). In addition, you will benefit from immersing yourself into the debate as to whether there is value to hedging and risk management in general.

The problems from Brealey, et al will refresh your technical skills and the Froot, et al article will give you a solid foundation for thinking about risk management from a strategic viewpoint.

Reading:
- Brealey, Myers, and Allen Chapter 27

Problems:
- Please Prepare problems from Brealey, Myers, and Allen Chapter 27: 1, 4, 12, 17, 19
- Using data in Option_Pricing_Exercises.xls and the option pricing model in Bscholes.xls, please perform the following:

1. Using the weekly stock prices in the data file, estimate the standard deviation of returns for each firm. To do so you should first convert the prices into a percent return for each week, then use the Excel function STDEV to compute the standard deviation. To change this weekly deviation to an annualized volatility, you will need to multiple by the square root of 12. Report these estimates for the three companies.
2. Use the constant yield version of the Black-Scholes formula to value 3, 6 and 9 month call options on each of the stocks: Amazon, Microsoft and Walmart. Use interest rate information in data file; the estimated annual standard deviation for volatility; and individual dividend yield information as appropriate. For the exercise price (strike price) you should use the following: AMZN: $85; MSFT: $25 and WMT: $50. Report the 3 call option estimates for each of the three companies.

3. Compare your estimate of the call price with the traded call options with the same maturity and strike price. If the prices differ from your estimate, change the volatility until you get the quoted price for the option. Report the average “implied” volatility across the three call options for each of the companies.

4. How do you interpret the implied volatility?

2. Hedging Strategy for Commodity Risk (J&L Railroad (UVA-F-1053))

Study Questions:

1. Should J&L hedge all of its exposure to diesel fuel for the ensuing year? What percentage of the 210 million gallons would you hedge?

2. What are the pros and cons of using NYMEX contracts versus using the risk-management products offered by KCNB? Is the use of a monthly average price a net advantage or disadvantage to J&L? What about the bank?

3. Using the estimate of 17.5 million gallons per month, how would you construct a futures hedge for the next 12 months? How would you construct a commodity-swap hedge?

4. Should Matthews use a cap as a hedge? What strike price for the cap would you recommend she choose?

5. If Matthews wants to minimize the cost of hedging, should she use a collar? What cap and floor strike prices would you recommend using?

3. Hedging Strategy for Commodity Risk (Delta Beverage (UVA-F-1188))

Study Questions:

1. Starting with Bierbaum’s estimate of a 4.0% increase in net revenues, compute Delta’s expected operating profits for the next 12 months. How sensitive are these profits to a 5% increase in the cost of aluminum cans. 10% increase?

2. Based on your sensitivity analyses, is Delta in jeopardy of violating its interest coverage ratio covenant as presented in Exhibit 5? (Use 1993 cash interest expense to compute the ratios.)
3. Should Bierbaum use aluminum futures to hedge against aluminum price increases going forward? Why or why not?

4. **Hedging Exchange Rates: Diva Shoes, Inc. (UVA-F-1222)**

**Study Questions:**

1. Show your estimate of Diva’s projected profits for the fiscal year ending September 1995. Be sure to explain your assumptions.

2. How would you quantify Diva’s exposure to exchange rate risk in April 1995? Show your calculations.

3. Assume you have a forward contract available at the forward price implied by interest rate parity (IRP) for September 1995. Also assume that you can buy a put or call at any strike price with a maturity of September 1995. Assume the forward contract carries an all-in upfront cost of 0.5% of the total contracted amount. What do you estimate as the cost of an option with a strike price exactly equal to the IRP forward price?

4. What would you recommend to Mr. Bisno regarding a hedging strategy for foreign exchange? Why?

5. **Equity Management/Risk Management: IBM: Issuer Put Options (UVA-F-1009)**

**Study Questions:**

1. How should IBM fulfill its share acquisition requirements for 1992?

2. Should the company pursue the put-option strategy?

3. Does the put-option strategy hedge IBM’s ESPP position? What policies, if any, should be instituted along with an issuer put-option program to minimize the risk to IBM?

4. Should the treasury department be allowed to make money like other IBM profit centers? Why or why not?

5. How would you expect the stock market to react to IBM's move to begin writing put options on its own shares? How do you think current shareholders and employees would perceive such a strategy?
6. Enterprise Risk Management: Risk Management at Hydro One (HBS 9-109-001)

Study Questions:

1. What is Hydro One’s strategy?

2. Be prepared to discuss Hydro One’s enterprise risk management program: the process and the outcome: Exhibits 3-6.

3. Should Laura Formusa, CEO, change HO’s strategic objectives in light of the changes and events in Exhibit 8 and the interviews in Exhibit 9?

4. What difference does ERM make to the running of the business, compared to not having a process like this at all?

5. Does your organization have an enterprise risk management program? How does it compare to HO’s? Using the HO enterprise risk management program as a template, what would you change in Exhibit 3 and 6 to better fit your company/organization?

6. Come to class prepared to critique and discuss the ERM system at Hydro One.

Reading: A Framework for Risk Management (HBR R94604)