IJASRM
International Journal of Advanced Scientific Research and Management, Vol. 1 Issue 10, Oct 2016.
www.ijasrm.com
ISSN 2455-6378

Measuring Shareholders' Value in Indian Pharmaceutical Companies': Economic Value Added (EVA) Approach

Merugu Venugopal[1] and Dr. M Ravindar Reddy[2]

[1] School of Management, National Institute of Technology, Warangal, India

[2] School of Management, National Institute of Technology, Warangal, India

Abstract

For many years Shareholder value creation or shareholder wealth maximization have turned into the corporate objective. Measuring the performance and value creation is an essential part of any organization and this enables the organization in forming strategies in achieving the corporate objective. The Economic Value added (EVA) developed by Stern Steward Co., has been broadly acknowledged and used by all levels of corporates across the globe for measuring and evaluating the firm's performance and shareholder value. The present study examined the shareholder's value creation in Indian pharmaceutical companies as measured by EVA. The Wealth creators and destroyers have been identified in the Pharmaceutical sector during the study period 2007-15. The Highest Average EVA generated by the Piramal Enterprises Ltd during the study period is 1020.84 cr. The study shows that 39 firms out of 77 were wealth creators. Finally, the conclusion is made that the companies with positive EVA will be able to attract investors in the future. Whereas negative EVA firms are not able to earn a return that is at least sufficient to cover up its overall cost of capital employed. EVA based performance framework not only provides the financial performance, it helps the management in strategic decision making in enhancing shareholder value.

Keywords: *Shareholders value creation, EVA, Performance indicators*

1. Introduction

Since a decade, organizations in the emerging economies are confronting new difficulties like severe competition, propelled innovation, changes in the capital markets, and so on. These have made the organizations to deliver superior performance and shareholder wealth maximization as their top priority to be competitive enough in the current arena. Thereby creating shareholder value or maximizing shareholder value turned into an extreme objective of the manager. Organizations which have adopted shareholder wealth maximization are had a tendency to outflank others. When an organization generates income over and above costs incurred to generate this income then one can say the firm has created a value for its shareholders.

To measure the real value created by the firm various value-based performance measures such as economic value added (EVA), market value added (MVA), cash flow return on investment (CFROI), cash value added (CVA), economic profit (EP), Shareholder value added (SVA), etc. have been developed over a period of time by various consulting (Bhasin & Shaikh, 2013). EVA is the measure of performance, enabling investors to identify investment opportunities and helps the managers in efficient decision making in the process of value creation.

For many years, several academicians, research and consulting firms engaged in the field of accounting and finance have been giving careful consideration to the advanced performance measures and conceding the confinements of conventional accounting measures of performance such as ROA, ROE, EPS, ROCE, RONW and earnings growth . EVA is the financial performance measure that comes closer than any other measure in capturing the true economic profits of an enterprise and EVA concept as a legitimate tool of corporate financial

performance measurement (Bhasin & Shaikh, 2013) (Weissenrieder, 1997). Estimation of shareholders wealth is one of the difficult challenges faced by the analysts and researchers (Bhanawat & Chundawat, 2012).

It is evident that the researchers have given much significance to EVA while measuring performance, or value creation of any organization. Presently, the business world is moving towards greater transparency and superior corporate governance mechanism. Thus, shareholder value creation aspect is of utmost importance in the present scenario of corporate performance and management. Therefore, one cannot preclude the present necessity of an exclusive study in this field.

The present study aims to examine whether the companies in Indian pharmaceutical industry has been able to generate value for its shareholders over a period of 2007 to 15.

2. Literature review

In the present era of the the competitive world, the organization goals have been changed from profitability to shareholder value creation and companies are facing new challenges like volatility in financial markets technological development and much more. These several changes have increased the burden on managers and redefined the role of managers to improve performance and deliver value to their shareholders (Bhasin & Shaikh, 2013). To meets the ultimate goal of the organization new concept of value-based management is evolving and which better reflects investment opportunities. Economic value added (EVA) is one of the concepts of value-based management (Garvey & Milbourn, 2000).

Economic Value added is developed by Stern Stewart & co. That emphasizes on the economic profits and values being created or destroyed by a company over a period of time (Kaur & Narang, 2009). Till today various empirical studies have been conducted to test EVA is a better performance measure than traditional accounting measures. However, the results are mixed. Some studies report that EVA adds value to shareholders when compared to traditional accounting (Lefkowitz, 1999; Lehn & Makhija, 1997; O'Byrne, 1996; Worthington & West, 2004; Maditinos & Row, 2006).

Indian companies started following disclosure practices of value based measures (EVA) in its reports(Kaur & Narang, 2010). India's leading software giant 'Tata Consultancy Services' (TCS), has followed to implement EVA (Sangameshwaran, 2002). Similarly, Hindustan Unilever limited incorporated EVA (Dhamija, 2008). Companies in automobile industry which have been adopted EVA have a positive trend to improve their firm values (Selvi & Vijayakumar, 2015). EVA allows a firm to identify whether the income is exceeded the cost of that capital for a given period. If the cost of capital exceeds the income, one can conclude that the firm goal is towards the creation of shareholder value or shareholder wealth maximization. As the value of shareholder maximizes, investors buy more shares in order to have more claims on its increased value, thereby the share price eventually maximizes (Bhasin & Shaikh, 2013). On the other side, most of the companies in India still not incorporated the EVA as a financial performance due to the computational issues of EVA (Selvi & Vijayakumar, 2015).

Various studies have examined the relationship between EVA and market value in the Indian companies and whether EVA is a better measure over the traditional accounting measures such as EPS, ROA, ROE, ROCE, RONW, etc. various studies showed that EVA is a better predictor of shareholder value over traditional accounting measures . And accounting measures are misleading the shareholders over the performance of the firm (Irala, 2007; Misra & Kanwal, 2007). EVA has more relevant and incremental information content than accounting measures (Selvi & Vijayakumar, 2015).

One recent advancement in the field of performance and value creation measurement is a variation of residual income known as economic value added (EVA) (Burksaitiene, 2009). The empirical literature shows that earnings ought not to depended on when measuring the financial strength of a company and value addition to its shareholders. Various studies have examined the data substance of different estimates as a result of the constraints in earnings figures. There are various issues in accepting the conventional accounting measures reflect the ultimate performance of the firm. One of the issues is that cost of capital not taking into consideration. From the review of the literature, it is evident that the academicians, researcher and consulting firms have given much importance to EVA while measuring performance, or value creation of any organization over traditional accounting measures. So this study aims to identify the trends in the shareholder value creation in the Indian pharmaceutical industry using the EVA.

Objectives of the study

1. To determine shareholder value creation as measured by EVA

IJASRM
International Journal of Advanced Scientific Research and Management, Vol. 1 Issue 10, Oct 2016.
www.ijasrm.com
ISSN 2455-6378

2. Identify the trends in the value creation and to compare the company wise shareholder value creation.

3. Methodology

A sample of 77 companies in Indian pharmaceutical industry was selected, which are listed in the BSE - SENSEX. For the purpose of the present research, secondary data and covers a period of 9 years, ranging from 2007 to 2015 and all the financial information required for the study was collected from the Capitaline Plus database.

Calculation of EVA:

EVA is a measure of firm's financial performance based on the residual income concept. It is calculated as net operating profit after tax minus total cost of capital or capital charge (Kaur & Narang, 2009) (Selvi & Vijayakumar, 2015).

EVA = NOPAT - (WACC*Capital Employed)
Where, EVA = Economic Value Added, NOPAT = Net Operating Profit after Tax (NOPAT = Operating Profit – Tax), WACC = Weighted Average Cost of Capital.

Calculation of Weighted Average Cost of Capital (WACC)

$$\text{WACC} = (K_e * W_e) + (K_d * W_d)$$

K_e = Cost of equity, K_d = Cost of debt

Calculation of Cost of equity (K_e) by the CAPM (Capital Asset Pricing Model)

$$K_e = R_f + \beta\,(R_m - R_f)$$

R_f = Risk free rate, β = Volatility of the stock with respect to the market, R_m = Market return

4. Analysis and Interpretation

The EVA of a company has been computed by deducting the overall cost of capital employed from its NOPAT. If the profits are more than its overall cost of capital employed, the company said to be successful in creating shareholder wealth. On the other side, if the profits are less than its overall cost of capital employed, the company said to be unsuccessful in creating shareholder wealth or it can be called as wealth destroyer i.e., the EVA values are in negative.

The average EVA values by the sample as a whole during the entire study period are shown in table 1. Further, it also signals the years where EVA was being created or destroyed by the sample as a whole. Table 1 also shows Average EVA based ranking of sample companies over the study period. From the table 1, on an average 39 out of the 77 companies have reported a positive EVA. This shows 39 companies created value for its shareholders during the entire study period. Whereas, the remaining 38 companies destroyed value of its shareholders. The companies with negative EVA are not able to meet its cost of capital. More interestingly one company has shown EVA value as zero. This shows the company has earned a return that is at least sufficient to cover up its overall cost of capital employed.

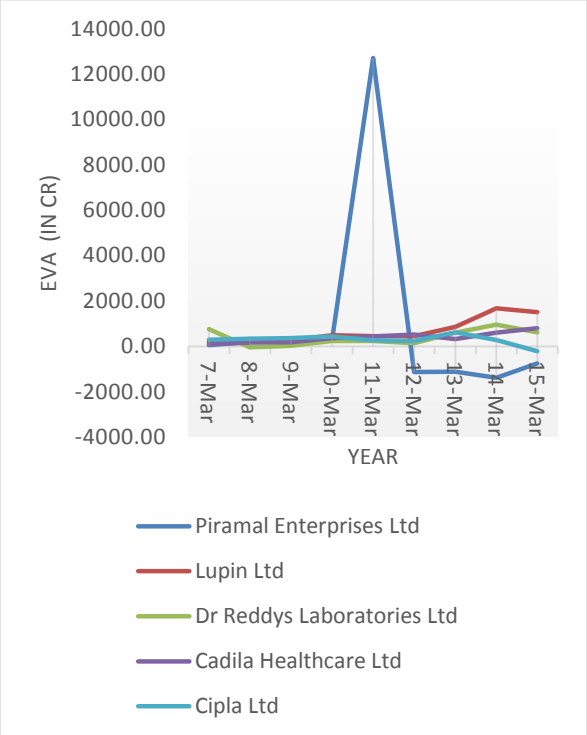

Figure 1 : EVA of Top - Five Wealth Creators, 2007 – 15

The EVA trends of top five wealth creators Piramal Enterprises Ltd, Lupin Ltd, Dr. Reddy s laboratories Ltd, Cadila healthcare Ltd and Cipla, Ltd for the 9 year period covering 2007 to 2015 are shown in figure 1. Except Piramal enterprises Ltd all have shown positive EVA during the study period with fewer fluctuations. During the 2011 period Piramal enterprise Ltd shown highest EVA value 12,725.64 Cr. The positive EVA value in the sample indicates that these companies are not only thinking about profit maximization but also focusing on the objective of shareholder wealth maximization. And the companies with positive EVA will attract more investors in the near future.

IJASRM

International Journal of Advanced Scientific Research and Management, Vol. 1 Issue 10, Oct 2016.

www.ijasrm.com

ISSN 2455-6378

Table 1: Average EVA Values

Company Name	7-Mar	8-Mar	9-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	Average	Rank
Aarey Drugs & Pharmaceuticals Ltd	0.89	-0.18	0.03	-0.10	-0.59	-1.60	-3.62	-2.48	-3.61	-1.25	**52**
Aarti Drugs Ltd	6.59	2.50	6.75	16.67	7.96	15.70	34.31	46.35	51.06	20.88	**17**
Advik Laboratories Ltd	-1.88	-1.37	-1.29	-1.17	-1.34	-0.61	-0.41	-0.82	-3.00	-1.32	**53**
AhlconParenterals (India) Ltd	4.96	3.21	-0.86	2.93	1.41	0.21	10.13	15.11	13.54	5.63	**25**
Albert David Ltd	8.34	3.82	2.52	4.04	-4.56	2.90	-2.76	6.40	-5.43	1.70	**31**
Alembic Ltd	41.79	72.14	-14.68	-7.90	-90.90	-33.08	-20.13	2.23	-43.30	-10.43	**67**
Ambalal Sarabhai Enterprises Ltd	-36.20	-15.49	1.43	-4.97	-1.34	-11.68	-21.92	-21.14	-7.91	-13.25	**69**
Amrutanjan Health Care Ltd	3.17	1.71	89.47	2.53	-2.93	-3.29	-1.35	0.45	-3.03	9.64	**21**
AnuhPharma Ltd	3.21	4.23	4.48	8.07	5.74	4.04	5.20	9.93	12.10	6.33	**23**
Arvind Remedies Ltd	2.96	1.15	3.38	10.78	15.55	25.37	59.66	67.63	-295.12	-12.07	**68**
Auro Laboratories Ltd	-0.24	-0.16	-0.12	0.02	0.32	0.33	0.86	0.45	0.59	0.23	**38**
AurobindoPharma Ltd	162.43	132.35	-2.50	295.42	270.09	-385.67	31.82	815.13	986.97	256.23	**8**
BalPharma Ltd	-1.08	0.22	1.31	-1.23	0.65	2.37	1.76	5.13	-0.54	0.95	**34**
BDH Industries Ltd	-1.86	-1.87	-1.44	-0.94	-1.90	-1.76	0.04	0.65	0.17	-0.99	**51**
Bharat Immunological & Biological Corporation Ltd	-8.73	-7.89	-6.79	-12.81	-7.97	10.62	1.30	1.68	-9.04	-4.40	**60**
Cadila Healthcare Ltd	103.06	162.99	183.05	367.38	442.65	521.90	319.29	606.62	804.33	390.14	**4**
Cipla Ltd	297.41	332.28	363.54	442.13	267.75	243.19	614.31	279.89	-212.93	291.95	**5**
Coral Laboratories Ltd	4.27	0.50	0.70	1.81	-1.52	1.69	3.11	5.10	3.55	2.13	**28**
DIL Ltd	-6.02	-5.79	-4.58	-1.40	8.39	3.36	-7.90	-4.26	-11.03	-3.25	**58**
Dishman Pharmaceuticals and Chemicals Ltd	26.85	10.91	49.05	13.26	-18.13	-50.34	-37.77	-31.26	-44.18	-9.07	**65**
Divis Laboratories Ltd	122.58	241.08	290.14	168.41	226.22	311.61	313.89	470.08	466.35	290.04	**6**
DrReddys Laboratories Ltd	758.71	-44.16	29.74	239.57	237.44	135.51	613.15	958.87	621.56	394.49	**3**
FDC Ltd	20.69	25.76	35.20	105.29	73.69	71.90	82.93	45.06	37.34	55.32	**11**
Gennex Laboratories Ltd	-1.24	-1.47	-2.12	-3.61	-2.84	-2.64	-2.33	-0.70	-1.81	-2.08	**56**
Glenmark Pharmaceuticals Ltd	92.96	259.14	148.91	-101.17	19.60	-9.13	197.36	123.55	700.23	159.05	**9**
Godavari Drugs Ltd	-0.48	-1.88	-1.09	-0.97	-1.19	-2.32	0.20	1.29	3.45	-0.33	**43**
GuficBioSciences Ltd	-1.49	-1.06	-0.59	-0.10	-0.19	0.50	3.53	3.75	-0.61	0.42	**37**
Gujarat Terce Laboratories Ltd	-0.09	-0.09	-0.29	-0.28	-0.18	-0.54	-0.73	-0.55	-0.79	-0.39	**44**
Gujarat Themis Biosyn Ltd	-11.46	-0.40	-2.23	-0.09	-3.29	3.20	-0.93	5.31	4.87	-0.56	**46**
Hikal Ltd	6.08	35.37	47.93	26.50	11.68	39.48	4.55	55.01	2.00	25.40	**16**
Ind-Swift Laboratories Ltd	-6.20	-0.53	24.18	37.04	6.28	8.56	-182.68	-212.49	-310.03	-70.65	**75**
Ind-Swift Ltd	11.32	21.31	20.32	25.49	16.94	-10.38	-111.38	-105.57	-128.26	-28.91	**71**
Ipca Laboratories Ltd	83.27	104.43	48.34	126.05	162.12	171.76	207.21	327.60	76.86	145.29	**10**
Ishita Drugs & Industries Ltd	-0.05	0.06	0.12	0.12	-0.13	-0.18	0.19	-0.17	-0.46	-0.05	**41**
J B Chemicals & Pharmaceuticals Ltd	36.58	-6.34	9.96	25.67	-11.35	559.42	-37.64	-55.66	-39.27	53.49	**12**
Jagsonpal Pharmaceuticals Ltd	-3.32	-3.45	-1.06	0.64	-3.56	-4.33	-8.06	-3.85	-15.54	-4.72	**62**
Jubilant Life Sciences Ltd	160.89	254.81	271.83	55.68	78.66	-292.98	-188.99	-165.48	-39.92	14.94	**20**

Kilitch Drugs (India) Ltd	0.61	12.22	4.94	3.20	-0.72	61.47	-12.75	-12.18	-21.21	3.95	**26**
Kopran Ltd	-67.06	-13.13	-25.51	-1.49	-11.84	-11.24	-9.04	6.30	-29.72	-18.08	**70**
Lincoln Pharmaceuticals Ltd	-1.50	1.44	1.05	3.85	-0.84	-0.75	2.98	2.52	2.14	1.21	**33**
Lupin Ltd	190.43	323.33	261.96	486.94	448.29	451.59	859.30	1683.68	1516.87	691.38	**2**
Mangalam Drugs and Organics Ltd	-2.42	-2.91	-0.17	-0.60	-1.01	0.37	-10.80	-1.92	5.16	-1.59	**55**
MarksansPharma Ltd	-11.48	-2.44	-15.91	-17.31	-342.48	-132.63	60.35	43.43	21.70	-44.08	**73**
Medi Caps Ltd	3.64	8.70	-3.13	-3.80	-5.91	-5.12	-2.94	-5.13	-10.23	-2.66	**57**
Medicamen Biotech Ltd	0.98	0.70	0.13	3.47	0.84	-2.43	-5.79	0.33	-0.17	-0.21	**42**
Morepen Laboratories Ltd	-221.74	-106.30	-88.31	-65.14	-103.96	-78.43	-68.47	-42.23	-61.02	-92.84	**76**
NatcoPharma Ltd	13.09	16.44	20.50	9.44	12.95	26.88	30.13	46.27	69.02	27.19	**15**
Natural Capsules Ltd	0.91	0.84	2.56	2.40	1.63	1.93	3.64	0.90	1.74	1.84	**29**
Nectar Lifescience Ltd	46.36	56.25	43.00	22.81	37.11	16.89	4.91	-50.18	-124.70	5.83	**24**
Neuland Laboratories Ltd	5.17	10.13	12.87	-4.79	2.60	1.88	12.28	16.47	1.99	6.51	**22**
NGL Fine Chem Ltd	0.73	-1.00	1.30	1.71	0.48	0.01	1.53	3.24	5.49	1.50	**32**
Novartis India Ltd	45.74	50.18	60.44	68.18	88.67	67.23	25.61	-20.11	-71.78	34.91	**14**
Parabolic Drugs Ltd	15.31	34.75	34.99	47.74	32.85	27.86	-167.32	-126.27	-332.01	-48.01	**74**
Parenteral Drugs (India) Ltd	3.29	15.78	-1.21	-7.59	-35.11	-91.36	-122.46	-64.78	-53.63	-39.68	**72**
Piramal Enterprises Ltd	60.72	200.21	280.41	306.68	12725.64	-1136.44	-1118.73	-1382.47	-748.46	1020.84	**1**
Roopa Industries Ltd	-0.82	-0.38	-0.33	-0.20	-0.08	0.19	-0.45	-2.18	-0.01	-0.47	**45**
SamratPharmachem Ltd	-0.19	0.55	-0.90	0.71	0.21	3.31	-0.99	-0.58	-1.23	0.10	**39**
Sandu Pharmaceuticals Ltd	-0.27	-0.39	-0.47	-0.64	-1.15	-1.10	-0.24	-0.83	-1.61	-0.74	**50**
SanjivaniParanteral Ltd	0.42	1.69	2.37	2.21	-0.29	2.15	1.21	0.29	-5.90	0.46	**36**
Sequent Scientific Ltd	3.98	-0.25	0.66	30.38	4.29	1.84	-62.87	-109.22	44.64	-9.62	**66**
Shilpa Medicare Ltd	3.52	8.16	3.22	32.39	27.70	4.43	16.49	37.82	27.30	17.89	**18**
Source Natural Foods & Herbal Supplements Ltd	-2.64	-0.16	-0.13	-1.00	-1.60	-0.85	0.17	-0.19	-0.25	-0.74	**49**
Sun Pharmaceuticals Industries Ltd	300.46	605.37	826.31	325.28	618.99	823.49	-458.50	-3509.39	-2123.58	-287.95	**77**
Sunil Healthcare Ltd	1.87	1.26	0.16	0.18	0.41	1.83	1.52	-1.25	2.25	0.91	**35**
Syncom Formulations (India) Ltd	-1.25	-0.73	-1.85	-1.45	-7.57	-6.94	-3.11	-4.11	-6.97	-3.77	**59**
Themis Medicare Ltd	-1.42	6.91	-13.42	14.75	2.02	-37.09	-8.77	0.37	-3.58	-4.47	**61**
Torrent Pharmaceuticals Ltd	57.56	100.64	130.46	137.24	206.33	211.50	439.52	636.66	493.29	268.13	**7**
Transchem Ltd	-3.35	-1.75	-6.31	-7.45	-8.05	-5.26	-5.61	-3.28	-3.77	-4.98	**63**
TTK Healthcare Ltd	-1.04	7.67	3.02	5.76	6.70	4.95	2.35	0.33	2.98	3.64	**27**
Unichem Laboratories Ltd	52.15	35.11	73.25	68.22	32.43	15.02	22.94	80.01	-51.47	36.41	**13**
Unjha Formulations Ltd	-0.55	-0.18	0.22	-0.03	0.13	0.01	0.09	0.11	0.17	0.00	**40**
Veerhealth Care Ltd	-0.61	-0.55	-0.56	-0.19	-1.56	-0.16	-0.21	-1.33	-1.05	-0.69	**48**
Venus Remedies Ltd	26.03	31.83	36.88	27.24	30.68	18.75	32.72	-5.23	-42.70	17.36	**19**
Vikram Thermo (India) Ltd	0.47	1.11	0.74	1.09	1.50	4.18	3.05	3.30	-0.11	1.70	**30**
Vista Pharmaceuticals Ltd	-1.76	-1.66	-1.87	-2.18	-1.24	-3.20	-0.97	-0.06	1.06	-1.32	**54**
Wintac Ltd	-2.07	-3.16	-3.00	0.40	-0.53	-7.47	-19.11	-9.79	-9.51	-6.03	**64**
Zenith Health Care Ltd	-0.67	-0.40	-0.54	-0.34	-0.70	-1.03	-0.60	-0.89	-0.96	-0.68	**47**

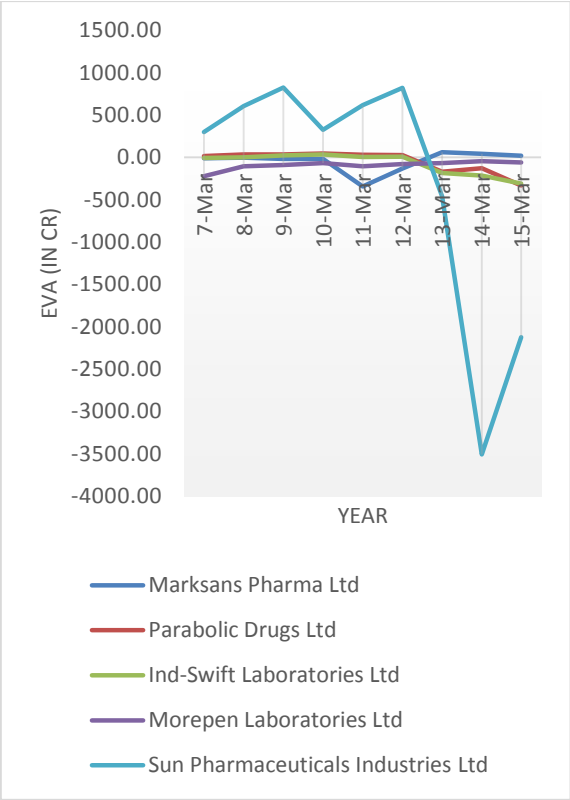

Figure 2: EVA of Bottom - Five Wealth Destroyers, 2007 - 15

Figure 2 depicts the trends of bottom five wealth destroyers Marksanspharma Ltd, Parabolic drugs Ltd, Ind-swift laboratories Ltd, More open laboratories Ltd and sun pharmaceuticals industries Ltd. since 2013, sun pharmaceuticals industries Ltd has shown a very high negative EVA value and average value over the study period is -285.95. This negative EVA indicates that the firms are not able to manage its cost of capital, which lead them in higher WACC than their earnings. This shows the inefficiency of the management of performance of the firm and shareholder wealth maximization.

5. Conclusion

The study explored that most of the companies are having positive EVA from 2007 to 2015. These companies are not only thinking about profit maximization but also focusing on the objective of shareholder wealth maximization. Piramal enterprises Ltd, Lupin Ltd, Dr.Reddys laboratories Ltd, Cadila healthcare Ltd and Cipla Ltd are the top most companies in creating value for shareholders. Destroyers Marksanspharma Ltd, Parabolic drugs Ltd, Ind-swift laboratories Ltd, More open laboratories Ltd and sun pharmaceuticals industries Ltd. are completely destroying the value of shareholders. The companies with positive EVA will be able to attract investors in the future. Whereas negative EVA firms are not able to earn a return that is at least sufficient to cover up its overall cost of capital employed. EVA based performance framework not only provides the financial performance, it helps the management in strategic decision making and enhancing shareholder value.

References

[1] Bhanawat, S. S., & Chundawat, D. S.. Prediction of Shareholders ' Wealth : A Quantitative Analysis, 7–17, (2012).

[2] Bhasin, M., & Shaikh, J. M. (2013). Economic value added and shareholders ' wealth creation : the portrait of a developing Asian country. *INTERNATIONAL JOURNAL OF MANAGERIAL AND FINANCIAL ACCOUNTING*, *5*(June 2015). http://doi.org/10.1504/IJMFA.2013.053208

[3] Burksaitiene, D. (2009). MEASUREMENT OF VALUE CREATION : ECONOMIC VALUE ADDED AND NET PRESENT VALUE, 709–714, (2002).

[4] Garvey, G. T., & Milbourn, T. T. EVA versus Earnings : Does It Matter Which Is More Highly Correlated with Stock Returns ? Published by : Wiley on behalf of Accounting Research Center , Booth School of Business , University of Chicago Stable URL : http://www.jstor.org/stable/2672916 EVA , *38*, (2000).

[5] Kaur, M., & Narang, S. Insights on Shareholder Value Addition from India's Wealth Club: A Study of Selected Companies. *IUP Journal of Accounting Research & Audit Practices*, *8*(3/4), 20–51, (2009). Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=59176440&site=ehost-live

[6] Kaur, M., & Narang, S. EVA Disclosures in the Annual Reports of Indian Companies: An Empirical Study. *Global Business Review*, *11*(3), 395–420, (2010). http://doi.org/10.1177/097215091001100306

[7] Maditinos, D. I., & Row, P. The Introduction of Economic Value Added (EVA ®) in the Corporate World Associate Professor in Informatics and Finance European Affairs Responsible for the

Business School Technological Educational Institute of Kavala Business School Director of Research , Outreach and European Affairs Old Royal Naval College Georgios N . Theriou , PhD student Lecturer in Human Resources Technological Educational Institute of Kavala Business School The Introduction of Economic Value Added (EVA ®) in the Corporate World Abstract, 1–11, (2006).

[8] Selvi, A. M., & Vijayakumar, A. Performance of Indian Automobile Industry : Economic Value Added (EVA) Approach, *32*(4), (2015).

[9] Weissenrieder, F. Value Based Management: Economic Value Added or Cash Value Added? *Social Science Research Network*, 1–42, (1997). http://doi.org/10.2139/ssrn.156288

[10] Worthington, A. & West, T. Australian Evidence Concerning the Information Content of Economic Value-Added. Australian Journal of Management, 29(2), 201-224, (2004).