A Study On Financial Position Of Bhel Ltd Through Mordern Tool Eva - An Emperical Study
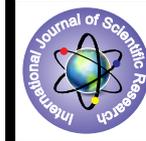
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ABSTRACT

This researcher paper examines a financial strength of BHEL Ltd through modern tool EVA and other financial indicators like EPS, ROCE, and RONW etc. Under this research paper attempt has been made to described how to improve EVA, and T-test used to measure correlation between these financial indicators of the company, result of the study shows that there exits correlation(strong) between EVA&EPS, than other indicators. First part of study described by Cost of Equity capital of the company and their estimation through Arithmetic mean, study covered eight years 2003-04 to 2010-11. This research paper strongly support that financial position of BHEL is strong during the study period.

INTRODUCTION:

Economic Value Added is a measure of economic profit. It is calculated as the difference between the Net Operating Profit after Tax and the opportunity cost of invested Capital. This opportunity cost is determined by the weighted average cost of Debt and Equity Capital ("WACC") and the amount of Capital employed. An equivalent way to calculate EVA® is to multiply Capital by the difference between the Return on Capital and the WACC. If one of the firm's goals is to increase EVA® on a sustainable basis, notice from this formula that it can be accomplished in four different ways. First, the firm can grow the business by investing where the returns exceed the WACC. Second, the firm can improve the operating efficiencies on its existing Capital, thereby increasing the return on Capital. Third, a firm can harvest Capital from its losing investments, where the return is less than the WACC and has almost no hope for improving. The fund thus generated by harvesting is disgorged to the shareholders or it is used to make worthwhile investments elsewhere. Fourth, the firm can increase its ratio of debt-to-equity when doing so lowers the WACC and doesn't threaten flexibility or survival. The ways a management team could increase the firm's EVA would be to:

1. Increase revenue
2. Minimize operating expenses needed to generate a given amount of revenue
3. Produce the same goods and services using less capital
4. Invest additional capital in opportunities that will earn more than the associated capital charge
5. Reduce the cost of capital

PREVIOUS STUDIES:

1. Mohamadreza Abdoli (2012). "Economic Value Added Vs. Accounting Residual Income: Which one is a Better Criterion for measurement of created shareholders value."This paper, the relationship between each independent variable including economic value added and residual income as the Representatives of economic models with the shareholders' created wealth is studied. The results indicate that both economic value added and residual income have significant relationship with the shareholders' created wealth. However, the residual income criterion is more significant than the economic value added in relation with the created wealth for shareholders. The difference between the impacts of these two variables is due to accounting adjustments through which the effect of accrual accounting is eliminated, hence it is considered as a better criterion for performance evaluation and increase in shareholders' wealth.

2. Hitesh J shukla(2008) "Concept and Measurement Cost of Capital" Under this paper attempt has been made to discovered concept and measurement techniques of Cost of capital of ACC Ltd in this study researcher found cost of capital for a period of six years i.e. 2000-01 to 2005-06. With the help of necessary secondary data, drawn from the annual reports of the firm. The CAPM based cost of equity for ACC was much lower than the estimates according to the dividend growth model. CAPM was theoretically superior to the dividend-growth model. ACC's market value weighted av-

erage cost of capital was found higher than the book value weighted average cost of capital.

3. Bindu Nair, Dr.Ashish Pareek (2011). "A study of the Various performance Management System adopted By Selected Indian Sector" This paper tries to find out the Performance Management Systems adopted by select Indian Private Sector Companies and the kind of measures they use to measure their performance This research finds that all the companies are using both financial as well as non-financial measures to measure their performance and most of the managers are satisfied with their existing performance management systems.

RESEARCH METHODOLOGY

Researcher has used following methods for analysis and interpretation of data.

Research Questions:
· To know the Concept of Modern tool (EVA).
· To find association between different financial indicators.
· To find Trend of Cost of Equity Capital,

Data Collection:
Researcher has used secondary data and collected from Annual reports of BHEL during 2002-03 to 2010-2011.

Statically tools:
Following tools have used to analyze data.
(1) Financial Indicators like EVA, EPS, RONW, and ROCE.
(2) Mean
(3) Standard Deviation
(4) Correction of co-efficient
(5) T-test

Hypothesis:
H0: There is no significant relationship between EVA and EPS
H0: There is no significant relationship between EVA and RONW
H0: There is no significant relationship between EVA and NPM
H0: There is no significant relationship between EVA and ROCE

Time Frame:
Researcher has taken Eight years (2003-04 to 2010-11) as study period.

RESULT AND DISCUSSION:
Table -1 Economic Value Added Statement and Cost of Equity Capital of BHEL Ltd.

year	EVA(CR)	Growth (%)	COST OF EQUITY (%)	Growth (%)
2003-04	366	229.73%	12.9	NA
2004-05	504	37.70%	11.8	-8.53%
2005-06	1079	114.09%	11.9	0.85%
2006-07	1657	53.57%	14.6	22.69%
2007-08	1810	9.23%	14.4	-1.37%
2008-09	2008	10.94%	13.4	-6.94%

2009-10	2670	32.97%	13.3	-0.75%
2010-11	3793	42.06%	14	5.26%
Mean	1735.88		13.29	
SD	1134.88		1.0535	
CV	65.38%		7.93%	
Arithmetic Mean 66.29%				1.60%

(Compiled from Annual Reports), SD=Standard Deviation, CV= Coefficient of variation.

Table -1 shows a picture of Economic value Added and Cost of Equity Capital of BHEL Ltd. In the beginning of the study EVA is noted only Rs 366 (Cr) which increased by 229.73 percentage compare to previous year. During the entire study period average EVA noted 1735.88(Cr), which shows company's financial Strength in case of Value creation of their share holders and as per study estimation has been made with the help of Arithmetic Mean and found that EVA of Company will be increased by 66.29%, Where focus has also given in Cost of Equity Capital of company and Mean of Cost of equity capital noted 12.9 which decreased then two consecutive years. During the entire study period Average Cost of Equity capital noted 13.29(%) where in estimation has been made with the help of Arithmetic Mean that found Cost of Equity Capital will be increased by 1.60%.

TABLE-2 FINANCIAL INDICATORS OF BHEL LTD.

YEAR	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Avg
EVA(CR)	366	504	1079	1657	1810	2008	2670	3793	1735.88
EPS(RS)	26.9	39	68.6	98.7	58.4	64.11	88.06	122.8	70.82
Return on Net worth (%)	12.5	15.8	23	27.5	26.5	24.26	27.08	29.83	23.31
Net Profit margin (%)	7.6	9.2	11.6	12.9	13.4	11.2	12.62	13.87	11.55
ROCE (%)	16.03	21.22	29.35	42.84	41.56	36.95	41.37	44.25	34.20

(Compiled From Annual Reports)., NPM=Net Profit Margin(%).

Table-2 shows a picture of financial strength indicators EVA, EPS, RONW, NPM, and ROCE, In case of EVA Company has strong position to create wealth of shareholders each year during the study period. EPS of Company in 2003-04 is just Rs 26.9 which increased to 122.8 Rs in 2010-11 which also shows a financial strength of company except year 2007-08. In case RONW, which also increased year by year in 2003-04 it was 12.5(%), but in 2007-08 some down come in RONW, then after it increased and ROCE (%) of company noted 16.03(%) in 2003-04 but in year 2007-08 found some decreased (36.95%).All financial indicators shows a strength of the company during the study period.

TABLE: 3 T-TESTS FOR CORRETIONSHIP BETWEEN VARIABLES.

VARIABLES	"R"	T-CRITICAL	T-TABLE	RESULT
EVA&EPS	0.88	4.49	2.45	Rejected
EVA&RONW	0.86	4.13	2.45	Rejected
EVA&NPM	0.81	3.4	2.45	Rejected
EVA&ROCE	0.84	3.81	2.45	Rejected

(Compiled from Annual Reports), R=correlation.

Table -3 shows a picture of Company's financial health indictor's correlation EVA, EPS, RONW, NPM, and ROCE etc, whereas T-test has used to measures association between these variables. As per interpretation of data, correlation of EVA&EPS found perfect positive (0.88) which is shows they are strongly significant. Hence null hypothesis is rejected in case during the study period, in case of EVA&RONW which also have perfect positive (0.86) correlation and T-test also found exits association between them during the study period and correlation between EVA&ROCE (0.84) also support that there exits association during the study period. But in case of EVA&NPM low correlation found compare to other variables it is (0.81),but result of t-test also support that there exists a correlation ship between variables

TABLE: 4 CAPTITAL STRUCTURE OF BHEL-2011(Cr)

Source of Capital	BV	BW	MV	MW
Equity Capital	411.71	0.02	100971	0.836
Reserve Capital	19,664.00	0.97	19,664.00	0.163
Debt Capital	163.35	0.01	163.35	0.0014
Total	20239.06	1.00	120798.4	1.000

(Compiled From Annual Reports)

Table-4 is a Capital Structure of BHEL in 2011 which Shows Strength of Company. In analysis of Capital Structure, found that large amount of reserve with weights of 0.97 in total capital structure of company. Base of Reserve in amount is Rs 19664 and market value of equity share also large amount found, it is 100971 with market value weights 0.836 which show financial capacity of company.

MAJOR FINDINGS:
·   Mean of EVA found 1735.88 (Cr) during the Study Period.
·   Standard deviation of EVA (1134.88) during the Study Period.
·   Estimated growth rate in EVA found 66.29% during the Study Period
·   Estimated growth rate in Cost of Equity Capital found 1.60%during the Study Period
·   Reserve Capital position of Company found strong.
·   Correlation between EVA&EPS found very strong during the study period.
·   Correlation between EVA&RONW found also strong during the study period.
·   Average EPS of the company Found at Rs 70.82.
·   Average RONW found at 23.31% during the study period.
·   Average ROCE found at 34.20%

CONCLUSION AND RECOMMENDATIONS:
From the above research study, it is concluded that company has a strong position in case of capital structure and also has strong financial position. After all t-test used to describe correlation between these indictors during the study period. EVA position of company becoming strong year by year and here strategy for more improvement in EVA, which will improve EVA of the company.

REFERENCE

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