

**UNIVERSITY GRANTS COMMISSION
WESTERN REGIONAL OFFICE
GANESHKHIND, PUNE – 411 007.**

**PROFORMA FOR SUBMISSION OF INFORMATION AT THE TIME OF SENDING
FINAL REPORT OF THE WORK DONE ON THE PROJECT**

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|--|-----------|--|
| 1. NAME AND ADDRESS OF THE
PRINCIPAL INVESTIGATOR | :- | <u>Mr. Ahir K.D.</u> |
| 2. NAME AND ADDRESS OF THE
INSTITUTION | :- | Shri M. P. Shah Commerce College,
Surendranagar |
| 3. UGC APPROVAL NO AND DATE | :- | 23-097/12(WRO), Dtd. 05.02.2013 |
| 4. DATE OF IMPLEMENTATION | :- | 05.02.2013 |
| 5. TENTURE OF THE PROJECT | :- | 5TH February'2013 to 31st March'2014 |
| 6. TOTAL GRANT ALLOCATED | :- | Rs. 100,000/- |
| 7. TOTAL GRANT RECEIVED | :- | Rs. 72,500/- |
| 8. FINAL EXPENDITURE | :- | Rs. 79,387/- |
| 9. TITAL OF THE PROJECT | :- | “Shareholder’s Value Creation in
Pharmaceutical Industries of Gujarat” |
| 10. OBJECTIVE OF THE PROJECT | :- | As Per Attached Details |
| 11. WHETHER OBJECTIVES WERE
ACHIVED (GIVE DETAILS) | :- | Yes (As Per Attached Details) |
| 12. ACHIEVEMENTS FROM THE
PROJECT | :- | As Per Attached Details |
| 13. SUMMARY OF THE FINDINGS
(IN 500 WORDS) | :- | As Per Attached Details |
| 14. CONTRIBUTION TO THE SOCIETY
(GIVE DETAILS) | :- | As Per Details Attached |
| 15. WHETHER ANY PH.D ENROLLED/
PRODUCED OUT OF THE PROJECT | :- | Yes Principal Investigator has completed
his Ph.D. in the title “Shareholders’ Value
creation : A study of “Indian
Pharmaceutical industry” at Saurashtra
University, Rajkot (Gujarat) in
January’2017. |
| 16. NO. OF PUBLICATIONS OUT OF
THE PROJECT (PLEASE ATACH RE-PRINTS) | :- | Yes |

(PRINCIPAL INVESTIGATOR)

(REGISTRAR/PRINCIPAL)

10. OBJECTIVE OF THE PROJECT:

The main objectives of the project are as under:

- ♣ To examine the concept of shareholders' value creation and value based management.
- ♣ To analyze the trend and growth of shareholders value in pharmaceutical industry of Gujarat in terms of EVA (Economic Value Added) and MVA (Market Value Added).
- ♣ To measure the trends of Accounting Value Added.
- ♣ To assess shareholders value addition by financial ratios.
- ♣ To make suggestions for improvement of shareholders value creation.

11. WHETHER OBJECTIVES WERE ACHIEVED :

The objectives of the Minor Research Project are achieved. All objectives examined and achieved as under:

- ♣ Examined the concept of shareholders' value creation and value based management.
- ♣ Analyzed the trend and growth of shareholders value in pharmaceutical industry of Gujarat in terms of EVA (Economic Value Added) and MVA (Market Value Added).
- ♣ Measured the trends of Accounting Value Added.
- ♣ Assessed shareholders value addition by financial ratios.
- ♣ Made suggestions for improvement of shareholders value creation.

12. ACHIEVEMENTS FROM THE PROJECT:

If EVA is negative in such case the company must increase NOPAT and should improve their financial performance.

- (1) The company should make attempt for steady and sustainable growth.
- (2) Companies should also control their cost of brought in goods and services in order to add more value to their product.
- (3) Companies under the study, should improve their installed capacity. It will help to increase in sales and profit.
- (4) All the companies, should minimize and control their variable and operating cost through adoption of efficient Strategies in the company.
- (5) If interest amount is higher, company should try to minimize their debts for future financial stability.

13. SUMMARY OF THE FINDINGS :

In corporate world, shareholders are considered as a genuine and real owner of a company. They invested their money into shares and stock of a company. There by company established and exist. The equity share capital has also its cost: so, the management of company, should earn sufficient net operating profit to meet its cost of capital. When net operating profit after tax (NOPAT) exceeds its cost of capital, the company creates value or wealth for their shareholders. But , when NOPAT is less than its capital changes, in such case, company destroys their shareholders' wealth.

The researcher has carried out work and study of “ Shareholders' Value Creation in Pharmaceutical Industries of Gujarat.” The study is related with shareholders value creation in selected companies of “ Pharmaceutical Industry.” The summary of finding are as below:

13.1 INTRODUCTION OF SHAREHOLDERS' VALUE

The concept of Value Based Management (VBM), the cost of Capital, Shareholders' Value Creation is discussed in detail. The various tools measuring financial performance in a company, explained I details with their formula of calculation. Mainly how to create Shareholders Value through Market Value Added (MVA) and Economic Value Added (EVA) is narrated with detailed explanations.

13.2 PHARMACEUTICAL INDUSTRY OF INDIA AND GUJARAT

The history of pharmaceutical industry of world, kind of pharmaceutical company, various kind of new drugs or medicine approved by USFDA (United State Foods and Drugs Authonly), kind of drugs (1) Branded drugs (2) generic drug , the regularly control of the Pharmaceutical Industry, etc. have been discussed.

History of Pharmaceutical Industry by per of medicine, by per disease etc. also been discussed.

13.3 RESEARCH METHODOLOGY

The subject of the present study is “Shareholders Value Creation: A study of Pharmaceutical Industry of Gujarat”, the period of study is for seven years from 2005-06 to 2011-12. The study is based on the secondary data. The data collected through published annual account and annual report of the selected companies. The main objective of the present study is to measure financial performance of selected companies through Market Value Added (MVA), Shareholders Value Added (SVA), and Economic Value Added (EVA).

Various statistical tools like average, mean, deviation, Chi-test, one way ANOVA has been applied to test the validity of two hypothesis namely:

Null hypothesis and (2) Alternative hypothesis

By the researcher following companies had been selected for the purpose of the present research.

- (1) Cedilla Pharmaceuticals Ltd. Ahmedabad
- (2) Torrent Pharmaceuticals Limited, Ahmedabad
- (3) Alembic Pharmaceuticals, Vadodara
- (4) Claris Life Science Limited, Ahmedabad
- (5) Intas Pharmaceuticals limited, Ahmedabad

At the end limitation of present study have also been presented.

13.4 MARKET VALUE ADDED AND SHAREHOLDERS VALUE ADDED

Market Value Added is an external tool to measure financial performance of a corporate unit. Is a difference between market price and book price of a equity share of a company is MVA.

$MVA = \text{Market Capitalization} - \text{Net Worth}$

$\text{Market Capitalization} = \text{No. of equity shares} * \text{Closing price of equity share}$

$\text{Net Worth} = \text{Equity share capital plus reserve and surplus}$

When market capitalization is higher than net worth of a company, it means company creates value for their shareholders. When value is added shareholders value is created.

A study of Market Value Added (MVA) and Shareholders Value Added (SAV) in selected Corporate units, under the study has noticed some findings as below:

The MVA trends is fluctuating but positive in all selected companies of Pharmaceutical Industry of Gujarat. The figure of MVA was ultimately positive and seen highest at overall and at average level. So companies have added value to shareholders wealth.

The company has paid dividend during all the study period to their Shareholders. This shows that the companies have added high values to shareholders' wealth, which indicates high performance standards of the company.

13.5 ECONOMIC VALUE ADDED (EVA)

It an internal tool to measure the financial performance of a corporate unit. It measures the efficiency profit and balance-sheet of a company. EVA developed by Stern Stewart in 1991. Most corporate across the world the world and in India accepted and adopted the concept of EVA into their financial report.

$$\text{EVA} = \text{NOPAT} - \text{COCE}$$

$$\text{NOPAT} = \text{Net Operating Profit after Tax}$$

$$\text{COCE} = \text{Cost of Capital Employed}$$

If EVA is positive than company creates value for their shareholders, but when EVA is negative, means company destroy the wealth of their shareholders.

The EVA trend indicates the efficiency of NOPAT. When trends of EVA is positive and also increasing so during these year company has created wealth for their shareholders. But the trends of EVA is negative, in such case the NOPAT is not efficient to meet the cost of capital of the company. The reason for negative EVA, may be increased amount of Cost of Capital. The Company should increased its Net Operating profit for that period.

The EVA trends is positive and increasing also for the whole study period. The company has created wealth their shareholders for whole years of study period.

13,6 ACCOUNTING VALUE ADDED

Torrent pharmaceuticals Ltd

The NVA trend was increasing during the whole study period from 2005-06 to 2011-12. The lowest NVA was Rs.433.05crores in 2005-06 and the highest NVA was Rs.1557.36 crores in 2011-12.

The calculated value of Chi-square is 8002.76, while the table value of Chi-Square is 12.59 at 5% level of significance, so the null hypothesis is rejected. Hence there is significant difference between actual value and trend value of NVA in Torrent pharma. It indicates the high performance of company.

13.7 RATIO ANALYSIS

It deals with ratio analysis. The researcher discussed basic theory of the ratio analysis in the beginning. After discussion the below five ratio like as gross value added ratio, net value added ratio, earning per share (EPS) ratio, return on net capital employee (ROCE) Ratio and return on equity (ROE) ratio and use one way ANOVA test for finding results as under.

Gross Value Added Ratio

The gross value added ratio of selected pharmaceutical industries during the study period has been shown an average 61.72%. One way ANOVA test indicates the calculate value of 'F' was 6.93 and the table value of 'F' at 5% level of significance was 2.04. So, the calculated value of 'F' which was greater than the table value. It indicated that the null hypotheses is rejected and the alternative hypotheses accepted. It indicated that there is significant difference between gross value added ratio of selected pharmaceutical companies.

Net Value Added Ratio

The net value added ratio of selected pharmaceutical industries during the study period has been shown an average. It indicated that there is significant difference between net value added ratio of selected pharmaceutical companies

Earning Per Share(EPS)

The Earning per Share (EPS) ratio of selected pharmaceutical industries during the study period has been shown an average. It indicated that there is significant difference between earning per share (EPS) of selected pharmaceutical companies.

Return on Net Capital Employee (ROCE)

The Return on net capital employee(ROCE) ratio of selected pharmaceutical industries during the study period has been shown an average. It indicated that there is significant difference between Return on net capital employee (ROCE) ratio of selected companies.

Return on Equity(ROE)

The Return on Equity(ROE) ratio of selected pharmaceutical industries during the study period has been shown an average. It indicated that there is no significant difference between Return on Equity (ROE) ratio of selected pharmaceutical companies.

13.8 FURTHER SCOPE OF THE STUDY

The researcher has attempted to analyze the trend and growth of Shareholders' Value Creation in terms of Market Value Added (MVA) and Economic Value Added (EVA) in selected companies of Pharmaceutical Industry.

- Separate and specific study can be carried out for each aspects of Shareholders' Value creation.
- The present study is only for limited years. This can be increased in order to broaden up the scope of the study.
- The present study can be further compared with others companies of Pharmaceutical industry or any other industry.

13.9 SUGGESTIONS

Here are some suggestions, drawn after concluding the study of Shareholders' Value Creation of selected ten companies of Pharmaceutical Industry. Which may be useful to concerns of the company and for those who are interested in research work in future in the same area of interest or for the same or any other corporate unit.

- (1) All the companies under the study, should increase their Net Operating Profit in orders to get positive EVA.

- (1) All the ten companies under the study, should attempt to control over the cost of capital employed to get positive EVA for the betterment of stakeholders.
- (2) If EVA is negative in such case the company must increase NOPAT and should improve their financial performance.
- (3) The company should make attempt for steady and sustainable growth.
- (4) Companies should also control their cost of brought in goods and services in order to add more value to their product.
- (5) Companies under the study, should improve their installed capacity. It will help to increase in sales and profit.
- (6) All the companies, should minimize and control their variable and operating cost through adoption of efficient Strategies in the company.
- (7) If interest amount is higher, company should try to minimize their debts for future financial stability.

13.10 CONCLUSION

In the beginning of 21st century some deadly disease e.g. swine influenza, Zika virus etc. were spread in the various country of the world. People of the world afraid of new pattern such disease. But with advancement of science and technology pharmaceutical industry invented new drugs to control such disease. Healthcare issue is also become the industry. Corporate health companies like Wockhardt Healthcare, Forties Hospitals, Sterling Hospitals, Apollo Hospitals, ZydusCadila etc. established in India. In Indian culture people believe a Doctor as a God, so don't worry for health and let the pharmaceuticals companies be provided such environment to perform with ethical value. It is truly said that **“First Happiness is Healthiness”**.

14. CONTRIBUTION TO THE SOCIETY :

Since, long there is a method or tools to measures financial performance of a company. That is accounting profitability method. E.g. EPS (Earning Per Share), ROL (Return on Investment) etc.

But in recently shareholders value based measure is developed and accepted by many corporate units. It is Market Value Added (MVA), Shareholders Value Added (SVA) and Economic Value Added (EVA) concept in 1991. In short, creation of shareholders value or wealth is beaming now a man objective of any corporate units.

Annexure-III

FINAL REPORT



Minor Research Project: Title of Project:

**“SHAREHOLDERS’ VALUE CREATION IN
PHARMACEUTICAL INDUSTRY OF GUJARAT”**

U.G.C Minor Research Project F.No.23-097/12(WRO), Dated. 05-02-2013

Work Done : 05-02-2013 to 05-02-2015

Principal Investigator

Name:Mr. Ahir K.D.

Designation: Associate Professor

Qualification: M.Com

Sex: MaleCategory:SC

Title of Project:

**“SHAREHOLDERS’ VALUE CREATION IN
PHARMACEUTICAL INDUSTRY OF GUJARAT”**

Institute:

Shree M.P.Shah Commerce College

Surendranagar Dist. Surendranagar State: Gujarat (India)

To

UGC: Western Regional Office

Deputy Secretary

Ghaneskind, Poona University Campus

Poona – 411007 (MAHARASHTRA)

Minor Research Project: **Final Report**

Project title

“SHAREHOLDERS’ VALUE CREATION IN PHARMACEUTICAL INDUSTRY OF GUJARAT”

1. INTRODUCTION

The equity shareholders are real and genuine owners of Joint Stock Company. The main objective of investing their saving money in equity shares of company is to receive good capital appreciation and regular and stable return (i.e. dividends) from company. So investors, before taking their decision, consider several factors which influence the corporate performance. For measuring the corporate financial performance, there are accounting profitability measures and shareholders’ value based measures. Accounting profitability measures include ROI, ROE, EPS, ROCE and DPS etc., shareholders’ value based measures include EVA and MVA.

Maximizing the shareholders value is considered as one of the fundamental goals of all kinds of businesses. In United States, top management is expected to maximize shareholders’ value. There are a number of Value Based Management (VBM) frameworks, Shareholders Value Analysis (SVA) and Economic Value Analysis (EVA) developed by Stern Stewart (1990). Both are two well-known ones. Maximizing shareholders value is becoming the new corporate standard in India. The corporate, who gave the lowest preference to the shareholders’ inquisitiveness, are now bestowing the utmost inclination to it. Shareholders’ wealth is measured in terms of the returns they receive on their investment. The returns can either be in the form of dividends or in the form of capital appreciation or both. Capital appreciation depends on the subsequent changes in the market value of shares. This market value of shares is influenced by a number of factors which can be company specific, industry specific and macro-economic in nature.

2. IDENTIFICATION OF RESEARCH PROBLEM

Problem identification too broadly defined cannot be addressed adequately in single study. Formulation of problem is often more essential than its solution because when the problem is formulated, an appropriate technique can be applied to generate alternative solution. In essence, a proper formulation of the research problem starting with objective would enable a researcher to go ahead in the proper direction. Finally, it may be noted that problem formulation would have focus on what sort of decision issue are tackled.

India is growing fast country, value added reporting is recently developing concept in India. Value added concept is comparatively new but is gaining considerable importance those days, particularly for taxation and managerial performance purposes. A growing number of companies in India have started including a value added statement (VAS) on the lines of the companies in western countries, as a part of their published annual reports and accounts. The concept of value added or wealth creation is a performance measure and it reports the wealth generated by a business undertaking over a period of time. In now days, not only financial information including in annual report but also includes social information in annual report. Social measurement tools as bellows.

1. Value Added Reporting
2. Market Value Added
3. Economic Value Added

There are three important measurement tools include in annual report that give us social performance describe towards shareholders, government, lenders, and employee.

After reviewing many research study and articles researcher comes to know what the important role play social measurement tools in India and also seen that which factors influence to measure social performance between private sector corporate units and public sector corporate units in India.

Most of the research study shows that an empirical study and a comparative two countries' company to measure social performance and in recent years, there has been a tremendous exchange of business and management ideas and techniques amongst

companies in different countries. Listed companies in U.K., U.S.A., Japan, South Africa, and other foreign countries use value added reporting in annual reporting.

This empirical research study narrates the vital role of social performance through value added reporting in India. Research defines various existing literatures related with the study and problems of the title, various objective frames by the researcher, which leads to research phenomena. There were used many literature of review for this research study and formulated appropriate methodology for accomplish objectives of the study. By referring the different past research studies, researcher selected this topic f

or the purpose of the study the relationship between sale turnover to gross value added and net value added. However most of the prior researcher studies have been based on empirical and they have covered different time duration and methodologies.

Consequently, researcher recognition of variables, statistical tools and techniques would for suitable findings. Researcher has framed for the purpose of the study entitled.

Gujarat state is leading in pharmaceuticals drugs and medicines in the country. There are some companies such as Cedilla Pharmaceuticals Ltd. Ahmedabad, Torrent Pharmaceuticals Limited, Ahmedabad, & Intas Pharmaceuticals limited, Ahmedabad of which drugs approved by FDA (Foods and Drugs Administration of USA). At present study of **SHAREHOLDERS' VALUE CREATION IN PHARMACEUTICAL INDUSTRY OF GUJARAT is much important.**

“SHAREHOLDERS' VALUE CREATION IN PHARMACEUTICAL INDUSTRY OF GUJARAT”

3. REVIEW OF THE LITERATURE

Value Added Reporting is developing concept that why some studies conducted in context with the performance through value added reporting to the corporate sector. The researcher has studied those works which are as follows:

- ✎ The study made by **Dr. Mohana Rao** who published a book in “**Value Added Reporting - in Theory, Practice and Research**”. He has studied concept of value added, value added-computation formula. Value added ratios analysis and value added reporting has been examined in the united states in forms of its relevance to capital market. He

studied analysis of value added statement of SAIL (Steel Authority of India Ltd.) part of creation of value added and disposal of value added. He made several suggestions. For the strengthening the financial soundness.

- ✎ **Kaushal A. Bhatt** has done his M.phil under guidance on **Dr. Prof. S. J. Parmar, Saurashtra Uni.** Thesis on “**Value Added As A Performance Measurement Tool.(A comparative study of GSFC & GNFC)** for the period from 2001-02 to 2005-06. He had made an attempt to analysis of value added statement of GSFC & GNFC. He had studied distributed to net value added towards Employees, Government, Capital Providers and Owner (Retained in Business). He had also analyzed value added ratios between comparatively studies on GSFC & GNFC. He also suggested to GNFC better performance compare to GNFC through analyzed value added ratios.

- ✎ **Ravi M. KISHORE** has written a book “**Advance Management Accounting**” published by **Taxmann Publishing Company, New Delhi (2005)**. Which covers the concept of value added, application of value added and generation of value and its also formats of value added statement in detail.

- ✎ **Dr. Pradeep Singh,** has written an article in “**The Management Accountant, August, 2008.**” On the value added reporting with the title “**Social Performance Through Value Added Reporting**”-- **An Empirical study of Lupin Lab. Ltd.** In this article, he has analyzed to explain performance volutionbyLupin Ltd. By the value added reporting from 1995-96 to 2004-05. He has suggested to analysis and interpretation of Value Added Statement and Value Added Ratios could be concluded that the management of Lupin Lab. Ltd. Has served to the society vary well as total value added has been distributed among the employees, government, financial Institutions, banker & shareholders, on the other hand it also contributed of value added forwards the growth and development of the company retained in the business.

- ✎ The study made by **Dr. N .P. Agrawal**who published a book “**Analysis and Interpretation of Value Added Statement.**” He has studied methods of calculating value added forms of value added statement & various types of value added ratios and covered more than 7 various types of statically tools used through net value added &

gross value added towards, stakeholder, owner (retained), government, employees. He made several suggestions for the strengthening performance through value added reporting.

- ✎ **P. Mohana Rao** has written a book “Corporate social Accountings & reporting” published by **Deep & Deep** publication New Delhi. He has covered three types of social responsibility, concept of social responsibility. Social responsibility toward different groups like shareholder, employees, consumer, community, investors, suppliers, competitors, and government.

- ✎ **Anthony T. Barber** has written an article “**Performance Results in Value Added Reporting**” **Mid-Atlantic Journal of Business** ,State University of New York, College at Old Westbury,(March 1, 1997). He has been a tremendous exchange of business and management ideas and techniques amongst companies in different countries. Perhaps one of the most publicized examples of this exchange of ideas is the growing adoption by U.S. businesses of the Japanese concept of Just-in-Time inventory. Worldwide accounting and financial reporting has not been immune to this exchange of influences. An idea which is growing in use by foreign multinational firms is that of value added reporting

- ✎ **Pong, Chris; Mitchell, Falconer** has published article as on title “**Accounting for a disappearance: a contribution to the history of the value added statement in the UK.**”-**Accounting Historians Journal** (December 1, 2005). They has been an empirical study of the information in the VASs of UK companies shows that they were unlikely to give support to the economic interests of the employee user group who had been promoted as an important beneficiary of the VAS. The study demonstrates that the social and economic nature of accounting means that change analyses which take account of both aspects of the discipline's character are likely to be more convincing than those which focus solely on one or the other.

✎ **L.J. Stainbank** has written article title as on **“The value added statement: --does it add any value?”**(**School of Accounting, University of KwaZulu-Natal**) **research studied on** “The value added statement has been voluntarily reported by South African companies for many years despite reservations about its usefulness. This article examines current literature on value added statements in two areas: the usefulness of the value added statement in South Africa and the relevance of social accounting theories in explaining its continued disclosure in South African listed companies’ annual reports. It also reports the results of a questionnaire survey addressed to preparers of value added statements. The research studies examined in the literature review indicate that legitimacy theory is more likely to provide an explanation for the disclosure of value added statements in annual reports in South Africa. The results of the empirical survey indicate that the majority of the respondents are of the opinion that it is desirable to prepare a value added statement, but that it is not used in the majority of companies. Furthermore, the reasons advanced by the preparers for the desirability of the value added statement provide some evidence that legitimacy theory may be behind the propensity of companies to publish a value added statement. The article recommends that the preparation of the value added statement should be standardized. However, the disclosure of an independently prepared value added report may be more useful to all users.

✎ **Arumugam Subramanian** has written research paper on titled **“Value Added Reporting: A Case Study Of Abans Listed Manufacturing Company Limited in Sri Lanka”** **published by** University Of Jaffna, Jaffna, Thriunelvely, Jaffna, Sri Lanka. He has studied a business enterprise specifically a company is a conscious, deliberate and purposeful creation for satisfying the domain of aspiration of the society at large. It is an independent and a separate legal entity. The survival stability and growth of such entity within society largely depend on the wealth created by it through the collective efforts of all the stakeholders-shareholders, providers of loan capital, employees and the government. All these stakeholders are the parties to whom the result of operations of business is communicated. He has attempted to show how and to what extent the Value Added Statement (VAS) can supplement additional financial information to satisfy all the stakeholders of the enterprise. Further, in order to meet the objectives of the study, data were collected from secondary sources mainly from financial report of the selected company (i.e., ABANS Listed Manufacturing Company) which was published by

Colombo Stock Exchange (CSE) in Sri Lanka. Hence, it is clear that ratios using Value Added (VA) indicate that the company little bit efficient in terms of utilization of materials

✎ **Andrew C. Worthington & Tracey West** has written articles “**Value-Added Reporting: A Review of the Theoretical and Empirical Literature**” They have been a renewed emphasis on devising measures of corporate financial performance and incentive compensation plans that encourage managers to increase shareholder wealth. One professedly recent innovation in the field of internal and external performance measurement is a trade-marked variant of residual income known value-added reporting. This paper attempts to provide a synoptic survey of VAR’s conceptual underpinnings and the comparatively few empirical analyses.

✎ **C. J. van Staden** has written as title of thesis “**The Value Added Statement: Bastion of Social Reporting or Dinosaur of Financial Reporting?**” **31 March 2000** Department of Accountancy and Business Law College of Business, Massey University, Palmerstone North, New Zealand. South Africa was experiencing the highest incidence of publication of the value added statement reported anywhere in the world to date. In addition research investigating the predictive ability of value added information has been conducted in the USA since 1990, even though the value added statement has not been published there. The research reported in this paper sets out to establish whether the value added statement is a disclosure worth considering by companies around the world, by investigating the South African experience with the value added statement. The social accounting theories of organizational legitimacy and political costs were found to be best suited to explain why the value added statement is published. Surveys among the companies publishing the value added statement indicated that management had the employees in mind when they published this information. However, a survey among users has indicated that very little use has been made of the value added statement. The main reason for this seems to be that the unregulated nature of the value added statement allows for inconsistencies in disclosures, which eventually caused users to suspect bias in the reports. The USA evidence that the information has additional predictive power is not confirmed by a South African study, and is complicated by the limited additional

information contained in the value added statement. The South African experience with the value added statement does.

- ✎ **SuvarunGoswami** ,(The university of burdwad) has written research articles on title as **“Value added Statement (VAS) – a critical study” (A case study of Bharat Heavy Electronics Limited)** Vol.2 no.2 This paper he has tried to show how and what to extent, the VAS can supplement addition financial information to satisfy all stakeholders of enterprise.

- ✎ **Ahmed Riahi- Belkaoui**has published book title on**“Value added reporting” (lessons for the United States)** - Greenwood Publishing Group, 1992 - Business & Economics. A new form of accounting statement--the value added statement--is gaining popularity in the corporate annual reports of the largest companies in the United Kingdom. This new statement can be viewed as a modified version of the income statement. Like the income statement, the value added statement reports the operating performance of a company at a given point in time, using both accrual and matching procedures. Unlike the income statement, however, it is interpreted not as a return to shareholders but as a return to the larger group of capital and labor providers. Riahi-Belkaoui shows that the value added statement can be easily derived from the income statement and is therefore easily adaptable to the needs of U.S. companies. To illustrate the usefulness of the value added statement, He devotes Chapter 1 a thorough discussion of its many benefits. He then analyzes the usefulness of the value added concept in understanding the characteristics of corporate takeovers in the United States, and in Chapter 2 he discusses the relationship between the value added concept and the systematic risk of U.S. companies, concluding in Chapter 3 with a discussion of value added statements in financial analysis

- ✎ **Ahmed Riahi- Belkaoui** written book on **“Value added reporting and research”** (state of the art) **Greenwood Publishing Group, 1999 - Business & Economics - 185 pages**. It is clear that value added methods provide relevant, useful information for financial analysis, market valuation, and financial decision making in corporate settings. Value added methods can be used in ratio analysis, in the determination of earnings as management tools, and can be substituted for earnings in equity valuation. When

included in a wealth measurement it can vastly improve the quality of decision making. Riahi-Belkaoui covers these topics and more. His book is essential examination of what the latest value added methods are and what they can do, not only for accounting professionals but for academics and top corporate management as well. Value added reporting is popular in most European countries and in New Zealand, South Africa, and Australia. Most emerging countries are using it too, or considering it. Riahi-Belkaoui explicates latest developments in value-added practice and research, first covering the meaning of the concept, the history behind value added's development and its implied advantages and disadvantages. He then covers the derivation of a value added report, using a fictional case and the resulting data, before moving to an overview of the empirical literature most concerned with value added in the United States. Documenting the overall behavior of the net value added earnings policy model, he lays the foundation for more contextually specific approaches and investigates the usefulness of the substitution of net-value added in equity valuation. The book concludes with an examination of whether accounting knowledge is associated with a decision maker's tendency to ignore value added in wealth measurement in favor of the profit concept. He draws heavily on his own important writings, to further illustrate and explain the methods and benefits of value added approaches in accounting and other forms of financial decision making.

- ✎ **Ahmed Riahi- Belkaoui** has written book on “**Performance results in value added reporting**”, **Greenwood Publishing Group, 1996 - Business & Economics - 175 pages**. Value added reporting provides a better measure of the wealth produced by a firm than other methods, says Riahi-Belkaoui in this research-based analysis. It is more useful generally to investors and other users of accounting information, and to policy makers throughout the financial services and related industries. Empirical studies of its uses in Europe support the author's contention and provide a compelling argument for its use in the United States. An important book for professionals and academics alike.

- ✎ **KPMG-BS Study (1998)** assessed top companies on EVA, sales, PAT (Profit after Tax), and MVA criteria. The survey has used the BS 1000 list of companies using a composite index comprising sales, profitability and compounded annual growth rate of those companies covering the period 1996-97. Sixty companies have been found able to create

positive shareholder value whereas 38 companies have been found to destroy it. Accounting numbers have failed to capture shareholder value creation or destruction as per the findings of the study. 24 companies have destroyed shareholder value by reporting negative MVA.

- ✘ **Anand, et.al. (1999)** revealed that EVA, REVA (Refined Economic Value Added) and MVA are better measures of business performance than NOPAT and EPS in terms of shareholders' value creation and competitive advantage of a firm. Since conventional management compensation systems emphasize sales / asset growth at expense of profitability and shareholders' value. Thus, EVA is a measure that shifts focus on an organizational culture of concern for value.

- ✘ **Banerjee and Jain (1999)** examined the relationship between shareholder wealth and certain financial variables. This study was conducted with a sample of top 50 companies from Drugs and Pharmaceutical industry. This study concluded that out of select independent variables, EVA has proved to be the most explanatory variable and the capital productivity is a predictor of shareholder wealth.

- ✘ **Madhu Malik (2004)** examined the relationship between shareholder wealth and certain financial variables like EPS, RNOW and ROCE. By using correlation analysis, it was found that there was positive and high correlation between EVA and RONW, ROCE. There was a positive but low correlation between EVA and EPS. By using co – efficient of determination (r^2), EVA was compared with Traditional performance measures and it was found that not a single traditional performance measure explains to the fullest extent variation in shareholder wealth.

- ✘ **Panigrahi (2005)** examined how the Economic Value Added (EVA) is superior to Market Value Added (MVA). This has been examined by financial performance of ITC Ltd, which has adopted the EVA as its performance measurement. This study found that by increasing Economic Value Added (EVA), Shareholder Wealth is created and established the fact that the Economic Value Added (EVA) is superior to the Market Value Added (MVA).

- ✎ **Bhayani (2006)** studied economic value added of Cholamandalam Investment and Finance Co. Ltd for the period of 1998-99 to 2002-03. The company has been successfully able to create value for its shareholders. The company's earnings are much higher than the overall cost of capital. The traditional performance indicators are showing quite high values of ROCE, EPS growth as compared to EVACE. It is observed that the traditional parameters indicated quite a rosy and healthy picture of the company during all five years of the study.

- ✎ **Kaur and Narang (2009)** in his study an attempt has been made to explain the application of EVA for selected companies. The sample for the study was top 205 companies has been selected from BT-500 India's most valuable companies. The study period was of 12 years (1995-96 to 2006-07). The results of the study indicate negative EVA for eight years consecutively.

- ✎ **Chauhan and Bhayani, (2010)** has examined the impact of mergers on shareholders value creation in Indian industry. This study includes companies which have undergone merger during the period 1st April, 1999 – 31st March, 2000. , There are about 196 merged companies in India during above period and we have selected 56 firms for the research to examine pre and post merger performance of firms covered under the study. The result suggests that firm's shareholders value creation is highly dependent on Operating expenses, Profit margin, ROCE and Expense ratio. The inter company and inter industry analysis results indicate there is no positive impact of mergers on shareholder value creation.

- ✎ **Khatik and Singh, (2010)** studied economic valued added in 10 selected companies of India for the period of 1998-99 to 2007-08. The results of the study indicate there are no any uniform EVA trends in selected firms.

- ✎ **Sharma and Kumar (2010)** have analyzed effectiveness of Economic Value Added in selected companies for the period of 2001-02 to 2008-09. Researcher has used traditional measures along with EVA to measure effectiveness of the firm. The result of statistical tools reveals that except few majorities of the sample companies are able to continuously create value for their shareholders during the study period. The study finds that EVA is

gaining popularity in India as important measures of firm performance.

- ✎ *Sakthivel (2011)* analyzed shareholder's value in Indian pharmaceutical industry for the period of 1997-98 to 2006-07. It is concluded that the companies under pharmaceutical industry has succeeded to meet public expectations in terms of shareholders' value creation through EVA either by increasing operating income from assets in place through reducing cost of production or increasing sales, or reducing the cost of capital by changing the financing mix in capital structure. This study showed that shareholders' value creation tend to go up every year for pharmaceutical industry since 2000-01.

The detailed review of literature indicates that very few studies have been conducted in India to study the shareholders value creation. It is very clear from the above literature in India no industry specific study has been conducted to examine the trend of shareholders value creation. At present India is the fastest developing economy in the world. In India during the last decade pharmaceutical industry has got prominent importance, because of the development of our economy. The Gujarat state has been playing a leading role in pharmaceutical industry of India. So, researcher has conducted present research on pharmaceutical industry of Gujarat and tried to study the shareholders value creation in it.

4. OBJECTIVE OF THE STUDY

The main objectives of the study are as under:

- ♣ To examine the concept of shareholders' value creation and value based management.
- ♣ To analyze the trend and growth of shareholders value in pharmaceutical industry of Gujarat in terms of EVA (Economic Value Added) and MVA (Market Value Added).
- ♣ To measure the trends of Accounting Value Added.
- ♣ To assess shareholders value addition by financial ratios.
- ♣ To make suggestions for improvement of shareholders value creation.

5. HYPOTHESIS OF THE STUDY

Statistics which helps to the researcher in arriving at the creation for such decisions is known as testing hypothesis. The theory of testing hypothesis was established by J. Neyman and E. S. Pearson and employs statistical techniques to arrive at decision in certain situations where there is fixed in advance

Below explain certain basically idea related with the testing hypothesis

Statistical Hypothesis:–

Simple and Composite: - A statistical hypothesis is some assumption or statement, which may or may not be true, about a population or equivalently about the probability distribution characterizing the given population, which researcher want to test on the basis of the evidence from the random sample. If the hypothesis is completely specific the population, then it is known as simple hypothesis, otherwise it is known as composite hypothesis.

Null Hypothesis:-

The ransom selection of the samples from the given population makes the tests of significance valid for the researchers. For applying any test of significance researcher first set up a null hypothesis.

In the word of **Professor R. A. Fisher** “null hypothesis is the hypothesis which is tested for possible rejection under the assumption that is true”. It is usually denoted by H_0 .

For the analysis of Shareholders’ Value Creationin Pharmaceutical Industry of Gujarat following null hypotheses will be tested:

The broader hypothesis of the study is as under:

- ✎ The shareholders’ value addition trends are uniform in EVA, MVA and in Accounting Value Addition in the Pharmaceutical industry of Gujarat.

Also tested other hypotheses are in the relevant chapters.

6. SCOPE OF THE STUDY

The current research is for the pharmaceutical industry in Gujarat; all the companies of pharmaceutical industry of Gujarat can be included in the research. But only 5 companies from Gujarat pharmaceutical industry is covered for the study. There is further classification in the public limited companies as those are into business of:

1. Bulk Drugs
2. Formulations
3. Bulk Drugs & Formulations

The selection of the companies would be done from the large type of companies in the pharmaceutical industry of Gujarat.

The researcher selected those companies which are having the highest market share in term of volumes.

7. PERIOD OF THE STUDY

The present study was undertaken by the researcher for the period of seven (7) Accounting years from 2005-2006 to 2011-12. The researcher had selected the base year 2005-2006 because this year was normal for the present research of analysis and evaluation.

8. SAMPLE OF THE STUDY

By the researcher following companies were had been selected for the purpose of the present research.

- (6) Cedilla Pharmaceuticals Ltd. Ahmedabad
- (7) Torrent Pharmaceuticals Limited, Ahmedabad
- (8) Alembic Pharmaceuticals, Vadodara
- (9) Claris Life Science Limited, Ahmedabad
- (10) Intas Pharmaceuticals limited, Ahmedabad

9. SOURECES OF DATA

The study is based on secondary data. To analyze the trend and growth of value addition in terms of EVA, MVA and Accounting Value Added in Pharmaceutical Industry of Gujarat. Required financial data of sample companies would be collected through

- Annual reports published by the companies.
- Financial reports published by the companies.
- Data related to the calculation of shareholder value creation by the companies.
- From “**Prowess**” Database of Centre for Monitoring Indian Economy (C.M.I.E.). And published annual reports of companies can be collected from the corporate offices of respective pharmaceutical companies. The information related to Indian Pharmaceutical Industry will be collected from websites, magazines, and from the Government of India Publication.

10. METHODS OF ANALYSIS AND INTERPRETATION OF DATA

In order to analyze the present research work on “**“SHAREHOLDERS’ VALUE CREATION IN PHARMACEUTICAL INDUSTRY OF GUJARA”** various techniques of financial management like as ratio analysis and various statistical techniques used by the researcher as under:

10.1 USE OF FINACIAL RATIO ANALYSIS

Financial analysis is the process of identifying the financial strengths and weakness of the selected pharmaceuticals companies by the properly establishing relationship between the item of the balance sheet and profit and loss account.

Ratio analysis is a powerful tool of financial analysis a ratio is defined as “the indicated quotient of two mathematical expressions” and as “the relationship between two or more things”. in financial analysis, a ratio was used as an index or yardstick for evaluating the financial position and performance of selected Pharmaceuticals companies of Gujarat state,

The relationship between two accounting figure, expressed by mathematically is known as financial ratio. A ratio helps the analyst to make qualitative judgment about the

selected pharmaceuticals companies financial position and performance. Financial ratio could be classified in the following group as under

- ❖ Liquidity ratios
- ❖ Leverage ratios
- ❖ Activity ratio
- ❖ Profitability ratio

In this research the use of ratios had not been made in the course of data but various ratios calculated in order to analyze the size, composition and circulation of working capital and its various components had been explain at the relevant chapters in the research.

10.2 ARITHMETIC MEAN

Arithmetic mean gives a single value to describe the whole data. Simple arithmetic mean of each series of different ratios has been obtained by adding the values of observations and dividing it by the number of observations.

10.3 THE STANDARD DEVIATION

The standard deviation concept was introduced by 'Karl Pearson' in 1823. Standard deviation is most widely used measure of dispersion of a series and is commonly denoted by the symbol ' σ ' (pronounced as 'sigma'). Standard deviation is retired as the square –root of the average of squares of deviations, when such deviations for the values of individual items in series are obtained from the arithmetic average.

10.4 Co-EFFICIENT OF VARIATION

Co-efficient of variation is a relative measure of dispersion. Among different measures of relative variation, one developed by Karl Pearson is the most common in use. Co-efficient of variation is used in problems where we want to compare the variability of two or more than two series. That series (or group) for which the co-efficient of variation is greater is said to be more variable or conversely less consistent, less uniform, less stable or less homogeneous. On the other hand, the series for which co-efficient of variation is less is said to be less variable or more consistent, more uniform, more stable or more homogeneous. In ratio analysis of financial data, lower co-efficient of variation in a ratio is taken as relatively better control of the management on that ratio. Co-efficient of variation is denoted by C.V. and obtained as follows:

$$C.V. = S/x$$

Where x = mean, S = standard deviation,

However, in this study, while computing the coefficient of variation, the standard deviation (S) has been for $(N-1)$ number of observations.

10.5 F-TEST (Analysis of variance)

F-test is based on F-distribution and is used to compare the variance of the one way single factor. This test is also used in the context of analysis of variance (ANOVA) for judging the significance of more than two sample means at one and the same time. It is also used for judging the significances of multiple correlated coefficient test statistic F-test is calculated and compared with its probable value for accepting or rejecting the null hypothesis.

Professor R.A. Fisher was the first man to use the term “VARIANCE” and in fact. It was who developed a very elaborate theory concerning ANOVA explaining its usefulness in practical field. ANOVA is essentially a procedure for testing the difference among different groups of data for homogeneity.

“The essence of ANOVA is that the total amount of variation in a set of data is broken down into two types, that amount which can be attributed to chance and that amount which can be attributed to specified causes.”

Thus, through ANOVA technique one can in general, investigate any number of factors which are hypothesized or said to influence the dependent variable one may as well investigate the difference amongst various categories within each of these factors. Which may a large number of possible values? If we take only one factor and investigate the difference amongst its various categories having numerous possible values. We are said to use ANOVA.

In the present study the researchers used ANOVA for the testing of hypothesis.

11. SIGNIFICANCE OF THE STUDY

Value Added Concept is a new concept and method in the Indian corporate environment to evaluate the performance of the corporate sector. Its significance is not only

for external purpose, it is equally important for internal purpose also. Significance of value added reporting is explained with following views:

❖ **Comparison of Performance**

Value Added is an alternative performance measure to profit. Value Added is superior performance measure because it bounces attention on inputs controllable by the management changes in material prices are usually not controllable by the management and Value added by doubling material costs allows attention to be directed at more comparable items.

❖ **Productivity Measurement**

For the measurement of productivity value added provides better information e.g. Value Added per rupees of performance of capital employed, Value Added for rupees of employee: etc. to measure various type of ratio analysis denote productivity measurement.

❖ **Resources Allocation**

Resources allocation decisions are normally based on the concept of maximum appropriate criterion because it incorporates the rewards to the employees as well as to providers of capital fund. For profit maximization ranking insure the allocation are based in contribution per units of the limiting factors and for value added maximization ranking would be a value added per units limiting factors.

❖ **Incentive schemes for the employee**

The value added reporting is found useful by many companies for explaining related corporate units results to employees the value added concept of profit is often an motivating and employees may well find the concept of creating wealth or adding value more acceptable one of the significant uses of the value concept is its incorporates in companies incentives schemes or bonus schemes. The schemes work by establishing ratio of value added to the pay roll and thereby creating a base index of favorable in later period a bonus is payable to share members.

12. CHAPTER PALN OF THE STUDY

The present study is divided into eight chapters, which are as under:-

- 1) Value Based Management and Shareholders' Value Creation

- 2) Pharmaceutical industry of Gujarat.
- 3) Research Methodology
- 4) Analysis of Shareholders' Value Added and market value Added
- 5) Analysis of Economic Value Added
- 6) Analysis of Accounting Value added
- 7) Ratio analysis
- 8) Summary of Findings and Suggestions

13. LIMITATIONS OF THE STUDY

Every living and non living thing has its own limitation which restricts the usability of that thing. The same rule applies to this research work. The main limitation of the study is as under:

- ✎ This research work is a micro nature research based in the samples 5selected corporate units.
- ✎ This study is based on secondary data derived from published annual reports of the selected units. The reliability and finding are contingent. Upon the data published in annual report.
- ✎ This research work is based on the 7 years financial performance of the sample selected corporate units from 2005-06 to 2011-12.
- ✎ The present study is based on value added statement and value added has its own limitation which also applied to this study.
- ✎ The ratio analysis has its own limitation. The same also applies to the present study.

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