

# A STUDY ON SHAREHOLDERS' VALUE CREATION OF SELECTED COMPANIES AS PER THE PERSPECTIVE OF LIQUIDITY & PROFITABILITY

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## Abstract

Shareholders' value creation concept is become as significant for business world as it takes a place as one of the key objective. Greater part of the firms has already on track of focusing on shareholders' wealth maximization. Market Value Added is the best secondary performance measure as it signifies the market evaluation of the effectiveness with which a company's managers have used the limited resources under their control. The present study is focused to find the relationship between profitability and liquidity and shareholder value creation in terms of Market Value added (MVA). Thus, the purpose of the study is to know internal measures, which can influence the MVA. For this research, Market Value added is taken as a dependent variable and the profitability ratio (ROCE, ROE, PAT and EPS) and Liquidity ratios (Quick Ratio, Current Ratio and inventory turnover ratio) variables are selected as independent variables. Sample of 09 listed pharmaceuticals companies of BSE have been taken for the study. The period of the study is 7 years (F.Y. 2016-17 to F.Y. 2022-23). The study reveals that there is positive relationship between MVA and profitability ratio and Liquidity ratios of selected companies during the period. Result shows that there is significant relationship between ROCE, EPS, QR and CR with MVA.

**Keywords:** Shareholder value creation, Market Value added (MVA), Profitability ratio, Liquidity ratios, pharmaceuticals companies

## INTRODUCTION

Joint Stock Company came into existence because of limitations of partnership and sole proprietorship. As a result of formation of joint stock companies, the new trend of development was started. Shareholders are the real owner of the company, while the management is in the hand of Board of Directors. Boards of Directors are elected by the shareholders. In the beginning the company gives much importance to profit maximization by its formation. Slowly, the board of directors realized that it is not advisable to earn profit at the cost of shareholders. Shareholders satisfaction should be the primary concern of the joint stock company, if it does not happen then shareholders will withdraw his investment from the company and joint stock company or any other form of business cannot do any economic activity without money. At this level acceptance of importance of shareholder was increased. And in modern times priorities are given to shareholders value creation. The pharmaceutical industry is one of the world's most research intensive industries, which is making massive contribution to health care. The United Nations include pharmaceutical industry in sustainable development goals as a key player. Pharmaceutical industry is a significant provider to weight any country's wealth by providing employment for millions of people and causal of foreign exchange (Gulshan Akhtar, 2013). The Indian pharmaceutical industry is one of the most significantly rising markets and has 4 been experiencing phenomenal development in recent years.

### Definition of Shareholders Value Creation:

- Value creation is the Primary financial performance indicator for measuring and evaluating financial performance within the group.
- The essence of investing is putting funds at risk with the hopes of receiving a greater amount in return. If this is accomplished, it can be said that one has created value.
- According to Beatrix Nyiramahoro and Natalia Shooshia have defined shareholder value as the "Total economic value of an entity such as a company or a business unit is the sum of the value of its debt and its equity. This value of the business is named corporate value while the value of the equity portion is named shareholder value in the form of equation".

### Importance of shareholders' value creation:

- Measurement of the shareholders' value creation will be helpful for reflecting the economic efficiency of the Companies.
- It will also be helpful for reflecting the managerial efficiency of the management of the Companies.
- This will provide guidance for decision oriented information to shareholders to evaluate their investment decisions for both group of shareholders - to existing shareholders and potential shareholders.
- This will also provide guidance for the lenders to disburse their— funds in favour of borrowers.
- By this type of performance evaluation any industry or company can improve their performance towards shareholders.
- It will also clear the long term financial view of the company so financial strategy can be formed easily.

### METHODOLOGY OF THE STUDY

The purpose of research methodology is to decide the process of investigation. The research methodology for this study is developed as follows.

#### Problem statement:

Shareholders satisfaction should be the primary concern of the joint stock company; if it does not happen then shareholders will withdraw their investment from the company. Any form of business cannot do any economic activity without money. At this level, acceptance of importance of shareholders' value is increased, and in modern times priorities are given to shareholders value creation. The Indian pharmaceutical industry is one of the most significantly rising markets and has been experiencing phenomenal development in recent years and is likely to be in the top ten global markets in terms of value.

Shareholders' value creation has always been a tricky matter to start with. By thoroughly going through previous researches, it was observed that most of the studies were based on banking sectors. Very few studies have been conducted to understand the shareholders' value creation of Indian pharmaceutical Companies. As Indian pharmaceutical sector is growing day by day, need of more capital has risen. It would be beneficial to companies if the funds are obtained through equity shares rather than borrowed from market as it will help the companies to maximize their wealth. So, with the view point of above mentioned details researcher has selected topic as "Shareholders' Value Creation of selected companies, to become precise a researcher has selected problem statement as, "Shareholders value creation study from different perspective like profitability, and liquidity. The purpose of this research is to study the shareholders value creation with different viewpoint for the selected pharmaceuticals companies.

#### Objective of the Study:

- 1) To study the concept of shareholders' value creation.
- 2) To calculate shareholders value creation through Market Value Added (MVA).
- 3) To examine the effect of Profitability on shareholders' value creation.
- 4) To examine the effect of Liquidity on shareholders' value creation

#### Hypothesis of the Study:

To maintain objectivity and avoid uncertainty in the results, null hypothesis method is used. Null hypothesis is the hypothesis of no differences. The hypothesis can be accepted or rejected only at certain probability levels. In order to achieve the objectives of the research following hypotheses are framed.

- 1) There is no significant impact of Profitability on Shareholders' Value Creation.
- 2) There is no significant impact of Liquidity on Shareholders' Value Creation.

#### Methodology:

##### • Sample Selection:

The data used in this study relate to those pharmaceuticals companies listed in the Bombay Stock Exchange (BSE) for which the data are available in the ACE EQUITY database. The analysis is confined to the BSE listed Indian pharmaceuticals companies only. This is due to the fact that BSE has the second largest number of domestic quoted companies on any stock exchange in the world after New York Stock Exchange (NYSE) and has more quoted companies than either the London or the Tokyo stock Exchange. ACE EQUITY database obtained data relating to 173 BSE listed Pharmaceutical companies, from that population, top 9 companies based on market capitalization are selected for sample. The researcher selected all those companies which complete data is available and final sample consisted of 9 pharmaceuticals companies as detailed in the following table:

Table: 1 List of selected companies

Sr.No.	Company Name
1	Sun Pharmaceutical Industries Ltd.
2	Divi's Laboratories Ltd.
3	Dr. Reddy's Laboratories Ltd.
4	Cipla Ltd.

5	Torrent Pharmaceuticals Ltd.
6	Zydus Lifesciences Ltd.
7	Aurobindo Pharma Ltd.
8	Alkem Laboratories Ltd.
9	Lupin Ltd.

#### Duration of the Study:

The study is conducted on the basis of Seven years.  
i.e. From 2016-17 to 2022-2023.

#### Collection of Data:

For the purpose of the study, secondary data is used.

For obtaining the secondary data the following sources are as follows:

- I. Published financial reports of the company i.e. 2018 - 2023.
- II. ACE EQUITY database
- III. Website of selected companies

#### Method:

Methods used for measurement of value creation are as follows:

Formulas for Calculation:

- ✓ MARKET VALUE ADDED (MVA): Market Capitalization – Net Worth

#### Statistical Tools and Techniques:

The Table below gives the summary of the Statistical tools and Techniques, Models and the variables used in the analysis to attain the objectives of the study.

#### Summary of the Statistical Tools and Techniques, Models and the Variables

Objective no.	Objective	Model / Method	Variable Description	Statistical Tools & Techniques
1	To study the concept of shareholders' value creation.	****	****	****
2	To calculate shareholders value creation	Market Value Added (MVA).	****	****
3	To examine the effect of Profitability on shareholders' value creation.	$MVA = \alpha + \beta_1 \cdot ROE + \beta_2 \cdot EPS + \beta_3 \cdot ROCE + \beta_4 \cdot PAT + \epsilon$	Return on Equity (ROE), Earning Per Share (EPS), Return on Capital Employed (ROCE), and Profit AFTER Tax (PAT)	Multiple Regression Analysis
4	To examine the effect of Liquidity on shareholders' value creation	$MVA = \alpha + \beta_1 \cdot CR + \beta_2 \cdot QR + \beta_3 \cdot ITR + \epsilon$	Current ratio (CR), Quick ratio (QR), Inventory Turnover ratio (ITR)	Multiple Regression Analysis

#### Significance of the Study:

- This will be helpful for reflecting the economic efficiency & managerial efficiency of the Selected Companies of Pharmaceutical Industry.
- This will provide guidance for decision oriented information to shareholders to evaluate their investment decisions for both group of shareholders - to existing shareholders and potential shareholders.
- This will also provide guidance for the lenders to disburse their funds in favour of borrowers.
- This will give depth knowledge of shareholder value creation with different perspective,
- This will be also useful for other industry or other companies for improving their performance towards shareholders.

#### Limitations:

- The study is limited to selected companies of Indian Pharmaceutical Industry.
- The study will base on Secondary Data.
- The study will limited to one technique of shareholders value creations.

## LITERATURE REVIEW

Literature review is an activity through that researcher can increase the subjective knowledge. (Bumtariya, 2016). With the knowledge of previous research, researcher can do the research properly and can contribute new view points of the topic. To understand the concept of shareholders value creation more effectively, here are some literature review performed by the various researchers and analysts.

- Banerjee and Jain (1999) investigated the relationship between shareholder value and certain financial variables such as Earning per share, Adjusted return on net worth, Capital Productivity, Labour Productivity, Economic Value Added, and Market Value Added. For this purpose a sample of top 50 companies from Pharmaceutical industry was selected. The researcher concluded that out of selected independent variables, Economic Value Added had proved to be the most significant variable and the capital productivity was a predictor of shareholder wealth.
- Madhu Malik (2004), observed the relationship between shareholder wealth and different financial variables like Earning per share, Return on net worth, return on capital employed. By using correlation analysis, it was found that there was positive and high correlation between economic value added and Return on net worth, return on capital employed.
- Khan, Chaohan, Chandra, & Goswami (2012), observed whether Economic Value Added of the selected 30 companies listed in BSE securities market, creating value for their shareholders or not. Multiple correlation and multivariable linear regression model was used for the analysis. The researcher also found the impact of net worth, sales growth on Economic Value Added and revealed that no correlation between EVA and MVA, no correlation between EVA and Net Worth. The researcher also suggested that the profitability is an important factor for creating value in selected companies
- Chauhan (2012) examined the shareholder's value creation in the Indian petroleum industry.. The study had used T-test to test the hypothesis in the present research. EVA was found to have significant correlation with Net operating profit after tax, Earning per share, operating profit and Market capitalization and MVA figures of the firm for private and public sector. Both sectors have created a positive EVA and MVA in the study.
- Atiyet (2012), tried to find out the most significant determinants for shareholder value creation and the impact of capital structure on shareholder value creation, for this purpose 88 French companies were selected as sample. They used panel data and multiple regressions for analysis. The researcher concluded that the self-financing projects effect positively and significantly the shareholder value creation for Economic Value Added and Market Value Added. The financial debt contributes effect positively and significantly the Economic Value Added, But it's negatively related to Market Value Added.

TABLE 1: Calculation of Market Value Added (MVA)

(RS. in Millions)

Company Name	AVG VALUE OF MVA	Rank
Sun Pharmaceutical Industries Ltd.	1308927.50	1
Divi's Laboratories Ltd.	532003.30	2
Dr. Reddy's Laboratories Ltd.	419330.92	3
Cipla Ltd.	374108.03	4
Torrent Pharmaceuticals Ltd.	311615.35	5
Zydus Lifesciences Ltd.	291110.80	6
Aurobindo Pharma Ltd.	242677.73	7
Alkem Laboratories Ltd.	241522.50	8
Lupin Ltd.	213482.47	9

**(Source: researcher's calculated data)**

Formulas for Calculations:	
MARKET VALUE ADDED (MVA):	Market Capitalization – Net Worth

According to the Average MVA Sun Pharmaceutical Industries Ltd. ranked first among all other sample companies while Lupin Ltd., stood last as per Market value added. Though this sample selection is belonging to those companies whose market capitalization is highest among same industry so no company in this sample has destroyed their value.

TABLE 2 : Profitability impact on Shareholders' Value Creation:

<b>Objective</b>	<b>To examine the effect of Profitability on shareholders' value creation.</b>
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<b>Model</b>	<b>MODEL 1)</b> $MVA = \alpha + \beta_1. ROE + \beta_2. EPS + \beta_3. ROCE + \beta_4 PAT + \epsilon$
<b>Variable Description</b>	Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), and Profit After Tax (PAT)
<b>Statistical Tools &amp; Techniques</b>	Multiple Regression Analysis

**Table 2.1 Number : regression statistics**

<i>Regression Statistics</i>	
Multiple R	0.826431
R Square	0.682988
Adjusted R Square	0.64992
Standard Error	341644.8
Observations	63

**Table 2.2: ANOVA analysis**

ANOVA	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	14872132	312586039	31.77824	0.0302814 *
Residual	59	68965493	569653256		
Total	63	2.17E+13			

**Table 2.3: regression analysis**

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
ROCE	23836.16	12686.47	1.878864	0.065206 *
ROE	-16619.8	12804.48	-1.29797	0.199349 **
PAT	18.60282	2.88312	6.452324	0.122789 **
EPS	-2330.51	1068.621	-2.18085	0.033193 *

\*Significant at 5 % \*\* non significant at 5 %

From the above analysis in table no. 2.1 to 2.3 of regression analysis of MVA and profitability ratios shows that the multiple correlation coefficients are 0.826431. This indicates that the correlation among the independent and dependent variables is strongly positive. The coefficient of determination is 68.29%. This means that close to 68% of the variation in the dependent variable is explained by the independent variables. Since the p-value of F-statistic is less than 0.05 at 5% level of significance, so we reject the null hypothesis and conclude that there is significant relationship between MVA and profitability measures of selected companies.

The significance of independent variables are also been tested individually. Since the p-value of ROE & PAT is greater than 0.05 at 5% level of significance, so we accept the null hypothesis and conclude that there is no significant relationship between MVA and ROE & PAT of selected companies. Whereas the p value of ROCE and EPS is less than 0.05 at 5% level of significance, so we reject the null hypothesis and conclude that there is a significant relationship between MVA and ROCE and EPS of selected companies.

**TABLE 3: liquidity impact on Shareholders' Value Creation:**

<b>Objective</b>	To examine the effect of liquidity on shareholders' value creation.
<b>Model</b>	<b>MODEL 2)</b> $MVA = \alpha + \beta_1. CR + \beta_2. QR + \beta_3. ITR + \epsilon$
<b>Variable Description</b>	Current ratio (CR), Quick ratio (QR), Inventory Turnover ratio (ITR)
<b>Statistical Tools &amp; Techniques</b>	Multiple Regression Analysis

**Table 3.1 Number : regression statistics**

<i>Regression Statistics</i>	
Multiple R	0.790766188
R Square	0.625311164
Adjusted R Square	0.596154869
Standard Error	368317.8967
Observations	63

**Table 3.2: ANOVA analysis**

ANOVA					

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	1.35838E+13	4.53E+12	33.37762	0.025937586*
Residual	60	8.13948E+12	1.36E+11		
Total	63	2.17233E+13			

Table 3.3: **regression** analysis

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Current Ratio(CR)	-766744.4693	259950.2759	-2.94958	0.004531*
Quick Ratio(QR)	1222457.545	380963.3966	3.208858	0.00214*
Inventory turnover ratio (ITR)	54207.33047	11810.2841	4.589841	0.196547**

\*Significant at 5 % \*\* non significant at 5 %

From the above analysis in table no. 3.1 to 3.3 of regression analysis of MVA and liquidity ratios shows that the multiple correlation coefficients are 0.7907. This indicates that the correlation among the independent and dependent variables is strongly positive. The coefficient of determination is 62.53%. This means that close to 69% of the variation in the dependent variable is explained by the independent variables. Since the p-value of F-statistic is less than 0.05 at 5% level of significance, so we reject the null hypothesis and conclude that there is significant relationship between MVA and liquidity measures of selected companies.

The significance of independent variables are also been tested individually. Since the p-value of Inventory turnover ratio (ITR) is greater than 0.05 at 5% level of significance, so we accept the null hypothesis and conclude that there is no significant relationship between MVA and Inventory turnover ratio (ITR) of selected companies. Whereas the p value of Current Ratio (CR) and Quick Ratio (QR) is less than 0.05 at 5% level of significance, so we reject the null hypothesis and conclude that there is a significant relationship between MVA and Current Ratio (CR) and Quick Ratio(QR) of selected companies.

## CONCLUSION AND SUGGESTIONS

The study explains importance of using profitability ratios and liquidity ratios as tools for Market Value Added. The study reveals that there is positive relationship between Market Value Added and financial performance measures of selected companies during the study period. The statistical investigation with the help of R<sup>2</sup> and ANOVA analysis rejects the null hypothesis as its p value is also less than 5% and both the ratio profitability and liquidity have significant impact on Market Value Added. MVA implies for current net value of previous plans and future profitable chance. MVA evaluates the effect of managerial actions on shareholder value from an organization's inception. This study shows that MVA can explain other financial performance measures. The study justifies that MVA can be used instead of other financial performance measures. Further more studies can be done for other companies/sectors with more financial variables, measurement methods, with identification of other quantitative factors.

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