# University of Southern California Marshall School of Business FBE 532

Corporate Financial Strategy

Fall, 2007

Prof. M. Weinstein x06499,HOH702G email: <u>mark.weinstein@marshall.usc.edu</u> Monday 6:30 - 9:20

For the ones who had a notion A notion deep inside That it ain't no sin To be glad you're alive

> Bruce Springsteen Badlands



### TEXTS

[Required] Case and ReadingsPacket: at the Bookstore

[Recommended] Ross, Westerfield, Jaffe and Jordan *Corporate Finance: Core Principles and Applications* (1<sup>th</sup> ed.), McGraw-Hill, 2007 (RWJJ) I assume you have all been through this, or a similar textbook before. Readings in this text are for background and to refresh your memory.

# **COURSE OBJECTIVES**

This course will use cases to examine how the concepts and methods that you learned in FBE521 (or 548) can be applied to "real world" situations. We examine the linkages between the financing issues and the strategic objectives of the firm. It will be important to see what these linkages are and how the financial decisions reached must be consistent with the firm's objectives. By the end of the course, you should have become somewhat comfortable with taking raw financial data from the firm and applying different valuation approaches as a guide in decision-making. You should also have a deeper appreciation for the role of financial decisions in furthering corporate objectives and for the relations between the finance side of the firm and the operating side of the firm.

#### **COURSE PROCEDURES:**

#### Timing:

I will treat each meeting as consisting of two 80-minute classes with a 10 minute break in between. Thus, my plan is for the class to run from 6:30 - 7:50, then there will be a 10 minute break, and class will then resume at 8:00 and run to 9:20.

#### Group Case Writeups:

After week three I expect you to form work groups of between 4 and 5 students. If I have to, I will assign students to groups at the end of the third week of class. I prefer not to have to intervene. In the event that I do have to assign a student, I expect the receiving group to welcome that additional student unconditionally. Starting the class meeting on September 24 each group will hand in one case write-up per week. In weeks when we discuss two cases, I will assign half the groups to one case and half to the other. A look at the schedule will show that each group will hand in 11 writeups over the course of the semester. I will indicate which cases are to be done by which groups. While all writeups are to be

handed in, I will randomly choose to intensively grade no more than 6 of each group's writeups to determine part of the course grade.

For each case I present a number of "study questions." These questions are designed to get you going in addressing the case. Note that a case write-up does not consist of answering the study questions. The study questions should be the start of your thinking about the case, not the end.

Written case analyses should contain a discussion of the issues, financial analysis, and recommendations. The document should be written as a business memo directed to the decision maker in the case. Text is limited to at most two double spaced pages in a 12 point or larger font (this text is in 12 point type), with at most four pages of exhibits, graphs and figures. These must be easily readable and the entire document is to be on 8.5" x 11 inch paper with no cover page. Penalties will be imposed for any violation of these rules (i.e., length, size of font, etc.)

Case writeups are due at the start of class. They will not be accepted late. I will not accept faxed or e-mailed documents. There is no makeup of these written assignments.

A caution. I really have no interest in how you assign the writing tasks within your groups. However, the entire group gets the same grade on the writeup. In the past some writeups have been poorly done. This means that either the rest of the group did not properly monitor work that was being submitted in their name, or they did not understand the case. In either case a low grade on the writeup is appropriate. Moreover, you must be aware that you have to understand the material in all the cases, whether you wrote them up or not.

#### The nature of the course

This is primarily a case course. As you know, cases provide a rather unstructured and open-ended experience and you will have fairly little guidance, and rather larger uncertainty, about what the instructor wants, what the "right" answer is. This is intended, as this is the way the real world is.

This is often uncomfortable for students, as it requires you to learn by dealing with the inherent uncertainty of decision making with limited information. These are not simple text-book word problems. You will be tempted to look to the instructor in such a course for more guidance. However, it is inappropriate for me, or any other instructor in this kind of course, to give much detailed guidance. This would defeat the purpose and limit the learning that goes on. For this reason I will not discuss individual cases with any student prior to the class in which that case is discussed. As in the world outside the classroom, there is no single "right" analysis of a case. There are some approaches that are more "right" than others, and some that are clearly wrong in that they make unreasonable assumptions or proceed in an unreasonable manner. At some point in the discussion I will probably present my ideas of how one might analyze the situation, but mine is not the only valid approach and other reasonable approaches may be equally "right." Often students will ask for copies of my case notes and spreadsheets after we have discussed a given case in class. My policy, AND THAT OF ALL FBE INSTRUCTORS, is not to distribute these notes and spreadsheets. First, as stated earlier, given the inherent ambiguity of a case, there is no single "right" answer. There are, of course good and bad arguments and approaches. This course will help you distinguish between them. Handing out my solutions would reduce the ambiguity and defeat the purpose of the course. Moreover, it would render that case unusable in the future.

Because of the nature of this course (and the grading criteria), it is extremely important that you attend every class, arrive on time and be prepared to participate. To help me out, you should bring a name card and place it on the desk in front of you. I may not remember who said what without those cards. After the enrollment in the course has stabilized, I will pass around a seating chart. *At that point, I ask that you remain in that seat for the entire term.* This will help ensure that class participation is accurately recorded and rewarded. Note that good class participation does not mean simply speaking, it means participating and moving the discussion along in a productive manner.



"Know something? The entire dialectic of Marxist revisionism can be reduced to one simple formula: Money talks."

### **EXAMS**

There will be a final exam December 17, 2007 at 7:00 pm. The final exam will involve a case analysis. I will hand out the case at the last class meeting. My intent is that you will have some time to do whatever analysis you want to do and then you will come to the final exam and answer a set of questions on the case. There will be few, if any, excuses for missing the exam, which I will NOT reschedule.

#### GRADING

Grading will be based on the graded case-writeups (35%), credit for non graded writups (5%), final exam (45%), and class participation (15%).

*Effort adjustment*: Naturally, in group projects, there is a free rider problem. In order to induce effort from all of the group members, I will ask that, at the last class meeting, each student provide me with an allocation of "effort points" to the members of the group other than him or her-self. The total number of points to be assigned is  $25 \times (N-1)$ , where N is the number of people in the group. Thus, for a five person group you will divide 100 points among the four other students in the group, for a four person group you will divided 75 points among the three other students in the group. These allocations will be kept strictly confidential and may be used to modify the group grade to provide more credit for those who work the hardest. I do expect you to discuss the allocations with other members of your group.

In evaluating class participation I will be considering the contributions that you have made to furthering the discussion of the topic at hand. Mere opening your mouth is not good class participation. I am looking for comments that are thoughtful and lead the discussion forward, not astray. See the discussion concerning the Blackboard discussion threads below for another element of class participation.

Note that I will cold-call. Thus, I expect everyone in the class to be able to discuss each case. However, I recognize that there are times when you will be unable to be prepared for a class. In that case, you must contact me BEFORE class and you may ask for a "cold-call" pass. Of course, I do not expect you to abuse this loophole, and you may only use it twice during the semester. Also, I will not cold-call in a case discussion for which you were not responsible for a write-up. In effect, I expect those who had to hand in a write-up to take the lead in class discussion.

# **ELECTRONIC RESOURCES**

I will maintain a website for this course on Blackboard. The website will contain an electronic version of this course syllabus, with hypertext links to 1) Excel spreadsheets for each case, 2) every handout as a PDF file, 3) any lecture notes this I write up as Powerpoint presentations. Each spreadsheet contains most of the exhibits in the case. This will make it easier for you to spend time on the analysis rather than punching in numbers. I will also monitor two separate discussion threads on Blackboard. One thread is for comments or questions on the mechanics of the course, the second is for comments or questions on the subject matter of the course. I would like you to post any questions that you have to the conference. I will leave them open for a bit so that other students may respond, then I will reply. This way all questions are available to all students. I will consider posting and replying to questions on these discussion threads as an element of class participation in determining your grade. Of course, if you have a private question please contact me directly by e-mail, or at my office.

# ACADEMIC DISHONESTY

The use of unauthorized materials, communications with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination, or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting form the nervous tensions accompanying examinations. Where a clear violation has occurred, however, the instructor may disqualify the students work as unacceptable and assign a failing



# **SECTION 1: INTRODUCTION AND REVIEW**

#### 8/27/2007

Introduction to course

Quick Review of M&M Capital Structure and Dividend Policy

If the investment value of an enterprise as a whole is by definition the present worth of all its future distributions to security holders, whether on interest or dividend account, then this value in no wise depends n what the company's capitalization is. Clearly, if a single individual or a single institutional investor owned all of the bonds, stocks and warrants issued by the corporation, it would not matter to this investor what the company's capitalization was (except for details concerning the income tax). Any earnings collected as interest could not be collected as dividends. Thus such an individual it would be perfectly obvious that total interest- and dividend- paying power was in no wise dependent on the kind of securities issued to the company's owner. Furthermore no change in the investment value of the enterprise as a whole would result from a change in its capitalization. Bonds could be retired with stock issues, or two classes of junior securities could be combined into one, without changing the investment value of the company as a whole. Such constancy of investment value is analogous to the indestructibility of matter or energy: it leads us to speak of the Law of the Conservation of Investment Value, just as physicists speak of the Law of the Conservation of Matter, or the Law of the Conservation of Energy.<sup>1</sup>

> John Burr Willams The Theory of Investment Value Harvard University Press, 1938

Because this class meets only once a week, please review the chapters on Capital Structure and Dividend Policy in the textbook you used for your first corporate finance class before this class.

<sup>&</sup>lt;sup>1</sup> More accurately, one should speak of the Law of Conservation of Matter and Energy, as we now know that matter can be converted into energy.

### 9/10/2007

Background Readings: RWJJ: Ch. 13, 14, 15, 16

### Case: Debt Policy at UST

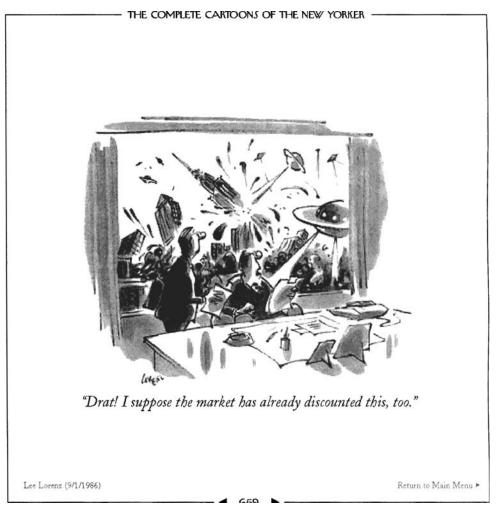
#### Study Questions:

- 1. What are the primary business risks associated with UST Inc.? What are the attributes of UST Inc.? Evaluate from the viewpoint of a bondholder.
- 2. Why is UST considering a leveraged recapitalization after such a long history of conservative debt policy?
- 3. Should UST Inc. undertake the \$1 billion recapitalization? Calculate the marginal (or incremental) effect on UST's value, assuming that the entire recapitalization is implemented immediately (January 1, 1999).
  - a) Assume a 38% tax rate
  - b) Prepare a *pro-forma* income statement to analyze whether UST will be able to make interest payments.
  - c) For the basic analysis, assume the \$1 billion in new debt is constant and perpetual. Should UST alter the new debt via a different level or a change in the amount of debt through time?
- 4. UST Inc. has paid uninterrupted dividends since 1912. Will the recapitalization hamper future dividend payments?

#### Case: Cost of Capital at Ameritrade

- 5. What factors should Ameritrade management consider when evaluating the proposed advertising program and technology upgrades? Why?
- 6. How can the Capital Asset Pricing Model be used to estimate the cost of capital for a real (not financial) investment decision?
- 7. What is the estimate of the risk-free rate that should be employed in calculating the cost of capital for Ameritrade?
- 8. What is the estimate of the market risk premium that should be employed in calculating the cost of capital for Ameritrade?

9. In principle, what are the steps in computing the asset beta in the CAPM for the purpose of calculating the cost of capital for a project?



### 9/17/2007

### Case: Cost of Capital at Ameritrade (continued)

- 1. Ameritrade dos not have a beta estimate as the firm has been publicly traded for only a short time period. Exhibit 4 provides various choices of comparable firms. What comparable firms do you recommend as the appropriate benchmarks for evaluating the risk of Ameritrade's planned advertising and technology investments.
- 2. Using the stock price and returns data in Exhibits 4 and 5, and the capital structure information in Exhibit 3, calculate the asset betas for the comparable firms.
- 3. How should Joe Ricketts, the CEO of Ameritrade, view the cost of capital estimate you have calculated?



# Case: Dividend Policy at Linear Technology

- 1. Describe Linear Technology's payout policy.
- 2. What are Linear's financing needs? Should Linear return cash to its shareholders? What are the tax consequences of keeping cash inside the firm?
- 3. If Linear were to pay out its entire cash balance as a special dividend, what would be the effect on value? On the share price? On earnings? On earnings per share? What if Linear repurchased shares instead? Assume a 3% rate of interest.
- 4. Why do firms pay dividends? Why has the rate of dividend initiations changed over time?
- 5. What should Paul Coghlan recommend to the board?

# **SECTION 2: CORPORATE VALUATION METHODS**

#### 9/24/2007

Background Readings:

What's it Worth? RWJ: 17 Note on Valuation and Market Multiples Technical Note on LBO Valuation (B) Note on Capital Cash Flow Valuation

#### Case: Radio One

- 1. Why does Radio One want to acquire the 12 urban stations from Clear Channel Communications in the top 50 markets along with nine stations in Charlotte, NC, Augusta, GA, and Indianapolis, IN? What are the benefits and risks?
- 2. What price should Radio One offer based on a discounted cash flow analysis? Are the cash flow projections reasonable?
- 3. What price should Radio One offer based on a transaction and trading multiples analysis?



# Case: Kohler

- 1. What is the total enterprise value of Kohler Co. using a discounted cash flow approach? What is the total enterprise value using a multiples (market value of comparable companies) approach? What is the value of a share held by a minority shareholder of Kohler Co. that is implicit in your valuations?
- 2. What assumptions can you use to arrive at the share price of \$55,400 that was estimated by Kohler Co.? Show how these assumptions impact your valuation.
- 3. What assumptions can you use to arrive at the share price of \$270,000 that was estimated by the dissenting shareholders? Show how these assumptions impact your valuation.

For the last two questions assume that (i) legal fees can be ignored; and (ii) Herbert Kohler, the dissenters, and the IRS all have the same cost of capital—i.e., that any interest charges are offset by the value for Herbert Kohler of paying late.

- 4. What is the maximum share price at which Herbert Kohler should be willing to settle with the dissenting shareholders in order to stop the trial on April 11, 2000. Assume that: (i) if the trial proceeds, it is expect to last less than a month and to result in one of two possible outcomes in terms of the price per share established in court: the \$273,000 being claimed by the plaintiffs, or the \$55,400 being defended by Herbert Kohler; (ii) Kohler estimates the probabilities of the two outcomes at 30% and 70% respectively.
- 5. How would your answer to (4) change if you also assume that (i) the inheritance tax owed on Frederic Kohler's estate was 50.2% of his holdings in Kohler Co. (equivalent to 489 shares out of the 975 he owned); (ii) the taxes paid by the estate amounted to \$27 million (489 shares valued at \$55,400 each); (iii) were the settlement or the trial to result in a revised share price in excess of \$55,400, the IRS would likely demand a similar valuation for its claim on Frederic's estate; and (iv) Herbert Kohler estimates the probability of the IRS's demand at 100% if he proceeds to trial and 50% if he settles.

# 10/1/2007

# Case: Sampa Video, Inc.

#### Study Questions

- 1. What is the value of the project assuming the firm was entirely equity financed? What are the annual projected free cash flows? What discount rate is appropriate?
- 2. Value the project using the Adjusted Present Value (APV) approach assuming the firm raises \$750 thousand if debt to fund the project and keeps the level of debt constant in perpetuity.
- 3. Value the project using the Weighted Average Cost of Capital (WACC) approach assuming the firm maintains a constant 25% debt-to-market value ratio in perpetuity.
- 4. What are the end-of-year debt balances implied by the 25% target debt-to-value ratio?
- 5. Using the debt balances from question 4, use the Capital Cash Flow (CCF) approach to value the project.
- 6. How do the value from the APV, WACC and CCF approaches compare? How do the assumptions about financial policy differ across the three approaches?
- 7. Given the assumptions behind the APV, WACC and CCF, when is one method more appropriate or easier to implement than the others?

# Case: BW/IP International

#### Study Questions

Note: For this case I am more concerned about your ability to understand the various cash flow valuation approaches. Thus, the questions are much more specific. For each of the first four questions, assume that the asset  $\beta$  of BW/IP International is 1.0, that the risk free rate is 9%, the that market risk premium is 8% and that the terminal growth rate beyond 1993 for BW/IP is 4%. Further, in all FTE valuations, assume that the debt beta is 0. In answering these questions you must provide detailed calculations including the identity and source of any number used and the rational for all calculations.

- 1. Assume that you are conducting a capital cash flow valuation of BW/IP. What is value of the terminal perpetuity as of 1993? What is the Capital Cash Flow for 1990? What is the discount rate that you will use to determine the present value of the Capital Cash Flows?
- 2. Now assume that you are using the Flow to Equity approach to value BW/IP. What will the equity beta be in 1993? What discount rate will you use for the cost of equity capital in 1993? What is the Flow to Equity in 1990?

- 3. Assuming a tax rate of 28%, what is the Free Cash Flow in 1990? Why is the free cash flow different from the Capital Cash Flow? Refer to specific numbers from the case to reconcile the difference between Free Cash Flow and Capital Cash Flow and explain the source of this difference.
- 4. Assume for the sake of this question only that your estimate of the value of BW/IP equity as of 1987 from the CCF method is about \$40 million, while that from the FTE approach is about \$20 million. Why would these two approaches, starting from the same cash flow estimates, produce such different estimated valuations? Why is CCF biased high and FTE biased low? How (just a direction, not a number) would the FTE valuation change is you assume that the debt has a positive  $\beta$ ? Why?
- 5. How do you get the CEO and managers of an LBO firm to invest in good opportunities, even when doing so means taking more risk?



# 10/8/2007

# **SECTION 3: MERGERS AND ACQUISITIONS**

Background Readings:	From Competitive Advantage[supplemental]
	RWJJ: 19
	Technical Note on LBO Valuation (A)

#### Case: Service Corp. Int'l

#### Study Questions

- 1. Although SCI's stock is trading around \$31.00 per share in July, 1995, analysts are predicting it could be \$41.00 or more within a year or two. Would you buy SCI's stock at this time? Why or why not?
- 2. How does SCI make money in the death care industry? Is this strategy sustainable?
- 3. Does SCI's acquisition strategy create value in North America? In international markets?
- 4. Should SCI continue to grow? As a manager, how would you convince investor that SCI's growth strategy made sense? As an investor, how would you determine whether SCI's growth strategy made sense?
- 5. How much debt should SCI have in its capital structure? How should SCI fund future acquisitions?

#### Case: Conrail (A)

- 1. Why does CSX want to buy Conrail? How much should CSX be willing to pay for it?
- 2. Analyze the structure of CSX's offer for Conrail

- a) Why did CSX make a two-tiered offer? What effect does this structure have on the transaction?
- b) What are the economic rationales for and the takeover implications of the various provisions in the merger agreement (i.e. no-talk clause, lock-up options, break-up fee, and poison pill shareholder rights plan)?
- 3. As a Conrail shareholder, would you tender your shares to CSX at \$92 in the first-stage offer?

# 10/15/2007

Background Readings: M&A Legal Context: Basic Framework... The Poison Pill

# Case: Conrail (B)

#### Study Questions

- 1. Why did Norfolk Southern make a hostile bid for Conrail?
- 2. How much is Conrail worth? In a bidding war, who would be willing to pay more, Norfolk Southern or CSX?
- 3. Why does CSX refer to Norfolk Southern's bid as a "non-bid"? What should Norfolk-Southern do as of mid-January, 1997?
- 4. As a shareholder, would you vote to opt-out of the Pennsylvania anti-takeover statute? What do the capital markets expect will happen?
- 5. What are the costs and benefits of regulating the market for corporate control through statutes such as Pennsylvania's anti-takeover law?

# Case: Circon(A)

- 1. What motivated Circon Chairman and CEO Richard Auhll? Did he have financial incentives that strongly aligned his interests with those of the shareholders?
- 2. Put yourself in Auhll's shoes moments after receiving the telephone call from U.S. Surgical CEO Leon Hirsch: how do you respond to the hostile bid? What factors would you consider?
- 3. Put yourself in the shoes of George Cloutier, moments after being asked by Richard Auhll to join the Circon board. Would you agree to be on the board? What role would you wish to play? Is your role consistent with your "duty of care" as a member of the board?
- 4. Did Circon's poison pill represent a strong or weak barrier to a hostile takeover? Specifically, if a hostile bidder had "broken through" (or triggered) the poison pill, what precisely would have happened to Circon's capital structure and the hostile bidder's stake in the company? [see especially Footnote 1on pages 4 and 5 and Exhibit 2 of the (A) case.]

- 5. Put yourself in the shoes of Charles Elson immediately after getting elected to the Circon board. How do you assess your situation? What are your options? How do you achieve change within the board and/or within the company?
- 6. At the board meeting at the end of the (A) case, what options available to the board? Which appears to have been the most attractive? How should the board have implemented this option?



# 10/22/2007

# Case: Time Inc.'s Entry Into the Entertainment Industry (A)

#### Study Questions

- 1. How attractive is the merger of Time and Warner?
  - a) What are the value enhancement opportunities?
  - b) Is the proposed exchange ratio of .465 per Warner share attractive?
- 2. What prompted Paramount's interest in Time?
- 3. What legal, financial, and restructuring options does Time have to combat the Paramount bid? To ensure that it is not a target in the future?
- 4. What would you do as Mr. Munro? How would you explain a decision to reject the Paramount offer at the annual shareholder's meeting?

# Case: Gordon Cain and the Sterling Group (A)

- 1. How much did each CCI employee's quarterly profit-sharing check increase as a result of cutting the downtime at the Corpus Christi plant by two weeks?
- 2. If the Corpus Christi turnaround had to be done every three years, what would be the increase in the value of CCI's equity if the pretax cots of capital is 20% and the turnaround were permanently reduced by two weeks?
- 3. How does this value increase compare to the original cost of the equity? How much did the average employee in the ESOP benefit from this increase?
- 4. Which is more important, the ESOP or the profit sharing? Why? Is there a difference between distributing profit sharing checks quarterly or annually? Why do McMinn and Waggoner do it differently?
- 5. Why didn't Cain want to sell CCI? Why did some mangers and employees want the company to be sold?
- 6. Does success inevitably destroy the effectiveness of strong incentives?
- 7. Is value created by the CCI LBO? If so, where does it come from?

# **SECTION 3: CORPORATE RESTRUCTURING**

# 10/29/2007

Background Readings: When Does Restructuring Improve Economic...



# Case: Bankruptcy and Restructuring at Marvel Entertainment Group

#### Study Questions

1. Why did Marvel file for Chapter 11? Were the problems caused by bad luck, bad strategy, or bad execution?

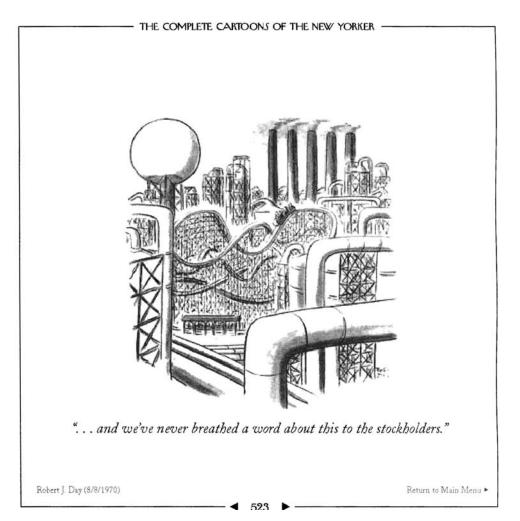
- 2. Evaluate the proposed restructuring plan. Will it solve the problems that caused Marvel to file Chapter 11? A Carl Icahn, the largest unsecured debtholder, would you vote for the proposed restructuring plan? Why or why not?
- 3. How much is Marvel's equity worth per share under the proposed restructuring plan assuming it acquires Toy Biz as planned? What is your assessment of the pro forma financial projections and liquidation assumptions?
- 4. Will it be difficult for Marvel or other companies in the MacAndrews and Forbes holding company to issue debt in the future?
- 5. Why did the price of Marvel's zero-coupon bonds drop on Tuesday, November 12, 1996? Why did portfolio managers at Fidelity and Putnam sell their bonds on Friday, November 8, 1996?

# Case: Restructuring Navigator Gas Plc

- 1. Would you have bought the First and Second Priority Notes when they were issued in 1997? Analyze navigator's initial financial policy
- 2. If you owned the First Priority Mortgage Notes, would you vote in favor of the plan that Butters proposed or would you try to negotiate for a different outcome? What if you owned the Second Priority Mortgage Notes? (In valuing the claims under the restructuring plan Butters proposes, assume that free cash flows grow at 2% from 2008 until 2030 and that at the end of 2030 the ships have no value and are scrapped.)
- 3. If Butters had to restructure Navigator under Isle of Man law instead of under U.S. law, would the differences between these legal systems described in the case have affected the terms of the restructuring?
- 4. How should Butters respond to Cambridge Gas Transport's challenge to the U.S. ruling?

# 11/05/2007

Background Readings: Free Cash Flow.....(on Blackboard)



Case: Sealed Air Leveraged Recapitalization (A)

- 1. What if free cash flow? How can it create organizational problems?
- 2. In their introductory textbook, Brealy and Myers define *financial slack* as having funds "so that financing is quickly available when good investment opportunities arise." What is the difference between free cash flow and financial slack?
- 3. What are the organizational advantages and disadvantages of leverage?

# Case: Seagate Technology Buyout

#### Study Questions

In analyzing these questions, assume that the transaction is expected to close on December 31, 2000

- 1. Why is Seagate undertaking this transaction. Is it necessary to divest the Veritas shares in a separate transaction? Who are the winners and loser resulting from this transaction?
- 2. What are the benefits of leveraged buyouts? Is the rigid disk drive industry conducive to a leveraged buyout?
- 3. Luczo and the buyout team plan to finance their acquisition of Seagate's operating assets using a combination of debt and equity. How much debt would you recommend that they use? Why?
- 4. Base on the scenarios presented in Exhibit 8, and on your assessment of the optimal amount of debt to be used in Seagate's capital structure, how much are Seagate's operating assets worth? For both of the assumptions listed below, estimate the value of Seagate's operating assets. Assume that of the \$800 million in cash that the buyout team will acquire as part of the transaction, \$500 million is required for net working capital and \$300 million is excess cash.
  - a) Assume that the buyout team plans to maintain its debt at a constant percentage of the firm's market value
  - b) Assume that the buyout team plans to pay down its debt as cash flows permit until a terminal debt level of \$700 million is reached.



# 11/12/2007

# Case: Humana, Inc.

#### Study Questions

- 1. Do you think Humana's problems were serious enough to warrant some form of restructuring?
- 2. How much extra value would be created by separating the hospital and health plan segments through a spinoff? What are the sources of this additional value, and how should the spinoff be structured for Humana to realize maximum benefits from the spinoff?
- 3. Kaiser Permanente has employed an integrated strategy of owning both hospitals and health plans for many years, some would argue with great apparent success. This suggests that Humana's problems are not the fault of the integrated strategy *per se*, and that breaking apart the hospital and health plan segments may not enhance shareholder value in the long-run. Do you agree or disagree?
- 4. Do any of the other options considered by management represent a more sensible solution to Humana's problems than the spinoff?
- 5.

Case: Seagate Technology Buyout (continued)

# **SECTION 4: REAL OPTIONS**

# 11/19/2007

Background Reading: RWJ:Ch. Ch. 23 Investment Opportunities as Real Options A Real World Way to Manage ...

Case: Merck & Company: Evaluating a Drug Licensing Opportunity.

#### Study Questions

- 1. How has Merck been able to achieve substantial returns to capital given the large costs and lengthy time to develop a drug?
- 2. Build a decision tree that shows the cash flows and probabilities at all stages of the FDA approval process?
- 3. Should Merck bid to license Davanrik? How much should they pay?
- 4. What is the expected value of the licensing arrangement to LAB? Assume a 5% royalty fee on any cash flows that Merck receives from Davanrik after a successful launch.
- 5. How would your analysis change if the costs of launching Davanrik for weight loss were \$225 million instead of \$100 as given in the case?

# Case: Arundel Partners

- 1. Why do the principals of Arundel Partners think they can make money buying movie sequel rights? Why do the partners want to buy a portfolio of rights in advance rather than negotiating film-by-film to buy them?
- 2. Estimate the per-film value of a portfolio of sequel rights such as Arundel proposes to buy. [There are several ways to approach this problem, all of which require some part of the dataset in Exhibits 6 9. You may find it helpful to consult the Appendix, which explains how these figures were prepared.]
- 3. What are the primary advantages and disadvantages of the approach you took to valuing the rights? What further assistance or data would you require to refine your estimate of the rights' value?

4. What problems or disagreements would you expect Arundel and a major studio to encounter in the course of a relation like that described in the case? What contractual terms and provisions should Arundel insist on?

# 11/26/2007

# Case: Bidding for Antamina

#### Background Reading: Copper and Zinc Markets, 1996

### SEE QUESTION 3 FOR A REQUIRED ACTIVITY

- 1. In what way is the development of a copper mine like Antamina a real option? In what way is the bidding structure put in place by the Peruvian government an option? What is the correspondence between these real options and financial options? What other real options does the owner of Antamina have?
- 2. Conceptually, how would you build a real options model to value the Antamina project? What data and assumptions would you need? The spreadsheet, bid.xls, implements one model of the real options in Antamina. You should try to "figure out" how it works through reverse engineering. What are the key assumptions and limitations of the model? How could it be improved?
- 3. Using the spreadsheet, bid.xls, calculate values for the project, and then submit a bid representing how much you will pay for the property. The bids should be sent to me via email no later than 1:00 pm on the day we discuss this case. You should submit three different bids, each one under a different set of auction procedures:
  - a) If the winning bidder was legally forced to develop Antamina after completing the exploration phase, and was required to pay the Peruvian government up-front for this project, what is the most they would be willing to pay?
  - b) If the winning bidder could choose to whether or not to develop Antamina at the end of two years, but was required to pay the Peruvian government a single fee up-front for the right to develop the project, what is the most they would be willing to pay? Under this alternative, there is no investment commitment or penalty; the firm merely pays the government up front, and has the right to develop at the end of two years. If they don't develop at year two, they lose the right to develop the field.
  - c) Under the current bidding rules, the winning bidder states both an initial cash payment as well as an investment commitment that is paid only if they choose to develop the field. Bids are evaluated by summing up-front amount and 30% of the investment commitment. If you proceed with development, but fail to spend the full investment commitment, the Peruvian government will fine you 30% of the difference. What is the most that you would be willing to bid under these rules? How would you trade off these two components of the bid?

4. What are the incentives brought about by the different auction rules? Do the rules seem to meet what you perceive to be the goals of the Peruvian government?

# 12/3/2007

Background Readings: Note on Financial Planning Over Long Horizons

# Case: Genzyme Corporation: A Financing History

- 1. Describe Genzyme's business and corporate development strategies. What the important decisions that must be made over time as these strategies are implemented?
- 2. What role does financing play in the execution of Genzyme's development strategies? What are the main features of the financing program Genzyme has adopted? How do they relate to the business and corporate development strategies? In particular, why did Mr. Termeer pledge not to raise external equity to fund Genzyme's R&D?
- 3. Examine the structure and pricing of the Genzyme Clinical Partners deal that funded some the development of Ceredase. What are the primary advantages of this complex financing? How does it compare to simple equity?
- 4. In what ways would Genzyme be different today if it had been financed entirely with equity? With funds from pharmaceutical industry partners?

- THE COMPLETE CARTOONS OF THE NEW YORKER -



"Hi, Dad. Investment banking wasn't that great after all."

Peter Steiner (2/29/1988)

Return to Main Menu 🕨

167