Working Capital Management

"We have done it again," said George Brash, the president and chief executive officer of Superior Outboard Motors, to his group of senior managers at their January meeting. "Our sales for this past year are up over 8% compared to the previous year, but our net profit margin and earnings per share are down! The shareholders are understandably upset and are demanding answers. It won't be long before the analysts change their recommendations. We better come up with some explanations and strategies to rectify the problem."

Superior Outboard Motors, headquartered in Tampa, Florida, had manufacturing facilities in Blaine, Washington and Elkhart, Indiana. It specialized in the manufacture of outboard motors of various capacities, for small to medium sized boats. The average selling price of its motors was $4000 and the cost of production was $2800 per unit. The company had been in business for over 10 years and was well respected in the industry.

In particular, analysts had rated its after-sales service, consumer relations, and treatment of employees pretty high in comparison with its competitors. The company's stock (SOMI), which traded in the over the counter market, had appreciated significantly up until the first quarter of the current year. After that, however, the company had reported a drop in EPS for three quarters in a row causing the stock price to go down and the shareholders to make frantic calls to the consumer relations office.

"I think I know what the problem is, George," said Matt Snow, the vice-resident of finance. "I have taken a look at our financial statements (See Tables 1 and 2) and inventory figures for last year (see Table 3). While most of the expenses seem to be reasonable, I strongly believe that the policy of level monthly production, which was implemented at the start of the year, is the main culprit. Ours is a seasonal business with the peak season being during the months of May-August. Yet, we seem to be maintaining a level production rate of 600 motors per month. As a result, our inventory builds up significantly during the lean months and sits there tying up our capital. With interest rates as high as they have been on our short-term borrowing (prime rate plus 3%, i.e. 9% plus 3%), the interest charges have been killing our profits.

"As you can see in this cash budget that I have prepared (Table 4), our short-term debt varied between $2.09 million and $7.09 million during the first six months of the year. We ended the year with no short-term debt, but ended up paying almost $290,000 in interest expenses for the year. That's money that was spent primarily to finance inventory, which I might add, sat around for a few months. I recommend that we drop the level production policy and align our monthly production output with the forecasted sales for the month. I haven't worked out all the numbers yet, but I am quite sure that we will be able to boost our earnings quite a bit by making that change."

"Wait a minute," said Mike Cooper, the production manger, from the other side of the room. "Have you considered the effect of that change on our workforce and employee morale? We will have to lay off people during lean times and scramble to hire more workers during peak production periods. That will have a negative effect on our operating efficiency and will result in some additional costs for training and orientation. My staff and I are in contact with these folks on a daily basis. I would hat to have to tell some of these ‘nice’ folks that they were being laid off for a few months, especially when our annual sales have been going up. There’s got to be a better way!”

“Gentleman,” said George Brash, sensing that that the arguments were getting rather heated. “Let’s not jump to any conclusions here. I think you both have expressed valid points. On the one hand, we can’t lose sight of the fact that we value our employees and must continue caring for them. Yet on the other, we have a responsibility to our shareholders. We cannot let our earnings and stock price keep on dropping, especially considering the fact that our sales have been going up on a consistent basis. As you all know, the market can be merciless, once the analysts change their tone. Matt, why don’t you do the necessary number crunching and present the results at our next meeting? Let’s analyze all aspects of our working capital management policies and try and come up with the best possible alternative. I think this experience clearly proves that in our business, as in most businesses, Timing is everything!”

Table 1

Superior Outboard Motors Income Statement	
Sales	$28,800,000
Cost of Goods Sold	20,160,000
Gross Profits	8,640,000
Overheads	4,809,600
Depreciation	1,000,000
Earnings before Interest and Taxes	2,830,400
Interest Expense	1,787,928
Earnings before Taxes	1,042,472
Taxes	466,400
Net Income	$576,072

Table 2

Superior Outboard Motors Balance Sheet			
Cash	$918,280	Accounts payable	$1,680,000
Accounts receivable	129,600	Short-term Debt	-
Inventory	4,060,000		
Total current asset	$5,107,880	Total current liabilities	$1,680,000
		Long-term debt	$10,820,000
Net fixed assets	$13,152,120	Total liabilities	$12,500,000
		Equity (1 million shares)	$5,760,000
Total assets	$18,260,000	Total liabilities and stockholders’ equity	$18,260,000

Table 3 Monthly Sales (Units) and Production Output (Units)

	Beginning Inventory	Production	Sales	Ending Inventory
January	1450	600	0	2050
February	2050	600	0	2650
March	2650	600	200	3050
April	3050	600	600	3050
May	3050	600	1200	2450
June	2450	600	1500	1550
July	1550	600	1640	510
August	510	600	1000	110
September	110	600	700	10
October	10	600	200	410
November	410	600	106	904
December	904	600	54	1450

Note: Inventory value is $2800 each.

Table 4 Cash Budget

	Rate	Dec	Jan	Feb	Mar	Apr	May
Unit sales		50	0	0	200	600	1200
Revenues	$4000	200,000	-	-	800,000	2,400,000	4,800,000
Cash Receipts							
Cash sales	40%	78,400	-	-	313,600	940,800	1,881,600
Collections (prior month's sales)	60%		120,000	-	-	480,000	1,440,000
Total Cash Receipts			120,000	-	313,600	1,420,800	3,321,600
Production (units)		600	600	600	600	600	600
Production costs	2800		1,680,000	1,680,000	1,680,000	1,680,000	1,680,000
Cash Payments							
Production costs		1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000
Overhead		400,800	400,800	400,800	400,800	400,800	400,800
Interest			125,000	125,000	125,000	125,000	125,000
Taxes					116,600		
Total Cash Payments			2,205,800	2,205,800	2,322,400	2,205,800	2,205,800
Net cash flow			(2,085,800)	(2,205,800)	(2,008,800)	(785,000)	1,115,800
Beginning cash balance			200,000	200,000	200,000	200,000	200,000
Cumulative cash balance			(1,885,800)	(2,005,800)	(1,808,800)	(585,000)	1,315,800
Monthly loan/repayment			2,085,800	2,205,800	2,008,800	785,000	(1,115,800)
Cumulative loan			2,085,800	4,291,600	6,300,400	7,085,400	5,969,600
Ending cash			200,000	200,000	200,000	200,000	200,000
Cumulative loan			2,085,800	4,291,600	6,300,400	7,085,400	5,969,600
Interest expense	1%		20,858	42,916	63,004	70,854	59,696

Table 4 Cash Budget (Continued)

	Rate	Jun	July	Aug	Sep	Oct	Nov	Dec
Unit sales		1500	1640	1000	700	200	106	54
Revenues	$4000	6,000,000	6,560,000	4,000,000	2,800,000	800,000	424,000	216,000
Cash Receipts								
Cash sales	40%	2,352,000	2,571,520	1,568,000	1,097,600	313,600	166,208	84,672
Collections (prior month's sales)	60%	2,880,000	3,600,000	3,936,000	2,400,000	1,680,000	480,000	254,400
Total Cash Receipts		5,232,000	6,171,520	5,504,000	3,497,600	1,993,600	646,208	339,072
Production (units)		600	600	600	600	600	600	600
Production costs	2800	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000
Cash Payments								
Production costs		1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000
Overhead		400,800	400,800	400,800	400,800	400,800	400,800	400,800
Interest		125,000	125,000	125,000	125,000	125,000	125,000	125,000
Taxes		116,600			116,600			116,600
Total Cash Payments		2,322,400	2,205,800	2,205,800	2,322,400	2,205,800	2,205,800	2,322,400
Net cash flow		2,909,600	3,965,720	3,298,200	1,175,200	(212,200)	(1,559,592)	(1,983,328)
Beginning cash balance		200,000	200,000	200,000	3,498,200	4,673,400	4,461,200	2,901,608
Cumulative cash balance		3,109,600	4,165,720	3,498,200	4,673,400	4,461,200	2,901,608	918,280
Monthly loan/repayment		(2,909,600)	(3,060,000)	-	-	-	-	-
Cumulative loan		3,060,000	-	-	-	-	-	-
Ending cash		200,000	1,105,720	3,498,200	4,673,400	4,461,200	2,901,608	918,280
Cumulative loan		3,060,000	0	0	0	0	0	0
Interest expense	1%	30,600	0	0	0	0	0	0

Questions:

1. Compute and comment on Superior Outboard Motors' net working capital, current ratio, and quick ratio.

2. Examine the company's monthly inventory turnover ratio. What does it indicate?

3. How long are the firm's operating and cash cycles?

4. What would the firm's total interest expenses on short-term borrowing and earnings per share be if it had followed a policy of aligning the production output with the number of units sold each month?

5. Is the firm following an aggressive or a conservative financing policy for funding its working capital? Explain.

6. Is Matt correct in stating that the main culprit is the firm's production policy? Besides changing the production levels per month, are there any other things that the firm can realistically do to boost earnings per share?

7. Using DuPont analysis, compute and comment on the firm's profit situation.

8. Do you agree with the production manager's comment that "there's got to be a better way?" Explain.