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Determinants of Wealth Maximisation in FMCG Sector

Commerce

KEYWORDS : Wealth maximization, Economic Value Added, Earnings per share, Market Value Added.

Dr (Mrs.) Padmasani — Assistant Professor, Department of Commerce, Bharathiar University, Coimbatore -46

Mrs. R. Vijayalakshmi — M.Phil (FT) Scholar, Department of Commerce, Bharathiar University, Coimbatore -46

ABSTRACT

Shareholders` wealth maximization has become the predominant goal of corporations in India. Most CEOs today understand that, the need to create shareholder wealth is paramount and the world`s most competitive management teams are responding to the pressure to create wealth by embracing new metrics and new models for managing their companies. In this regard, this paper tries to identify two facts- whether the sample companies in FMCG sector have created wealth to their shareholders and whether the value based or traditional based performance measures influence in shareholders wealth maximization. For this purpose, a sample of six companies in FMCG sector, which is the fourth largest sector in India with a total market size of Rs.167100 crores in the year 2011-12 is considered. This study concludes that as compared to traditional measures, EVA is the best internal measure and also the best determinant in the creation of shareholders wealth in FMCG sector.

Introduction

Today in corporate sections, profit maximization is replaced by wealth maximization and thus they try to maximize the present value of the expected future cash flows to shareholders. To measure the financial performance most of the companies are using traditional tools such as Earnings per share (EPS), Return on Capital employed (ROCE), Return on net worth (RONW), Return on Investment (ROI), Profits margin etc. but these measures are insufficient to study the health of the company, and also do not reflect the real value of shareholders` wealth (Mandeep Kaur and Sweety Narang (2008), Debdas Rakshit (2006). Moreover, the increasing awareness in corporate sector has led to a revolutionary change in the criteria of financial performance measurement. A new concept called "Economic Value Added (EVA) is well recognized and is being used to evaluate the overall financial performance of corporate entities (Bacidore et al., 1997). According to this concept, the companies that earn higher returns than overall cost of capital (including the cost of equity) create value for their shareholders, while those companies which earn lower returns than overall cost of capital destroy the shareholders` value (Bruner, 1998). Singh (2002) stated that no company survives or grows if it fails to generate wealth for the ultimate shareholders.

FMCG

Fast Moving Consumer Goods (FMCG) popularly known as consumer packaged goods, play a vital role as a necessity and an inelastic product. The Indian FMCG sector is the fourth largest sector of the economy with a total market size of Rs. 167,100 crores and the market is estimated to grow up to US$ 100 billion by 2025, according to market research firm Nielsen. In the last decade the FMCG sector has grown at an average of 11 per cent a year, whereas in the last five years, the annual growth accelerated to 17 per cent. The FMCG industry is one of the fastest growing sectors as it is characterized by a well established distribution network, low penetration level, low operating cost, lower per capital consumption and intense competition between the organized and unorganized segments. In this context, the present study aims at examining the shareholders wealth maximization in FMCG sector as it would help especially the small investors in deciding their investment plan.

Review of Literature

Madhu Malik (2004) had examined the relationship between shareholder wealth and certain financial variables like EPS, RNOW and ROCE. By using correlation analysis, it was found that there was positive and high correlation between EVA and RONW, ROCE but low correlation between EVA and EPS. It was also found that not a single traditional performance measure explains to the fullest extent variation in shareholder wealth.

Sanjay Satyanarayan Joshi (2011) had examined the value creation for shareholders of fertilizer companies in India. Out of 13 companies, a high degree of positive correlation between EVA and MVA was found in Chambal fertilizer and Zuari and the remaining eleven fertilizer firms have no correlation between EVA and MVA.

Sakthivel .N (2011) in his study analyzed the value creation in Indian Pharmaceutical Industry form 1997-98 to 2006-07 by using regression analysis. It was also found that EVA was the only variable which had unique influence on MVA of pharmaceutical companies.

Objectives

1. To compute and analyze the indicators of the shareholders` wealth creation in select FMCG companies.
2. To study the relationship between shareholders wealth maximization (MVA) and other selected financial variables (EVA and EPS, ROE, ROCE, PAT) of FMCG companies.

Hypothesis

Ho = EVA does not have any impact on shareholder`s wealth creation.

Methodology

For analysis, FMCG companies listed in BSE 100 index, having complete financial information for the ten year period from 2002-2011 were considered, and hence, only six companies were chosen for the study. They are Colgate –Palmolive (India) Ltd, Dabur India Ltd. Hindustan Unilever Ltd, ITC Ltd. Nestle India Ltd. Tata Global Beverages Ltd. The data were collected from Prowess, maintained by Centre for Monitoring the Indian Economy (CMIE). Information related to interest rate and corporate taxes were collected from RBI bulletin and Income tax manual respectively. The stock price of the companies had been obtained from BSE website for the calculation of market value of the selected companies.

Measurement of Economic Value Added (EVA)

It is a residual income that subtracts the cost of capital from the cost of capital from the operating profits generated by a business. Even though several methods are available to calculate the Economic value added (EVA), the following method is used for this study.

EVA = NOPAT- (WACC X Capital employed)

Where, **NOPAT** = Profit & loss before tax + Interest expenses – Income taxes-tax shield on interest (Tax rate X Interest expenses).

WACC = Cost of debt X {Total debt /(Total debt + Shareholders funds}X (1- Tax)+[cost of Equity X {[shareholders funds / (Total

debt Shareholders)]

Cost of equity (Ke) is calculated by using CAPM Model.

$$Rj = Rf + (Rm - Rf) * \beta j$$

Where, *Rj* = Expected return on security *j*;

Rf = Risk-free rate;

Rm = Market rate of return; and

bj = Beta, i.e., sensitivity of the return on scrip *j* to the changes in the market index.

Risk-Free Rate *(Rf)*
The average of 10 years government gold bond rate is taken as a Risk free rate.

Market Return (*Rm*)
Rm has been calculated as the simple average of daily return on BSE Index for the period from April 2001 to March 2010. The formula is :

$$Rm = \frac{Index\ number\ of\ current\ year - Index\ number\ for\ previous\ year}{Index\ number\ of\ previous\ year} X100$$

Computation of Market Value Added
With a view to measure shareholders wealth, Stewart invented the term Market Value added (MVA). Market value added is defined as "the difference between market value of invested capital and book value of invested capital of a company at a given period of time". Market value of invested capital refers to the market value of equity capital and debt capital, but the market value of debt is not easily available, as debts are not generally traded.

Thus, the definition of MVA can be stated as

MVA = Market Capitalization - Net worth.

Where, Market capitalization is the product of closing share price and number of outstanding shares as on that date ((i.e.) date of Balance sheet),

Whereas net worth is the sum of equity capital, reserves and surplus net of revaluation reserves less accumulated losses and miscellaneous expenditure.

Trends in Selected Performance Indicators
To assess the shareholders` wealth maximization in FMCG sector, the conventional performance measures like Earnings per share (EPS), Return on Capital employed (ROCE) Return on Equity (ROE) Profit after tax (PAT), and one value based performance measure viz Economic Value Added (EVA) were selected and measured and the results are shown in Table 1.

Table: 1
Trends in Selected Performance Indicators of FMCG Companies

Year	Mar02	Mar03	Mar04	Mar05	Mar06	Mar07	Mar08	Mar09	Mar10	Mar11	Mean
Panel A : MVA per share (Figures in Rs.)											
CPL	122.69	101.28	112.29	163.18	412.12	311.77	370.42	454.84	651.27	786.56	348.64
DIL	41.7	21.6	69.49	99.4	116.71	90.51	103.95	90.27	149.99	90.2	87.38
HUL	211.53	208.73	138.24	144.75	121.28	259.3	201.41	219.05	226.16	228.96	195.94
ITC	514.94	476.46	372.73	723.45	64.85	166.99	118.3	169.79	145.99	109.3	286.28
NIL	484.88	504.74	597.75	604.97	1118.72	894.16	1454.65	1507.3	2615.86	3579.83	1336.29
TGB	1.4	27.01	161.42	347.89	671.27	350.6	538.8	299.45	647.13	64.85	310.98
Ind.Mean	229.52	223.3	241.99	347.27	417.49	345.56	464.59	456.78	739.4	809.95	
Panel B : EVA per share (Figures in Rs.)											
CPL	2.08	3.6	5.67	5.88	7.32	8.88	15.25	19.17	28.28	26.41	12.26
DIL	-0.09	0.69	2.07	3.32	2.09	2.18	2.55	2.84	3.63	1.79	2.11
HUL	5.42	5.99	6.71	3.96	4.61	6.31	7.72	9.96	8.39	8.92	6.8
ITC	16.24	20.98	26.61	43.57	2.43	3.12	2.95	2.74	5.19	3.37	12.72
NIL	13.91	17.47	23.83	22.83	27.95	28.12	37.36	49.24	60.87	74.39	35.6
TGB	-22.42	-19.59	-16.95	-9.77	-7.16	-0.92	-5.37	-25.11	8.26	-2.42	-10.14
Ind.Mean	2.52	4.86	7.99	11.63	6.21	7.95	10.08	9.81	19.1	18.74	

Continued....

Year	Mar02	Mar03	Mar04	Mar05	Mar06	Mar07	Mar08	Mar09	Mar10	Mar11	Mean
Panel C : EPS (Figures in Rs.)											
CPL	4.96	5.77	7.94	8.79	10.12	11.33	17.04	21.34	31.12	29.6	14.8
DIL	2.88	2.98	3.54	5.17	3.3	2.69	3.67	4.32	4.99	2.71	3.63
HUL	7	7.87	7.55	5.09	6.05	6.98	8.06	9.25	9.58	9.72	7.72
ITC	46.94	55.41	64.31	60.4	6.07	6.96	8.2	8.65	10.64	6.45	27.4
NIL	17.29	23.78	26.43	27.01	33.55	32.72	48.4	59.28	68.36	90.09	42.69
TGB	9.26	12.56	16.28	23.14	28.77	33.03	25.33	27.27	63.3	2.92	24.19
Ind.Mean	14.72	18.06	21.01	21.6	14.64	15.62	18.45	21.69	31.33	23.58	
Panel D : ROE (Figures in %)											
CPL	28.18	32.24	44.21	45.36	50.76	57.1	142.85	134.17	129.79	104.82	76.95
DIL	16.38	20.78	38.59	44.53	45.61	65.72	61.42	51.1	58.01	46.34	44.85
HUL	53.9	49.91	82.87	57.23	61.09	68.14	133.85	121.14	85.26	87.57	80.1

ITC	27.34	25.86	25.09	27.97	24.83	26.01	26	23.89	28.99	31.37	26.73
NIL	65.27	69.66	78.53	78.87	87.41	81.02	98.89	112.83	112.68	95.7	88.09
TGB	7.62	7.71	9.6	12.98	16.91	20.19	17.72	9.06	19.09	8.98	12.99
Ind.Mean	33.12	34.36	46.48	44.49	47.77	53.03	80.12	75.36	72.3	62.47	
Panel E : ROCE (Figures in %)											
CPL	18.44	22.46	27.08	30.56	35.26	38.5	63.19	104.9	109.83	77.23	52.74
DIL	9.41	10.94	15.55	30.31	31.99	40.05	48.01	39.38	33.96	32.2	29.18
HUL	39.54	36.76	32.26	22.91	29.96	49.55	54.6	90.81	58.47	59.14	47.4
ITC	18.65	19	18.64	21.17	17.77	18.78	18.77	17.17	19.66	22.74	19.23
NIL	33	35.39	50.65	50.12	60.55	55.24	67.29	81.29	85.74	80.82	60.01
TGB	5.58	5.22	6.07	7.95	10.68	13.51	10.03	5.74	11.36	5.49	8.16
Ind.Mean	20.77	21.63	25.04	27.17	31.03	35.94	43.65	56.55	53.17	46.27	
Panel F: PAT (Amounts in Crs)											
CPL	69.8	88.66	108	113.29	137.6	160.17	231.71	290.22	423.26	402.58	202.53
DIL	65.03	84.91	101.14	147.97	189.29	251.95	315.92	372.84	433.14	471.81	243.4
HUL	1640.3	1825.86	1771.79	1197.34	1408.1	1855.37	1925.47	2496.45	2202.03	2305.97	1862.87
ITC	1189.72	1371.35	1592.85	2191.4	2235.35	2699.97	3120.1	3267.56	4061.6	4988.21	2671.81
NIL	173.15	201.52	263.08	251.92	309.57	315.1	413.81	534.08	655	818.66	393.59
TGB	71.96	70.6	91.53	128.81	186.93	306.57	312.86	160.34	392.56	182.8	190.5
Ind.Mean	534.99	607.15	654.73	671.79	744.47	931.52	1053.31	1186.92	1361.27	1528.34	

Source: Compiled from Prowess Database
Note: CPL = Colgate –Palmolive (India)Ltd, DIL= Dabur India Ltd, HUL=Hindustan Unilever Ltd, ITC= ITC Ltd, NIL= Nestle India Ltd, TGB= Tata Global Beverages Ltd, Ind.Mean = industry Mean

It is observed from Table 1 that, overall, all the selected companies in FMCG sector have generated shareholders wealth which was revealed by the positive mean value of MVA per share during the study period. However, among the six sample units, the highest wealth was created by Nestle India Ltd (NIL), with an average of Rs.1336.29 which is three times higher than industry average. In respect of EVA, five companies have created value to shareholders with positive mean value (i.e, earnings are more than cost of capital) whereas Tata Global Beverages Ltd has not created positive mean value. The highest EVA per share of Rs.35.60 was created by Nestle India ltd (NIL). From year wise analysis of EVA per share of FMCG sector, it was found that the year 2009-2010 may be considered as a successful year for the shareholders value creation because the highest average of EVA per share Rs.19.10 was reported during the year. The highest average PAT (Rs. 1528.34) is observed in the year 2010-2011 and among the selected companies ITC ltd reported highest average PAT.

Correlation between Value Based and Conventional based Measures

The calculated degree of correlation between value based and conventional measures has been shown in Table 2.

Table 2. Correlation Matrix

	MVA	EVA	EPS	ROE	ROCE	PAT
MVA	1					
EVA	0.921*	1				
EPS	-0.137	-0.105	1			
ROE	0.152	0.271*	0.179	1		
ROCE	0.155	0.242	0.280*	0.934*	1	
PAT	0.915*	0.909*	-0.088	-0.020	-0.015	1

***Significant at the 0.05 level**

Table 2 reveals that the EVA has the positive and highest relationship with MVA followed by PAT and also PAT has highest positive relationship with EVA. However, EPS has negative relationship with both MVA and EVA at 0.05 significant level.

Determinants of Wealth Maximization

In order to find out wealth maximization through EVA and conventional measures, OLS regression is used to gauge the factors which are influencing the wealth maximization (Market Value Added). This study focuses on the combined influence of several independent variables with the one dependent variable by using Ordinary least square regression model. Dependent variable is the response variable that is estimated or predicted in a regression model. The response variable is postulated as a function of the independent variable. The dependent variable considered in the study is Market Value Added (Y). The other variables EVA and selected conventional measures (EPS, ROI, ROE, ROCE and PAT) are considered as independent variables. Hence, the specification of model used in this study is as follows:

= α+β+ β β+ β+ β+

Where,

is the Market Value Added of an company for a period t.

is the Economic Value Added of an company for a period t.

is the Earnings per share of the company for a period t.

is the Return on equity of the company for a period t.

is the Return on capital employed of the company for a period t.

is the Profit after tax of the company for a period t.

To examine the impact of selected performance indicators on MVA of FMCG, OLS regression model is used and the results are given in Table 3.

Table 3. OLS Regression Analysis of Determinants of Wealth Maximisation

Variables	Coefficients	t Stat	P-value
Intercept	1621.343	0.721	0.4738
EVA	12.838	2.67*	0.01
EPS	-80.810	-1.61	0.113
ROE	-67.069	-0.856	0.396
ROCE	157.019	1.484	0.143
PAT	9.848	3.60*	0.001
Adj.	0.88		
F vale	88.77*		
DW Stat	1.785		

Note: * significant at 0.05 level

The OLS regression results reported in Table 3 is obtained using SPSS (Statistical Package for Social Science). The F- value of the model is statistically significant at 5 per cent level. The Durbin – Watson (D-W) value of 1.785 indicates less autocorrelation among the independent variables of the model. The overall adjusted of 0.88 points out that the selected independent variables (EVA, EPS, ROE, ROCE and PAT) are having explanatory power of 88 per cent on dependent variable (MVA), which means that the fitment of the model is good.

The OLS includes the dependent variable of MVA being influenced by various conventional and value based variables related to the firm. EVA and PAT are found significantly influencing the Market Value Added of selected firms operating in FMCG sector. The relationship between other performance measures and MVA is negative and not significant. Hence, the null hypothesis that "EVA does not have any impact on shareholders` wealth creation in FMCG sector" is rejected. Therefore, if the firm wants to maximize the shareholder`s wealth, they should concentrate in improving economic profit..

Conclusion

In majority of the empirical studies regarding EVA, it is found that there is a positive association between EVA and shareholders` wealth creation measured by MVA. Based on this, an attempt has been made in selected FMCG companies to find out whether EVA is better influencing factor of shareholders wealth creation (MVA) as compared to other frequently used conventional measures like EPS, ROE, ROCE, and PAT. According to the results of this study, It was found that EVA is the highly influencing factor of MVA than selected conventional measures. In addition with, PAT is also found to be highly correlated, and hence managers are advised to focus on enhancing conventional measures in addition to EVA which would directly increase the wealth of the firm.

REFERENCE

Bacidore,J.M., Boquist, J.A., Milbourn, T.T., & Thakor , A.V(1997), "The search for the Best | Financial Performance Measure , Financial Analyst Journal, pp 11-20. | Mandeep Kaur & Sweety Narang (2008), "Economic Value Added Reporting and Corporate | Performance: A study of Satyam Computer Services Ltd". The ICFAI journal of Accounting | Research, pp.40-51. | Mandeep Kaur & Sweety Narang (2009), "Insights on Shareholder Value Addition from India's | Wealth Club: A Study of Selected Companies". The ICFAI Journal of Accounting research, | pp. 20-53. | Niranjan Swain, Mishra, Jayasimha K.R & Vijayalakshmi S(2002),``Shareholder Wealth | Maximization in Indian Pharmaceutical Industry: An Econometric Analysis", Journal of | Applied Finance , November, pp 31-51. | Pandey I.M (2005), "What Drivers the Shareholder Value ?", Asian Academy of Management | journal of Accounting and Finance, pp105-120. | Ramachandra Reddy B. & Yuvaraja Reddy B(2007)," Financial Performance through Market | Value Added (MVA) approach", The Management Accountant, pp, 56-59. | Sanjay Satyanaraya Joshi (2011)," Relationship Between EVA, MVA and other Accounting | Measures of Fertilizer Companies in India", International Journal of Research in IT & | Management, Vol.I, Issue7, pp.1-14. Also available at http://www.Mairec org. | Soral G & Shurveer S (2009),``Shareholder Value Creation in the Indian Banking Industry: An | EVA analysis", The IFCAI Journal of Accounting Research and Auditing Practices, pp.54-59. |