

Case 1 signal cable company



Case 1: Signal Cable Company Introduction The Signal Cable Company, located in Tarrytown NY, is a cable manufacturer for analog and digital interconnects, speaker, video and home theater cables. The company is well known for “ highest standard in quality and customer service” and their “ superior design” and “ No-Hype approach resulted in one of the best price/performance ratio in the industry” (www.

signalcable. com). After a steady growth over the last few years, the management decided to enter in the fiber optics business. The market was growing, the demand increased and the competition was not too severe.

Thus the company established two additional manufacturing facilities and increased its inventory to meet the raising number of orders. Current Situation But despite or because of these investments the results showed a lower net profit margin, furthermore the cash balance and the stock price had fallen recently. Jay Smith, Assistant of the President, has now the challenge to prepare some feasible answers and suggestions for his boss, Joe Mathis, who has to inform the shareholders about the current situation.

Questions of the Case Study 1. Why has the stock price fallen despite the fact that the net income has increased? The stock price has fallen from \$7 to \$5. 50 despite the fact that the net income has increased.

The reason for the decrease of the stock price is that the shareholders are concerned about the increasing debts and liabilities, caused by the recent investments in two additional manufacturing facilities and a significant increase of its inventory. The concerns are based on the belief that the increased amount of debts and liabilities will result in lower future net

income, because of the interests, which the company will have to pay. So the negative effects of these recent investments are visible in some severe changes in the balance sheet, the income statement and the financial ratios. For example from 2003 to 2004 the amount of interest paid increased from 44, 000 to 155, 000, the total current liabilities increased from 355, 000 to 895, 000, the long term debt increased from 200, 000 to 1, 226, 280. These changes can also be seen in the following financial ratios. The long-term debt ratio increased from 22% to 61%.

long-term debt ratio = $\frac{\text{Long-term debt}}{\text{Long-term debt} + \text{equity}}$ 2004: LTDR = $\frac{1,226,280}{2,018,450} = 0.61$ 2003: LDTR = $\frac{200,000}{892,000} = 0.22$ The total debt ratio increased from 45% to 73%. total debt ratio = $\frac{\text{total liabilities}}{\text{total assets}}$ 2004: TDR = $\frac{2,121,280}{2,913,450} = 0.73$ 2003: TDR = $\frac{555,000}{1,247,000} = 0.45$

The Times interest earned decreased from 5.72 to 2.54. times interest earned = $\frac{\text{EBIT}}{\text{interest payments}}$ 2004: TIE = $\frac{393,500}{155,000} = 2.54$ 2003: TIE = $\frac{251,833.8}{44,000} = 5.72$

In addition the shareholders might be worried about the arising liquidity problems, which are also caused by the recent investments. The liquidity problems will be discussed in detail in Answer 2. . How liquid would you say that this company is? Calculate the absolute liquidity of the firm.

How does it compare with the previous year's liquidity position? The cash balance decreased from 40, 000 to 5, 000, while the accounts receivable increased from 200, 000 to 540, 000. In addition the inventory amount increased from 650, 000 to 1, 300, 450. This means that the increase of

sales did not flow in the cash balance but in the accounts receivable position. That means that many customers have not paid their bills directly (this can also be seen in the cash flow statement of answer 4). This liquidity situation might cause severe liquidity problems, if the company has to pay for a couple of major bills.

So the actual liquidity of the Signal Cable Company is not satisfying, which can be seen in the following ratios. The net working capital to asset deteriorated from 43% to 33%. NWC to total assets ratio = Net working capital Total assets 2004: $NWC \text{ to TAR} = \frac{950,450}{2,913,450} = 0.33$ 2003: $NWC \text{ to TAR} = \frac{535,000}{1,613,450} = 0.33$

43 1,247,000 The current ratio deteriorated from 2.51 to 2.06. Current Ratio = Current Assets Current Liabilities 2004: $CR = \frac{1,845,450}{900,000} = 2.06$

06 95,000 2003: $CR = \frac{890,000}{355,000} = 2.51$ The cash ratio decreased dramatically from 11.3% to 0.56%.

Cash Ratio = Cash Current Liabilities 2004: $CashR = \frac{5,000}{895,000} = 0.0056$ 2003: $CashR = \frac{40,000}{355,000} = 0.113$ The absolute liquidity of the firm can be seen in the change of net working capital (NWC) and is \$ 415,450. In the case of Signal Cable Company the change in net working capital is a negative sign for liquidity, because the amount is based on high accounts payable and low cash. Thus the capital can not be used in the short-term.

Change NWC = NWC 2004 - NWC 2003
 Change NWC = 950,450 - 535,000 = 415,450

value? Is the book value accurately reflecting the true condition of the company? The book value regards past costs of assets. The market value is the price of the share multiplied with the numbers of outstanding shares. The current book value of the company is 792, 170 in 2004 and 692, 000 in 2003 (Equity of ever year).

The current market value of the company is 1, 100, 000 (price per share x amount of outstanding shares). The book values per share increased from \$ 3. 46 in 2003 to \$ 3. 96 in 2004.

The stock price shows the market value per share and increased in the last period to \$ 5. 50. This figure shows that the market values the Signal Cable Company higher as it really is, which is not unusual. Book value per share = Equity outstanding shares 2004: $BV \text{ per share} = \frac{792, 170}{200, 000} = 3. 96$
2003: $BV \text{ per share} = \frac{692, 000}{200, 000} = 3. 46$

Although the book value increased the market regards the company still better than it really is, because of this the book value does not reflect the true condition of the company accurately. Besides the book value does not consider the intangible assets, e. g. know-how and image, because it is difficult to calculate its value precisely. 4.

The board of directors is not clear as to why the cash balance has dropped so much in spite of the increase in sales and the gross profit margin. What should Jay tell the board? Jay should tell the board that the reason for the low cash balance is justified by the fact that many customers have not paid their bills directly, which can be seen in the accounts receivable position in the balance sheet, where the amount of them has doubled. Cash Flow Statement

Cash Provided by Operations: Net Income 143,100 + Depreciation 79,000
 Change in working capital: - Increase of accounts receivable 340,000 -
 Increase of inventory 650,450 + Increase of accounts payable 90,000 +
 Increase in notes payable 450,000 = Cash provided by Operations - 228,350
 Cash Flow from Investments: Cash provided by disposal of 790,000 property,
 plant, and equipment = Cash provided by Investments 790,000
 Cash provided by (used for) Financing Activities: Additions to long-term debt + 1,
 026,280

5. Measure the free cash flow of the firm.

What does it indicate? $FCF_{2004} = OCF - \Delta \text{long-term Capital Expenditure} - \Delta \text{NWC}$
 $OCF_{2004} = EBIT(1-t) + \text{Depreciation}$
 $FCF = \text{free cash flow}$
 $OCF = 393,500(1 - 0.4) + 79,000 = \$315,100$
 $OCF = \text{operating cash flow}$
 $OCF = \$315,100 - \Delta \text{Gross Fixed Asset} \$790,000 - \Delta \text{Net Working Capital} \$415,450$
 Free Cash Flow \$ - 890,350
 The free cash flow of the financial perspective is usually claimed by shareholders (Equity) and Debtors (Debt). In the case of Signal Cable the free cash flow is negative, because of the substantial investments, which lead to an increase in gross fixed assets (accounts receivable, inventories) and net working capital. These outflows exceed the EBIT of the year 2004 significantly. But in general a negative free cash flow might not be a bad sign. The business is running a cash deficit not because it is unprofitable but it is growing so fast. Rapid growth is good news, as long as the business is earning more than the cost of capital on its investments.

On the one hand the negative free cash flow can be a problem in the short view, because it shows a low liquidity, so that important bills can not be paid, for instance. On the other hand the investments can charge off in the long-term so that the free cash flow can develop in the next periods so that it

ends up in a positive figure. 6. Calculate the net working capital of the company for each of the two years. What can you conclude about the firm's net working capital? The networking capital has increased significantly from \$ 535, 000 in 2003 to \$ 950, 450 in 2004.

This leads to the assumption that the assets must have been growing with a higher rate than the liabilities. Therefore, it can be concluded that the new assets were mostly financed with long-term debt. As seen in question 2, the growth of the networking capital has a negative impact on the company's liquidity, because networking capital locks up money in the short term. Net Working Capital = Current Assets - Current Liabilities 2004: $NWC = 1,845,450 - 895,000 = \$ 950,450$ 2003: $NWC = 890,000 - 355,000 = \$ 535,000$

Should the shareholders be concerned about the drop in cash flow or should they be happy that the earnings per share have increased? Explain your answer. To answer this question the long- and short-term should be considered. In the short term the shareholders should be concerned about the solvency (illiquidity) of the Signal Cable Company and should monitor the development of the cash balance and further financial transactions of the company. Another critical factor is the high rate of capital lock up.

To follow the actual cash situation they should monitor the cash ratio. Long-term investors are mostly interested in the progress of the profit. The Signal Cable Company has increasing its sales, net income and earnings per share* over the last few years. A decrease of cash flow or even a negative cash flow is not a very server problem as long as the company growths constantly.

The prospects of the company are positive, if the market continues the positive development. * earnings per share increased because the net income increased from \$ 124, 700. 3 to \$143, 100 and the net income divided by a constant number of shares (200, 000) results in an increase of the earnings per share.