FINANCIAL ACCOUNTING (EWMBA 202A) PROJECT

InBev vs. Anheuser Busch

You will form a team of two students. Each student will pick a company to analyze. For questions marked "Group", you will work together and provide one response.

1. (Group) Analyze the three most important factors that affect the profitability of firms within the beer industry.

2. (Individual) InBev is a publicly traded based in Leuven, Belgium and is one of the largest beer companies in the world. You are to analyze InBev's financial statements for 2007.

   Using the model developed in Module 4 of the text, disaggregate ROE into its operating and nonoperating components. Discuss the impact financial leverage has on InBev's ROE. Further, disaggregate RNOA into its components and analyze each of the components further to gain insights into the factors driving InBev's performance.

   Using appropriate ratios, analyze the riskiness (short-term liquidity and long-term solvency) of InBev

   Note: InBev's financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS).

3. (Individual) Anheuser Busch is the largest US brewer and the producer of the world's largest-selling beer brands, Budweiser and Bud Light. You are to analyze Anheuser Busch financial statement for 2007.

   Using the model developed in Module 4 of the text, disaggregate ROE into its operating and nonoperating components. Discuss the impact financial leverage has on Anheuser-Busch's ROE. Further, disaggregate RNOA into its components and analyze each of the components further to gain insights into the factors driving Anheuser Busch's performance.

   Using appropriate ratios, analyze the riskiness (short-term liquidity and long-term solvency) of Anheuser Busch.

   Note: Anheuser Busch's financial statements are prepared in accordance with US GAAP.

4. (Group) From a reading of the footnotes, identify three areas where the accounting is different for the two companies. Briefly explain the differences.

5. (Group) Compare and analyze the profitability and riskiness of InBev and Anheuser Busch. InBev and Anheuser Busch use different formats and classifications for their financial statements. Make sure the ratios are comparable

6. (Group) On June 11, 2008, InBev made a $65/share cash offer to purchase Anheuser Busch. Why is InBev interested in buying Anheuser Busch?

CORPORATE FINANCIAL REPORTING – GROUP PROJECT: PICKING STOCKS USING EARNINGS QUALITY SIGNALS

Note:

I am very grateful to Jung Hoon Kim, GSI for the class, for structuring this project.

Preface:

Read the two articles: Empire of the Quants by Edward Robinson in Market and Outsmarting the Market by Anthony Bianco in Business Week. Both articles talk about how Barclays Global Investors (BGI) uses the earnings quality signal developed by Richard Sloan, a former accounting professor at the University of Michigan. One of the earnings quality signal that the article mentions is the accrual metric that Sloan used in his 1996 paper in the Accounting Review (also attached)

Skim Richard Sloan's 1996 Accounting Review paper. You will be using the accrual metric that Sloan uses in his paper (page 293) as one of the earnings quality signals. In addition, you will use another accrual metric based on the difference between income and cash flow from operations.

For this project, you will use the data provided in Excel format for 60 firms. For simplicity, all the firms selected have December 31 year ends.

PART I

Step 1:

In the worksheets FS – 2003 (Dataset) and FS – 2004 (Dataset), selected Balance Sheet and Income Statement items are provided. The data is provided for all but 6 (10%) of the firms. Refer to the 10K statements for the relevant years for these 6 firms and fill in the data items. Make sure the data definitions are consistent across all the firms. To ensure consistency, you might want to check the data in the Excel file for a few of the other 54 firms (for which data is provided) with their 10K statements.

Step 2:

Calculate the (Working Capital) Accruals using the definition used in Sloan (1996 – page 293). Note that there are a few superfluous data items in the two dataset worksheets.

Definition of (Working Capital) Accrual

$$\text{Accruals} = (\Delta CA - \Delta Cash) - (\Delta CL - \Delta STD - \Delta TP) - Dep$$

- Change in Current Assets: Current Assets in 2004 – Current Assets in 2003

- Change in Current Assets: Current Assets in 2004 – Current Assets in 2003
- Change in Cash: Cash in 2004 – Cash in 2003
- Change in Current Liabilities: Current Liabilities in 2004 – Current Liabilities in 2003
- Change in Short-term Debt: Debt in Current Liabilities in 2004 – Debt in Current Liabilities in 2003
- Change in Taxes Payable: Income Taxes Payable in 2004 – Income Taxes Payable in 2003
- Depreciation: Depreciation and Amortization in 2004

Step 3:

Calculate the three financial variables that will be used in the empirical analysis (see Sloan – page 294)

$$\text{Earnings} = \frac{\text{Income from Continuing Operations}}{\text{Average Total Assets}},$$

$$\text{Accrual Component} = \frac{\text{Accruals}}{\text{Average Total Assets}}, \text{ and}$$

$$\text{Cash Flow Component} = \frac{\text{Income from Continuing Operations} - \text{Accruals}}{\text{Average Total Assets}}.$$

- Per Asset Earnings:
- Per Asset Accruals:
- Per Asset Cash Flows

Where,

Earnings in 2004: Operating Income after Depreciation in 2004

Average Total Assets: (Total Assets in 2004 + Total Assets in 2003) /2

Step 4:

Calculate Abnormal Returns (Size-adjusted)

Refer to page 294 of Sloan (1996)

> The measurement of future stock returns begins four months after the end of the fiscal year from which the financial statement data are gathered. Alford et al. (1994) report that, by this time, almost all firms' financial statements are publicly available. Stock returns inclusive of dividends are obtained for each firm from the CRSP monthly returns file and annual buy-hold returns are computed for three future years.

Thus, the Dataset has stock returns beginning four months after the fiscal yearend (May '05 to April '06)

Refer to again to page 294:

> The computation of abnormal returns requires adjustment for the normal or expected return. Two alternative adjustment procedures are employed in this study. First, size is a well-documented predictor of future returns, and prior research in this area typically employs a size adjustment (Ou and Penman 1989; Bernard and Thomas 1990). In this study, size-adjusted returns are computed by measuring the buy-hold return in excess of the buy-hold return on a value-weighted portfolio of firms having similar market values. The size portfolios are formed by CRSP and are based on size deciles of NYSE and AMEX firms. Membership in a particular portfolio is determined using the market-value of equity at the beginning of the calendar year in which the return cumulation period begins.

You will only use the first adjustment using size and ignore the second adjustment involving Jensen alphas.

Refer to the Excel Worksheet Return (Dataset). Notice that the return data is provided for each firm from column D. Size-matched returns begins in Column Q.

Step 4A:

Calculate the Size-adjusted (Abnormal) Returns using the formula provided below:

Refer to the footnote to Table 6 on page 307:

• The size-adjusted returns are computed by taking the raw buy-hold return, inclusive of dividends and any liquidating distributions and subtracting the buy-hold return on a size matched, value-weighted portfolio of firms. The size portfolios are based on market-value of equity deciles of NYSE and AMEX firms. The decile rankings and decile returns are supplied by CRSP. The return cumulation period begins four months after the fiscal year-end of the year in which the level of operating accruals is measured.

$$AR_{iT} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$$

R_{it}: Individual Stock Returns
R_{mt}: Size Matched Returns

Where:

Individual Stock Return Computation:
(1 + May 2005 Return) x (1 + June 2005 Return) x (1 + July 2005 Return) x (1 + August 2005 Return) x (1 + September 2005 Return) x (1 + October 2005 Return) x (1 + November 2005 Return) x (1 + December 2005 Return) x (1 + January 2006 Return) x (1 + February 2006 Return) x (1 + March 2006 Return) x (1 + April 2006 Return)

Size Matched Return Computation
(1 + May 2005 Size Matched Return) x (1 + June 2005 Size Matched Return) x (1 + July 2005 Size Matched Return) x (1 + August 2005 Size Matched Return) x (1 + September 2005 Size Matched Return) x (1 + October 2005 Size Matched Return) x (1 + November 2005 Size Matched Return) x (1 + December 2005 Size Matched Return) x (1 + January 2006 Size Matched Return) x (1 + February 2006 Size Matched Return) x (1 + March 2006 Size Matched Return) x (1 + April 2006 Size Matched Return)

Step 5:

Merge the appropriate columns in the two worksheets, Computation of Accruals and Excess Return Computation in the worksheet Final Results by company name.

FIRST DO STEPS 6A AND 7A (Sloan (1996) definition of Accrual), THEN DO STEPS 6B AND 7B (Alternative definition of Accrual using Cash and Earnings)

Step 6A:

Form Portfolio (Worksheet: Final Results)

- Sort companies in ascending order based on Per Asset Accruals
- Take 20 companies with lowest accruals and name them "L" group under "Portfolio" column
- Take 20 companies with highest accruals and name them "H" group under "Portfolio" column
- Take the rest 20 companies and name them "M" group under "Portfolio" column
- Now you have a portfolio that consists of three groups (H, M and L)

Step 7A

Examine Relation between Accruals and Stock Return (Worksheet: Final Results)

- Take the average of Per Asset Accruals for each portfolio
- Take the average of Cumulative Excess Returns for each portfolio
- Compute "Hedge Return" by subtracting the Cumulative Excess Return of "H" portfolio from the Cumulative Excess Return of "L" portfolio

Step 6B

- Calculate alternative definition of Accrual

  Per Asset Accrual = Per Asset Earnings – Per Asset Cash Flows

- Sort companies in ascending order based on Per Asset Accruals
- Take 20 companies with lowest accruals and name them "L" group under "Portfolio" column
- Take 20 companies with highest accruals and name them "H" group under "Portfolio" column
- Take the rest 20 companies and name them "M" group under "Portfolio" column
- Now you have a portfolio that consists of three groups (H, M and L)

Step 7B

Examine Relation between Accruals and Stock Return (Worksheet: Final Results)

- Take the average of Per Asset Accruals for each portfolio
- Take the average of Cumulative Excess Returns for each portfolio
- Compute "Hedge Return" by subtracting the Cumulative Excess Return of "H" portfolio from the Cumulative Excess Return of "L" portfolio

PART II:

a) What are your conclusions from this analysis? What is your explanation for the results? Be detailed.

b) Why has this anomaly persisted – Sloan published his paper in 1996 and your project was based on 2004-05 data.

PART III:

In this study and in Sloan's paper, we use earnings quality defined by accounting accruals as a signal to pick stocks. Can your group think of another signal to pick stocks? Why do you think it would be a valid signal? How would you implement the project – provide broad details?

PART IV (Optional – Successful completion of this part will result in an A for the course)

Implement the study using the signal you suggested in Part IV.

Managerial Accounting – Siemens Electric Motor Works

Case:

Siemens Electric Motor Works found itself facing an increasingly competitive environment and so made a decision to move from mass production of standard motors to the production of small lots of custom motors. In doing so, they found their old cost system led them to poor decision making. By switching to a new cost system, more accurate product costs were computed, facilitating better pricing of products.

Prepared list of questions:

a) Describe the old cost system at Siemens?
   - How many overhead rates did Siemens calculate?
   - How did it calculate its overhead rates?
   - Etc.

b) What was Siemens' old strategy? Why was it able to survive?

c) Was the old cost system adequate under Siemens' old strategy? Why?

d) What was Siemens' new strategy? Why did it have to move to a new strategy?

e) Was the old costs system adequate under Siemens' new strategy?

f) Calculate the cost of the order under i) the old cost system and ii) the new cost system? Which costs are more accurate? Why?

g) Punch Line - What insights do you gain about how costs behave at Siemens by comparing the costs under the old and new cost system?

h) Punch Line – What would have happened if Siemens had adopted the new strategy but stuck to the old cost system?

i) The case describes the competitive conditions facing Siemens in the 1970's. Give examples of other firms or industries that are currently facing similar competitive conditions? What insights from the Siemens case apply to these situations?

EWMBA – 222 FINANCIAL INFORMATION ANALYSIS

GROUP PROJECT – VALUATION FOR M&A

Wipro Limited (NYSE: WIT) provides comprehensive IT solutions and services, including systems integration, information systems outsourcing, package implementation, software application development and maintenance, and research and development services to corporations globally. It is headquartered in Bangalore, India. Its US headquarters is in Fremont, CA.

Answer the following questions using any public information source. Provide detailed references for all your sources.

You have been recently appointed as an Associate at Goldman Sachs, San Francisco. Your first client is Wipro Limited.

I. Wipro's Acquisition Strategy

a. What are the challenges facing Wipro? Can Wipro sustain its competitive position?

b. To date, how has growth by acquisition transformed Wipro? See the attached article on Wipro's acquisitions. In particular, focus on Wipro's recent US acquisition of Infocrossing. What synergies did Wipro expect from the acquisition?

c. Given your responses to the above questions, which US company do you think Wipro should acquire next? Why?

II. The M&A Pitch Book: Proposed Acquisition of Perficient, Inc (NASDAQ: PRFT) by Wipro, Limited.

Your audience is the executive committee of Wipro, Inc headed by Suresh Senapaty, Executive VP, Finance and CFO. Your aim should be to convince the executive committee to go forward with the proposed transaction, committing time, capital, and other resources to consummate the deal.

a) What is the strategic rationale for this deal? You need to think seriously about the economics of the merger and present arguments to convince the executive committee of the merits of the merger.

b) What are the risks on which the due diligence team should focus? These might include risks already disclosed in public sources, as well as risks you hypothesize. Your recommendations will form the basis for a detailed due diligence review conducted by Wipro later.

III. Valuation Issues

a. How much is Perficient, Inc worth as a stand-alone company?

To answer the question above you have to answer the following questions:

i) Identify and explain any Income Statement, Balance Sheet, and Statement of Cash Flows items over the past three years that you believe should be considered for potential adjustment in preparation for forecasting the statements of Perficient.

ii) Using the adjusted financial statements, examine in detail the operating and non-operating performance (calculating ROE and disaggregating it intp its components) of Perficient for the last three years.

iii) Parsimonious forecasting:

Forecast PRFT sales, NOPAT, and NOA for the next five years using appropriate assumptions for Sales Growth, Net Operating Profit margin (NOPM), and Net Operating Asset Turnover (NOAT). Clearly state and explain your assumptions

Forecast the terminal period values assuming an appropriate terminal year growth rate and NOPM and NOAT assumptions.

iv) Determining the parameters for the Valuation Model

- Calculate the required rate of return on equity (cost of equity) for PRFT. Explicitly note the risk-free rate of return, the beta for the firm, and the market risk premium.
- Enter the appropriate cost of debt and preferred stock for PRFT, if necessary. Please identify the source.
- Calculate the weighted average cost of capital (WACC). What are the challenges of calculating WACC?

v) Valuation using the numbers from the parsimonious forecasting model in iii)

Estimate the value of a share of PRFT common stock using the discounted cash flow (DCF) model using the numbers obtained from the parsimonious forecasting model. How does your valuation estimate compare with the closing price on the valuation date?

vi) Market-based Valuation

- Choose an appropriate comparable for PRFT. Use the PE Multiple to value PRFT. Indicate why you believe the comparable you have chosen is appropriate. Are there differences between the comparable and PRFT that makes the valuation suspect? How would you control for these differences?

- Calculate PRFT's Relative PE ratio (= Current PE ratio (PRFT)/Current PE ratio (S&P500)) over the past five years. Use an appropriate web source for PE ratios of S&P 500 over the past five years. Comment on the results.

b. How much is Wipro, Inc worth as a stand-alone company?

Repeat ii) – v) above for Wipro to estimate the stand-alone value of Wipro

IV. Merger Valuation

a. Identify (operating, financial, and others) and explain the synergies from the merger.

b. Estimate the range of values of synergies from the merger. You should attempt to do it two ways: i) You can make adjustments to the parsimonious forecasting model to calculate the value of synergies and ii) You can calculate the value of synergies separately.

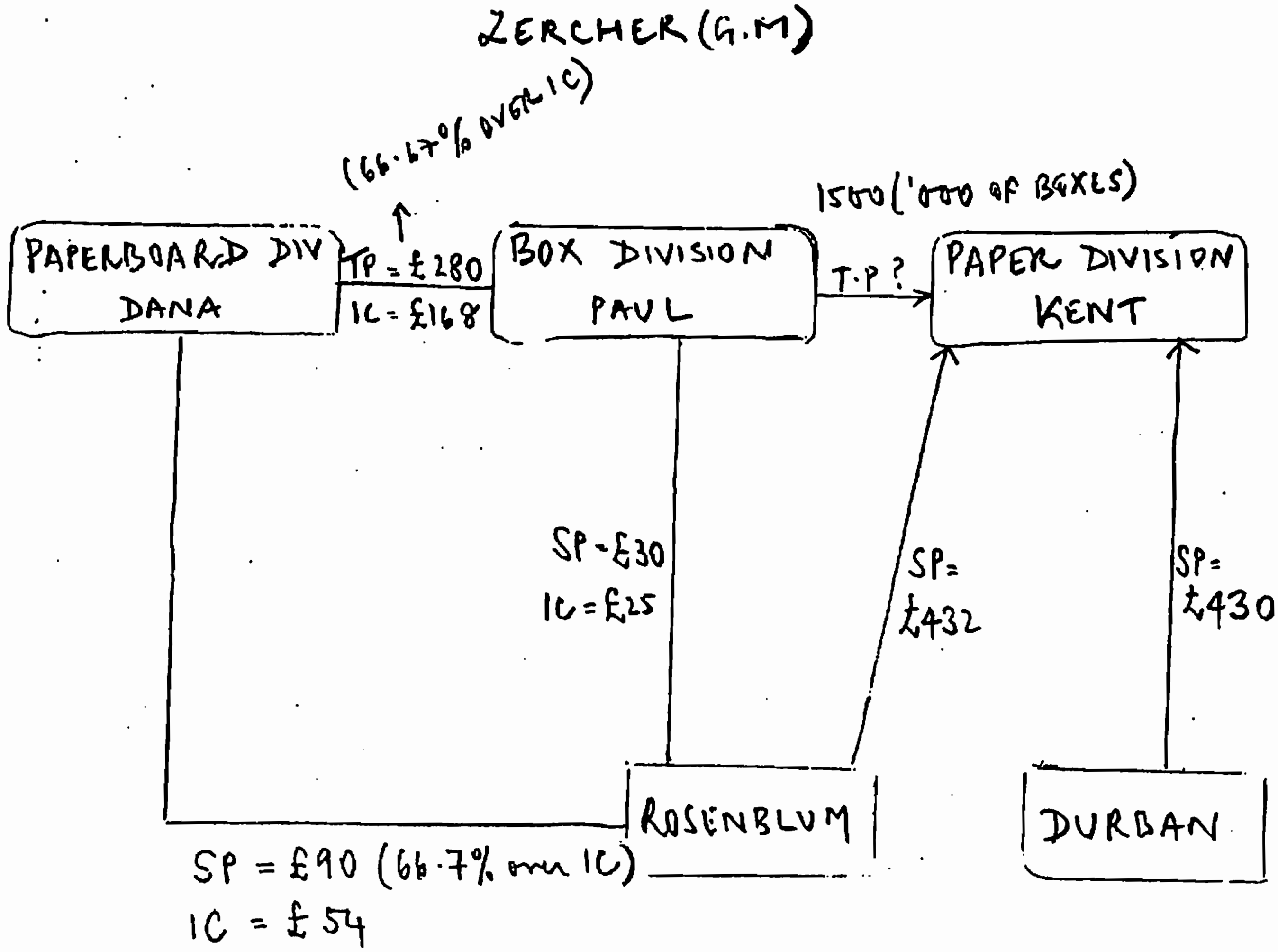
c. Estimate the range of prices Wipro should be willing to pay for PRFT

d. Estimate the range of prices Wipro should pay for PRFT using the transaction multiples for the Wipro-Infocrossing merger concluded in August 2007 as a basis.

Managerial Accounting – Rotch Paper

Rotch Paper is a vertically integrated paper manufacturing company with several profit centers. The case requires students to determine the optimal transfer price.

The case has been converted into a role-playing exercise to highlight the behavioral implications of asymmetric information and incentive contracts with kinks



TP = TRANSFER PRICE

SP = SALE PRICE

IC - INCREMENTAL COST

Your name: ______________________

Your "double": ____________________

Team no.: ______________________

ROTCH PAPER LTD.

Box Division Manager Package (Paul)

The purpose of this case is to explore management control issues related to profit centers and transfer pricing. This is an interactive exercise which will involve negotiation. Preparation of this case is to be essentially an individual effort. Prior to the negotiation session, you should discuss this case only with your double.

You are to assume the role of **Paul**. You must decide what additional steps, if any, you will take on the bid you made to the Paper Division. Please submit the attached pre-negotiation form to the observer at the beginning of your meeting.

Case: ROTCH PAPER LTD. (Paul)

You are Paul, the General Manager of Rotch Paper Ltd.'s Box division. (See Exhibit A for organization chart.)

Rotch Paper Ltd. is a medium-size, partly integrated paper company, producing white and kraft papers and paperboard. A portion of its paperboard output is converted into corrugated boxes by your division, which also prints and colors the outside surface of the boxes. Including the Box division, the company has four producing divisions and a timberland division, which supplies part of the company's pulp requirements.

For several years each division has been judged independently on the basis of its profit and return on investment. Top management has been working to gain effective results from a policy of decentralizing responsibility and authority for all decisions but those relating to overall company policy. The company's Managing Director and Board of Directors believe that in the past few years the concept of decentralization has been successfully applied and are convinced the company's profits and competitive position have definitely improved as a result of profit decentralization.

The Paper Division (headed by Kent) designed a special display box for one of its papers in conjunction with the Box Division, which is equipped to make the box. Your staff for package design and development spent several months perfecting the design, production methods, and materials that are to be used. Because of the unusual color and shape, these are far from standard. According to an agreement between the two divisions, the Box Division was reimbursed by the Paper Division for the cost of its design and development work.

When the specifications were all prepared, the Paper Division asked for bids on 1,500 thousands of the boxes from the Box Division and from outside companies. Each division manager is normally free to buy from whatever supplier he wishes; and even on sales within the company, divisions are expected to meet the going market price if they want the business. You have bid £480 a thousand boxes (£720,000 total bid). The order represents less than 5% of your division's annual sales volume.

Profit margins of converters such as the Box Division are being squeezed. In recent months you were regularly not operating at full capacity. The Box Division, as do many other similar converters, buys paperboard and its function is to print, cut, and shape it into boxes. Though it buys most of its materials from other Rotch divisions, most of the Box Division's sales are made to outside customers. If you get the order from the Paper Division, you probably will buy the linerboard and corrugating medium from the Paperboard Division of Rotch. The walls of a corrugated box consist of outside and inside sheets of linerboard sandwiching the fluted corrugating medium. About 70% of your estimated out-of-pocket (incremental) manufacturing cost of £400 (per thousand) for the order represents the cost of linerboard and corrugating medium. The Paperboard Division has been running near capacity, and Dana Labovitz, its division manager, has indicated that she does not believe that she should reduce her prices to the Box Division.

From knowledge you have gained at the monthly division managers' meetings you estimate the Paperboard Division's out-of-pocket manufacturing costs on both lining and corrugating medium are about 55-60% of its selling price. You know Kent has knowledge of the general cost structure and pricing policies of your Division, but would not have the specific details of your costs for this order.

You arrive at your bid of £480 a thousand by adding your normal 20% overhead and profit charge to your out-of-pocket manufacturing costs of £400.

Kent, manager of the Paper division, has advised you that he has received bids of substantially less than £480 from outside suppliers. He has not identified the outside suppliers or the amount of their bids. There are many converters, and it would be difficult, if not impossible, for you to determine the names of all other bidders and the amounts of their bids. You do know, however, that Rosenblum Paper Ltd. has bid £432, and that it has agreed to buy the outside lining from the Paperboard Division at a price of £90 a thousand boxes. Also, you have agreed to do the printing for Rosenblum at £30 a thousand. Your out-of- pocket costs for the printing would be about £25 a thousand.

Your initial response to Kent, when informed of the above, was that you would not reduce your £480 bid for several reasons:

1. You would be countermanding your order of last month to your salesmen to stop shaving their bids and to bid full cost quotations. You have been trying for weeks to improve the quality of the business, and if you turn around now and accept this job at anything less than £480 you will be tearing down this program you have been working so hard to build up. You feel the division can't very well show a profit by putting in bids which don't even cover a fair share of overhead costs, let alone give a profit.

2. It is difficult to know for sure, but there are some indications that the sales force is responding to your order of last month. There are more bids being made recently, and they seem to be close to the full cost quotations. It's too early to tell what the results of these bids will be. The Box Division Sales Manager, who is normally a reliable fellow, has reported on three bids, each of which he feels you have a 50-50 chance to get. In any case, you would have sufficient capacity to handle the Paper Division's order, but a couple of these other orders would certainly help the profit picture.

3. You did the development work on the box for Kent, and having received no profit on that, you feel that you are entitled to a good mark-up on the production of the box itself.

4. The recent draft of the divisional P&L statement you recently submitted shows net profits of £44,000 in excess of the corporate target for your division. The budget estimates include the sale of 1,500 thousands boxes to the Paper Division at £480 a thousand. The Rotch incentive system provides a bonus to Division Managers equal to 20% of their salary for achieving profit targets.

You are aware that Kent has spoken to Zercher about your bid. Both you and Kent report to Zercher. Zercher knows of your recent directives to your salesmen to stop shaving their bids. She believes very strongly in Rotch's policy of divisional autonomy. While you know it is possible, you do not think it is very likely that Zercher will force you to reduce your bid nor do you think it is certain that Zercher will force Kent to order from you.

A final concern you have is you know Zercher retires in three years. Company policy is to promote from within whenever possible. It is generally believed that all division managers are potential candidates for Zercher's position when she retires; it is also expected that Zercher will be asked to recommend a successor.

You have just received the following hand-written note from the Managing Director of Rotch Paper Ltd.:

Dear Paul:

I am pleased to see that your budget draft calls for a net profit in excess of our target for your division. As you know the decentralized nature of our company makes it imperative that the performance of each division is financially sound.

Thank you for your help. I know that we can count on you for a continuing fine performance.

Zercher

EXHIBIT A

ROTCH PAPER, LTD.

ORGANIZATION CHART

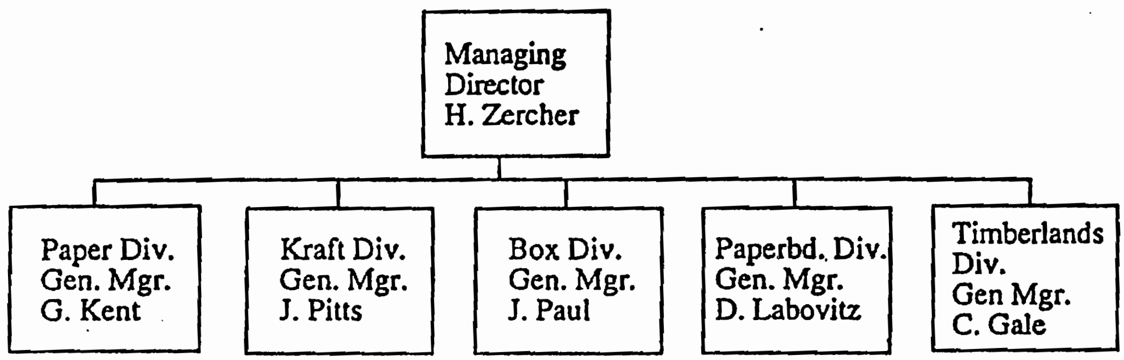


EXHIBIT B

ROTCH PAPER, LTD.

BOX DIVISION WORKING ANALYSIS OF BID TO PAPER DIVISION

Selling Price		£480
Manufacturing costs		
Direct labor & supplies	£120	
Linerboard and corrugating	280	
z Manufacturing Overhead	18	
Total mfg. costs		(418)
Gross Profit		62
Selling expenses		(38)*
Net Profit		£24

Notes:

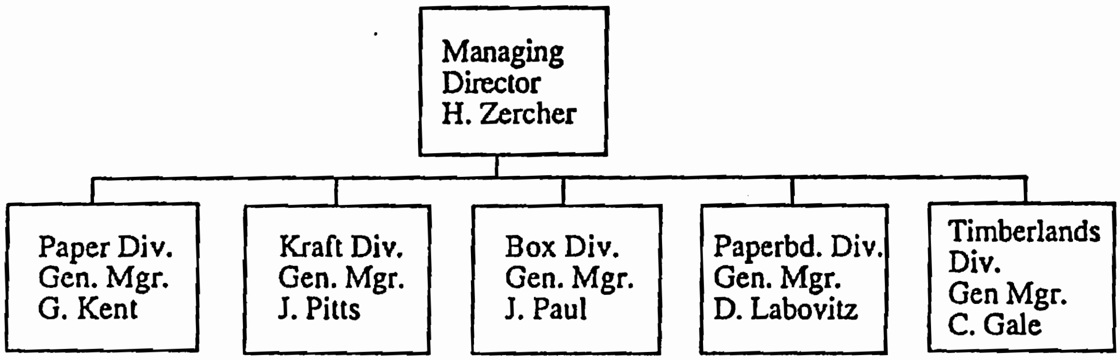
1. The Box Division's standard pricing policy is to add 20% to direct manufacturing costs.
2. The Box Division's selling force is paid salary plus 1.25% of selling price on outside sales.

Paul

EXHIBIT A

ROTCH PAPER, LTD.

ORGANIZATION CHART



Your name: ____________________

Your "double": ____________________

Team no.: ____________________

ROTCH PAPER LTD.

PRE-NEGOTIATION FORM

To be handed in prior to meeting to your Observer: ____________________

Box Division Manager Package (Paul)

Preparation for meeting with Kent

1. Price

a. What is your target price , the amount of money which, if you receive less, you will feel that you have not done very well?

b. What is your walk-away price, the amount offered which you will just not accept regardless of what happens during the meeting?

c. What will be your initial price, the amount you will ask at the beginning of the meeting?

d. What do you anticipate may be Kent's

target price?

walk-away price?

initial price?

2. What are your main negotiating points, in order of importance?

a.

b.

c.

d.

3. In what order will you bring these up?

4. What do you anticipate will be Kent's main negotiating points, in order of importance? How will you counter them?

5. Is there anything you hope to achieve in addition to a good price? What tradeoffs might you make? Be as specific as you can?

6. What will be your general approach/strategy to this session?

7. What will be your approach to Zercher?

Positive/Negative aspect of the experiential learning format?

- Positives

- Negatives

How to make experiential learning more effective?

- Choose the right game/simulation/role-playing situation, and

- PRAY!