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A Study on Value Relevance of Accounting Information in Indian Stock Market: the Case of Auto Sector

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Abstract:
In the recent times, there have been various studies criticizing the value relevance of accounting information as the economies are transforming from industrial economies to knowledge based and service economies. There is tremendous growth of intangibles, inclination towards high technology and hence more focus on non financial information. This has lead to a re-examining of the value relevance of financial information provided in the financial statements. This belief has become stronger due to the studies which have talked about the losing relevance of such financial statements or accounting or financial information. In this study Ohlson's (1995) equity valuation is explicitly applied to examine the value relevance of financial information. Variables selected for the study represent the financial statements and an attempt is made to find the combined effect of these variables on the PB ratio and market price. The study has used the appropriate statistical tools such as regression, correlation analysis to analyse the data. The expected results are that financial information is relevant and has an impact on the dependent variable. The study concludes that there is a impact of accounting/ financial information on market price of share and this impact is more pronounced in comparison to the impact on PB Ratio. Net income and the PE Ratio are the most significant variables of the study.

Keywords: *Accounting Information, Value relevance, financial statements*

1. Introduction

Accounting function is an important input for financial decision making. Accounting generates data and information relating to operations and various other activities of the company. Financial statements, such as the balance sheet, income statement and cash flow statement are the result or end products of accounting. These statements provide the investors an insight about the company's performance and help them in taking valuable decisions as it lays adequate information before the shareholders for enabling them to judge the performance of the company. Financial statements play a very important role in accounting and corporate reporting. The information contained in these statements and reports assist financial managers, investors and other stake holders in evaluating the past performance and future directions of the firms and in meeting legal obligations such as payment of taxes and so on.

Hendricks, (1976) mentions that accounting information is generated to facilitate decision making. In order to have effective financial information and reporting it should be relevant, complete and reliable. This requires the information to be unbiased and objective and should not be unfair and should not favour any party over the other. According to (Hellstrom 2005) relevant information is that information which influences the economic decisions of users by helping them to evaluate past, present and future events. Lev (1989) asserted that relevance of accounting information depends on the quality of the accounting information

Accounting information should enhance the ability of the decision maker to envisage future actions. For the growth of the capital market it is necessary to have reliable information. Based on the "engine of economic growth" potential of the stock market, developed nations do not toy with their Stock Markets and relevance of financial reporting.US capital markets are very successful because people are willing to invest more capital there since they receive higher quality financial information than is available in any other place in the world (Tuner, 2001).

Germon and Meek (2001) state that " those who have funds to invest or lend may decide where to place their resources based on the financial accounting information reports". They also state further that importance of stock markets as a source of external finance is growing around the world and stock market development has become a top priority of many countries.

Value Relevance means the accounting amount is associated with some measure of value. In simple words it implies ability of the financial information contained in the Financial Statements to explain the stock market measures. Simplifying it still further by value we mean creation of wealth and relevance means the information that has the ability to influence decisions.

Financial Analysis always involves the use of various financial statements. The information contained in the Balance sheet and Income statement directly or indirectly influences the decisions of the investors. These statements give an insight about the performance of the companies.

In this paper I would like to study the impact of various accounting variables on the share price and PB ratio. An attempt is also made to study the combined relevance of financial statements by considering the variables net worth ie the representative of balance sheet, the profit after tax for the relevance of profit and loss account, cash flow from operating and financial cash flows for the relevance of cash flow statement and earnings yield. Many researchers have used the ohlson model in order to study the relevance of accounting information like (Nguyen Viet Dung(2010), Vijitha P. and *Nimalathasan B(2014), Richard P. Brief and Paul Zarowin.)

2. Literature Review

The study variables used in this paper have also been used in studies done in Dhaka Stock Exchange (DSE) by Miah (2012),who found a negative relationship between changes in net asset value per share and changes in share price. The study was focussing on 105 companies from 2000 to 2010.According to the study EPS; dividend per share and book value per share has significant impact on the market price of share. Further, results indicated that dividend per share and EPS being the strongest determinants of market price. Kumar and Hundal (1986) examined the impact of dividend per share, earning per share net asset value per share, leverage ratio on market price of share. They used the linear regression models and found dividend policy was the more sensitive factors in affecting share price.

In a paper by Sushma Vishnani and Bhupesh Kumar titled "Value Relevance of Published Financial Statements- with Special Emphasis on Impact of Cash Flow Reporting" the value relevance of financial statements was determined. This study aims at explaining likely impact of financial reporting by listed companies on the market prices of their shares. The study revealed that value relevance of published financial statements is negligible. However, ratios based on these financial statements show significant association with stock market indicators.

Another study by Vijitha P. and Nimalathasan B (2014) titled "Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka" has examined the value relevance of accounting information by studying variables such as Earning per Share (EPS), Net Assets Value Per Share (NAVPS), and Return On Equity (ROE) and Price Earnings Ratio (P/R) to Share Prices (SP) of manufacturing companies in Colombo Stock Exchange (CSE). They found that that the value relevance of accounting information has the significant impact on share price and value relevance of accounting information is significantly correlated with share price.

In another study titled "The Value Relevance of Book Values, Earnings and Cash Flows: Evidence from Korea" by Gee-Jung, Kwon, cash flows was taken as a variable as the study assumed that cash flows provide incremental information and it was found that the cash flows has explanatory power in stock prices like earnings and book value.

In another study by Katerina Hellström, titled "The Value Relevance of Financial Accounting Information in a Transitional Economy: The Case of the Czech Republic" the value relevance of accounting information was investigated in Czech Republic by using the ohlson model. The study found that value relevance of accounting information is lower in the Czech Republic than in Sweden the value relevance of Czech accounting information has changed over time. Value relevance of Czech accounting has improved over the research period (1994-2001).

A paper by Patricia Mui-Siang Tan and Chee Yeow Lim, seeks to address the value relevance of summary accounting measures and fundamental income statement variables in the market valuation of biotech firms. The study employed the Ohlson model, the linear function of book value and earnings, and the basic model was augmented with additional accounting variables. The results indicated that Both book value and earnings are value relevant, but positive earnings are positively priced while negative earnings are negatively priced. Though earnings and book value have remained the dominating study variables, their reliability affects the relevance in determining the firm value.

Earnings and book value are commonly used as the basis for firm valuation. However, the reliability of earnings, as indicated by earnings management, may affect its relevance in determining firm value as revealed in a study by Catherine Whelan (2004) in the research work titled "The Impact of Earnings Management on the Value-Relevance of Earnings and Book Value: A Comparison of Short-term and Long-term Discretionary Accruals"

An empirical study of the relevance of accounting information on investor's decisions by r.a.a.s. perera and s. s. Thrikawala studied the relevance of Accounting Information on investor's stock market decisions in Commercial Banks registered under Colombo Stock Exchange (CSE) in Sri Lanka. The study used correlation coefficient between Market Price per Share (MPS) and selected accounting information such as Earning per Share (EPS), Return on Equity (ROE) and Earning Yield (EY) to measure the value relevance of the accounting information. The data analysis was based on the Accounting Information in the published financial statements of Commercial banks registered under CSE. It covered a period of 5 years from 2006 to 2009.

According to the findings there is a relationship between Accounting Information and Market Price per Share. Further it revealed that investors still consider Accounting Information which contain in the published financial statements of Commercial Banks registered under CSE for the stock market decisions in Sri Lanka.

3. Research Methodologies

3.1. Significance of the Study

Since financial statements play a very important role in the dissemination of information ,it becomes essential to study that whether the information provided is value relevant or not. Indian capital market has undergone a sea change since 1991, after the adoption of liberalization and globalization policy by the Indian government. As a result, the Indian capital market is growing continuously to boost our Indian economy without doubts. It has been reflected in the number of stock exchange which has gone up to 22 by 1995 from a meagre number of seven. Not only this, the number of listed companies, market capitalization and value

of shares sold and purchased considerably increased. More and more investors are taking interest in the capital primary and secondary market and therefore looking for more and more information and hence the study of value relevance of accounting information in Indian perspective becomes imperative.

3.2. Research Problem

In the recent times, there have been various studies criticizing the value relevance of accounting information and hence it is necessary to re examine the value relevance of financial information in Indian context.

3.3. Research Objectives

- To test the relevance of financial information in Indian context with reference to Auto sector.
- To study the degree to which accounting variables affect the market price of equity share and on the price book value ratio.
- To identify the most significant value relevant variables among the financial variables.
- To see the effect of combined value of financial statements on PB ratio.

3.4. Description of Variables

3.4.1. PB Ratio

This ratio measures a relationship between market value per share and book value per share. It is also known as market Response ratio. It is a key indicator of stock market performance. This ratio is used to compare a stock's market value to its book value. The book value of a share is determined by dividing net worth of a company. This ratio indicates market response to the book value of a share. If the ratio is high it indicates a better position for the shareholder's in terms of capital gains. A lower P/B ratio could mean that the stock is undervalued and vice-versa. A lower ratio indicates more attractive investment opportunity. In this study, an attempt is made to examine the impact of each component of company's financial statements (viz., Balance Sheet, Profit and loss statement, and Cash Flow Statement) on the company's price-to-book ratio on combined basis. This ratio indicates how investors look upon the company. Higher ratio is associated with high rates of return on equity. A ratio more than 1 indicates that investors are ready to pay more than the book value.

3.4.2. PE Ratio

This ratio measures the relationship between the market price per share and earnings per share. This ratio measures the expectations of the shareholders about the earnings of the firm. It indicates the number of times of EPS, .the share is being quoted in the market. It indicates the investor can recover his investment by way of EPS. A high PE Ratio indicates that the company is growing and has good earning prospects. The price/earnings (P/E) ratio shows how much investors are willing to pay. P/E ratios are higher for firms with strong growth prospects and lower for riskier firms.

3.4.3. Earning Yield (EY)

This ratio measures the relationship between EPS and market price per share. The objective of computing this ratio is to measure the performance of earnings in relation to market price per share. It specifies the return in terms of EPS on market price. Higher the ratio the better it is.

3.4.4. Return on Equity

This ratio measures a relationship between net profit after interest and tax and shareholders' funds. This ratio measures the efficiency with which the funds supplied by shareholders are used. This ratio indicates the firm's ability of generating profit per rupee of shareholder' funds. The higher ratio is the indication of the firm's ability of generating profit per rupee of shareholders' funds.

3.4.5. Cash flow from operating activities (CFFOA)

The other variables which are used in the study in combination with Net income and Net Asset value per share are cash flows from operating activities and financing activities. In order to support the financing activities and investing activities the cash holding may be more. Cash flows from operating activities are derived from the principal revenue producing activities of the enterprise and therefore should be considered value relevant by investors as these activities have a bearing on determination of net profit or loss. It is a key indicator of the extent to which the operations of the enterprise have generated sufficient cash flows to maintain the operating capability of the enterprise. Cash flow from operating activities are primarily derived from the principal revenue revenue producing activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss. It is the key indicator of the extent to which the operations of the enterprise have generated sufficient cashflows to maintain the operating capability of the enterprise.

3.4.6. Cash flow from financing activities

Financing activities are activities that result in changes in the size and composition of the owner's capital and borrowings of the enterprise.

3.4.7. Net Income (NI)

According to investors, words.com, in business, what remains after subtracting all the costs (namely, business, depreciation, interest and taxes) from a company's revenues is known as Net income and also sometimes called the bottom line.

3.4.8. Net Worth

The amount by which assets exceed liabilities is known as Net Worth. A consistent increase in net worth indicates good financial health; conversely, net worth may be depleted by annual operating losses or a substantial decrease in asset values relative to liabilities. A company that is consistently profitable will have a rising net worth or book value, as long as these earnings are not fully distributed to shareholders but are retained in the business. Companies whose book values are rising continuously and consistently are rewarded with increase in stock market value. Net worth presents a picture of the financial soundness of the business at a specific point in time. The amount by which the value of the assets exceeds the liabilities is the net worth (equity) of the business. The net worth reflects the amount of ownership of the business by the owners. A net worth statement using the market valuation method measures the "solvency" of the business. As long as net worth is positive, the business is solvent. If liabilities exceed assets and the net worth is negative, the business is "insolvent" and "bankrupt". Net worth is used to measure the financial strength of a business.

4. Database & Methodology of the Study

The sample, for the purpose of this study, consists of the 4 major Indian companies in Auto sector who are into four wheelers manufacturing. These companies are transparent as far as financial statements are concerned. The time frame of 2004-2013 has been taken. This data was taken from the annual reports and ace knowledge.

5. Development of Hypothesis

- $H_{1:}$ Net Income and EPS are highly significant and is positively related to the value of the firm
- $H_{2:}$ ROE, PE Ratio, Net asset value per share is highly significant and has a major impact on market price of equity share.
- $H_{3:}$ Financial statements are value relevant and have a major impact on PB Ratio.
- $H_{4:}$ Cash Flow from operation, Cash flow from financing activities is positively related to the dependent variable and significant variables of the study.
- $H_{5:}$ Accounting and financial variables do explain the variations in the market price of the share.

6. Results and Discussion

The two regression models are developed for all the companies under study to study the effect of financial variables on the dependent variable. The first model where dependent variable is MPS, the independent variables are ROE%, Net income(NI), Net asset value per share (NAVPS), and PE Ratio (PER).

The second model is developed to see the impact of financial statements on the stock market measure PB Ratio. The net worth (NW), earnings yield, Cash flow from operation activities (CFFOPA), Cash flow from financing activities (CFFFA), Profit after tax(PAT)

Name of the Company	Statistics	RR	R square	Adjusted R square	Standard Error	Durbin watson	Significance
Ashok Leyland	Model 1Dependent variable MPS	..974	.949	.846	.331	1.760	.048
Ashok Leyland	Model 2 Dependent variable PB Ratio	..956	.914	.845	2.950	1.822	.007
Maruti	Model 1 Dependent variable MPS	..982	.964	.936	89.932	1.370	.001
Maruti	Model 2 Dependent variable PB Ratio	..602	.362	-.435	1.049	2.612	.795
Mahindra and Mahindra	Model 1 Dependent variable MPS	..999	.997	.995	18.080	3.442	.000
Mahindra and Mahindra	Model 2 Dependent variable PB Ratio	..867	.752	.442	.709	1.918	.206
Tata	Model 1 Dependent variable MPS	..910	.828	.713	42.1726	3.00	.018
Tata	Model 2 Dependent variable PB Ratio	..956	.913	.784	.6047090	1.729	.040

Table 1: Summarized results for Regression models

Inference from the regression Table 1

The correlation coefficient is given by R and is a measure of the linear association between the variables. We see from the above table that R is very high indicating a significant and strong relationship between the independent and dependent variables. The independent variables like PE ratio, ROE, NI and Net asset value per share (NAVS) are highly co related with the dependent variable as revealed from the Regression Model 1 from R values.

The coefficient of determination R square gives an indication of how good the independent variables in predicting the dependent variables. It describes the amount of variation in the dependent variables. The larger the value the better the regression line describes the data. In case of Ashok Leyland 94% variations are explained by the independent variables. This %age is high in almost all the companies (96%, 99% and 83% in case of Maruti, M&M and Tata). The durbin watson statistics state that there is no auto correlation.

In case of the second model where the dependent variable is PB ratio, the models are not significant in Maruti and Mahindra and Mahindra. In case of Ashok Leyland both the models are significant and 94% variations are explained by the independent variables in the dependent variable.

The model for Maruti where the dependent variable is PB ratio, the independent variables has no influence. The net worth is the representative of balance sheet and PAT is the representative for P&L and cash flow from operations and financing activities represent the cash flow statements and from the model it is revealed that the financial statements do not have any influence on the PB ratio and non significant in case of Maruti and Mahindra & Mahindra whereas all the companies have significant regression models for Market price per share indicating that financial information has a major impact and variations are caused by the independent variables on the market price per share.

Name of company	**Ashok Leyland**			**Maruti**			**Mahindra & Mahindra**			**Tata**		
Name of variable	Unstandardized coefficient(B)	Sig	VIF	Unstandardized coefficient(B)	Sig	VIF	Unstandardized coefficient(B)	Sig	VIF	Unstandardized coefficient(B)	Sig	VIF
ROE%	0.029	0.885	1.3	48.379	0.007	3.3	2.006	..311	2.5	-3.612	0.087	2.1
Net Income(NI)	0.002	0.004	1.4	0.001	0.736	1.5	14.221	0	2.9	0.001	..010	2.5
NAVPS	-0.063	0.282	1.4	2.751	0	2.6	0.332	..381	4.2	0.521	0.08	2.3
PE Ratio	1.452	0.018	1.3	37.86	0.015	2.1	16.138	0.013	1.8	0.052	0.865	3

Table 2: Coefficients and the significance value table for Regression model 1(dependent variable MPS

From the Table no 2, the coefficient value of regression clearly shows to what extent each independent variable impact the dependent variable, here market price of share. Based on that, the p value for net income and PE Ratio is significant at 95% level. This means that these two variables significantly influence the share price and variations are being caused significantly by these two variables. ROE and Net assets value per share is not significant. In Maruti Net assets value per share is significant and ROE does have significant impact on share price and found to be dominant in Maruti.

From the table 2, we can infer that Net income is the most significant variable as revealed from the p values and PE ratio is the second significant variable inferred from the p values. The VIF statistics suggest that there is no multi co linearity existing between the independent variables. From the B values, it is revealed that when there is increase in one unit in NI, the share price also increases by .002 units in share price. If there is a increase in one unit of PE ratio it is going to have a positive impact on share price by 1.452 in case of Ashok Leyland. This dominance is more prominent in case of Maruti as far as PE ratio and ROE is concerned. In case of Mahindra and Tata also we see a positive dominance of these variables on share price. The ROE is not significant. The ROE as sole measure of performance is not a good indicator as it does not consider the risk and the amount of capital invested in and may be the reason that it could not be directly associated with share holder's wealth and wealth maximisation.

Regression equations:

Equation for Ashok Leyland where the dependent variable is MPS $Y_0 = b_0 + b_1 + b_2 + b_3 + b_4$

= -15.347+.029(ROE) + .002(NI) - .063(NAVPS) +1.452(PE Ratio)

Equation for Maruti

= -1558.909+.001(NI) +2.751(NAVPS)+37.860(PE Ratio)+48.379(ROE%)

Equation for Mahindra and Mahindra

= -325.045 + 14.221(NAVPS) + 16.138(PE Ratio) +.382(NAVPS) +2.006(ROE%)

Equation for Tata

= 185.312+ 3.618(ROE%)+.001(NI)+.521(NAVPS)+.052(PE Ratio)

Name of company	Ashok Leyland			Maruti			Mahindra & Mahindra			Tata		
Name of variable	Unstandarized coefficient(B)	Sig	VIF	Unstandarized coefficient(B)	Sig	VIF	Unstandarized coefficient(B)	Sig	VIF	Unstandarized coefficient(B)	Sig	VIF
Earning yield	-0.755	0.043	5.2	-0.109	0.91	1.8	-0.712	0.274	1.82	-0.621	0.266	3.04
PAT	0	0.081	6.026	3.885E	0.975	4.7	0	0.193	58.6	0	0.082	2.12
Net worth	-8.955E	0.091	5.9	-1.354E	0.472	5.9	-7.138E	0.25	1.02	-2.386E	0.598	1.84
CFFO	-9.637E	0.152	4.9	1.936E	0.85	8.9	3.395E	0.755	28	-2.724E	0.08	1.53
CFFF	-4.950E	0.498	3.4	1.278E	0.879	1.2	1.027E	0.851	2	-2.298E	0.07	3.08

Table 3: Coefficients and the significance value table for Regression model 2

From the table 3, we can see that only earnings yield variable is significant and no other variable is significant. This shows that financial information in terms of net worth, Profit after tax and cash flows are not having any impact and cannot cause variations in the dependent variable PB Ratio individually. Since the models are significant it can be said that together variations are caused in PB Ratio.

The value of net worth reported in the published Balance Sheet of listed companies in Auto sector is not affecting stock market performance of the companies and insignificant as revealed from the sig values. It has negative relationship with PB Ratio indicating one unit change in the Net worth would bring -8.955E change in PB Ratio. In one of the study by Sushma Vishani the similar results were obtained.

Coefficient value for net worth is coming out to be negative, which shows a negative impact on the stock market performance for all the companies.

It is also depicted that Cash flow from operating activities and financial activities have no significant impact on stock market performance of the company. It has negative relation with the dependent variable PB ratio.

This study reveals that value relevance of combined published financial statements is negligible.

The coefficient value for PAT is 0 and is not statistically significant. Further, R2 is quiet low and adjusted R square is negative which suggests that the model 2 is insignificant for all the companies except Ashok Leyland and Tata. The Indian investors are considering many other factors other than the financial statements.

Correlations Ashok Leyland								
		EPS	MPS	Book Value	NI	DPS	PE ratio	NAVPS
EPS	Pearson Correlation	1	-0.211	.985**	-0.266	..992**	0.34	.985**
	Sig. (2-tailed)		0.558	0.oo0	0.458	..000	0.337	0
MPS	Pearson Correlation	-0.211	1	-0.264	.830**	-0.227	0.376	0.264
	Sig. (2-tailed)	..558		0.461	0.003	0.528	0.284	0.461
Book Value	Pearson Correlation	.985**	-0.264	1	-0.352	.988**	0.395	1.000**
	Sig. (2-tailed)	0.002	0.461		..318	..000	0.258	0
NI	Pearson Correlation	-0.266	.830**	-0.352	1	-0.288	-0.082	-0.352
	Sig. (2-tailed)	.458	0.003	0.318		..420	0.821	..318
DPS	Pearson Correlation	.992**	-0.227	.988**	-0.288	1	0.363	.988**
	Sig. (2-tailed)	0.004	0.528	0	..420		..303	0
PE_ratio	Pearson Correlation	0.34	0.376	0.395	-0.082	0.363	1	0.395
	Sig. (2-tailed)	0.337	0.284	0.258	0.821	0.303		0.258

NAVPS	Pearson Correlation	.985**	0.264	1.000**	-0.352	.988**	0.395	1
	Sig. (2-tailed)	0.004	0.461		0.318	0	0.258	
**. Correlation is significant at the 0.01 level (2-tailed).								

Table 4: Correlation Coefficients for Ashok Leyland

Net income is highly positively and significantly correlated with the market price per share. The net asset value per share is positively associated with market price. The PE ratio is positively correlated with the market price of share. There is a negative correlation between book value per share and share price.

		Pbratio	Net Worth	PAT	Cash From Operating Activities	Cash from Financing Activites	Earnings Yield
Pbratio	Pearson Correlation	1	-0.173	0.313	0.403	-.845**	-.740*
	Sig. (2-tailed)		0.632	0.378	0.249	0.002	0.014
Net_worth	Pearson Correlation	-0.173	1	.711*	0.346	0.308	-0.193
	Sig. (2-tailed)	0.632		..021	0.327	0.387	0.592
PAT	Pearson Correlation	0.313	.711*	1	.645*	-0.13	-0.366
	Sig. (2-tailed)	0.378	0.021		0.044	0.721	0.299
Cash From Operating Activities	Pearson Correlation	0.403	0.346	.645*	1	-0.202	-.715*
	Sig. (2-tailed)	0.249	0.327	0.044		0.575	0.02
Cash from Financing Activites	Pearson Correlation	-.845**	0.308	-0.13	-0.202	1	0.54
	Sig. (2-tailed)	0.002	0.387	..721	0.575		0.107
earnings_yield	Pearson Correlation	-.740*	-0.193	-0.366	-.715*	0.54	1
	Sig. (2-tailed)	0.014	0.592	0.299	0.02	0.107	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Table 5 :Correlation Coefficients for Ashok Leyland

It shows the correlation coefficient between the operating cash flows and the pb ratio is .40 It Indicates that there is a positive correlation between the operating cash flows per share and Net worth (.346). Any increase in operating cash flows is resulting into increase in net worth. There is a positive significant relation between cash flow from operations and Profit after tax. The net worth is highly positively and significantly correlated with PAT. There is also a significant and positive relation between operating cash flows and PAT. There is a high and significant negative correlation between earnings yield and pb ratio. The cash from financing activities is highly significantly and negatively correlated with the pb ratio.

Maruti		EPS	MPS	ROE (%)	NAVPS	PERATIO	Earnings Yield	NI
EPS	Pearson Correlation	1	.890**	0.061	.812**	-0.464	0.527	-0.423
	Sig. (2-tailed)		0.001	0.866	0.004	0.177	0.117	0.223
MPS	Pearson Correlation	..890**	1	-0.203	.882**	-0.051	0.463	-0.45

	Sig. (2-tailed)	..001		0.573	0.001	0.889	0.178	0.191
ROE (%)	Pearson Correlation	..061	-0.203	1	-0.507	-0.503	-0.167	-0.183
	Sig. (2-tailed)	..866	0.573		0.135	0.139	0.645	0.613
NAVPS	Pearson Correlation	.812**	.882**	-0.507	1	-0.122	0.598	-0.285
	Sig. (2-tailed)	0.004	0.001	0.135		0.738	0.068	0.426
PERATIO	Pearson Correlation	-0.464	-0.051	-0.503	-0.122	1	-0.248	0.016
	Sig. (2-tailed)	0.177	0.889	0.139	0.738		0.489	0.965
Earnings_yield	Pearson Correlation	0.527	0.463	-0.167	0.598	-0.248	1	-0.3
	Sig. (2-tailed)	0.117	0.178	0.645	0.068	0.489		0.399
NI	Pearson Correlation	-0.423	-0.45	-0.183	-0.285	0.016	-0.3	1
	Sig. (2-tailed)	0.223	0.191	..613	0.426	0.965	0.399	
**. Correlation is significant at the 0.01 level (2-tailed).								

Table 6: Correlation Coefficients for Maruti

Earnings are highly positively and significantly correlated with the market price. Net assets value is highly and significantly positively correlated with the MPS. In case of NI the relation is negative. Here we can infer that more emphasis is on assets as NAVPS is showing a positive relation between MPS. There is a very high positive relation of EPS and MPS.

Maruti		**Pbratio**	**Net Worth**	**PAT**	**Cash From Operating Activities**	**Cash from Financing Activites**	**Earnings yield**
Pbratio	Pearson Correlation	1	-0.589	-0.439	-0.491	0.201	-0.361
	Sig. (2-tailed)		0.073	0.204	0.149	0.577	0.305
Net Worth	Pearson Correlation	-0.589	1	.819**	.906**	-0.269	0.598
	Sig. (2-tailed)	0.073		0.004	0	0.453	0.068
PAT	Pearson Correlation	-0.439	.819**	1	.885**	-0.193	0.529
	Sig. (2-tailed)	0.204	0.004		0.001	0.593	0.116
Cash From Operating Activities	Pearson Correlation	-0.491	.906**	.885**	1	-0.272	0.587
	Sig. (2-tailed)	0.149	0	0.001		0.447	0.074
Cash from Financing Activites	Pearson Correlation	0.201	-0.269	-0.193	-0.272	1	0.123
	Sig. (2-tailed)	0.577	0.453	0.593	0.447		0.734
Earnings yi eld	Pearson Correlation	-0.361	0.598	0.529	0.587	0.123	1
	Sig. (2-tailed)	0.305	0.068	0.116	0.074	0.734	
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 7: Co efficient of correlation for Maruti

All the variables have negative correlation with the dependent variable PB ratio in Maruti**.** The net worth is highly positively correlated with the cash from operating activities which clearly indicates that the company's operations are directly contributing to the net worth of the company. Moreover there is a positive correlation between the Profit after tax and net worth which shows as the profit increases the net worth is also increasing. The positive correlation between the cash flows from operating activities and PAT conveys that the operating activities are leading to profits for the company.

TATA		Pb ratio	Net worth	CFOPA	CFFFA	PAT	NAVPS
Pb ratio	Pearson Correlation	1	-0.173	-0.296	-.775**	-0.1	-0.522
	Sig. (2-tailed)		0.61	0.377	0.005	0.769	0.099
Net Worth	Pearson Correlation	-0.173	1	0.183	-0.134	-0.085	0.168
	Sig. (2-tailed)	0.61		0.589	0.694	0.803	0.621
CFOPA	Pearson Correlation	-0.296	0.183	1	0.131	0.453	0.172
	Sig. (2-tailed)	0.377	0.589		0.701	0.162	0.613
CFFFA	Pearson Correlation	-.775**	-0.134	0.131	1	0.377	.756**
	Sig. (2-tailed)	0.005	0.694	0.701		0.253	0.007
PAT	Pearson Correlation	-0.1	-0.085	0.453	0.377	1	.675*
	Sig. (2-tailed)	0.769	0.803	0.162	0.253		0.023
NAVPS	Pearson Correlation	-0.522	0.168	0.172	.756**	.675*	1
	Sig. (2-tailed)	0.099	0.621	0.613	0.007	0.023	
**. Correlation is significant at the 0.01 level (2-tailed), .05 level							

Table 8: Correlation Coefficients for TATA

From the Table No 8 Cash flow from financing activities and cash flow from operations is negatively correlated with the dependent variable PB Ratio. Even the net assets value per share is also negatively correlated with the dependent variable PB Ratio. The profit after tax and net asset value per share is also negatively correlated with the dependent variable. The relation is non significant.

Correlations								
TATA		EPS	ROE (%)	MPS	NI	DPS	NAVPS	Earnings_yield
EPS	Pearson Correlation	1	.742**	-0.312	-0.276	.789**	0.442	0.215
	Sig. (2-tailed)		0.009	0.35	0.412	0.004	0.174	0.526
ROE (%)	Pearson Correlation	.742**	1	-0.558	-0.009	0.49	-0.005	0.275
	Sig. (2-tailed)	0.009		0.074	0.978	0.126	0.989	0.414
MPS	Pearson Correlation	-0.312	-0.558	1	.626*	-0.11	-0.21	-.816**
	Sig. (2-tailed)	0.35	0.074		0.039	0.748	0.536	0.002
NI	Pearson Correlation	-0.276	-0.009	.626*	1	-0.297	-.736**	-.657*

	Sig. (2-tailed)	0.412	0.978	0.039		0.376	0.01	0.028
DPS	Pearson Correlation	.789**	0.49	-0.11	-0.297	1	.746**	0.262
	Sig. (2-tailed)	0.004	0.126	0.748	0.376		0.008	0.437
NAVPS	Pearson Correlation	0.442	-0.005	-0.21	-.736**	.746**	1	0.438
	Sig. (2-tailed)	0.174	0.989	0.536	0.01	0.008		0.178
earnings_yield	Pearson Correlation	0.215	0.275	-.816**	-.657*	0.262	0.438	1
	Sig. (2-tailed)	0.526	0.414	0.002	0.028	0.437	0.178	
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Table 9: Correlation Coefficient for Tata

From the table No 9, we see that Net income is positively and significantly correlated with MPS. Earnings yield are positively and significantly correlated with MPS. ROE % is negatively correlated with MPS. The ROE is negatively correlated with MPS and this shows that MPS is not just affected by the return on equity but many other factors which may be beyond the scope of this research paper.

Mahindra and Mahindra Correlations							
		Pbratio	Net_worth	PAT	Earnings Yield	CFFOPA	CFFFA
Pb ratio	Pearson Correlation	1	-0.012	0.133	-.763*	0	-0.124
	Sig. (2-tailed)		0.974	0.714	0.01	0.999	0.733
Net_worth	Pearson Correlation	-0.012	1	.983**	-0.121	.975**	-0.576
	Sig. (2-tailed)	0.974		0	0.739	0	0.081
PAT	Pearson Correlation	0.133	.983**	1	-0.234	.953**	-0.599
	Sig. (2-tailed)	0.714	0		0.515	0	0.067
Earnings Yield	Pearson Correlation	-.763*	-0.121	-0.234	1	-0.141	0.178
	Sig. (2-tailed)	0.01	0.739	0.515		0.697	0.623
CFFOPA	Pearson Correlation	0	.975**	.953**	-0.141	1	-.642*
	Sig. (2-tailed)	0.999	0	0	0.697		0.046
CFFFA	Pearson Correlation	-0.124	-0.576	-0.599	0.178	-.642*	1
	Sig. (2-tailed)	0.733	0.081	0.067	0.623	0.046	
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 10: Correlation Coefficients for Mahindra & Mahindra

From the Table 10 Net worth is negatively correlated with the PB Ratio. Earnings yield has a significant but negative correlation with PB Ratio. There is almost no correlation between cash flows from operations and the PB ratio. Very low degree of correlation is observed in PAT and PB Ratio.

M&M		EPS	ROE (%)	MPS	NI	DPS	NAVPS	PAT	Earnings yield	PE ratio
EPS	Pearson Correlation	1	0.102	.991**	-0.41	0.471	0.591	.998**	-0.279	0.19
	Sig. (2-tailed)		0.779	0	0.239	0.169	0.072	0	0.436	0.598
ROE (%)	Pearson Correlation	0.102	1	0.184	0.152	0.161	-0.554	0.054	-0.525	0.607
	Sig. (2-tailed)	0.779		0.612	0.675	0.656	0.097	0.881	0.119	0.063
MPS	Pearson Correlation	.991**	0.184	1	-0.411	0.461	0.53	.984**	-0.377	0.304
	Sig. (2-tailed)	0	0.612		0.238	0.18	0.115	0	0.283	0.394
NI	Pearson Correlation	-0.41	0.152	-0.411	1	-0.407	-0.46	-0.409	-0.037	0.084
	Sig. (2-tailed)	0.239	0.675	0.238		0.243	0.181	0.241	0.919	0.817
DPS	Pearson Correlation	0.471	0.161	0.461	-0.407	1	0.602	0.454	-0.041	-0.198
	Sig. (2-tailed)	0.169	0.656	0.18	0.243		0.066	0.187	0.91	0.583
NAVPS	Pearson Correlation	0.591	-0.554	0.53	-0.46	0.602	1	0.608	0.241	-0.391
	Sig. (2-tailed)	0.072	0.097	0.115	0.181	0.066		0.062	0.502	0.264
PAT	Pearson Correlation	.998**	0.054	.984**	-0.409	0.454	0.608	1	-0.234	0.146
	Sig. (2-tailed)	0	0.881	0	0.241	0.187	0.062		0.515	0.687
Earnings_yield	Pearson Correlation	-0.279	-0.525	-0.377	-0.037	-0.041	0.241	-0.234	1	-.887**
	Sig. (2-tailed)	0.436	0.119	0.283	0.919	0.91	0.502	0.515		0.001
PE_ratio	Pearson Correlation	0.19	0.607	0.304	0.084	-0.198	-0.391	0.146	-.887**	1
	Sig. (2-tailed)	0.598	0.063	0.394	0.817	0.583	0.264	0.687	0	
**. Correlation is significant at the 0.01 level (2-tailed).										

Table 11: Correlation coefficient for Mahindra and Mahindra

From the above correlation table 11, it is revealed that EPS and PAT highly positively correlated with the MPS. PE Ratio, ROE, NAVPS and DPS are positively correlated with the share price.

	Ashok Leyland				Maruti			
	Minimum	Maximum	Mean	Std deviation	Minimum	Maximum	Mean	Std deviation
ROE (%)	9.04	27.34	21.111	5.8352881	11	25	19	5.055
MPS	9	30	19.7	7.499	421	1416	952.6	355.362
Net_worth	9942	31585	20594.7	7349.649	35749	185789	97489.4	49955.3
NI	3924.33	10692.31	6844.1	2470.50367	-49828	14876	-16408.5	21624.3
NAVPS	9	84	21.1	22.368	124	615	334.7	167.511
PE_ratio	9	18	13.2	2.7	14	26	18	4.243
earnings_yield	3	6	3.8	1.033	0	1	50	0.527

Table 12: Descriptive statistics

According to the Table above for descriptive statistics it can be seen that descriptive statistics of the accounting information comprises of minimum, maximum, mean and Standard Deviation. Highest value of standard deviation of accounting information is perceived in Net worth and lowest standard deviation is recorded in Earnings yield. NI and ROE indicate the maximum value, highest average value of accounting information is indicated by the net worth and average value of earnings yield is very low.
According to the descriptive of Maruti, it can be seen that NI has negative minimum value and the net-worth has maximum value. The average value is the highest in net worth only and the lowest value is for earnings yield. The highest standard deviation is seen in net worth. The lowest standard division is seen for earnings yield.

Descriptive Statistics Mahindra & Mahindra					Descriptive Statistics Tata			
	Minimum	Maximum	Mean	Std. Deviation	Minimum	Maximum	Mean	Std. Deviation
ROE (%)	18	36	27.6	5.441	2	32	19.494545	11.173644
MPS	116	861	428.6	261.039	36	276	159.89355	78.722871
Net Worth	17474	145166	64196.2	44960.46	35675	199860	113383.992	62672.105
NI	-33512.4	5396.07	-14334	12508.9165	-186898	50371.9	-43730.93	76600.728
NAVPS	123	246	173	35.678	60	315	167.297818	82.286147
PAT	3485.43	33528.2	15708.4	10789.6387	3018	22401	14115.7955	5756.7698
PE_ratio	1	17	14.6	1.897	9	285	51.003636	79.985
earnings_yield	1	3	2.1	0.568	1	3	1.905727	0.7002577

Table 13: Descriptive Statistics

Highest value of standard deviation of accounting information is perceived in Net worth and lowest standard deviation is recorded in Earnings yield. PAT and NW indicate the maximum value, highest average value of accounting information is indicated by the net worth and average value of earnings yield is very low.
According to the descriptive of Tata, it can be seen that NI has negative minimum value and the net worth has maximum value. The average value is the highest in net worth only and the lowest value is for earnings yield. The highest standard deviation is seen in Net income and net worth. The lowest standard division is seen for earnings yield.

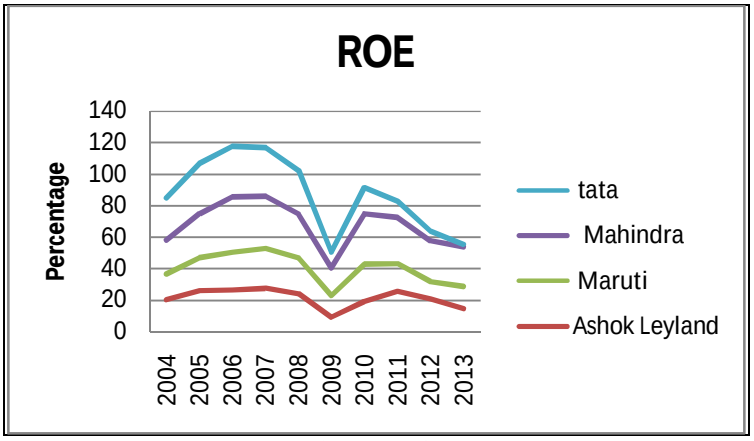

Figure 1:ROE

The Figure 1 ROE shows a plunge in all the companies during 2008-09 due to the depressionary trend set in the market. The reason that ROE is not a significant variable is because there are many factors and variables which are having an impact on the stock performance measures such as MPS or PB Ratio. Even though the net worth of the companies are showing an increasing trend, the ROE has plunge down and that is why it is revealed that even if the company has sound financial credentials, the stock market is not just affected by the financial variables but a multiple economic factors which affect the stock market performance.

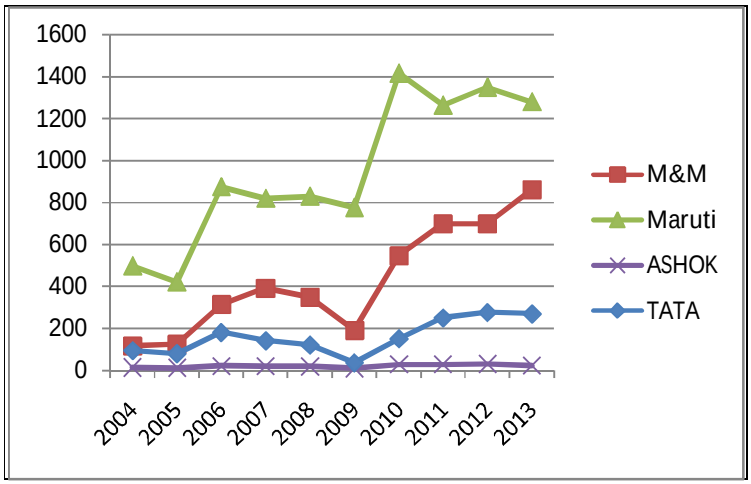

Figure 2: Figure for MPS 2

From the Figure 2 MPS, the company's share prices are increasing but during 2008-09 the share price of all the companies under study has sharply fallen and the reason attributed to this is the depressionary trend which had set in during that period.

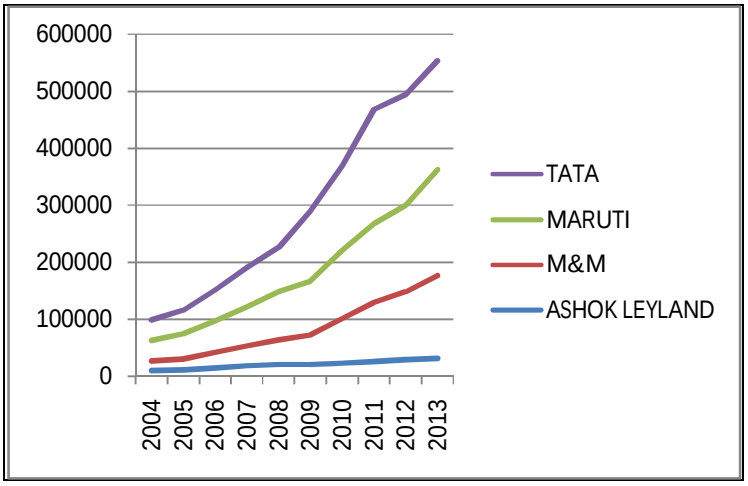

Figure 3: for Net worth

Even though the net worth of the companies are showing an increase, it is not in a position to create a positive impact in the stock market as some other economic factors would have been dominant during the period 2008-09.

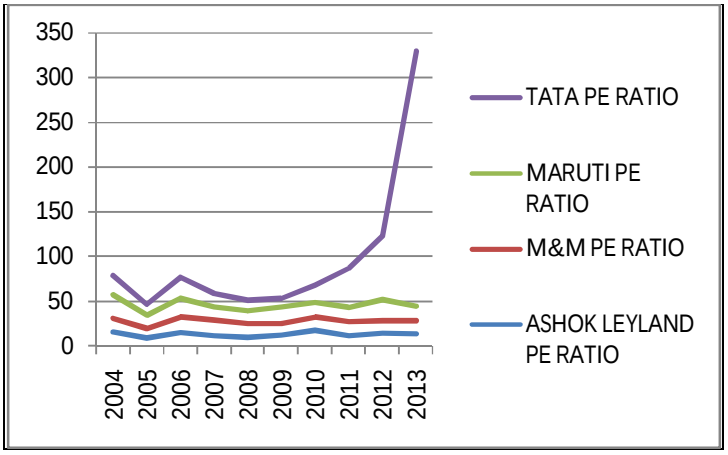

Figure 4

There is a sharp increase in PE Ratio of TATA but the stock measure PB RATIO is showing a plunge during 08-09 due to the recessionary trend which had set in. The stock market and its measures are not merely the reflection of financial variables but various controllable and uncontrollable factors. These results are consistent with other studies like Sushma Vishani where the study concluded that there is negligible effect on PB Ratio of the financial but in this study the overall model is significant in two companies but in case of Maruti and Mahindra and Mahindra , even the model is not significant.

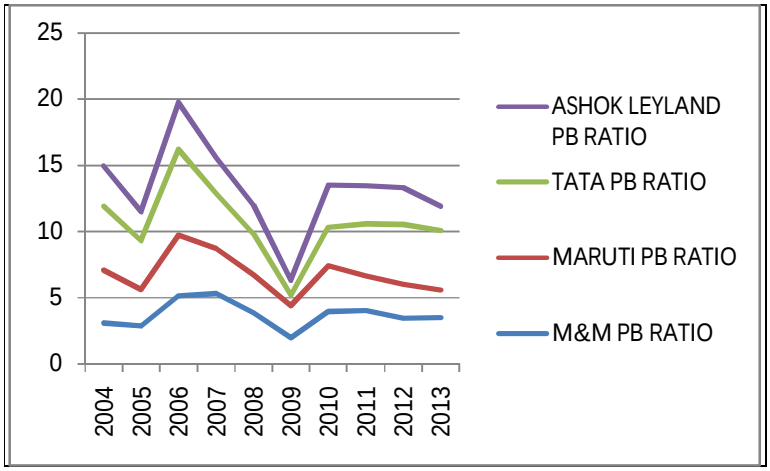

Figure 5

PB Ratio is fluctuating and indicates that it is affected by various factors which may not be reflected in the company's financials.

7. Conclusions

This study is done to investigate the pragmatic relationship between share prices and explanatory variables such as NAVPS, NI, P/E Ratio, ROE, for the period 2004-2013. The result revealed that the accounting information such as EPS, NI, NAVPS, and earnings yield are significantly correlated with share price. The P/E ratio is positively correlated with share price at 5% significance level. From the regression analysis it can be concluded that value relevance of accounting information has the significant impact on share price but the financial information contained in the financial statements does not have much impact on the PB ratio. In a study conducted for Vietnamese stock market by Nguyen Viet Dung (2009), the value relevance of financial statement information in Vietnam is weak in comparison to not only developed countries but also other emerging markets in the region. In our study also we find a weak relation between the financial statements and the stock measure PB Ratio. Information as disclosed in financial statements is still a useful basis for making investment decisions as revealed from the R values for the second regression model. Though the adjusted R square is very low the Indian stock market is still affected by the information in Financial statements. The impact is much more prominent and pronounced on market price share. There is a very strong relationship between financial variables and market price per share.

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