INDIAN AUTOMOBILE MANUFACTURING INDUSTRY – A STUDY ON THE FINANCIAL PERFORMANCE

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ABSTRACT

The Automobile industry in India plays a major role in driving economic growth and technological advancement. Automobile Manufacturing companies employ over 5 Million people directly and through Auto Ancillary companies. Auto Ancillary companies are dependent on Automobile Manufacturing companies. In this paper, a study has been done on the financial performance of 13 Automobile Manufacturing companies listed on the Stock Exchange for the financial year ended 31st March 2020. The analysis of the key financial indicators for profitability, liquidity, solvency and efficiency of these companies shows that many Automobile Manufacturing companies are not financially healthy. Only 23% of the companies (3 out of 13 companies) are in a 'safe zone' as far as financial distress and bankruptcy are concerned. The Covid-19 impact may adversely impact the financial performance further in the following financial year. Government support may be needed to protect this sector.

KEYWORDS: *Automobile Manufacturing Industry, Financial Analysis, Ratio Analysis, Z-score*

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INTRODUCTION

The Automobile industry in India plays a major role in driving economic growth and technological advancement. India is expected to emerge as the third-largest automotive market in the world in terms of volume by 2026, followed by China and the USA [1]. The Indian Automotive Manufacturing industry produced over 26 Million vehicles, including Passenger Cars, Commercial Vehicles, Three Wheelers, Two Wheelers and Quadricycles in April-March 2020. The total production of vehicles includes the production of 21,036,294 Two-wheelers and 752,022 Commercial vehicles. India has also exported 47, 65,754 vehicles during the financial year 2019-20 [2]. The Automobile Industry has received an FDI Equity inflow of about USD 2.8 Billion for the financial year 2019-20 [3]. The annual revenue of the Indian Automobile Industry during the financial year 2018-19 was around USD 118 Billion, which is equivalent to 7.1% of the country's total GDP, 27% of Industrial GDP and 49% of Manufacturing GDP [4]. Several policy measures have been taken by the Government of India and other stakeholders in the Indian market are aimed to make India a leader in the two-wheeler and four-wheeler market in the world.

The automotive industry can be segmented as (a) Automotive Manufacturers and (b) Auto Ancillaries. Auto Ancillaries are dependent on Automotive Manufacturers. Automotive Manufacturers include manufacturers of Two Wheelers, Three Wheelers, Passenger vehicles, Quadricycles, Commercial Vehicles and trucks and Tractors. This study relates to the analysis of the financial performance of the listed companies in the Auto Manufacturing Companies in India. The study does not include foreign companies that are not listed on the stock exchanges in India.

METHODOLOGY

Financials available for the 13 Automobile manufacturing companies for the financial year 2019-20 have been considered for this study. It does not include Auto Ancillary companies. The study covers the identification of listed Automobile manufacturing companies in India, financial analysis of the annual financial statements of the 13 companies identified, computation of financial ratios, analysis of these ratios and the interpretation. This study analyses the key financial ratios relating to Profitability, Liquidity, Solvency and Efficiency. These ratios are explained below:

Profitability: Profit after tax/Sales for the year. It shows the profit earned as a percentage of the revenue and indicates the overall profitability of the business.

Operating Margin: Operating Profits/Sales for the year. Operating margin does not include income from investments, taxes and interest. It reflects the profitability of the core business operation.

Debtors Outstanding (No. of days): It indicates the value of debtors outstanding in terms of sales. The efficiency of debtor collections can be ascertained by working out this ratio.

Inventory Holding (No. of days): It reflects the relationship between the cost of goods sold during the year and the average stock kept during that year. It reflects the efficiency of the operation in managing stock level.

Creditors Outstanding (No. of days): It indicates the value of creditors outstanding in terms of the cost of goods sold. It shows the extent of the credit period obtained from Suppliers.

Assets Turnover Ratio: This ratio is used to measure how efficiently the assets are being deployed to generate revenue. Higher turnover would mean effective utilization of assets. On the other hand, a lower Assets Turnover ratio indicates that the business operation is not using full capacity.

Current Ratio: It reflects the value of Current Assets held against the value of Current Liabilities. The current ratio indicates the ability of the firm to meet its current obligations. If the current ratio is higher, it would mean that the business has greater short term liquidity.

Quick Ratio: Quick Ratio shows the ability of the business to meet its current liabilities. Inventory is not considered liquid for this purpose. A ratio of 1 considered ideal for short term liquidity.

Altman Z-Score: Altman Z-score [5] is used to predict the potential bankruptcy of a company. It is a measure developed by Prof. Edward Altman in 1968. It combines five financial ratios as below:

“Altman Z-Score = $1.2A + 1.4B + 3.3C + 0.6D + 1.0E$

A - Working Capital/Total Assets ratio

B - Retained Earnings/Total Assets ratio

C – Earnings before Interest and Taxes/Total Assets ratio

D - Market Value of Equity/Total Liabilities ratio

E - Total Sales/Total Assets ratio”

Interpretation of the Z-Score: A score below 1.8 indicates that the enterprise is like to become bankrupt. Companies with Z-score above 3 are safe and unlikely to face bankruptcy. A score between 1.8 and 3 indicates that the company is in a gray area.

ANALYSIS AND FINDINGS

The 23 Auto Manufacturing companies analyzed are of different sizes in terms of revenue. The financial ratios worked out are analyzed by the revenue size in the following paragraphs.

Profile of the companies by revenue is given in Table 1

Table 1: Revenue Analysis

Categories	Annual Revenue (INR in Crores)	Companies No. %		Aggregate Revenue (INRs in Crores) %	
Large Companies	Above 50000	3	23%	365561	77.5%
Medium Companies	10000- 50000	4	31%	88358	18.8%
Small Companies	1000 - 10000	3	23%	16184	3.4%
Very small Companies	Below 1000	3	23%	1612	0.3%
Total		13	100%	471715	100%

Table 2: Profitability Analysis

Category	Total	Profitability (Profit after Tax/Revenue)			
		Loss	0-3%	3% - 6%	Above 6%
Large Companies	3	1	1	0	1
Medium Companies	4	1	1	0	2
Small Companies	3	1	0	0	2
Very Small Companies	3	2	0	0	1
Total No of companies	13	5	2	0	6
Total %	100%	39%	15%	0%	46%

Table 3: Operating Margin Analysis

Category	Total	Operating Margin/Revenue)			
		Loss	0 - 5%	5% - 10%	Above 10%
Large Companies	3			2	1
Medium Companies	4				4
Small Companies	3			1	2
Very Small Companies	3	1	1		1
Total No of companies	13	1	1	3	8
Total %	100%	7.5%	7.5%	23%	62%

Table 4: Debtors Outstanding (No of days Sales Outstanding)

Category	Total	No of days of Debtors Outstanding			
		Up to 30	30 - 45	45 - 60	>60
Large Companies	3	3			
Medium Companies	4	4			
Small Companies	3	2		1	
Very Small Companies	3	1		1	1
Total No of companies	13	10	0	2	1
Total %	100%	77%	0%	15%	8%

Table 5: Inventory Holding (No. of days)

Category	Total	Inventory Holding (No of days)			
		Up to 45	45 to 60	60 - 90	Above 90
Large Companies	3	1		2	
Medium Companies	4	4			
Small Companies	3	1		1	1
Very Small Companies	3	1			2
Total No of companies	13	7	0	3	3
Total %	100%	54%	0%	23%	23%

Table 6: Creditors Outstanding (No. of days)

Category	Total	Creditors Outstanding (No of days)			
		Upto 30	30 - 45	45 - 60	> 60
Large Companies	3		1	1	1
Medium Companies	4			3	1
Small Companies	3		1	1	1
Very Small Companies	3	1	1	1	
Total No of companies	13	1	3	6	3
Total %	100%	8%	23%	46%	23%

Table 7: Assets Turnover (No. of times)

Category	Total	Turnover/Assets (No of times)		
		Up to 1	1 -2	Above 2
Large Companies	3	1	2	
Medium Companies	4	1	3	
Small Companies	3	1	2	
Very Small Companies	3	1		2
Total No of companies	13	4	7	2
Total %	100%	31%	54%	15%

Table 8: Current Ratio

Category	Total	Current Assets/Current Liabilities		
		Up to 2	2 to 3	Above 3
Large Companies	3	2	1	0
Medium Companies	4	2	1	1
Small Companies	3		1	2
Very Small Companies	3	1	1	1
Total No of companies	94	5	4	4
Total %	100%	38%	31%	31%

Table 9: Quick Ratio

Category	Total	Liquid Assets/Current Liabilities		
		Up to 1	1 to 2	Above 2
Large Companies	3	2	1	
Medium Companies	4	2	1	1
Small Companies	3	1	1	1
Very Small Companies	3	1	1	1
Total No of companies	13	6	4	3
Total %	100%	46%	31%	23%

Table 10: Altman's Z-Score

Category	Total	Altman's Z-Score		
		Up to 1.8	1.8 to 3	Above 3
Large Companies	3	2	1	
Medium Companies	4	2	1	1
Small Companies	3	1	1	1
Very Small Companies	3	1	1	1
Total No of companies	13	6	4	3
Total %	100%	46%	31%	23%

KEY OBSERVATIONS

The analysis of financial ratios worked out from the annual financials of automobile manufacturing companies reveals the following:

- **Revenue:** Nearly 78% of the total revenue came from 3 companies in the Automobile manufacturing sector considered in this study. The bottom 3 companies contribute only 0.34% of the total revenue (Table 1).
- **Profitability:** (i) The average Profit after tax on annual revenue for the financial year 2019-20 considering the total revenue of all the 13 companies is just 0.6%. (ii) 54% of the auto companies made a profit of 3% or less. (iii) 39% of 13 companies ended the year with a loss. (iv) Even a large company incurred a loss during the financial year 2019-20. (Table 2)
- **Operating Margin:** (i) 38% of the companies made an operating margin of less than 10%. (3) The average Operating Margin of companies with revenue below INR 1000 Cr is just 1.6%, while the overall average Operating Margin of all the 13 companies is 10.4%. (Table 3).
- **Debtors Outstanding:** (i) 77% of the companies manage the debtors outstanding within 30 days. (ii) 50% of small and very small companies have debtors' outstanding level over 45 days (Table 4).
- **Inventory Holding:** (i) 5 out of 7 medium and large companies manage inventory below 45 days' level. (ii) 2/3 of the small and very small companies have inventory levels over 60 days (Table 5).
- **Creditors Outstanding:** (i) 6 out of 7 medium and large companies have creditors outstanding of 45 days and more. (ii) 2/3 of very small and small companies have creditors outstanding of over 45 days (Table 6).
- **Assets Turnover Ratio:** None of the small, medium & large companies have Assets Turnover > 2 (Table 7).
- **Current Ratio:** (i) 38% of the companies are below 1. (ii) 69% of the companies are below 2 (Table 8). A current ratio of 2 is considered ideal for a comfortable financial position.
- **Quick Ratio:** 46% of the companies are below 1 (Table 9). A quick ratio below 1 indicates that the value of liquid assets is lower than current liabilities.
- **Altman's Z-Score:** Only 23% of the companies (3 out of 13) are in the safe zone (Z-score above 3). 23% of the companies, including a large company, are facing the risk of becoming bankrupt, as the Z-score is below 1.8 (3 out of 13). (Table 10).

LIMITATIONS

The study does not include automotive manufacturing enterprises that are not listed on the Stock Exchange. A balance sheet is a snapshot of the financial position of an enterprise on the last day of the financial year and the value of assets and liabilities presented in financial statements may change or may even be manipulated [6]. The financial information relates to the financial year 2019-20, the impact of Covid 19 is not significant during this period.

CONCLUSIONS

The financial indicators for the level of Inventory and Creditors appear to be good, but the same may harm the auto ancillary companies that supply materials to auto manufacturing companies. The profitability, asset utilization and solvency parameters of the Auto Manufacturing Companies are not looking good. This would also impact the Auto Ancillary Manufacturers who supply materials to Automobile manufacturers. The new normal situation caused by Covid 19 during the subsequent year is going to have a major adverse impact on the auto industry. Considering the Automobile industry's (Auto manufacturing as well as Auto Ancillaries) contribution to the economy and employment, the Government may need to intervene and support the industry.

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