Assignment (Spring 2020)

Program: MBA-90

Semester: 4th

Course: Financial Management

Lecturer Name: Naveed Azeem

Assignment Submitted By: Ali Latif Awan

Roll No: 15319

Chapter NO 1 :- Introduction to Managerial finance. Pg 2/13

Chapter NO 1 :- Case Study

Topic :- Assessing the Goal of Sports Products, Inc.

Q# 1:- What should the management of Sports Products, Inc., pursue as its overriding goal? Why?

Answer:- Maximization of share holder wealth, which means maximization of share price, should be the primary goal of the firm. Unlike profit maximization, this goal considers ~~the~~ timing, Cash flows, and risk. It also reflects the worth of the owner's investments in the firm at any time. It is the value they can realize should they decide to sell their shares.

Q2:- Does the firm appear to have an agency problem? Explain.

Answer:- Yes, there appears to be an agency problem. Although compensation for management is tied to profits, it is not directly linked to share price. In addition, management's actions with regards to pollution controls suggest a profit maximization focus, which ~~want~~ would maximize their earnings, rather than an attempt to maximize share price.

Q 3:- Evaluate the firm's approach to pollution control. Does it seem to be ethical? Why might incurring the expense to control pollution be in the best interests of the firm's owners in spite of its negative impacts on profits?

Answer:- The firm's ~~approach~~ approach to pollution controls seems to be questionable ethically. While it is unclear whether ~~the~~ their acts were intentional or accidental, it is clear that they are ~~vi~~ violating the law — an illegal act potentially leading to litigation costs — and as a result, are damaging the environment, an immoral and unfair act that has potential negative consequences for society in general. Clearly, Sports Products has not only broken the law but also established poor standards of conduct and moral judgment.

Q 4:- On the basis of the information provided, what specific recommendations would you offer the firm?

Answer:- Some specific recommendations for the firm include:

a) Tie management, and possibly employee, compensation to share price or a performance-based measure and make sure that all involved own stock and have a stake in the firm. Being compensated partially on the basis of share price or another performance measure, and owning stock in the firm will more closely ~~link~~ link the wealth of managers and employees to the firm's performance.

b) Comply with all federal and state laws as well as accepted standards of ~~condu~~ conduct or moral judgment.

c) Establish a corporate ethics policy, to be read and signed by all employees.

Chapter NO 2:. Financial Statements & Analysis:.

Case Study :- Assessing Martin Manufacturing's Current Financial Position.

Q1 :- ~~Calcurat~~ Calculate the firm's 2003 financial ratios, and then fill in the preceding table.

Answer: Martin ~~manu~~manufacturing Company is an intergrative case study addressing financial analysis techniques. The company is a capital-intensive firm which has poor management of accounts receivable and inventory. The industry average inventory turnover can fluctuate from 10 to 100 depending on the market.

a, **Ratio Calculations:.**

Financial Ratio	2003
Current Ratio	$ 1,531,181 ÷ $ 616,000 = 2.5
Quick Ratio	($ 1,531,181 − $ 700,625) ÷ $ 616,000 = 1.3
Inventory turnover (times)	$ 3,704,000 ÷ $ 700,625 = 5.3
Average Collection Period (days)	$ 805,556 ÷ ($ 5,075,000 ÷ 360) = 57
Total asset turnover (times)	$ 5,075,000 ÷ $ 3,125,000 = 1.6
Debt ratio	$ 1,781,250 ÷ $ 3,125,000 = 57 %
Time interest earned	$ 153,000 ÷ $ 93,000 = 1.6
Gross Profit margin	$ 1,371,000 ÷ $ 5,075,000 = 27%
Net Profit margin	$ 36,000 ÷ $ 5,075,000 = 0.71%
Return on Total Assets	$ 36,000 ÷ $ 3,125,000 = 1.2 %
Return on entity	$ 36,000 ÷ $ 1,343,750 = 2.7%

Pg 5/13

Historical Ratios

Martin Manufacturing Company

Ratio	Actual 2001	Actual 2002	Actual 2003	Industry Average
Current ratio	1.7	1.8	2.5	1.5
Quick ratio	1.0	0.9	1.3	1.2
Inventory turnover (times)	5.2	5.0	5.3	10.2
Average Collection Period (days)	50	55	57	46
Total asset turnover (times)	1.5	1.5	1.6	2.0
Debt ratio	45.8%	54.3%	57%	24.5%
Times interest earned	2.2	1.9	1.6	2.5
Gross profit margin	27.5%	28.0%	27.0%	26.0%
Net profit margin	1.1%	1.0%	0.71%	1.2%
Return on total assets	1.7%	1.5%	1.2%	2.4%
Return on equity	3.1%	3.3%	2.7%	3.2%
Price/earnings ratio	33.5	38.7	34.48	43.4
Market book	1.0	1.1	0.89	1.2

Q2:- Analyze the firm's current financial position from both a cross-sectional and a time-series viewpoint. Break your analysis into evaluations of the firm's liquidity, activity, debt profitability, and market.

Answer:- Liquidity:- The firm has sufficient assets to cover current ~~[illegible]~~ liabilities. The trend is upward and is much higher than the industry average. This is an unfavorable position, since it indicates too much inventory.

Activity :- The inventory turnover is stable but much lower than the industry average. This indicates the firm is holding too much inventory. The average collection period is increasing and much higher than the industry average. These are both indicators of a problem in collecting payments.

The fixed asset turnover ratio and the total assets turnover ratios are stable but significantly lower than the industry avegge. This indicates that the sales volume is not sufficient for the amount of committed assets.

Debt :- The debt ratio has increased and is substantially higher than the industry average. This places the company at high risk. Typically industries with heavy capital investment and higher operating risk try to minimize financial risk. Martin Manufacturing has positioned itself with both heavy operating and financial risk. The times-interest-earned ratio also indicates a potential debt services problem. The ratio is decreasing and is far below the industry average.

Profitability :- The gross profit margin is stable and quite favorable when compared to the industry average. The net profit margin, however, is deteriorating and far below the industry average. When the gross ~~for~~ profit margin is within expectations but the net profit margin is too low, high interest payments may be to blame. The high financial leverage has caused the low profitability.

Market :- The market price of the firm's common stock shows weakness relative to both earnings and book value. This results

Pg 7/13

indicates a belief by the market that Martin's ability to earn future profits fres more ~~the~~ and increasing uncertainty as perceived by the market.

Q3:- Summirize the Firm's overall Financial position on the basis of your findings in part B.

Answer:- Martin Manufacturing clearly has a problem with ~~bit~~ its inventory level, and ~~data~~ sales are not at an appropriate level for its capital investment. As a consequence, the Firm has acquired a substantial amount of debt, ~~not~~ which, due to the high interest payments associated with the large debt burden, is depressing profitability. These problems are being picked up by investors as shown in their weak market ratios

Pg 8/13

Chapter # 3 :- Cash Flow and Financial Planning

Case Study :- Preparing Martin Manufacturing's 2004 Pro Forma Financial Statements.

Q1:- Use the historical and projected financial data provided to prepare a pro forma income statement for the year ended December 31, 2004.

Answer

Martin Manufacturing Company

Pro forma Income Statement,

For the Year Ended December 31, 2004

Sales revenue		$ 6,500,000	(100 %)
less: Cost of goods sold		4,745,000	(.73 x sales)
Gross profits		$ 1,755,000	(.27 x sales)
less: Operating expenses			
Selling expense & general and administrative expense	$ 1,365,000 (.21x sales)		
Depreciation expense	185,000		
Total operating expenses		$ 1,550,000	
Operating profits		$ 205,000	
less: Interest expense		97,000	
Net profits before taxes		$ 108,000	
less: Taxes (40%)		43,200	
Total profits after taxes		$ 64,800	

Notes:- Calculations "driven" by cost of goods sold and operating expense (excluding depreciation, which is given) Percentages.

Pg 9/13

Q2:- Use the projected financial data along with relevant data from the pro forma income statement prepared in part a to prepare the pro forma balance sheet at December 31, 2004.

Answers:-

Martin Manufacturing Company

Pro forma Balance Sheet

December 31, 2004

Assets	
Current assets	
Cash	$ 25,000
Accounts receivable	902,778
Inventories	677,857
Total current assets	$ 1,605,635
Gross fixed assets	$ 2,493,819
Less: Accumulated depreciation	685,000
Net fixed assets	$ 1,808,819
Total assets	$ 3,414,454
Liabilities and stockholder's equity	
Current liabilities	
Accounts payable	$ 276,000
Notes payable	311,000
Accruals	75,000
Total current liabilities	$ 662,000
Long-term debts	1,165,250
Total liabilities	$ 1,827,250

P.T.O

Pg 10/13

Stock holder's equity	
Preferred stock	$ 50,000
Common stock (at par)	100,000
Paid-in capital in excess of par	193,750
Retained earnings	1,044,800
Total stockholder's equity	$ 1,388,550
Total	$ 3,215,800
External funds required	198,654
Total liabilities and stockholder's equity	$ 3,414,454

Begining retained earnings (January 1, 2004)	$ 1,000,000
Plus: Net profits	64,800
Less: Dividends paid	(20,000)
Ending retained earning (December 31, 2004)	$ 1,044,800

Q3:- Will Martin Manufacturing Company need to obtain external financing to fund the proposed equipment modernization program? Explain.

Answer:- Based on the pro forma financial statements prepared above, Martin Manufacturing will need to raise about $ 200,000 ($ 198,654) in external financing in order to undertake its construction program.

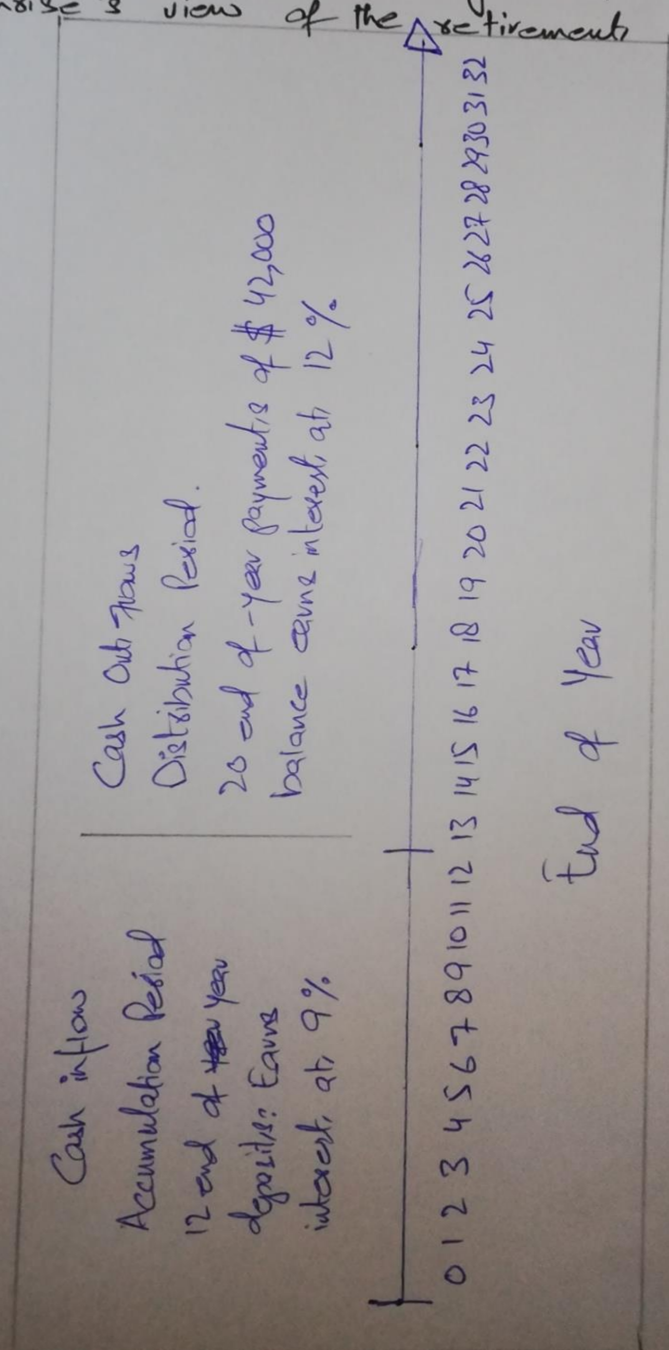
Pg 11/13

Chapter # 4:- Time Value of Money

Case Study: Finding Jill Moran's Retirement Annuity

Q1:- Draw a time line depicting all of the cash flows associated with Sunrise's view of the retirement annuity.

Answer:-



Pg 12/13

Q b. How large a sum must Sunrise accumulate by the end of year 12 to provide the 20-year, \$ 42,000 annuity?

Answer:- Total ammount to accumulate by end of year 12

$PV_n = PMT \times (PVIFA_{i\%,n})$

$PV_{20} = \$ 42,000 \times (PVIFA_{12\%,20})$

$PV_{20} = \$ 42,000 \times 7.469$

$PV_{20} = \$ 313,698$

Calculator Solution: \$ 313,716.63

Q c How large must Sunrise's equal annual end-of-year deposits into the account be over the 12-year accumulation period to fund fully Ms. Moran's retirement annuity?

Answer:- End-of-year deposits, 9% interest:

Formula:- $PMT = \dfrac{FVA_n}{FVIFA_{i\%,n})}$

$PMT = \$ 313,698 \div (FVIFA_{9\%, 12 yrs})$

$PMT = \$ 313,698 \div 20.141$

$PMT = \$ 15,575.10$

Calculator Solution:- \$ 15,575.31

Sunrise industries must make a \$ 15,575.10 annual end-of-year deposit in years 1-12 in order to provides Ms. Moran a retirement annuity of \$ 42,000 per year in years 13 to 32.

Q d. How much would Sunrise have to deposit annually during the accumulation period if its could earn 10% rather than 9% during the accumunalation period?

Answer :- End-of-year deposits, 10% interest

$PMT = \$313,698 \div (FVIFA_{10\%, 12 yrs})$

$PMT = \$313,698 \div 21.384$

$PMT = \$14,669.75$

Calculator Solution :- \$ 14,669.56

The corporation must make a \$14,669.75 annual end-of-year deposit in years 1-12 in Moran a retirement annuity of \$42,000 per years 13 to 32.

Q E :- How much would Sunrise have to deposit annully during the accumulation period if Ms. Moran's retirement annuity were a perpetuity and all other terms were the same as ~~it~~ initially described?

Answer Initial deposit if annuity is a perpetuity and initial deposit earns 9%

$PV_{perp} = PMT \times (1 \div i)$

$PV_{perp} = \$42,000 \times (1 \div .12)$

$PV_{perp} = \$42,000 \times 8.333$

$PV_{perp} = \$349,986$

End-of-year deposit,

$PMT = FVA_n \div (FVIFA_{i\%, n})$

$PMT = \$349,986 \div (FVIFA_{9\%, 12 yrs})$

$PMT = \$349,986 \div 20.141$

$PMT = \$17,376.79$

Calculator Solution : \$ 17,377.04