GROUP PROJECT – CASE STUDY

The Ivory Furniture Company

(Financial Analysis)

The Ivory Furniture Company is a manufacturer of home and office furniture and such household hardware items as curtain rods, picture hangers and the like. The company was formed in the early 1990's as a consolidation of four smaller furniture suppliers and producers, after experiencing severe difficulties from larger competitors.

Total furniture industry sales are generally quite stable, but due to fashion changes, individual firms experience considerably more instability than does the industry as a whole. For instance, if a firm 'misses the market', that is to say it does not receive well the changes in customer preferences for new designs, it will most probably experience significant sales reduction for as long as it fails to do so.

The company, whose financial statements are given in appendix A, markets its products to a large East Coast State. It has been prosperous throughout its 15th year history, but its most significant growth occurred in the early 2000's.

Robert Bradley, president of the Ivory Furniture Company, has recently received a note from John Pratt, vice president and loan officer of the First National Bank, voicing the Bank's concern about the deteriorating financial position of his company.

In fact, a preliminary analysis had been run on Ivory Furniture Company following the closing of the 2007 fiscal year, and John had noticed that some of the company's ratios were showing downward trends, falling below the averages for the furniture manufacturing industry. Although, Robert acknowledged receipt of the Bank's material, he neither replied to the bank showing concern, nor had taken action to correct the situation.

More specifically, the preliminary analysis indicated that some problems were developing, but no ratio was far below the level specified in the loan agreement between the bank and Ivory Furniture Company. However, a second more thorough analysis of the company's financial statements for the past two years revealed some worried signals showing that the company's current ratio was well below 1.8 times, a clearly specified prerequisite included in the loan agreement.

According to the loan agreement, the First National Bank could legally call upon the company for immediate payment of the entire bank loan (principal and accrued interest), and if payment could not be honored within 15 working days, the bank could consider this inability as a credit event (default) and consequently to exercise its rights pertained in the loan contract forcing Ivory Furniture Company into bankruptcy.

Most likely, the bank had no intention of actually enforcing the specific clause of the contract to its full extent, but it did intend to use the clause in question to put pressure on Robert Bradley to take some decisive action to improve his company's financial situation.

Robert Bradley decided to make an appointment to see John Pratt, who has handled the Ivory account at First National Bank since 1995. He felt eager to discuss possibilities and prerequisites of new credit lines, after receiving the second analysis which was run on the Bank's newly implemented computerized financial analysis program.

Based on this newly instituted program, the bank would require quarterly financial statements –limited at the beginning to Balance Sheets and Income Statements –from each of its strategic customers. This information are fed into a system that calculates the key ratios of each customer, charts trends in these ratios, compares the statistics of each company with the average ratios and trends of other companies in the same field as well as against Industry statistics and assesses the 'financial strength of each company's Balance Sheet'.

In cases where any ratio of any company appears significantly poorer than the corresponding industry averages, the system makes note of this fact automatically. Consideration is also given to specific terms of a loan contract which requires certain financial ratios to be maintained at specific minimum levels, and if these minimums are not being met and sustained, the system will automatically make a note of the deficiency.

John Pratt has also informed Robert Bradley that the bank plans to further upgrade the newly implemented computerized financial analysis program, which will potentially enable the bank to make adjustments to the quarterly submitted financial statements if deemed necessary, in order to assess more accurately financial strengths and weaknesses. Robert Bradley left the meeting full of worries, and decided to call for an immediate directors' meeting in Ivory.

At the company's directors' meeting[(1)] held right after Bradley's visit to the bank, he informed all participants, members of the executive management committee, about the Bank's latest views and expressed his concerns whether the bank would continue to supply the present line of credit, let alone increase the loan outstanding.

Robert was especially troubled by the fact that the Federal Reserve System recently had tightened bank credit, forcing commercial banks like the First National Bank to squeeze credit facilitation even to its strategic clients.

In this same meeting, Robert Bradley also presented a copy of Pratt's latest computer analysis of Ivory's financial statements for the last two fiscal years and the accompanied bank's assessment, which led the management of the First National Bank to the decision to insist on immediate repayment of the entire loan unless Ivory Furniture Company comes up with a program showing how the current financial situation could be improved.

At this point, Donna Frank, a university graduate in finance and accounting with five years of banking experience, was called upon and given the job to perform her own analysis of the company's financial statements for the last two years, provide explanations to her findings and where necessary to initiate suggestions for actions towards improvements to be made, aiming to assist Ivory's management to confront the bank's threats. Donna was recently brought in (hired) as assistant to the president of the board of Ivory Furniture Company Mr. Robert Bradley.

Leaving the meeting Donna was convinced that she needed to gather along with the company's financial statements and all other financial data that might be proven helpful to carry out the job assigned to her. As a start she decided t to perform a well supported ratio analysis which will enable her to answer the questions that follow:

Footnote1: The members of Ivory's executive management team present in the meeting were:

1. Robert Bradley (President of the board and CEO)
2. Ted Ellis (VP Finance –CFO)
3. Mariam Abdul (Accounting manager)
4. Kathrin Labour (HR)
5. Mark Abel (Production manager)
6. Andrew Spencer (Marketing manager)
7. George Collins (Sales manager)

QUESTIONS

1) How Ivory's key financial data compare with the corresponding ones in the furniture Industry? What do the data suggest about Ivory? (hint: fill in the table below to show common-size statements for Ivory. Industry data are shown below)

Income statements			**2007**	***2006***
Sales	--------	-------	100.0	100.0
Gross profit	--------	-------	55.1	54.8
EBIT	--------	-------	10.8	10.2
Net Income After Tax	--------	--------	6.4	6.1

Balance sheets			**2007**	**2006**
Cash	----------		3.4	3.1
Accounts receivable	----------	---------	14.3	14.5
Inventory	----------	---------	12.0	13.0
Total current assets	**----------**	**----------**	**31.3**	**33.4**
Fixed assets	----------	----------	53.7	51.6
Total assets	**----------**	**----------**	**100.0**	**100.0**
Current liabilities	---------	----------	32.3	33.2
Long-term debt	----------	----------	15.3	15.6
Equity	----------	----------	51.7	51.6
Total claims	**----------**	**----------**	**100.0**	**100.0**

2) Is the Bank's estimations and assessment about Ivory's liquidity accurate? If yes, what factors have caused Ivory's declining liquidity? Does Ivory appear to be satisfactorily liquid? (hint: Calculate key liquidity ratios for Ivory for 2007 and 2006. Industry data are shown below)

Industry average

Liquidity ratios	**2007**	**2006**
Current ratio	1.86	1.89
Quick ratio	1.05	1.07
Cash ratio	0.14	0.16

3) Calculate key efficiency ratios for Ivory for 1994 and 1993. Which of the ratios below are also used as liquidity indicators? What impact, if any, do they have on Ivory's liquidity. What is Ivory's total cash cycle? What can you conclude about Ivory's efficiency? (Industry data are shown below).

Industry average

Operating Efficiency ratios	**2007**	**2006**
Average collection period	23.1	24.8
Accounts receivable turnover	12.0	11.5
Inventory turnover	6.6	6.0
Accounts payable period	35	42
Cash conversion cycle	n/a	n/a
Fixed asset turnover	4.8	4.8
Total asset turnover	2.8	2.7

4) Would the Ivory's debt structure, as it compares to its total assets, be considered risky or that might have potential risks hidden? What can you conclude about Ivory's financial risk? (hint: Calculate Ivory's key debt management ratios for 2007 and 2006 Industry data are shown below).

	Industry average	
Leverage & Coverage ratios (Debt mgnt)	**2007**	**2006**
Total debt (ie total liabilities) to total assets (debt ratio)	51.5	52.8
Total debt (ie total liabilities) to total equity	1.6	1.7
Long Term debt to equity	61.5	62.8
Times interest earned	9.3	8.3

5) What can we conclude about Ivory's profitability? What are the key elements contributing to its profitability? Is the profit distribution enhancing Ivory's future growth and why? Should equity owners be satisfied and why? (Industry data are shown below).

	Industry average	
Profitability ratios	**2007**	**2006**
Gross profit margin	55.1	54.8
Net profit margin	6.4	6.1
Return on total assets	10.3	9.1
Operating profit margin	15.8	14.2
Return on owners equity	21.5	19.1

6) Explain what Ivory's corresponding key Investor or Market ratios tell about the opinion of the investors. (Industry data are shown below).

Investor or Market ratios	*Industry average* **2007**	**2006**
Dividend payout ratio	51.6	53.2
Dividend yield	3.5	3.6
Market to book value ratio	2.2	2.1
Price/earnings ratio (P/E ratio)	17.4	19.4

7) Donna has also calculated some other performance indicators to show to the bankers, in her efforts to assist her boss CEO Robert Bradley to fight back his case with Loan Officer and long time associate Mr. John Pratt. These ratios focus on Ivory's measurement of the return on invested or employed capital using the DuPont ratio**.**

The du Pont system calculations for Ivory for 2007 & 2006 are shown here:

NIAT[1]/Equity = (NIAT/Sales)*(Sales/Assets)*(Assets*Equity)

1) (NIAT = Change in Net Income After Tax)

RETURN ON INVESTMENT2007 = ($290.0 /$5730.6)*($5730.6/$2840.2)*($2840.2**/** $987.7)

= (5.06%) χ (2.02 times) χ (2.88 times) = **29.4 percent**

RETURN ON INVESTMENT2006 = ($243.4/$5576.4)* ($5576.4 /$3039.9)* ($3039.9**/** $840.2)

= (4.36%) χ (1.83 times) χ (3.62 times) = **29.0 percent**

Do you believe that Donnas' findings in the calculation of DuPont ratio above can be proven valuable to Ivory's President? How can they be interpreted? How Donna should justify the stagnant changes in Ivory's returns on investment?

8) On the basis of Dona's financial analysis do you believe that the bank should reconsider its decision to demand full repayment of the loans granted to Ivory? Would it make it possible to extend the existed credit facility and even grant additional loans if required? (defend your answer)

9) In case the bankers are not convinced what other options are open to Ivory?

10) As a final remark, what strengths and weaknesses have been revealed from Donnas' ratio analysis? Under what circumstances is the validity of her comparative ratio analysis questionable?

APPENDIX A

The Ivory Furniture Company

Financial Statements for the Years ended December 31, 2007 & 2006

Ivory SA Income statements

	Years ended December 31	
	2007	**2006**
Net sales	$5,730.6	$5,576.4
Cost of goods sold	2,700.0	2,661.8
Gross profit	**$3,030.6**	**$2,914.6**
Selling and administrative expenses	2,279.4	2,213.0
Depreciation expense	156.9	155.9
Other expenses	70.1	56.8
Income before taxes and interest (EBIT)	**$524.2**	**$488.9**
Interest expense	65.1	77.4
Income before taxes	**$459.1**	**$411.5**
Taxes	169.1	168.1
Net income after taxes	**$290.0**	**$243.4**
Dividends	*$142.5*	*$127.5*
Transfers to retained earnings	*$147.5*	*$115.9*
Earnings per share (75million shares)	*$3.87*	*$3.25*
Dividends per share	*$1.90*	*$1.70*

Ivory SA Balance sheets

	Years ended December 31	
	2007	**2006**
Current assets		
Cash and cash equivalents	$ 61.0	$ 95.2
Accounts receivable	478.9	575.3
Inventories	354.0	435.3
Other current assets	173.7	150.4
Total current assets	**$1,067.6**	**$1,256.2**
Fixed assets, net of depreciation	1,772.6	1,783.7
Total assets	**$2,840.2**	**$3,039.9**
Current liabilities		
Accounts payable	$ 391.6	$ 420.2
Accrued expenses	291.9	267.2
Notes payable and current maturities of long term debt	210.6	201.5
Other current liabilities	211.0	198.6
Total current liabilities	**$1,105.1**	**$1,087.5**
Long-term debt	747.4	1,112.2
Total liabilities	**$1,852.5**	**$2,199.7**
Common shareholders' equity:		
Common stock, $3.00 par value (75,000,000 shares outstanding)	225.0	225.0
Retained earnings	762.7	615.2
Total common shareholders' equity	**987.7**	**840.2**
Total liabilities and shareholders' equity	**$2,840.2**	**$3,039.9**

Market value data:	**2007**	**2006**
Per share price of common stock	$62.00	$56.50