Stern School of Business
New York University

Cases in Financial Management
B40.2345

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First Class Assignment

For the first class meeting, I will expect you to prepare the INTEL case in your course packet. You should use the detailed questions given in the course packet to organize your thoughts and analysis about the case. Our class discussion will cover the issues raised by the questions, i.e.: (i) What capital structure makes sense? (ii) What would be the best way to disburse cash? (iii) Describe the advantages and disadvantages of each alternative considered by management?

In addition to reading and analyzing the Intel case, you should come to class with a one to two page memorandum that summarizes your analysis. You may team up with one or two classmates and hand in one memorandum for the group. (I.e., I will accept a memorandum with up to, but not more than, three names on it.)

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Course Syllabus TENTATIVE

I. Course Materials

A. Packet I (Required):
1. Syllabus
2. Assignments
3. Cases
4. Readings

B. Text (Very Highly Recommended but probably have it already):
Brealey Myers Allen, *Principles of Corporate Finance*, McGraw Hill. (BM)
You may already have this text.

C. There will be some miscellaneous handouts during the course.

AND THERE ARE FILES ON BLACKBOARD WHICH CONTAIN SPREADSHEETS FOR THE CASES WE WILL ANALYZE IN THE COURSE. EACH SPREADSHEET CONTAINS ONE OR MORE OF THE EXHIBITS IN THE CASE. THIS WILL MAKE IT EASIER FOR YOU TO SPEND TIME ON THE ANALYSIS, RATHER THAN PUNCHING IN NUMBERS.

II. Course Objectives

This course will use the case method to study the practical aspects of important topics in corporate finance. We will apply some of the concepts and techniques learned in intro Finance classes to actual situations. In addition to analyzing the specific financing problems or issues, we will consider how those issues relate to the strategic objectives of the firm. It will be important to examine the "big picture" assumptions that are used in the numerical calculations. (Overall, this course represents a strong mix of the quantitative and the qualitative.)
This course also places a strong emphasis on presentation and discussion skills. It will be important to explain your positions or arguments to each other and try to argue for the implementation of your recommendations.

III. Administrative Issues

A. Course Procedures

For each class meeting, I will assign study questions concerning a case study. For most of the class period, we will consider these questions and the material in the case. **This includes the first meeting.** You are allowed and encouraged, but not required to meet in groups outside of class to discuss and analyze the cases. Students generally find that these groups complement class discussion well.

Each student will submit a two page memorandum of analysis and recommendation at the beginning of each case discussion. If you are working in a group, I will accept one memorandum from the group and count it for all students in the group. If you choose to do this, the group cannot be larger than 3 students. Each memorandum should be typed and double spaced. Write these as if you were writing a recommendation to the CEO or major decision maker in the case. The two page limit is for text only. You may attach as many numerical calculations as you wish. Memoranda will not be accepted after the class has met. And, you should **prepare a memorandum for Intel, the first class**.

The readings and articles which are assigned and handed out are largely non-technical in nature and summarize the findings of academic research in corporate finance in the recent past. These articles are meant to be background material which will help you analyze the cases. They should not necessarily be cited in the case discussion. You should argue as if you were in a corporate boardroom rather than in a doctoral seminar. The process of arriving at the right answer is as important as getting the right answer.

In the past, students have asked professors to hand out their case analysis "answers" after the class has discussed the case. However, my policy is not to hand them out in general; and I will continue this approach here. The reason is that there are usually no absolute right answers. The best cases are deliberately written to be ambiguous. Nevertheless, while there are no right answers, there are good arguments and bad arguments. This course is designed to help you learn to distinguish between sensible and senseless arguments. Handing out the analyses would reduce the ambiguity in the cases and partially defeat the purpose of doing the cases -- as well as stifle your creativity.

Because of the nature of the course (and its grading policy), it is extremely important that you attend every class, arrive on time and be prepared to participate. To help me out, you should bring your name cards to each class. I may not remember who said what without those cards.

B. Grading

1. Memoranda (20%)

A memorandum will be given credit if it is handed in and no credit if it is not. Therefore, the full 10 points are earned if you hand in a memorandum for each case. Initially, therefore, I will not grade them. However, I will use the memoranda to determine final grades for those students who are on the border of an A or B, the border of a B or C, or the border of a C, D, or F.

2. Class Participation (30%)

I will judge your performance based both on the quality and the quantity of your comments. Because so much of the learning in this course occurs in the classroom, it is very important that you attend every class. Low class participation combined with several absences can lead to a failing grade.

For those of you who think that 40% is high, remember that in the real world, more like 100% of your "grade" is based on how you communicate with your colleagues. In addition, your participation has a positive externality (in most cases, anyway) and so must be heavily incented. In order to help reduce any uncertainty, I will give periodic updates and am always willing to meet with any of you to discuss your class participation. If you are still uncomfortable with such a heavy weight on participation, this class may not be for you.

3. Final (50%)

The final examination will be an individual take-home case analysis. You will have approximately one week to work on the case.

IV. Course Outline

It is impossible to cover every topic relevant to corporate finance in a five class course. However, the cases we will discuss cover almost all of the major ones. I have chosen not to cover some high profile topics because they are covered in other courses. I feel, therefore, that the material we will cover in this course, combined with these others, will provide you with an extremely extensive education in financial management.

The following table lists the topics we will cover in this course -- and the cases which address each topic.

TOPIC	CASE
Capital Structure/Dividend Policy	INTEL
Capital Structure Options	AVON
Capital Structure Execution	MARRIOTT
Valuation	PINKERTON
Security Design/Corporate Governance	ALZA
Financial Distress Restructuring	CUMBERLAND
Mergers & Acquistions	PARAMOUNT 93
Merger Arbitrage	PARAMOUNT 94
Mergers & Acquisitions Bidding	CONRAIL
Corporate Restructuring	USX
International Finance/Risk Management	JAGUAR
Emerging Markets & Comprehensive	PEPSI

You will find that the cases we will discuss in this course which are on a topic previously covered are covered in a sophisticated manner here. Again, the intention is to limit redundancy in your education as well as provide you with the toughest challenges. The end result, however, is that the cases we will cover in this course are quite difficult.

Below is the schedule for when we will cover various cases. This is tentative and may be adjusted as the course proceeds; although, I expect little deviation from the plan. In addition, note that I will occasionally interject some lecture-ish moments. These will generally happen when I am summarizing a concept and will often be accompanied with handouts.

V. Class Schedule TBD

Class	Topic (cases in caps)
1	Introduction: INTEL
2	Dividend Policy: AVON
3	Capital Structure: MARRIOTT
4	Valuation: PINKETON
5	Security Design: ALZA
6	Distress restructuring: CUMBERLAND
7	M&A: PARAMOUNT 93
8	M&A: PARAMOUNT 94
9	CONRAIL
10	Spin-offs:USX
11	International Finance: JAGUAR
12	PEPSI
	Summary and Final Exam

Assignments:
Questions for Each Case

Intel Corporation

Readings:

Chapter 16-18, Brealey and Myers (review)
"Signaling with Dividends, Stock Repurchases and Common Stock," P. Asquith and D. Mullins (packet)
"The relative signaling power of Dutch auction and fixed price self-tender offers..." Comment and Jarrell (packet)

Questions:

1. How does Intel make money in the semiconductor business? What are the advantages to being an innovator versus being a second-mover in this industry? What kinds of steps should Intel take to strengthen its position vis-a-vis its competitors?

2. How much cash (or even debt) should Intel have in its "target" capital structure? What factors would make a deviation from this target acceptable? What factors would make such a deviation costly?

3. What are the salient differences between dividends and repurchases from the company's and management's perspective?

4. What are the advantages and disadvantages of the three different methods of share repurchase?

   a. Tender Offer Repurchase at a fixed price.
   b. Dutch Auction Repurchase Tender Offer.
   c. Open Market Repurchase.

   Which of these three is best for Intel? Why?

5. Evaluate the alternative proposed by Sodhani to (1) distribute put-warrants for 20 M shares to existing shareholders and (2) sell $1 billion in convertible bonds to new investors. What are some potential motivations for this package of securities? What impact will it have on Intel's capital structure?

6. Which cash disbursement mechanism (if any) would you recommend for Intel?

Note: For those of you who've had Option Pricing and want to try to value the put-warrants, the two-year Treasury-note rate is 5%. Make an assumption about Intel volatility. We will not do this in class.

<u>Avon Products, Inc. - PERCS</u>

<u>Readings:</u>

Chapter 20-21, Brealey and Myers (on options)

<u>Questions:</u>

1. Evaluate Avon's financial condition at the beginning of 1979. What investment and financing options were available to Avon then? What capital structure should Avon have pursued at this time?

2. How successful were Avon's investment and financing decisions from 1979 to 1987? What would you have done differently?

3. Evaluate Avon's financial condition in mid-1988. Why is Avon restructuring its business in 1988? Do the changes make sense?

4. Why is Avon reducing its dividend? How will the market interpret the reduction?

5. What is the purpose of the exchange offer? What will the exchange offer signal to investors? Should Avon pursue the exchange offer?

6. As an investor holding Avon stock, how would you evaluate the tradeoff between accepting the new preferred and keeping the common stock? Assume that the new common stock will pay a dividend of $1.00 per share (per year). Assume that the PERCS will be issued on June 1, 1988 and will remain outstanding until September 1, 1991. (I.e., the time to maturity is 3.25 years).

<u>Assume:</u>

a. The interest rate on 3-year Treasury Notes is 8.2%.

b. The three month Treasury Bill rate is 6.4%.

c. The historical standard deviation of Avon's stock in 1988 was 31%.

d. The formula for the value of a call option on a dividend-paying stock is:

Call value $= S^{@} N(d_1) - X \exp[-r_f t] N(d_2)$ where

$$d_1 = \frac{\ln (S^{@} / X) + r_f t + \sigma^2 t / 2}{\sigma \; t^{1/2}}$$

$$d_2 = \frac{\ln (S^{@} / X) + r_f t - \sigma^2 t / 2}{\sigma \; t^{1/2}}$$

$$S^{@} = S - \text{Pres. Value (dividends over life of call)}$$

S = stock price; X = exercise price; N() = the cumulative normal distribution;

Marriott

Questions:

1. Does Project Chariot add value? How does each party fare – equity, debt, and management?

2. Why is management considering the plan? Should they have any concerns?

3. Could the problem associated with the deal have been prevented? Who would benefit from these precautions?

<u>Pinkerton (B)</u>

<u>Readings:</u>

"The Valuation of Cash Flow Forecasts: An Empirical Analysis," Kaplan and Ruback (packet)

<u>Questions:</u>

1. What is a share of Pinkerton's common stock worth if Pinkerton does not do the IPO? Your valuation should assume that (a) the financial assumptions given in the case are accurate; (b) the corporate tax rate is 37%; (c) the growth rates Pinkerton is using are nominal rates; and (d) the valuation date is January 1, 1990. Also: (a) the beta given for Wackenhut is Wackenhut's equity beta; and (b) Wackenhut's EBITDA is $17 million.

2. Assume that the IPO and refinancing do not take place in January 1990. Can Pinkerton service its existing debt and stay within the debt covenants over the next three years? If MHTC permitted, could Pinkerton pay dividends to help Wathen solve his problems?

3. What should Pinkerton and Wathen do? What is the value of a share of Pinkerton stock if it does an IPO? Should Pinkerton go ahead with the IPO of two million shares (1.33M by the company and 0.67M by Wathen) at $16 per share? If yes, why? If no, explain what you would do instead and why? In making your decision, what are you explicitly assuming about expected costs of financial distress? Why? You should assume that Drexel can sell the two million shares at $16 per share.

We will focus on questions 1 and 3.

ALZA (A, B-1, and C)

Readings:

Chapter 16 Brealey-Myers-Allen (on Rights Issues)
"Survey of Corporate Governance," Shleifer-Vishny (packet)

Questions:

1. How does the competitive environment and Alza's strategy affect its need and ability to finance the new drug delivery technologies? How could Gerstel fund the research on new drug delivery techniques? On what grounds should he compare various funding alternatives? How do they compare to one another?

2. Carefully read the proposal to create BES (Bio-Electric Systems) and to finance it by the issuance of the callable common plus warrant package. Try to break apart the units into simpler pieces that we can understand. How does the unit work? Does it solve Gerstel's problems? Will it appeal to investors? Why or why not?

3. How much is a unit worth? Is 11$ a fair price? Why is Gerstel offering the units at $11?

4. As an Alza shareholder, what can you do with your rights to subscribe to the BES units? As an Alza shareholder, how can you obtain additional units beyond those to which your common shares entitle you to purchase for $11? Assuming that you want to own the units, does your guess about the likely success or failure of the offering affect how you will attempt to obtain additional units?

5. Critique Gerstel's strategy to offer the security as described in the B-1 case. Does his offering strategy make sense? What are its pros and cons? What would you have done differently? Why?

6. In the C case, we see the subsequent performance of ALZA, the BES units, and the pieces of the units that traded after the instrument separated into callable common and warrants. How should the callable common shares have been valued by the market in early 1991? On August 14, 1991? On November 12, 1991? On January 10, 1992? How were they valued by the market?

Cumberland Worldwide (A)

Readings:

"Note on Bankruptcy in the U.S.," HBS Case (packet)

Questions:

1. What is the problem at Cumberland Worldwide? How did we get into this mess?

2. Compare the value of the various Cumberland securities to the value of the underlying assets. Be careful to consider both selling Cross River (and Cumberland) as well as fixing Cross River and operating it. Is the market optimistic or pessimistic? What does the market think will happen? Is the market expecting an asset sale, a Chapter 11 filing, or what? Assume:

  a. Treasury bond rate is 8.5%
  b. β^U is 0.8.
  c. The sub debt receives $707 face amount of new zero coupon debt, not $1673

3. What do you think of the exchange offer versus the alternative of a Chapter 11 filing? I.e., who is going to vote for the exchange offer? Who is going to vote against it? Consider the positions of Cumberland's secured bank debt, unsecured senior debt, subordinated debt, preference stock, and common stock.

4. Should management alter the terms of the exchange offer? If so, how?

Paramount - 1993

Readings:

Chapter 31-3, Brealey Myers Allen

Questions:

1. Why do you think Paramount is a takeover target?

2. Which of the two firms - Viacom or QVC - would make a better fit with Paramount? Which would Paramount management, i.e., Martin Davis, prefer, if it had to choose?

3. What effect would Viacom have on the costs at Paramount if it bought the company? What effect would Viacom have on Paramount's growth rate? What would happen to costs and sales growth if QVC bought Paramount instead?

4. What is Paramount worth as is? to Viacom? to QVC? In class, I will expect you to argue for the particular cost savings and / or synergies that Viacom and QVC will be able to achieve.

5. How should Redstone proceed? What price should he offer? Should the offer be a cash offer, a stock offer, or some combination? What should he do about the lock-out option and the termination fees? Should he bother trying to buy Paramount at all?

Assume:
1. Paramount’s marginal tax rate is 37%
2. Expected inflation is 4%

Paramount - 1994

Questions:

What do you think of Redstone's tactics in making the initial offer to Paramount? The price? The deal structure? The lock-up option? The termination fee? What did the market think of the initial offer?

Why did Viacom change its bid on October 21?

What do you think of the behavior of Paramount's board before the Delaware Court decisions? What is the purpose of Paramount's rights plan (i.e., the poison pill). What do you think of the auction procedure devised by Paramount's board after the Delaware Court decisions?

Explain what has happened with the stock prices of the three players from September to the end of January. Specifically, explain the movements of QVC and Viacom stock as the likelihood of their winning changes. Make sure to look at November 24 and January 7.

What do you think of the plan by Viacom's investment bankers to use CVRs? What do the CVRs add to the mix?

What did the changes in QVC's final bid accomplish?

Which of the two final bids is more attractive at the current stock prices of QVC and Viacom? Which of the two bids would you accept? Why? Is there any way you can use the current and / or past stock prices to figure this out? Think of how the stock prices of QVC, Viacom, and Paramount will change when it becomes clear who will win.

Conrail (A&B)

Questions:

1. Review the firms' businesses, performance, and outlook. Is the potential CSX-Conrail merger a good one? Does a deal with Norfolk Southern make sense? In a bidding war, who should be willing to pay more, Norfolk Southern or CSX?

2. How much is Conrail worth? How much should CSX be willing to pay for Conrail? As a Conrail shareholder, would you tender your shares to CSX at $92.50 in the first-stage offer?

3. Analyze the structure of CSX's offer for Conrail. Why did CSX make a two-tiered bid? 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)? What do you think of the overall financial structure associated with the bid?

4. Why does CSX refer to Norfolk Southern's bid as a "non-bid"? What should Norfolk Southern do as of mid-January 1997?

5. As a shareholder, would you vote to opt-out of the Pennsylvania anti-takeover statute? What do the capital markets expect will happen?

6. What are the costs and benefits of regulating the market for corporate control through statutes such as Pennsylvania anti-takeover law?

USX Corporation

Readings:

"Diversification Discount," Lamont (packet) for a good survey
"Rethinking Thinking," Economist (packet)

Questions:

1. Does USX need to be restructured at this time? How much should USX be worth if Steel and Energy are broken apart?

2. Debate the relative merits of Icahn's proposal (spin-off) vs. the company's proposal (targeted stock). For what kinds of companies is targeted stock most appropriate? Least appropriate?

3. What other options should the company consider besides targeted stock or a spin-off?

4. What specific provisions should targeted stock contain to ensure maximum value creation for shareholders?

Jaguar PLC, 1989

Readings:
Chapters 26-27 of Brealey and Myers will be very helpful.
"A Framework For Risk Management," K. Froot, D. Scharfstein, and J. Stein (packet)
"Global Competition and Corporate Finance in the 1990s," Lessard (packet).

Questions (we will spend relatively less time on question 3):

1. Consider Jaguar's exchange rate exposures. To which currencies has Jaguar been exposed historically? What are the sources of these exposures? How would Jaguar be affected by a 10% decline in the value of the dollar? How have Jaguar's exposures changed since 1984?

2. What do you think of Jaguar's past decisions to hedge its dollar exposure between 1984 and 1987? Should Jaguar have hedged more of its dollar exposure? Less? None at all? Why or why not? What other methods could Jaguar have used for hedging its exposure?

3. Please evaluate the strategic merits of a combination between Jaguar and either Ford or GM. What are the sources of value created by such a combination? Why do Ford and GM seem to be the only ones seriously interested?

4. How much should Ford be willing to pay to acquire all of Jaguar's shares immediately? As a starting point, please use the projections in Exhibit 7 of the case. Assume interest rate parity holds, i.e., nominal exchange rates are determined by long-term interest rates. Does the value differ if you assume constant real exchange rates (also known as purchasing power parity)? You will need to make additional assumptions; identify them explicitly and be ready to defend them. To which factors is your valuation most sensitive? How would the value be affected by a 10% dollar depreciation? By a 10% dollar appreciation? By changes in unit sales?

5. Assume Ford acquires Jaguar. From the perspective of a U.S.-based Ford shareholder, evaluate qualitatively Jaguar's operating exposures to real exchange rate changes. Do the exposures change if Jaguar is a Ford subsidiary rather than a stand-alone British company? Should Ford hedge any of these exposures?

6. Devise a program of specific tactics for Sir John to employ to maximize value for Jaguar's shareholders. How should Sir John respond to Ford's actions on October 16? Make explicit whether your goal is to remain independent, be acquired by Ford, or sell a minority interest to GM.

Assume:

Jaguar has a $\beta^U = 1.0$.
Expected U.S. inflation = 3%, UK inflation = 5%, German inflation = 2%.
Jaguar's tax rate is 36%.

PepsiCo Bottling in Mexico

Questions:

1. Why is PepsiCo suddenly so interested in Mexico? Do the regulatory changes really benefit PepsiCo, the challenger?

2. As a bottler, what kind of financing and organizational relationship would you want with PepsiCo? What is the preferred financing and organization structure from PepsiCo's perspective? Will the structure of the joint venture investment affect what PepsiCo is willing to pay? How?

3. (a) How attractive was PepsiCo's investment in GEUSA? In doing your valuation, use exhibit 8A.
Net operating profit before tax should be net operating profit after tax in exhibit 8A.

(b) How attractive (to PepsiCo) is the Sanchez proposal for PepsiCo to buy 30% of Deltex for 1.1 billion pesos ($360 million)?

Both parts (a) and (b) require a present value analysis. They also require capital structure assumptions that you will need to justify. Part (b) is more difficult because it requires you to make some assumptions about interest rates or exchange rates.

Do not evaluate the investment in Protexa. (The projections may be inaccurate.)

4. As Suarez, would you invest in the Sanchez/Deltex joint venture as proposed in the case? Why or why not? Can you suggest a joint venture arrangement that is more attractive to both PepsiCo and Deltex?

Assumptions are on the next page.

Assumptions / clarifications:

a. All:

- NOPAT is net operating profit after tax which equals EBIT x (1-Tax Rate).
- The marginal tax rate is 34% (for Pepsi and for bottlers).
- The asset beta or unlevered beta of a bottler is 0.70.
  Do not use the 0.45 used in the case. The casewriter used the wrong formula.

For the U.S.:

- Expected inflation in the U.S. is 4%.

For Mexico:

- Inflation rates given in Exhibit 15 are inflation rates expected in Mexico in the absence of a revolution or some other shock.
- There is no long-term Treasury-Bond in Mexico.
- The spot exchange rate at the end of 1992/start of 1993 is 3.08 pesos per $.
- The forecast exchange rates are forecasts not futures or forward rates.

b. GEUSA assumptions in case and figures in exhibits 8A and 8B are in $M, not pesos. Use 1992 as the first cash flow year. The $33 M value for 20% ($165 M total) refersto the value of debt and equity. I.e., GEUSA starts off with no debt.

- In exhibit 8A, net operating profit pre-tax should be net operating profit **after** tax.
- Grow the ISR tax in 1993 with sales.
- Profit margins in text refer to the ratio of NOPAT to sales.
- Growth rates in text refer to growth in $ sales.

c. Deltex. Use 1993 as the first cash flow year. The $360 M value for 30% ($1.2 B total) refers to the value of equity. As of the end of 1992 / start of 1993, Deltex has some debt outstanding.

- Use the net changes in working capital in the statement of changes. (They do not include cash or short-term debt.)

- Ignore investments in affiliate and other assets.