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VALUE RELEVANCE OF MODERN MEASURES OF SHAREHOLDERS VALUE CREATION AND TRADITIONAL ACCOUNTING VARIABLES WITH SHARE PRICES – ANALYSIS OF AUTOMOBILE INDUSTRY IN CNX NIFTY

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ABSTRACT

In today's competitive business environment, companies strive to perform well and in turn create value to their shareholder's wealth. Value creation has become a necessity for corporate companies to sustain in the long run. Value-based performance measures have gained popularity in contemporary times as these are linked to the value drivers of a company. The performance of companies assessed based on value-based measures like EVA (Economic Value Added) and MVA (Market Value Added) acts as a benchmark to make informed decisions during investments. Whilst in past years, the company's performance was assessed by traditional measures like ROE, ROI, EPS, and other financial ratios. This paper attempts to test a model of traditional accounting variables and modern value-based measures like EVA and MVA with respect to their effect on Share prices of companies belonging to the Automobile industry in CNX NIFTY using a hypothesized model. Structural Equation Modelling was performed to test the model collecting the data for a period of ten years from 2005 to 2014 by using AMOS 18 version. The performance of the companies was evaluated based on the return ratios, leverage ratio, EPS, total assets, the percentage of EVA to capital employed (EVA%), EVA and MVA. The results proved value relevance of these metrics with respect to share price which could enable investors in making informed decisions about investments in these companies.

KEYWORDS: *Economic Profit, EVA, MVA, Informed Decisions, Share Price, Value Creation*

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INTRODUCTION

The growth in the Indian capital market has increased the necessity for companies to perform better on a consistent basis. Companies are expected to generate profits in excess of the cost of capital incurred. The concept of economic profit has gained popularity with the introduction of value-based performance measures like EVA and MVA. In contrast with the traditional performance measures (ROE, ROA, ROI, ROS, EPS etc), value-based measures consider the cost of capital that is borne by the company.

Economists argue that true economic profit is generated only when a company generates revenue over and above the economic costs. A company's performance is usually assessed by the investors based on the share prices. The suppliers of capital expect a fair return to compensate for the risk they have taken and will not be satisfied if enough returns are not generated.

Value-Based Measures of Performance – EVA & MVA

Economic Value Added

EVA is a measure of the financial performance of a company which comes closer than any other measure in reflecting the true economic profit of an enterprise. The concept of EVA was postulated by Stern & Stewart, a US-based consulting firm in the early 1980's. It gained popularity as a true measure of financial performance and many large organizations started using it as a benchmark for compensating their managers.

A positive EVA is seen as an increase in shareholder's wealth and that the capital provided by them have been used productively by the company. It is also a measure of corporate governance which has led the company to perform well in congruence with the policies of good governance. Thus, a company is deemed to have created value by earning returns which is more than the opportunistic cost of capital. EVA indicates the economic value added for the shareholders by the management for which they have been entrusted with. It is exceptional from other traditional measures in the sense that traditional measures are dependent on accounting data which is usually distorted and as a matter of fact doesn't reveal the real status of the company. On the other hand, the calculation of EVA calls for certain adjustments in the accounting data that makes it economically viable.

Many companies which appear to be profitable are in fact not creating value to their shareholders. As Peter Drucker enumerates in Harvard Business Review article, "Until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that it pays taxes as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources....until then it does not create wealth; it destroys it."

EVA has been implemented in numerous corporations as a tool to motivate managers to create shareholder wealth (Dodd and Chen, 1996). If a company has positive EVA, it has created value and if it reports negative EVA, there is eventual destruction of value (Stewart, 1991).

Market Value Added (MVA)

Market Value added (MVA) is the difference between a firm's market value and the economic book value of its capital employed. A firm's market value is the sum of the market value of its equity and debt. The employed capital equals the sum of stockholders' equity items and their liabilities.

MVA = firm's market value - a firm's capital employed

MVA is the present value of all future EVAs.

MVA = 〖EVA〗_1/((1+WACC)^1)+ 〖EVA〗_2/((1+WACC)^2)+ ……

It is emphasized that MVA is a stock measure, whereas EVA is a flow measure. MVA is the product of the actual value of past projects and future profitable opportunities of a firm and indicates how successfully a firm employs its capital and has predicted future profitable opportunities and has planned to achieve them. If future EVAs are positive, the firm's shares will be sold economically in the market. But, if EVAs are negative, the firm's shares will be sold at a price lower than the book value (Roze, Meshki and Pourali, 2013).

Corporate finance postulates maximization of shareholder's value or (wealth) as the primary objective. Shareholder's wealth is measured in terms of returns from their investment which is either in the form of dividends or appreciation in the capital. According to Raiyani and Joshi (2011), capital appreciation depends on the changes in the market value of the stocks. In this context, it is worthy to identify the factors that influence the share prices of a company. Damodaran, (2012) emphasizes that stock price is the real measure of shareholder's wealth. Damodaran, (2002) states that "As the lenders can protect themselves contractually, the objective can be narrowed down to maximizing stockholder's value, or stockholder's wealth. When financial markets are efficient, the objective of maximizing stockholder wealth can be narrowed even further to maximizing stock prices". This will, in turn, lead to a question "Whether stock price maximization will increase a firm's value?". The market value is influenced by both companies specific as well as market-wide factors and investors assess a company's performance based on financial reports that exhibits current performance and information about future performance from financial analysts (Sharma and Kumar, 2010).

LITERATURE REVIEW

The study conducted by **Sakthivel and Arjunan (2009)** revealed a positive relationship between EVA and MVA of firms in the Indian paper industry. They concluded that Indian paper firms were able to create value for their shareholders every year. In the same way, **Kaur and Narang (2009)** examined a sample of 104 Indian companies and found a positive influence of EVA on the market value of shares of these companies. The study concluded that value-based performance metrics were better predictors of value creation to the shareholders.

Joshi (2011) examined the relationship between EVA, MVA and other accounting measures like Return on Investment (ROI), Return on Equity (ROE), Earnings per Share (EPS) and Return on Net worth (RONW) of fertilizer companies through correlation analysis and compared the mean values of EVA and MVA using ANOVA. The results demonstrated the existence of a high degree of positive relationship between EVA and MVA values of Chambal and Zuari companies. Further, the results revealed a relationship between EVA and other accounting measures of National Fertilizer Limited and Deepak Fertilizers.

The study conducted by **Maditinos, Ševic and Theriou(2009)** investigated the explanatory power of EVA and SVA (Shareholder Value Added) compared with ROE, ROI, and EPS in explaining stock market returns. Pooled time series was performed on companies listed in the Athens Stock Exchange for a period from 1992 to 2001. Relative information content tests revealed that stock market returns were more closely associated with EPS than with EVA or other performance measures. However, incremental information content tests suggested that the pairwise combination of EVA with EPS increased significantly the explanatory power with respect to stock returns.

Few other studies revealed a negative correlation between EVA and MVA. **Fernandez (2001)** studied the relationship between EVA and MVA by examining 582 American companies for a period of 14 years from 1983 to 1997. The results revealed a lower correlation between EVA and MVA in 210 sample firms. Likewise, **DeWet (2005)** conducted a study in 89 South African firms and found a lower correlation between EVA and MVA.

The study conducted by **Artikis (2008)** examined wealth measurement tools giving more emphasis to value-based management. CVA (Cash Value Added), REVA (Refined EVA), MVA, EVA, and CFROI (Cash Flow Return on Investment) were the techniques used in the study. The analysis in the area of value-added financial management revealed that perfect correlation between value measurement techniques and stock prices to be impossible since the fundamentals of a company could not fully explain its market capitalization as well as other market anomalies such as speculative activities, market sentiments, macro-economic factors, and calendar effects.

Pinto and Santos (2011) examined the superiority of EVA in the corporate group of companies named Mota-Engil SGPS, SA. The study investigated the incremental information of a set of performance measures between 2005-2009 using regression models. The empirical results identified the statistically significant relationship between EVA and MVA. Likewise, **Chaouki and Jacques (2011)** examined a sample of 420 U.S. firms were investigated from 1990 to 2004. Additionally, four sub-samples were designed according to two contextual factors, namely, the size of the firm and its life cycle. The results indicated the existence of cointegration relationship between MVA and EVA compared to EPS and cash flow from operations (CFO).

Further evidence of a significant relationship between EVA and MVA was provided by **Panahi, Preece, Zakar& Rogers (2014)**. They examined the relationship between stock price behavior of companies and value-based measures like EVA and MVA in the Tehran stock market. The research demonstrated that by enhancement of EVA and MVA in the company's financial performance, their stock price in Tehran stock market increased and vice versa.

Arabsalehi and Mahmoodi (2012) examined115 Iranian listed companies in the Tehran Stock Exchange (TSE) from 2001 to 2008 and investigated the explanatory power of EVA, Refined EVA, MVA and SVA (Shareholder Value Added) compared to Earnings per Share, Return on Equity, Return on Assets, Cash Flow from Operations and Return on Sales in explaining stock returns. Relative information content tests revealed that stock returns were more closely associated with ROA and ROE than other performance measures.

In the same way, **Bhasin (2013)** analyzed the effectiveness of EVA over the conventional measures of corporate performance. The sample companies comprised of Bharat Heavy Electricals Ltd., Hero Moto Corp Ltd., Infosys Ltd., L&T Ltd., and TCS Ltd. that covered a period from 2007 to 2011. The study examined whether EVA better represented the market value of companies in comparison to conventional performance measures using various statistical tools like ANOVA, trend analysis and regression analysis. The study results indicated traditional performance measures to be more associated with MVA.

OBJECTIVES OF THE STUDY

- To evaluate whether the company has created value for its shareholders by calculating EVA and MVA which is a decisive tool to assess economic performance.

- To comprehend the relationship between traditional accounting variables like ROIC, ROE, ROA, ROS, EPS, Size of the Firm (Total Assets), Leverage Ratio and modern performance measures such as EVA and MVA and their effect on Share Prices.
- To establish the value relevance of traditional and modern performance measures in reflecting the share prices of companies belonging to the Automobile industry in CNX NIFTY.

Hypothesis

Null hypothesis: The hypothesized model has a good fit to the data of companies belonging to the Automobile Industry in CNX NIFTY.

RESEARCH METHODOLOGY

CNX NIFTY includes 50 top companies belonging to key sectors which best indicates the economic growth of India. A sample of five companies belonging to the Automobile Industry in CNX NIFTY has been selected for the study period of ten years from 2005 to 2014. The data is collected from PROWESS database, maintained by CMIE (Centre for Monitoring the Indian Economy).

Structural Equation Modelling (SEM) is performed using AMOS 18 version to comprehend the relationship between traditional performance measures, size of the company (Total Assets), leverage ratio (Debt to Equity) and EVA, MVA with respect to Share price by evolving a hypothesized model which tested the relevance and fit to the data.

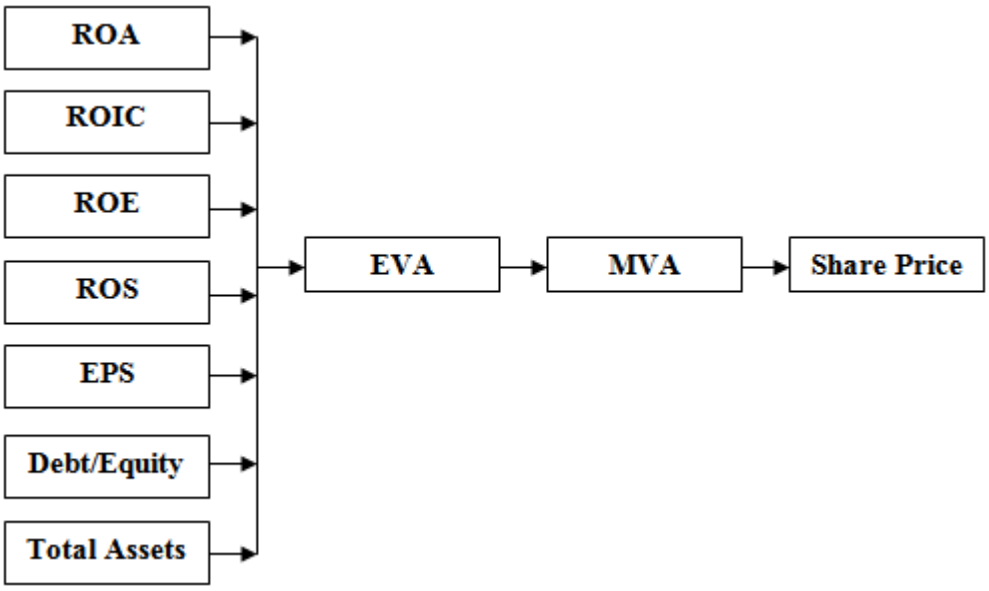

Figure 1: Hypothesized Model

The hypothesized model (Figure 1) tests the effect of traditional accounting and value-based measures on share prices of companies in the Automobile industry in CNX NIFTY.

Variables used in the Structural Equation Model

Observed, Endogenous Variables

- EVA
- MVA
- Share price

Observed, Exogenous Variables

- Return on Assets(ROA)
- Return on Equity(ROE)
- Return on Invested Capital(ROIC)
- Return on Sales(ROS)
- Earnings per Share
- Debt to equity
- Total Assets

Unobserved, Exogenous Variables

- e1: Error term for EVA
- e2: Error term for MVA
- e3: Error term for Share price

Number of Variables in the SEM

Table 1

Total Variables in this Model	13
Observed variables	10
Unobserved variables	3
Exogenous variables	10
Endogenous variables	3

Calculation of EVA, MVA and Accounting Variables

EVA = NOPAT - WACC * Average Invested Capital

Where NOPAT = Net Operating Profit after Tax

WACC = Weighted Average Cost of Capital

NOPAT = Operating Profit(1-t) where " t " is the marginal tax rate

WACC = $E/E+D * K_e + D/E+D * K_d$

Where E = Equity capital

D = Long term Borrowings or Debt

K_e = Cost of Equity

K_d = Cost of Debt

Cost of Equity

(K_e) is calculated using CAPM Model

Where $Ke = R_f + \beta (R_m - R_f)$

R_f = Risk free rate (yield on 364 days' government bond was taken)

β = Covariance (Stock Return, Market Return) / Variance (Market Return)

R_m = {(Current Index - Previous Index)/ Previous Index} * 100

Cost of Debt (k_d) = {Interest Expense/Average Borrowings} * (1-t)

EVA (%) = ROIC – WACC,

where ROIC = NOPAT / Average Invested Capital

Market Value Added (MVA) = Company's Total Market Value - Capital Invested

Return on Equity (ROE)

ROE = (Profit after tax - preference dividend / Average Equity) * 100

Return on Assets (ROA)

ROA = (Profit after tax / Average Total Assets) * 100

Return on Invested Capital (ROIC)

ROIC = (Net operating profit after tax / Average Invested Capital) * 100

Return on Sales (ROS):

ROS = (Net operating profit after tax / Net Sales) * 100

Leverage Ratio (Debt-Equity):

Debt to Equity ratio = Debt / Equity

Earnings Per Share (EPS): Net profit / Average Outstanding Shares

Size of the Firm is ascertained from the company's total assets

- The tax rate was taken as 35% applicable to companies;
- Beta(β) is the sensitivity of return of stock to changes in market return;
- The market rate of return (R_m) is calculated from the average yearly returns of CNX NIFTY Indices;
- Share prices used for the study were based on the average closing prices of companies in the Automobile industry of CNX NIFTY.

- Market Return (R_m) is used in the calculation of the cost of equity. It is computed using long-run averaged yearly return of CNX NIFTY for a period of 21 years from 1994 to 2015 which arrived at 13.38% p.a. The average risk-free rate on 364 days' government bond for the same period is computed, which arrived at 9.18% p.a. Thus, by subtracting the latter from the former, market risk premium (R_m - R_f) is 4.20% p.a.

RESULTS AND DISCUSSIONS

Impact of Predictor Variables on Share Price - SEM on Automobile Industry

The Indian automobile industry is one of the largest in the world with an annual production of 21.48 million vehicles in FY 2013-14. The automobile industry accounts for 22% of the country's manufacturing Gross Domestic Product (GDP). The representation of the automobile industry in CNX NIFTY is 9.53%. The automobile companies in CNX NIFTY are Bajaj Auto Ltd., Hero Motocorp Ltd., Mahindra & Mahindra Ltd., Maruti Suzuki Ltd., and Tata Motors Ltd.

The causal relationship between traditional accounting metrics such as ROIC, ROE, ROA, ROS, EPS, Size of the Firm (Total Assets), Leverage ratio (Debt to Equity) and modern value-based performance measures such as EVA and MVA and their effect on share prices of companies belonging to Automobile industry in CNX NIFTY have been determined using SEM. In order to improve the model fit to the data, certain changes are incorporated to the basic hypothesized model which has enabled further enhancement of the relationship between the variables. The figure below shows the modified Structural Equation Model on the Automobile industry.

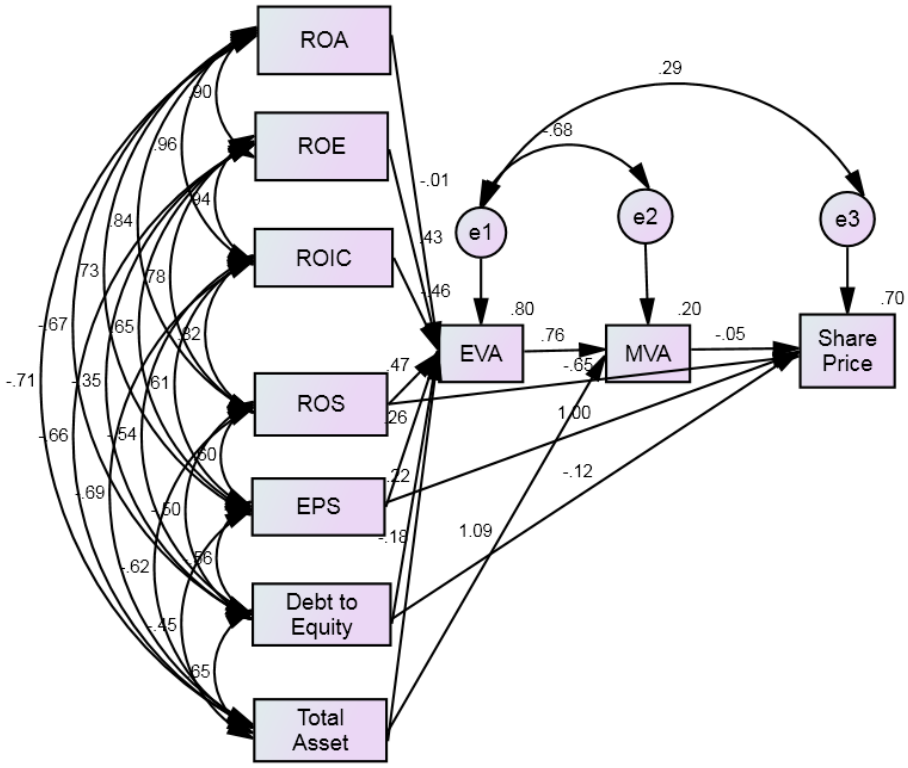

Figure 2: Structural Equation Model on Automobile Industry

Analysis of Variables in SEM - Automobile Industry

Table 1: **Variables in SEM - Automobile Industry**

Variables			Unstandardised Coefficient	S.E.	Standardised Coefficient	t value	p value
EVA	<---	ROA	-.975	39.046	-.007	-.025	.980
EVA	<---	ROE	24.619	14.153	.431	1.739	.082
EVA	<---	ROIC	-36.272	19.005	-.463	-1.909	.056
EVA	<---	ROS	154.099	32.373	.466	4.760	<0.001**
EVA	<---	EPS	9.339	3.382	.260	2.762	.006
EVA	<---	Debt/equity	-689.146	432.341	-.222	-1.594	.111
EVA	<---	Total assets	-.013	.008	-.184	-1.674	.094
MVA	<---	EVA	12.223	3.759	.758	3.252	.001
MVA	<---	Total assets	1.259	.242	1.089	5.207	<0.001**
Share price	<---	MVA	-.001	.002	-.049	-.530	.596
Share price	<---	Debt to Equity	-151.002	138.980	-.117	-1.087	.277
Share price	<---	EPS	14.955	1.713	1.002	8.729	<0.001**
Share price	<---	ROS	-88.687	14.539	-.647	-6.100	<0.001**

Note: ** Denotes Significant at 1% Level

Effect of Predictor Variables on EVA

From table 1 it can be inferred that the coefficient of **ROS** is 154.099 which represents the maximum effect of ROS on EVA, holding the other variables as constant. The estimated positive sign implies that EVA would increase by 154.09 for every percentage increase in ROS and this coefficient value is significant at 1% level. The coefficient of **EPS** is 9.339 which represents the partial effect of EPS on EVA, holding the other variables as constant. The estimated positive sign implies that EVA would increase by 9.339 for every percentage increase in EPS and this coefficient value is significant at 5% level.

The coefficient of **ROA** is -0.975 which represents the partial inverse effect of ROA on EVA, holding the other variables as constant. The estimated negative sign implies that EVA would decrease by 0.975 for every percentage increase in ROA and this coefficient value is not significant at 5% level. The coefficient of **ROE** is 24.619 which represent the partial effect of ROE on EVA, holding the other variables as constant. The estimated positive sign implies that EVA would increase by 24.619 for every percentage increase in ROE and this coefficient value is not significant at 5% level. The coefficient of **ROIC** is -36.272 which represents the partial inverse effect of ROIC on EVA, holding the other variables as constant. The estimated negative sign implies that EVA would decrease by 36.272 for every percentage increase in ROIC and this coefficient value is not significant at 5% level. The coefficient of **debt to equity** is -689.146 which represents the inverse effect of debt to equity on EVA, holding the other variables as constant. The estimated negative sign implies that EVA would decrease by 689.146 for every unit increase in debt to equity and this coefficient value is not significant at 5% level. The coefficient of **total assets** is -0.013 which represents the partial inverse effect of total assets on EVA, holding the other variables as constant. The estimated negative sign implies that EVA would decrease by 0.013 for every unit increase in total assets and this coefficient value is not significant at 5% level.

The standardized coefficient of **ROS** is 0.466 which is the highest among all other variables that affect EVA and significant at 1% level. This indicates that **ROS** has got a greater impact on **EVA** compared to other traditional variables. The increase in EVA may be the outcome of the increase in sales as a result of operational efficiency. Overall, the squared

multiple correlations (R-square values) which imply the percentage of variance explained by the predictor variables on EVA is 0.80 which suggests the greater explanatory power of predictor variables on EVA. The result is similar to the findings of Joshi (2011) who postulated the existence of the relationship between EVA and traditional performance measures.

Effect of Predictor Variables on MVA

From table 1 it can be inferred that the coefficient of **total assets** is 1.259 which represents the partial effect of total assets on MVA, holding the other variables as constant. The estimated positive sign implies that MVA would increase by 1.259 for every unit increase in total assets and this coefficient value is significant at 1% level. The coefficient of **EVA** is 12.223 which represent the partial effect of EVA on MVA, holding the other variables as constant. The estimated positive sign implies that such effect causes MVA to increase by 12.223 for every unit increase in EVA and this coefficient value is significant at 5% level.

The standardized coefficient of **total assets** is 1.089 which is the highest among all other variables that affect MVA and significant at 1% level. This indicates that **total assets** have got a greater impact on **MVA** than EVA. Overall, the squared multiple correlations (R-square values) which imply the percentage of variance explained by the predictor variables on MVA is 0.20 which suggests the partial explanatory power of predictor variables on MVA. The result is similar to the findings of Bhasin (2013) who confirmed a greater association between MVA and traditional metrics.

Effect of Predictor Variables on Share Price

From table 1 it can be inferred that the coefficient of **EPS** is 14.955 represents the partial effect of EPS on share price, holding the other variables as constant. The estimated positive sign implies that such effect causes the share price to increase by every percentage increase in EPS and this coefficient value is significant at 1% level. Likewise, the coefficient of **ROS** is -88.687 represents the inverse effect of ROS on share price, holding the other variables as constant. The estimated negative sign implies that such effect causes the share price to decrease by every percentage increase in ROS and this coefficient value is significant at 1% level.

The coefficient of **MVA** is -0.001 which represents the partial effect of MVA on share price, holding the other variables as constant. The estimated negative sign implies that such effect is inverse that share price would decrease by 0.001 for every unit increase in MVA and this coefficient value is not significant at 5% level. The coefficient of **debt to equity** is -151.002 which represents the inverse effect of debt to equity on share price, holding the other variables as constant. The estimated negative sign implies that such effect is inverse that share price would decrease by 151.002 for every unit increase in debt to equity and this coefficient value is not significant at 5% level.

The standardized coefficient of **EPS** is 1.002 which is the highest among all other variables that affect share price and significant at 1% level. This indicates that **EPS** has got a greater impact on **share price** compared to other variables such as MVA, debt to equity and ROS. Overall, the Squared multiple correlations (R-squared values) which implies the percentage of variance explained by the predictor variables on share price is 0.70. This, in turn, suggests that the traditional, as well as modern performance metrics together, could explain 70% of the variance in share prices which proves them to have better explanatory power and providing shareholders a better picture about the company's performance in the long run. The result is similar to the findings of King and Langli (1998) who corroborated that EPS has a significant impact on share price.

Analysis of Model Fit Summary of SEM - Automobile Industry

The model fit summary of SEM on Automobile industry is shown in the table below.

Hypothesis: The hypothesized model has a good fit to the data of companies belonging to the Automobile industry in CNX NIFTY.

Table 2: Model Fit Summary of SEM - Automobile Industry

Indices	Value	Suggested Value
Chi-square value	17.062	-
CMIN/DF	1.896	≤ 5.00 (Hair et al., 1998)
p value	0.048	> 0.05 (Hair et al., 1998)
GFI	0.939	> 0.90 (Hu and Bentler, 1999)
NFI	0.973	> 0.90 (Hair et al. 2006)
CFI	0.986	> 0.90 (Daire et al., 2008)
TLI	0.931	≥ 0.90 (Hair et al. 2006)

From the above table, it can be interpreted that the calculated p-value is almost equal to 0.05 and the value of Chi-Square/Degree of freedom (CMIN/DF) is less than 5.00 which indicates a perfect fit. The GFI (Goodness of Fit Index) value and NFI (Normated Fit Index) value are both greater than 0.9 which again represents a good fit. The calculated CFI (Comparative Fit Index) value is 0.986 which means that it is a perfect fit. It is found that TLI (Tucker Lewis Index) value is 0.931 which is greater than 0.90 which also indicates a perfect fit. Overall, the model holds good for the companies in the automobile industry in CNX NIFTY, thus ***hypothesis is accepted which implies that the hypothesized model has a good fit to the data of companies belonging to the Automobile industry in CNX NIFTY.*** The Structural Equation Modelling analysis has led to the inference that both traditional variables, as well as modern value-based measures, have a significant impact on share prices of companies in Automobile industry listed in CNX NIFTY over the 10-year period ranging from 2005 to 2014.

Comparison of Average Values of EVA, MVA and Share Price of Companies in the Automobile Industry - 2005 to 2014

Table 3: Average Values of EVA, MVA and Share Price of Companies in Automobile Industry (2005 - 2014)

Company Name	NOPAT (Rs.Cr.)	WACC (%)	CAPITAL (Rs.Cr.)	EVA (Rs.Cr.)	MVA (Rs.Cr.)	Share Price(Rs.)
Bajaj Auto Ltd.	2026.51	9.5	5114.58	1494.24	29438.84	687.53
Hero Motocorp Ltd.	1341.49	8.5	3788.50	1017.52	23113.78	1253.05
Mahindra & Mahindra Ltd.	1666.35	7.5	9973.04	876.94	21864.50	685.47
Maruti Suzuki Ltd.	1670.14	11.2	11482.88	368.95	20549.65	1011.98
Tata Motors Ltd.	1564.88	9.5	23258.51	-582.54	34342.82	564.43

From the above table, it is evident that the average EVA of Bajaj Auto Ltd. is Rs. 1494.24 crores which are the highest when compared with other Automobile companies. Hero Motocorp Ltd. ranks second in terms of average EVA with Rs. 1017.52 crores, followed by Mahindra & Mahindra Ltd. and Maruti Suzuki Ltd. The average EVA of Tata Motors Ltd. is Rs. -582.54 crores which show that the company is not creating value to its shareholder's wealth. Whereas, the MVA of Tata Motors Ltd. is Rs. 34342.82 crores which depict the company's growth prospects in the future with positive EVA's. The average share price of Hero Motocorp Ltd. is the highest at Rs. 1253.05 compared with other companies. This, in turn, shows that EVA,as well as MVA, together have better explanatory power with respect to share prices in the long run. Overall, except Tata Motors Ltd., all other companies in the Automobile industry are able to make productive use of

the capital provided by their shareholders during the period 2005 to 2014.

Comparison of Average Values of Traditional Accounting Variables and EVA% of Companies in Automobile Industry - 2005 to 2014

Table 4: Average Values of Traditional Accounting Variables and EVA% of Companies in the Automobile Industry (2005 - 2014)

Company Name	EVA (%)	ROA (%)	ROE (%)	ROIC (%)	ROS (%)	EPS (Rs.)	Debt/ Equity	Total Assets (Rs.Cr.)
Bajaj Auto Ltd	31.09	22.55	60.69	40.54	12.74	86.85	0.34	9470.37
Hero Motocorp Ltd.	29.14	22.10	50.11	37.68	8.98	70.46	0.18	7147.96
Mahindra & Mahindra Ltd.	9.81	11.69	27.80	17.29	8.37	44.11	0.43	16306.77
Maruti Suzuki	5.34	11.86	18.83	16.50	7.07	61.05	0.08	16596.46
Tata Motors Ltd.	1.14	4.97	16.91	10.64	5.16	25.37	0.85	38247.95

From the above table, it is evident that among all the Automobile companies listed in CNX NIFTY, Bajaj Auto Ltd. ranks first in terms of EVA% as well as traditional performance metrics such as ROA%, ROE%, ROIC%, ROS%, and EPS. It can be understood that Bajaj Auto Ltd. has been satisfying all their stakeholders in the long run. On the flipside, Tata Motors Ltd. has not been able to contribute much to their investors. Also, the debt to equity ratio of Tata Motors Ltd. is high with 0.85 compared to other companies. In terms of the size of the firm, Tata Motors Ltd. ranks first with an average total asset of Rs. 38247.95 crores.

Ranking of Companies in Automobile Industry of CNX NIFTY based on Average EVA Values - 2005 to 2014

Table 5: Average EVA based Ranking of Companies in Automobile Industry in CNX NIFTY (2005-2014)

Company Name	EVA (Rs.Cr.)	EVA Rank
Bajaj Auto Ltd.	1494.24	1
Hero MotoCorp Ltd.	1017.52	2
Mahindra & Mahindra Ltd.	876.94	3
Maruti Suzuki India Ltd.	368.95	4
Tata Motors Ltd.	-582.54	5

From the above table, it can be understood that the top four value-creating companies with respect to EVA are Bajaj Auto Ltd., Hero MotoCorp Ltd., Mahindra & Mahindra Ltd., Maruti Suzuki India Ltd. The bottom-most company which is not creating value or rather destroying value to their shareholder's wealth is Tata Motors Ltd. In order to create value to its shareholders, the company has to implement effective strategies towards efficient use of assets which will enable improving their operating performance, eventually contributing to better EVA in the future.

CONCLUSIONS

The study results vividly enumerated the relationship between traditional performance measures such as ROIC, ROE, ROA, ROS, EPS, Size of the Firm (Total Assets), Leverage Ratio and modern performance measures such as EVA and MVA and their effect on Share prices. The hypothesized model had a good fit for the data collected from the Automobile industry in CNX NIFTY indicating the value relevance of the predictor variables on the Share price in the context of the Indian stock market. This shows that investors can better understand the intrinsic value of companies and

decisively make investment choices based on EVA and MVA in conjunction with the traditional accounting variables. Among the five companies in the Automobile industry in CNX NIFTY, Bajaj Auto Ltd has contributed productively towards shareholders' wealth. Tata Motors has to implement a few strategies to effectively improve the utilization of its assets in increasing shareholders' wealth. The MVA of Tata Motors is high which shows the possibilities of future EVA's to be good and positive. The study enabled in finding those companies in the Automobile Industry that had created value to their shareholders from 2005 to 2014.

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