

## Economic Value Added (EVA) in Indian Perspective

---

S. K. Khatik & Pradeep Kumar Singh

---

### **Abstract**

*Economic Value Added (EVA) is one of the important tools in the hands of shareholders to evaluate the financial performance of the company. The technique of Economic Value Added has acquired acceptance as a tool for assessing the existing financial status and predicting the future performance of a company. It has been developed and popularized by the New York (US) based advisory firm Stern Stewart & Company. It covers all aspects of a company's financial management for capital budgeting, acquisition precising to strategic planning and shareholders communication besides, identifying the value addition to shareholders by the organization during the specific period. This research article highlights the concept of EVA, importance of EVA in Indian environment and application by some Indian companies during last one decade.*

**Keywords:** *Economic Value Added (EVA), value addition to shareholders, Earning per Share (EPS), Return on Equity and Return on Capital Employed, Weighted Average Cost of Capital (WACC) and Net Operating Profits after Taxes (NOPAT).*

---

### **Introduction**

Economic value added is an innovative corporate performance measuring technique, which deals with the benchmark of cost of capital or the firm during the financial years. Because simple return on capital employed or return on equity is not suitable in the competitive era when shareholders are eagerly interested to know the performance of the company for every rupee of their investment. The idea that the primary responsibility of corporate management is to increase shareholders' value has gained widespread acceptance in the US in the last two decades. To help firms create value for shareholders, value based management (VBM) systems have been developed. But the market value of the shares is influenced by the lot of other controllable and non-controllable factors. However, one of the factors which are directly influenced the market value of the firm is expectation of the shareholders regarding the return of their investment.

There are various measures like Earning per Share (EPS), Return on Equity and Return on Capital Employed (ROCE & ROI) have been used to evaluate the performance of the business. But under these methods benchmark is not available for comparison. EVA is superior to traditional measures such as PAT, PBT, and rates of return because it replicates the discipline of the capital markets within the firm, by clearly measuring returns relative to the cost of capital. It also provides a

roadmap to the ultimate goal of improving Market Value Added (MVA). EVA is a popular financial metric, and measures the profit that a company earns over the cost of capital. The ingredients for calculating the ratio are- Average Capital Employed (ACE), Weighted Average Cost of Capital (WACC) and Net Operating Profits after Taxes (NOPAT).

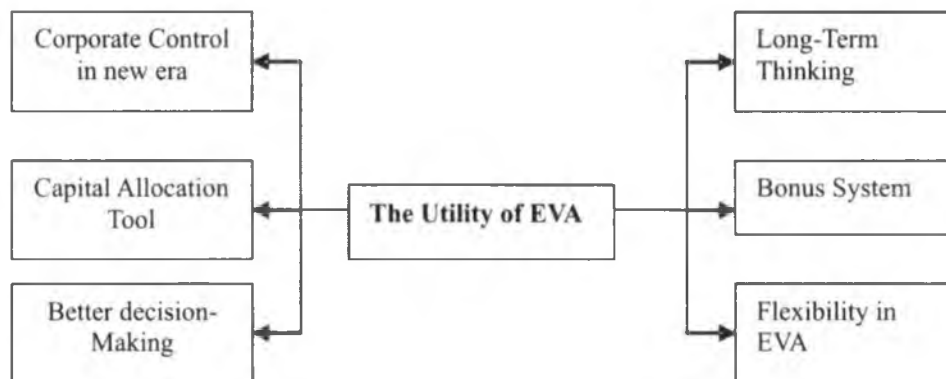
#### Economic Value Added (EVA)

Economic Value Added (EVA)<sup>®</sup> was developed by a New York Consulting firm, Stern Steward & Co and registered in 1990 to promote value-maximizing behaviour in corporate managers. It is a single, value-based measure that was intended to evaluate business strategies, capital projects and to maximize long-term shareholders wealth. Value that has been created or destroyed by the firm during the period can be measured by comparing profits with the cost of capital used to produce them. Therefore, managers can decide to withdraw value-destructive activities and invest in projects that are critical to shareholders' wealth. This will lead to an increase in the market value of the company. However, some activities that do not increase shareholders' value might be critical to customer's satisfaction or social responsibility. Economic Value-Added measures the profitability of a company after taking into account the cost of capital. It is the post-tax return on capital employed (adjusted for the tax shield on debt) less the cost of capital employed. Companies which earn higher returns than cost of capital create value, and companies which earn lower returns than cost of capital are deemed destroyers of shareholders' value. EVA is calculated by using the following formula:

$$\text{EVA} = \text{NOPAT} - (\text{WACC} * \text{CE})$$

Here, NOPAT= Net operating profit after tax, WACC= Weighted average cost of capital, CE= Capital employed. While calculation of NOPAT, the non-operating items like dividend/interest on securities invested outside the business, non-operating expenses etc. will not be considered. The total capital employed is the sum of shareholders funds as well as loan funds. But this does not include investments outside the business. In determining the WACC, cost of debt is taken as after tax cost and cost of equity is measured on the basis of capital asset pricing method. EVA is net the operating profit minus an appropriate charge for the opportunity cost of all capital, (equity, preference and debt capital) invested in an enterprise. As such, EVA is an estimate of true "economic profit", *i.e.*, the amount by which earnings exceed or fall short of the required minimum rate of return that shareholders and lenders could get by investing in other securities of comparable risk. In the EVA system, there are four ways to increase value:

**Operate:** Improve the return earned on existing capital, **Build:** Invest as long as returns exceed cost of capital, **Harvest:** Divest capital when returns fail to achieve cost of capital, **Optimize:** Reduce cost of capital by optimizing capital structure.



### Objectives of the study

This research paper has been conducted to fulfil following objectives:

- (i) To analyze the concept of Economic value added.
- (ii) To analyze the strategies for implementation of economics value added.
- (iii) To examine the trend and growth of economic value added in some selected Indian companies.

### Data and Methodology of the Study

This research paper is based on the 10 years financial performance of the some Indian companies which are dealing in different segments of business. The data of the some selected Indian companies, for the year (1998-99 to 2007-08) are used in this study, have been taken from secondary sources *e.g.* published annual reports of the company. Editing, calcification and tabulation of the financial data, which are collected from the above- mentioned source, have been done as per the requirement of the study. For the analysis of economic value added in some Indian companies data are analyzed in following ways: 1. Economic Value added statement. 2. Trend and growth of Economic Value of some selected Indian companies. For assessing the behaviour of data statistical technique has been also *e.g.* mean, stranded deviation and coefficient variations.

### Hypothesis to be tested

The following hypothesis has been set for testing in this paper:

Null hypothesis – Growth of Economics value added are similar in infosys, Hero Honda, HUL, Dr. Reddy's and BHEL respectively

### Limitations of the study

- i. This research paper is a micro nature research based in the selected sample Indian companies.
- ii. This research paper is based on the 10 years financial performance of the company from 1998 - 99 to 2007-08.
- iii. For the analysis of trends and growth of economic value added for the various companies data are grouped and sub-grouped.

### Analysis and interpretation of Data

There are many Indian companies using EVA also for the different managerial aspects. For instance, Infosys using EVA for the better corporate information system, Marico industries using it as singling device that capital is important and better utilization, Dr Reddy's EVA is criterion for various rewards, such as pay hike, stock options and performance bonus. Tata Consultancy Services explains the part EVA plays in transforming TCS from an Indian enterprise with a global reach to a truly global organization. Their first hand experience of the tool was a revelation of the fact that EVA results in an enlarged pie which benefits both the individual and the organization. For the Godrej Group, EVA has been a tool to measure, motivate, manage and finally, overhaul the mindsets of people.

#### Exhibit -I : Indian Companies and EVA.

<i>Company</i>	<i>Usage of EVA</i>
<b>INFOSYS</b>	EVA is used as a tool to tell its clients that the value delivered by Infosys is greater than what the client pays for
<b>MARICO</b>	As a signalling device to tell its employees that capital is important
<b>Dr. REDDY'S LAB</b>	As a qualifying criterion to grant rewards such a variable pay, stock options and performance bonuses
<b>TCS</b>	Here EVA is linked to compensation and has been implemented in great detail.

Stern Stewart & Company published MVA performance of the Indian companies for the year 2008. Exhibit-II explains the top 10 MVA companies for year 2008. According to the ranking RIL is the top most MVA company with Rs 1,45,668 crore in the year 2008 the after followed by Bharti Airtel with Rs 1,09,534 crore, ONGC Rs. 1,03,150 crore, NTPC Rs. 75,328 crore, Infosys Rs 60,814 crore and so on. Out of top ten position based on the market value added our sample companies Infosys, BHEL and HUL secured 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> rank respectively.

#### Exhibit-II : Top 10 Indian Companies Based on The MVA in 2008.

<i>Top 10</i>	<i>Company</i>	<i>Industry</i>	<i>MVA 2008 (Rs in Crore)</i>
1.	Reliance Industries ltd	Oil & Gas	145668
2.	Bharti Airtel	Telecom	109534
3.	ONGC	Oil & Gas	103150
4.	NTPC	Power	75328
5.	<b>Infosys Technologies</b>	InfoTech	60814
6.	NMDC	Metal & Mining	60596
7.	<b>BHEL</b>	Capital Goods	52305
8.	ITC	FMCG	50295
9.	<b>HUL</b>	FMCG	50054
10.	L&T	Capital Goods	42336

Source: Stren Stewart & Company

### Importance of EVA

In the era of global competition and value creation, EVA is important primarily for three reasons. **One**, it is an empirically tested measure of corporate performance that is closely related with the shareholders' value of the company. **Two**, it is not just a measure of performance but also provides a framework for an intensive compensation system which is useful to solve problems related with the employees. Effective incentive compensation is the anchor that holds the EVA framework in place. **Lastly**, it helps make more effective decisions, which thereby improve financial flexibility and lessen waste. This decision will certainly help the restructuring of capital structure and financial structure of the company.

### Strategies for Implementation of EVA

As a controlling and performing tool, Stern Stewart describes four main applications of EVA with four words beginning with the letter M.

**Measurement:** EVA is the most accurate measure of corporate performance over any given period. *Fortune* magazine has called it "today's hottest financial idea," and Peter Drucker rightly observed in the *Harvard Business Review* that EVA is a measure of "total factor productivity" whose growing popularity reflects the new demands of the information age.

**Management System:** While simply measuring EVA can give companies a better focus on how they are performing, its true value comes in using it as the foundation for a comprehensive financial management system that encompasses all the policies, procedures, methods and measures that guide operations and strategies. The EVA system covers the full range of managerial decisions, including strategic planning, allocating capital, pricing acquisitions or divestitures, setting annual goals—even day-to-day operating decisions. In all cases, the goal of increasing EVA is paramount.

**Motivation:** To instill both the sense of urgency and the long-term perspective of an owner, Stern Stewart designs cash bonus plans that cause managers to think like and act like owners because they are paid like owners. Indeed, basing incentive compensation on improvements in EVA is the source of the greatest power in the EVA system. Under an EVA bonus plan, the only way managers can make more money for they is by creating even greater value for shareholders. This makes it possible to have bonus plans with no upside limits. In fact, under EVA the greater the bonus for managers, the happier shareholders will be.

**Mindset:** When implemented in its totality, the EVA financial management and incentive compensation system transform a corporate culture. By putting all financial and operating functions on the same basis, the EVA system effectively provides a common language for employees across all corporate functions. EVA facilitates communication and cooperation among divisions and departments, it links strategic planning with the operating divisions, and it eliminates much of the mistrust that typically exists between operations and finance. The EVA framework is, in effect, a system of internal corporate governance that automatically guides all managers and employees and propels them to work for the best interests of the owners. The EVA system also facilitates decentralized decision-making because it holds managers responsible for- and rewards them for delivering value.

### Trend and Growth of EVA Some Selected Indian Companies

Economic Value-Added measures the profitability of a company after taking into account the cost of capital. It is the post-tax return on capital employed (adjusted for the tax shield on debt) less the cost of capital employed. Companies which earn higher returns than cost of capital create value, and companies which earn lower returns than cost of capital are deemed destroyers of shareholders' value. EVA is residual income after charging the Company for the cost of capital provided by lenders and shareholders. It represents the value added to the shareholders by generating operating profits in excess of the cost of capital employed in the business. It is a barometer on how the organization is run, focusing on strategies and the accountability of people. At the same time as Indian corporates have taken to EVA, they have customized it to suit their organizational needs. If quantifying the value-add to the customer has been the *raison d'être* for EVA in a services company like Infosys, Marico has converted it into SEVA or simplified EVA. For the Godrej Group, EVA has been a tool to measure, motivate, manage and finally, overhaul the mindsets of people. Under this research article data of five different companies are taken for the analysis point of view such as Infosys, Hero Honda, HUL, BHEL, and Dr. Reddy's Lab all these companies are leader in their business segment.

Table-III: Trend and Growth of EVA for various companies during 1998-99 to 2007-08.

(Amount Rs. in crore)

Year	Infosys	Growth (%)	Hero Honda	Growth (%)	HUL	Growth (%)	Dr Reddy's	Growth (%)	BHEL	Growth (%)
98-99	71	N/A	—	—	694	N/A	15	—	N/A	N/A
99-2K	129	82%	119	N/A	858	24%	6	(60%)	N/A	N/A
2K-01	389	202%	155	30%	1080	26%	14	133%	N/A	N/A
01-02	510	31%	374	141%	1236	14%	270	1829%	N/A	N/A
02-03	455	(11%)	481	29%	1429	16%	131	(52%)	111	N/A
03-04	689	51%	569	18%	887	(38%)	8	(94%)	366	230%
04-05	1132	64%	564	(1%)	1014	14%	(240)	(3100%)	504	38%
05-06	1540	36%	641	14%	1125	11%	(123)	(49%)	1079	114%
06-07	2122	38%	485	(24%)	1340	19%	257	309%	1657	54%
07-08	2286	8%	575	19%	2097	57%	(137)	(153%)	1810	9%
Mean	932.3		440.33		1176		20.1		921.16	

Source: Calculated and compiled from annual reports of sample companies from 1998-99 to 2007-08

All the figures in parentheses show negative value in the related year.

**Infosys:** In case of Infosys EVA is consistently an increase from Rs 71 crore to Rs. 510 crore between 1998-99 to 2001-02 then again it increases from Rs. 455 crore to Rs. 2,286 crore between 2002-03 to 2007-08, that shows, positive wealth creation for the shareholders and various stakeholders of the firm. Similarly growth of EVA as

compared to previous year highest in the year 2000-01 is 202 per cent. Except year 2002-03 there was a negative growth (11%) all the other nine year positive growth in the EVA of Infosys which is very important for the wealth creation value enhancement point of view. **Hero Honda:** Hero Honda is one of the leading automobile companies in India. When we are analyzing, their EVA is constantly increases from Rs 119 crore to Rs.569 crore between 1999-2k to 2003-04 then again after a small fluctuation again it increases up to Rs. 575 crore. Similarly, growth trends based on year to year basis out of nine years only three years negative and six years it as positive which shows every year they are creating wealth for the shareholders. **HUL:** In case of HUL when we are analyzing EVA we find two different trends during the study period, first one is between 1998-99 to 2002-03 during this phase EVA increases from Rs 694 crore to Rs.1,429 crore and second phase is from 2003-04 to 2006-07 in that period EVA is increases from Rs. 887 crore to Rs.1,340 crore. One of the reasons for the decreases of the amount of EVA in the years 2003-04 due to increases for their debt burden form Rs.881 crore to Rs. 1,588 crore and they has to pay more interest as compared to last year. **Dr Reddy's:** In case of Dr Reddy's EVA is fluctuating during the study period on both the direction positively and negatively from Rs.15 crore to Rs.270 crore (2001-02) and then went up to Rs.257 crore (2006-07). Out of 10 years, 3 years it is negative Rs. -240 (2004-05), Rs. -123 (2005-06) and Rs. -137 (2007-08) that means in these three years they are not creating wealth for the shareholders, they are destroying the precious wealth of owners, which is not favourable for the various stakeholders. **BHEL:** In case of BHEL data are available from year 2002-03 onwards. During above period, EVA is consistently and positively increases from Rs 111 crore to Rs.1,810 crore. As far as growth is concerned all the six years of study growth based on years to year bias always in positive that indicates a positive view for the shareholders regarding value creation.

After the above analysis, it is clear that reporting and discloser of EVA information is an important tool in the hands of management to create wealth for the various stakeholders. The following are the ways for the Indian companies to improve their EVE for better reporting point of view. **Firstly**, to improve operating performance with the help of operating profit margins or asset turnover ratios which improve to generate more revenue with least capital. **Secondly**, the capital invested in the business might be reduced by selling under-utilized assets; this strategy will simultaneously improve operating performance through a higher asset turnover ratio. **Thirdly**, reorganize the capital invested to projects and activities that have higher operating performance than the current projects or investments are exhibiting. And **finally**, if the business is not leveraged properly according the business environment; change the capital structure by alternatively lower cost debt for higher cost equity.

#### Testing of Hypothesis

Null hypothesis – Growth of Economics value added are similar in Infosys, Hero Honda, HUL, Dr. Reddy's and BHEL respectively.

In this research paper, hypothesis which was taken is tested by statistical tools like coefficient of standard deviation

**Table – IV : Statistical analysis**

<i>Particulars</i>	<i>Infosys</i>	<i>Hero Honda</i>	<i>HUL</i>	<i>Dr. Reddy's</i>	<i>BHEL</i>
Mean	932.3	440.33	1176	20.1	921.16
No. of items	10	9	10	10	6
Standard deviations	776.6	175.33	375.63	144.46	645.53
Coefficient of variation	83.29%	39.81%	31.94%	722.3%	70%

As table-IV shows that growth of economic value added of some selected Indian companies, which were indicating that coefficient of variation of Infosys, Hero Honda, HUL, Dr. Reddy's and BHEL are, 83.29 per cent, 39.81 per cent, 31.94 per cent, 722.3 per cent and 70 per cent during the study period and it is clear that growth of economic value added are not similar thus null hypothesis is rejected which was taken during the study. Because there are huge variation in growth of economic value added in some selected Indian companies and growth of Economic value added are not similar but among these companies HUL Company is strong and consistency in growth of economic value added among the other companies during the study period.

### Conclusion

EVA is a method to measure a company's true profitability and to steer the company correctly from the viewpoint of shareholders. EVA helps the operating people to see how they can influence the true profitability. EVA is a tool that can be used to enhance the quality of governance and management within an organization. Over the last few years, companies in India have paid a great deal of attention to improving their EVA. For the shareholders' value creation point of view EVA is one of the innovative tool which helps shareholders to know about the value creation or *vice versa* by the company during specific period. Growth of economic value added are not similar among the some selected Indian companies which were measured in table-IV, but growth of economic value added is more in HUL among the various companies which were taken in this paper.

### References

1. Mallik, A.K. and Rakshit, D. (2005), "EVA-Based Segmental Reporting: A Case Study", *Research Bulletin*, January, pp.12-27.
2. Ghosh, T.P. (1999): *Economic Value Added TM: A Tool for Business Planning*, ICWAI Publication, July.
3. Debda Rakshit (2006): "EVA Based Performance Measurement: A Case Study of Dabur India Limited" *Vidyasagar University Journal of Commerce*, Vol.11, March .
4. Misra Anil & Kanwal (2005): "Linkage between Economic Value Added and share prices: an empirical study of Indian corporates sector" *The ICAI Journal of Industrial Economics*, Vol 2, No. 04, Nov, pp. 30-57.
5. Banerjee A. (1999) : "Economic value Added and share holders wealth- an empirical study of relationship", *Paradigm*, Vol 03, No. 1, Jan – June, pp. 99-123.
6. Mitta R.K, Sinha Neena and Singh Archana (2008): "An analysis of linkage between economic value added and corporate social responsibility," *Management Decision*, Vol 46, No. 8, pp. 1437-1443.
7. Kumar Ashok & Pal Karam (2008): "Awareness of Economic Value added among Indian Corporate Managers: Evidences from a Primary Survey," *The ICAI Journal of Applied Finance*, Vol. 14, No. 8, pp. 53-65, August.



8. Ramana D V (2007): "Economic Value Added and other Accounting Performance Indicators: An Empirical Analysis of Indian Companies," *ICFAI University Journal of Accounting Research*. Vol. VI, issue 2, pp. 7-20.
9. Girotra Arvind Yadav Surendra S.(2001) "Economic Value Added (EVA): A new flexible tool for measuring corporate performance" *Global Journal of Flexible Systems Management*, Volume 2, Issue:1.
10. Bordia S.C.( 2008): "EVA vs. traditional corporate performance parameters: a dialectic" *Research Bulletin of ICWAI*, vol. XXXI , published by Institute of Cost and Works Accountants of India, pp. 51-61.
11. <http://www.Sternstewart.com>.

Dr S.K. Khatik is a reader and Head of the department of commerce and the Ex-Chairman, Board of Studies, Barkatullah University, Bhopal. He has published a number of research articles and papers in leading international and national journals.

Dr P.K. Singh is a Lecturer in the Department of Commerce, Mahatma Gandhi Government Arts College, New Mahe (U.T. of Pondicherry) India. His areas of specialization are taxation, accountancy, costing and financial management. He has published several research articles in different leading national and international journals. He received best research paper award in 61<sup>th</sup> all India commerce conference in year 2008 and also received best research award in all India accounting conference in year of 2006.

**"The Journal of Banking, Information Technology and Management." is a professional journal**

It is a professional journal devoted to the analysis and portrayal of development in banking, information technology and management. The policy of the journal is to publish papers, articles, reviews etc which provide an objective analysis based on scientific concepts, empirical research and factual data in general and with regard to various operational facts of banking, information technology and management in particular.

The Journal thus intends to improve communication between and within the academic and other research communities and those members of financial institutions, banks, both private and public, national and international, who are responsible for operational and policy decisions.

It is a biannual journal published in June and December every year. It is a refereed international journal with the review process being double blind.

The Journal is very useful to bankers, industrialists, executives, administrators, professionals, teachers, researchers and students.

**SUBSCRIPTION RATES FOR ONE YEAR**

(Two Issues)

Institutions	Rs. 850.00
Individuals	Rs. 750.00

**SUBSCRIPTION RATES FOR LIFE**

Institutions	Rs. 8500.00
Individuals	Rs. 7500.00

Please send your subscription to :  
Honorary Secretary General

**RESEARCH DEVELOPMENT RESEARCH FOUNDATION**

4 Ma-22, Jawahar Nagar, Jaipur-302 004  
Tel (141) 2652107 Telefax (141) 2650498

e-mail: [drjain2001@rediffmail.com](mailto:drjain2001@rediffmail.com) • Website: [www.rdaindia.net](http://www.rdaindia.net)