Cash Flow Analysis – A case study of Madura Metal Works Private Limited (MMW)

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Abstract:
Mr. Srinivasan switched on the TV to catch the headlines and saw the special address by Prime Minister Mr. Narendra Modi, announcing demonetisation of high valued currency notes, namely that of Rs. 1,000/- and Rs.500/-. Mr. Srinivasan got a jolt that Tuesday because most of his money was locked in his business. Suddenly he realised that he was unable to pay his suppliers and also collect from many of the buyers for the goods he had supplied. Over the next few days as he managed office, he realised that most suppliers expected immediate money payment, as soon as the goods were delivered. This situation started to create a dilemma for Mr. Srinivasan about how to manage the cash flow within the organisation. He decided to call his team from the accounts department to discuss the unfolding events and to see how to make the cash forecast - cash required for Operating, Financing and investing activities in order to avoid cash crises.

Would Mr. Srinivasan be able to manage his cash flow within the firm, so that the extent of the cash requirement forecasted could be maintained or would MMW need to go for external financing?
Keywords: *Cash Forecast, Cash Flow, Company Performance, Financial Management.*

PEDAGOGICAL OBJECTIVES

The main objective of this case is to help students understand and comprehend the position of cash flow within the manufacturing company in order to avoid debts. In this setting, students can reflect on

1. The importance of Cash and forecasting the cash requirements, required assumptions and current practices in organizations.
2. The importance of Cash Flow for an organisation.

CASE POSITIONING AND SETTING

This case can be used for educational purposes to facilitate teaching in Financial Management course about Cash forecast, Preparation of Cash Flow statements and identification of different variables involved in forecasting. The ideal audience for this case would be II-Year MBA students / Executive MBA students who would be specializing in Finance.

Cash Flow Analysis – A case study of Madura Metal Works Private Limited (MMW)

Madura Metal Works Private Limited (MMW), was involved in manufacturing metal products used in different commercial and household applications. The company was located in Ambattur, Industrial Sector in Chennai. They were one of the leading suppliers of metal products to a number of companies involved in automobile parts manufacturing and real estate activities. In recent years, companies were facing a high level of competition. MMW had been able to manage the competition and retain its share in the market. The main reason for this had been its quality maintenance and good designs. The improvement in technological aspects had helped them to increase production capacity, have an advantage in cost and the marketing strategies to overcome competition.

The business had seen a lull for the last two years of operation. But this seemed to have increased especially after de-monetisation and the introduction of Goods and Services Tax, when the company had started to face frequent problems related to cash aspects. As a result of this the company was unable to meet the obligation to pay to its creditors on time, and was forced to postpone its payments. Because of this, the company's credit-worthiness as a potential customer had started to dip. Mr. Srinivasan, Managing Director, wondered that if this situation continued, then the suppliers might force him to pay immediately and they wouldn't provide credit purchase.

To prevent the company from unforeseen events related to cash payments, he wanted to plan the requirements of cash in a better way to overcome this crucial situation. Mr. Srinivasan, called his finance manager Mr. Murthy to develop the monthly requirement forecast for next six months. Mr. Murthy, took the actual sales figures from the book of accounts for the last three months and presented it as shown below in Table No:1.

Table No: 1 – Actual Sales of MMW

Month and Year	Rs. In lakhs
September 2017	24
October 2017	28
November 2017	32

Mr. Murthy, analysed the company's performance with Mr. Srinivasan and forecasted the sales for the next seven months which were as stated below in Table No:2

Table No: 2 – Forecasted Sales of MMW

Month and Year	Rs. In lakhs
December 2017	26
January 2018	21
February 2018	16
March 2018	24
April 2018	20
May 2018	16
June 2018	20

For the past four years. MMW had on an average 30 percent of the firm's total sales as cash sales, the balance 70 percent of the sales was through trade receivables. Around 45 percent of these trade receivables were received in the first month after sales, 35 percent of the collections took place in the second month after sales and the balance was received in the third month.

MMW production process consumed around 75 percent of the raw materials are used towards sales. Based upon the accounts receivables information and the forecast done, Mr. Murthy anticipated the wages and salaries that had to be paid to the workers and employees would be as shown below in Table no:3.

Table No 3: Anticipated Wages and Salaries for next six months

Month and Year	Rs. In lakhs
January 2018	4.2
February 2018	3.9
March 2018	3.2
April 2018	4.0
May 2018	3.2
June 2018	2.8

Administrative expenses for one month was assumed to be Rs. 40,000 per month. Mr. Murthy was also aware of Rs. 25 lakhs taken as loan by the firm for which 16% annual interest had to be paid at the end of March. Previous year's tax payments of Rs.2.25 lakh were due in the month of April. He also estimated that the liability towards payment of the tax would be around Rs.24 lakhs, for which the firm needed to pay advance tax. All these payments were to be made on a quarterly basis, which would be due in March, June, September and December of the following year. The company had a plan for capital expenditure of Rs. 75 Lakhs in the month of February, of which 50 percent has to be paid back in the same month and balance in the month of May. The company had Rs. 20,000 as on 31st October.

Mr. Murthy assumed that the prices and the cost of the materials and labour would remain the same for forecasting the cash flow for next six months.

Mr. Murthy, after collecting all the necessary information started to classify the numbers into cash receipts and payments for preparing the cash flow statements. While entering the information into cash flow format he was not sure how to input these data. Also his immediate concern was that as and when there were any changes in the sales or other changes were made, the cash flow predictions had to reflect the changes and updates.

Before starting the work, he wanted to plan it more systematically.

Discussion Questions:

1. Help prepare the cash flows for Madura Metal Works Private Limited.
2. What are the assumptions that have to be made for preparing the cash flow? What will be the consequences if the assumptions are changed?
3. Discuss about the company's performance and give suggestions to improve the cash flow position of the firm.

TEACHING NOTES

SYNOPSIS

Mr. Srinivasan switched on the TV to catch the headlines and saw the special address by Prime Minister Mr. Narendra Modi, announcing demonetisation of high valued currency notes, namely that of Rs. 1,000/- and Rs.500/-. Mr. Srinivasan got a jolt that Tuesday because most of his money was locked in his business. Suddenly he realised that he was unable to pay his suppliers and also collect from many of the buyers for the goods he had supplied. Over the next few days as he managed office, he realised that most suppliers expected immediate money payment, as soon as the goods were delivered. This situation started to create a dilemma for Mr. Srinivasan about how to manage the cash flow within the organisation.

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PREREQUISITE CONCEPTUAL UNDERSTANDING BEFORE THE CLASSROOM DISCUSSION

Prasanna Chandra (2015). Financial Management Theory & Practice; McGraw Hill Education (India) Private Limited; 9the Edition.

I.M. Pandey (2015); Financial Management; VIKAS Publishing House Pvt Ltd; Noida; 11th eds.

DISCUSSION QUESTIONS

1. Help prepare the cash flows for Madura Metal Works Private Limited.

Cash flows are the key element in investment evaluation and they are not available readily. Estimating cash flows, the investment outlays and the cash inflows is the most important, but also the most difficult step in capital budgeting. Forecasting the cash flows involves numerous variables and many departments. The major role of the finance manager is to coordinate the efforts of various departments and obtain information from them, ensure that the forecasts are based on a set of consistent economic assumptions, keep the exercise focussed on relevant variables and minimise the biases inherent in the cash flow forecasting.

Solution:

Variables	Rs. in Lakhs							
	Beginning	**Dec'17**	**Jan'18**	**Feb'18**	**Mar'18**	**Apr'18**	**May'18**	**Jun'18**
Cash on hand (beginning of month)	0.20	0.20	17.88	35.22	128.45	98.15	112.00	90.35
CASH RECEIPTS								
Cash sales		8.00	6.00	5.00	7.00	6.00	5.00	6.00
Collections on accounts receivable		10.08	15.94	17.53	13.80	14.50	14.45	13.25
Loan proceeds				75.00				
TOTAL CASH RECEIPTS		18.08	21.94	97.53	20.80	20.50	19.45	19.25
Total cash available	0.20	18.28	39.82	132.75	149.25	118.65	131.45	109.60
CASH PAID OUT								
Interest expense					4.00			
Taxes and licenses						2.25		
Wages (less emp. credits)			4.20	3.90	3.20	4.00	3.20	2.80
Administrative expenses		0.40	0.40	0.40	0.40	0.40	0.40	0.40
advance tax					6.00			6.00
pay back of loan in feb'18					37.50		37.50	
SUBTOTAL		0	4.60	4.30	51.10	6.65	41.10	9.20
TOTAL CASH PAID OUT		0	4.60	4.30	51.10	6.65	41.10	9.20
Cash on hand (end of month)	0	17.88	35.22	128.45	98.15	112.00	90.35	100.40

2. What are the assumptions that has to be considered for preparing the cash flow? What will be the consequences if the assumptions are changed?

   Major Elements of the cash flow stream that has to be considered are as follows:

   - The initial investment is the after-tax cash outlay on the capital expenditure and net working capital when the project is set-up.
   - The operating cash inflows are the after-tax cash inflows resulting from the operations of the project during its economic life.
   - The terminal cash inflow is the after-tax resulting from the liquidation of the project at the end of its economic life.

   The basic Principles of cash flow estimation that has to be followed when preparing the cash flows are:

   - Separation Principle: separate the cash flows on the investment side from the cash flows on the financing side.
   - Incremental Principle: measure cash flows on an incremental basis.
   - Post-tax Principle: measure cash flows on a post-tax basis.
   - Consistency Principle: cash flows and the discount rates applied to the cash flows must be consistent with respect to the investor group and inflation.

   As the cash flows have to be forecast far into the future, errors in estimation are bound to occur. Yet, given the critical importance of cash flow forecasts in project evaluation, adequate care should be taken to guard against certain biases which may lead to over-statement of profitability like Intentional overstatement, lack of experience, Myopic euphoria, capital rationing or under-statement of profitability like salvage values are under estimated, intangible benefits are ignored, the value of future options is overlooked.

3. Discuss about the company's performance and give suggestions to improve the cash flow position of the firm.

The company is performing well and the cash flow is sufficient to run the business. If the accounts receivable is collected at the right time as mentioned there won't be any problem. The company may face a problem if the materials and other costs increases because Mr. Murthy, Finance Manager for the sake of simplicity, has assumed that the revenues and operating costs would remain constant over a period of time. But in reality, the revenues and costs are likely to change over time.

Apart from the regular variables the finance manager can also give provision for the Commission and other fees, contract labour wages, Employee benefit programs, Insurance, Purchase or re-sale of any kinds of property, Repairs and maintenance, Travel, Bad debt balance, Inventory on hand, Depreciation, etc.