

“THE STUDY OF FINANCIAL PERFORMANCE OF SELECTED AUTOMOBILE COMPANY IN INDIA”

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Abstract:

The automobile sector is an indicator of economic development of any country. It is also a technology and knowledge intensive sector because it demands high performance and quality parts. In India, also the automobile sector occupies a prominent place due to its deep forward and backward linkages with many key segments of the economy. This sector has a strong multiplier effect and is capable of being the driver of economic growth. The financial performance of the automobile sector can be correlated to the health of the Indian economy. A sound transportation system, to which the automobile sector is linked, plays a pivotal role in the country's rapid economic and industrial development. The prime objective of this paper is to analyse the financial performance of selected automobile company in India.

Key-word: Automobile sector, financial, performance, profitability, ratio

INTRODUCTION

A well-developed transportation system plays a key role in the development of an economy, and India is no exception to it. Automobile is one of the largest industries in the global market. The Indian automobile sector has emerged as a 'sunrise sector' in the India. India is emerging as one of the world's fastest growing passenger car markets. Second, largest two-wheeler manufacturer. It is also home for the largest motorcycle manufacturer and fifth largest commercial vehicle manufacturer. India is the largest base to export compact cars to Europe. Moreover, hybrid and electronic vehicles are new developments on the automobile canvas and India is one of the key markets for them. It has been recognized as one of the drivers of economic growth and the domestic automobile industry is believed to be the barometer of the economy.

REVIEW OF LITERATURE

Dr. Miss Kailash P. Damor (2002), has done research on “A comparative analysis of profitability trends in co-operative sugar industry of India”, in her research, she has given clear idea about profit and profitability. Profitability is related with two words, Profit and Ability. We discuss the word profit in many senses but the word profit is used as per its purpose, where as the ability shows the capability of earning profit from business. Profitability also shows our capacity of how much return we can give to our investors on their investment.

Dr. Sanjay Bhayani (2003), published a book, “Practical financial statement analysis” The study covered 16 public limited cement companies in private sector. He made study of analysis of profitability, working capital, capital structure and activity of Indian cement industry. In his research, he revealed various problems of cement industries and suggested remedies for the problems. He also suggested for the improvement of profitability and techniques of cost control.

Ray (2012), this study tries to evaluate the performance of Indian automobile industry in terms of various financial indicators, sales trend, production trend, export trend etc. for the period of 2003-04 to 2009-10. The result suggests that the automobile industry has been passing through turbulent phases characterized by enhanced debt burden, low utilization of assets, and above all, huge liquidity crunch. The key to success in the industry is to improve labour productivity, labour flexibility, and capital efficiency.

Dharmaraj and Kathirvel (2013), the Indian Automobile Industry marked a new journey in the 1991 with the financial revolutionary New Industrial Policy Act 1991, opening automatic route which allowed the 100 per cent Foreign Direct Investment(FDI). Here, an attempt is made to find out the effect of FDI on the financial performance of Indian Automobile Industry. The efficiency analysis showed that the companies are efficiently utilizing the available resources during post FDI as compared to pre FDI. It is concluded that foreign direct investment in India makes positive impact on the financial variables of the Automobile Companies.

Dr. Lalitkumar R. Chauhan (2014) “A Comparative Study of Financial Performance of Selected Companies of Automobile Industry of India” In this study profile of the selected companies of automobile industries in India, Analysis of Profitability, Capital Structure, Working Capital and Activity of the Automobile industry in India.

OBJECTIVES OF THE STUDY

- To understand the concept of Financial profitability
- To evaluate the Profitability Ratio of the selected Automobile sector in India during the period of study.

CONCEPT OF FINANCIAL PROFITABILITY

Profitability is a good device, which represent the earning of a business firm. Profit is a very good indicator of business performance, but the real standard of performance of a business firm cannot be judged by the absolute size of its periodic profit. Modern management is engaged in the task of maximizing the profit and wealth. The efficiency of management is measured by the profitability of the business; the greater is the profitability of the business, the more will be efficiency. An analysis of the profitability reveals as to how the position of profit stands because of total transactions made during the year. It need not be stressed that profitability is analyzed through the computation of profit ratios. Profitability of a business firm is very much helpful to the management, creditors and shareholders of business firm. The management of business firm has to take some crucial managerial decision like further expansion, raising of additional finance and problem of bonus and dividend payment etc. and for this purpose the management greatly rely-upon the profitability of the business firm.

PERIOD OF THE STUDY

The present study is covered for a period of the 5 (Five) accounting years ending to 31-3-2017. (From 2012-13 to 2016-17)

SOURCE OF DATA

The researcher uses secondary data collection for his convenience. Researcher gives more emphases on secondary data because the researcher undertakes research in Financial Performance practices for which researcher needs all Annual reports and records from the selected companies, which are in nature of secondary data.

SELECTED AUTOMOBILE COMPANIES FOR RESEARCH WORK

Sr. No.	Selected Automobile Companies for Research Work	Production	Date of in Corporation
1.	ASHOKLEYAND LIMITED	LCVs, MCVs, HCVs	1948
2.	TATA MOTORS LIMITED	LCVs, MCVs, HCVs	1945
3.	SWARAJ MAZDA LIMITED	LCVs, MCVs, HCVs	1983
4.	FORCE MOTORS LIMITED	LCVs, MCVs, HCVs	1958
5.	MAHINDRA & MAHINDRA LTD	LCVs, MCVs, HCVs	1945

HYPOTHESIS OF THE STUDY

For accomplishing objective of to evaluate the Profitability ratio of the selected Automobile Industry in India during the period of study. Hypotheses have been developed as following:

❖ **NULL HYPOTHESIS (H₀):**

1. H₀: There is no significant difference in operating profit margin ratio of selected Automobile companies during the period of study.
2. H₀: There is no significant difference in gross profit ratio of selected Automobile companies during the period of study.
3. H₀: There is no significant difference in net profit margin ratio of selected Automobile companies during the period of study.
4. H₀: There is no significant difference in cash profit margin ratio of selected Automobile companies during the period of study.

❖ **ALTERNATIVE HYPOTHESIS (H₁):**

1. H₁: There is significant difference in operating profit margin ratio of selected Automobile companies during the period of study.
2. H₁: There is significant difference in gross profit ratio of selected Automobile companies during the period of study.
3. H₁: There is significant difference in net profit margin ratio of selected Automobile companies during the period of study.
4. H₁: There is significant difference in cash profit margin ratio of selected Automobile companies during the period of study.

RESEARCH METHODOLOGY

For this study researcher is using secondary data as a source of information for thus research e.g. the Annual Reports, websites and other publications. The following tool & techniques have been classification in the study.

(A) Accounting Techniques (B) Statistical Techniques❖ **ACCOUNTING TECHNIQUES:**

- Ratio Analysis

❖ **STATISTICAL TECHNIQUES:**

The statistical techniques, which are used for the analysis, are as under:

- Arithmetic Mean
- The Standard Deviation
- Co-Efficient of Variation:
- One-way Analysis of Variance Test (ANOVA)

1. OPERATING PROFIT MARGIN RATIO

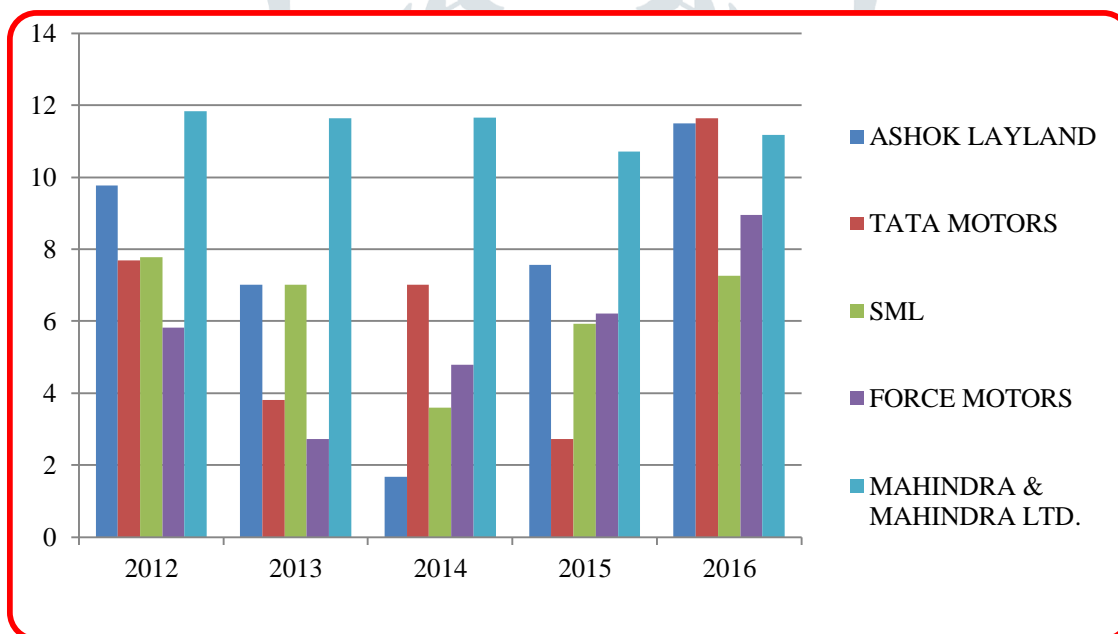
$$\frac{\text{Operating profit}}{\text{Net Sales}} * 100$$

Table-1 Operating Profit Margin Ratio

YEAR	COMPANY NAME				
	ALL	TML	SML	FML	MML
2012-2013	9.78	7.69	7.78	5.82	11.83
2013-2014	7.02	3.81	7.01	2.73	11.64
2014-2015	1.67	-2.65	3.59	4.78	11.65
2015-2016	7.56	-3.4	5.92	6.21	10.71
2016-2017	11.5	5.46	7.27	8.95	11.17
AVERAGE	7.50	2.18	6.31	5.69	11.4
S.D.	3.72	4.96	1.67	2.26	0.46
C.V.	49.59	227.12	26.41	39.73	4.00
MIN	1.67	-3.4	3.59	2.73	10.71
MAX	11.5	7.69	7.78	8.95	11.83

(sources: annual reports and accounts from 2012-2013 to 2016-2017)

graph no.1 operating profit margin ratio



operating profit margin ratio (%) one-way anova test

Anova: Single Factor						
SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
ASHOK LAYLAND	5	37.53	7.506	13.85528		
TATA MOTORS	5	10.91	2.182	24.56017		
SML	5	31.57	6.314	2.78073		
FORCE MOTORS	5	28.49	5.698	5.12607		
MAHINDRA &	5	57	11.4	0.2085		

MAHINDRA LTD.						
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	221.3648	4	55.3412	5.946734149	0.00254231	2.8660814
Within Groups	186.123	20	9.30615			
Total	407.4878	24				

- ❖ Degree of freedom = 25-1=24
- ❖ Table Value of 'F' =2.86
- ❖ Calculate Value of 'F' = 5.94

$$\begin{array}{rcl}
 F_{cal} & > & F_{tab} \\
 5.94 & > & 2.86 \\
 F_{cal} & > & F_{tab}
 \end{array}$$

It's indicates the calculate value of 'F' is 5.94 and the table value of 'F' at 5% levels of significance is 2.86. So, the calculate value 'F' which is more than the table value. It indicates that the Null Hypothesis is rejected and Alternate Hypothesis is accepted. So, it indicates that there is significant difference in Operating Profit Margin Ratio of selected automobile sector under study for the period.

2. GROSS PROFIT MARGIN RATIO

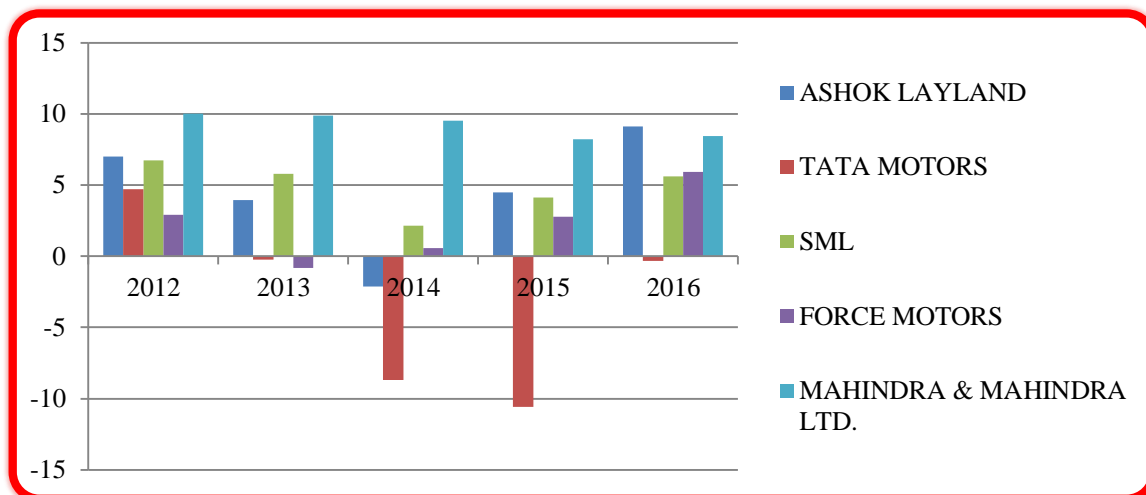
$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Turnover}} \times 100\%$$

table no. 2 gross profit margin ratio (%)

YEAR	COMPANY NAME				
	ALL	TML	SML	FML	MML
2012-2013	7.03	4.73	6.76	2.93	10.02
2013-2014	3.97	-0.24	5.8	-0.82	9.88
2014-2015	-2.11	-8.69	2.14	0.58	9.52
2015-2016	4.49	-10.58	4.14	2.78	8.21
2016-2017	9.15	-0.32	5.6	5.95	8.46
AVERAGE	4.506	-3.02	4.888	2.284	9.218
S.D.	4.242532	6.410604	1.799589	2.580762	0.831156
C.V.	94.15296	-212.272	36.81647	112.9931	9.016661
MIN	-2.11	-10.58	2.14	-0.82	8.21
MAX	9.15	4.73	6.76	5.95	10.02

(Sources: Annual Reports and Accounts from 2012-2013 to 2016-2017)

graph no-2 gross profit margin ratio



gross profit margin ratio (%) one way anova test

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
ASHOK LAYLAND	5	22.53	4.506	17.99908		
TATA MOTORS	5	-15.1	-3.02	41.09585		
SML	5	24.44	4.888	3.23852		
FORCE MOTORS	5	11.42	2.284	6.66033		
MAHINDRA & MAHINDRA LTD.	5	46.09	9.218	0.69082		
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	397.9744	4	99.493606	7.13885177	0.000967331	2.866081
Within Groups	278.7384	20	13.93692			
Total	676.7128	24				

- ❖ Degree of freedom = 25-1=24
- ❖ Table Value of 'F' =2.86
- ❖ Calculate Value of 'F' = 7.13

$$\begin{aligned}
 F_{cal} &> F_{tab} \\
 7.13 &> 2.86 \\
 F_{cal} &> F_{tab}
 \end{aligned}$$

It's indicates the calculate value of 'F' is 7.13885177 and the table value of 'F' at 5% levels of significance is 2.86. So, the calculate value 'F' which is more than the table value. It indicates that the Null Hypothesis is rejected and Alternate Hypothesis is accepted. So, it indicates that there is significant difference in Gross Profit Margin Ratio of selected automobile sector under study for the period.

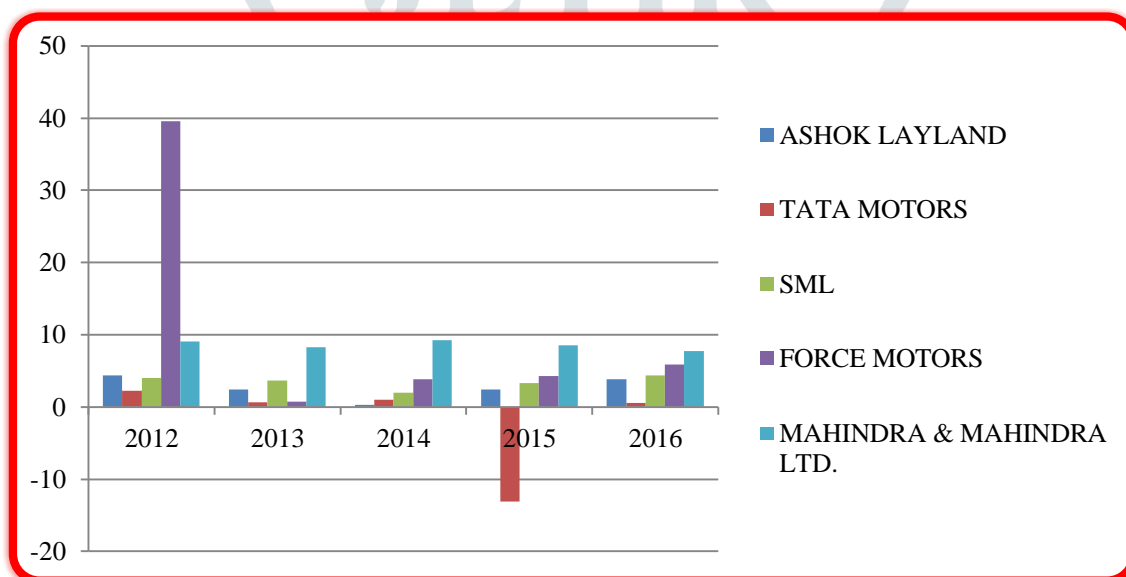
3. NET PROFIT MARGIN RATIO

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}}$$

YEAR	COMPANY NAME				
	ALL	TML	SML	FML	MML
2012-2013	4.4	2.28	4.06	39.53	9.03
2013-2014	2.46	0.67	3.63	0.72	8.29
2014-2015	0.29	0.97	1.97	3.84	9.27
2015-2016	2.46	-13.05	3.34	4.28	8.52
2016-2017	3.83	0.55	4.39	5.86	7.74
AVERAGE	2.688	-1.716	3.478	10.846	8.57
S.D.	1.5882	6.37318	0.93363	16.1428	0.60651
C.V.	59.0847	-371.4	26.844	148.837	7.07709
MIN	0.29	-13.05	1.97	0.72	7.74
MAX	4.4	2.28	4.39	39.53	9.27

(Sources: Annual Reports and Accounts from 2012-2013 to 2016-2017)

graph no-3 net profit margin ratio



net profit margin ratio (%) one way anova test

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
ASHOK LAYLAND	5	13.44	2.688	2.52237		
TATA MOTORS	5	-8.58	-1.716	40.61748		
SML	5	17.39	3.478	0.87167		
FORCE MOTORS	5	54.23	10.846	260.59108		
MAHINDRA & MAHINDRA LTD.	5	42.85	8.57	0.36785		
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	497.1495	4	124.287386	2.037695554	0.127628462	2.866081

Within Groups	1219.882	20	60.99409			
Total	1717.031	24				

- ❖ Degree of freedom = 25-1=24
- ❖ Table Value of 'F' =2.86
- ❖ Calculate Value of 'F' = 2.03

$$\begin{aligned}
 F_{cal} &< F_{tab} \\
 2.03 &< 2.86 \\
 F_{cal} &< F_{tab}
 \end{aligned}$$

It's indicates the calculate value of 'F' is 2.037695554 and the table value of 'F' at 5% levels of significance is 2.86. So, the calculate value 'F' which is less than the table value. It indicates that the Null Hypothesis is accepted and Alternate Hypothesis is rejected. Therefore, it indicates that there is no significant difference in Net Profit Margin Ratio of selected automobile sector under study for the period.

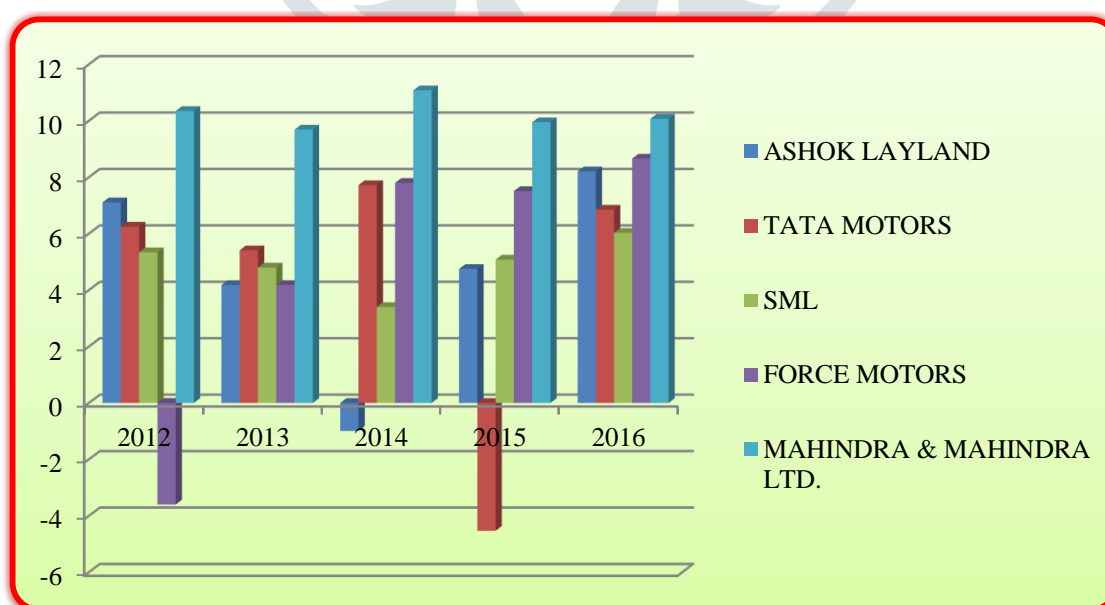
4. CASH PROFIT MARGIN RATIO

table no. 4 cash profit margin ratio (%)

YEAR	COMPANY NAME				
	ALL	TML	SML	FML	MML
2012-2013	7.11	6.25	5.34	-3.6	10.35
2013-2014	4.18	5.41	4.8	4.18	9.69
2014-2015	-0.99	7.72	3.4	7.8	11.08
2015-2016	4.75	-4.53	5.08	7.51	9.95
2016-2017	8.21	6.85	6.03	8.66	10.07
AVERAGE	4.652	4.34	4.93	4.91	10.228
S.D.	3.562502	5.029771	0.96933	5.05291	0.53209
C.V.	76.58001	115.8933	19.66186	102.9106	5.20229
MIN	-0.99	-4.53	3.4	-3.6	9.69
MAX	8.21	7.72	6.03	8.66	11.08

(sources: annual reports and accounts from 2012-2013 to 2016-2017)

graph no-4 cash profit margin ratio



cash profit margin ratio (%) one way anova test

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
ASHOK LAYLAND	5	23.26	4.652	12.69142		
TATA MOTORS	5	21.7	4.34	25.2986		
SML	5	24.65	4.93	0.9396		
FORCE MOTORS	5	24.55	4.91	25.5319		
MAHINDRA & MAHINDRA LTD.	5	51.14	10.228	0.28312		
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	123.0248	4	30.75621	2.37519353	0.086562836	2.866081
Within Groups	258.9786	20	12.948928			
Total	382.0034	24				

- ❖ Degree of freedom = 25-1=24
- ❖ Table Value of 'F' =2.86
- ❖ Calculate Value of 'F' = 2.37

$$\begin{array}{rcl}
 F_{cal} & < & F_{tab} \\
 2.37 & < & 2.86 \\
 F_{cal} & < & F_{tab}
 \end{array}$$

It's indicates the calculate value of 'F' is 2.37519353 and the table value of 'F' at 5% levels of significance is 2.86. So, the calculate value 'F' which is less than the table value. It indicates that the Null Hypothesis is accepted and Alternate Hypothesis is rejected. Therefore, it indicates that there is no significant difference in Cash Profit Margin Ratio of selected automobile sector under study for the period.

CONCLUSION

Financial efficiency is the ability of a given investment to earn a return from its use. It's vital instrument to measure not only the business performance but also overall efficiency in its concerned. In present study, four types of measurement tools of financial efficiency were discussed on Operating profit Margin ratio, Gross profit ratio, Net profit Margin ratio, Cash profit margin ratio.

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