Accounting and Market Based Determinants of Stock Returns: A Study of Indian Stock Market

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Abstract

Stock markets move in an unsystematic manner thus, it is difficult to recognise the stock that will do well. A better insight into the basic fundamental analysis is required when one looks for such stocks which led to creation of wealth in long term. The present study makes an effort to assess the influence of nine company specific factors mainly ratios that assess company's performance and further these ratios are categorised into two categories i.e. accounting based ratios and market based ratios. Fixed effect model of panel data regression with robust standard errors is estimated to analyse the influence and the findings suggest that Book to market ratio exerts significant positive influence on stock returns which suggest that value stocks generate higher return as compared to growth stocks. However, for the average investor, using the book value strategy alone might not be sufficient in determining stocks intrinsic worth. Thus, the investors are advised to buy the stocks of well established companies that are trading below their book value. But investors should also ensure the profitability of companies. Significant positive influence of size of the firm on stock prices suggests that return generated by the big firms has been much better than the returns of small firms.

Keywords: Accounting based ratios, Market based ratios, Panel data regression, Fixed effect model with robust standard errors.

Introduction

Investment in stock is a risky proposal and investors are hesitant to make investment in stock market because of fear of losing money in the market. The main reason behind this is that they do not do adequate research and rely primarily on their brokers to select stocks to invest. Stocks represent business ownership. For a publicly traded company, the stock prices can often be a barometer of company's health. It reflects investors' perception of firm's ability to earn and grow its profits in the future. Identifying a good stock means finding a good business that is priced at a reasonable valuation. Financial report issued by a company is a reflection of company's financial performance. Ratio analysis is a technique to evaluate the financial reports. While investors can not know everything about any given investment but they can rely on various performance measures to evaluate the efficiency and effectiveness of the firms. Thus, if they discern the precise factors affecting stock prices, they will invest in stocks confidently. Identifying the factors significant in explaining stock prices/returns is an area of concern that has drawn attention of various researchers.

The aspiration to understand the factors affecting stock prices or returns led to various models like dividend discount model, Fama and French three factor model (1992), Ohlson model (1995), Fama and French five factor model (2015) attempting to link company specific factors to stock returns. Various studies considering different company specific factors have used different techniques such as simple regression, panel data regression, cross sectional regression etc and have produced contrary results. Apart from the conventional measures like size, book to market ratio, price earnings ratio etc. there are various other company specific variables that need to be explored. Till date there is no consent as to which single or combination of variables best explains stock returns. The present study aims to reinvestigate the behaviour of stock returns with respect to selected nine company specific factors mainly ratios categorised as accounting based and market based ratios by applying panel data regression in Indian context.

Review of Literature

The present section of the study deals with the review of literature on how company specific factors influences the stock prices/returns. Most of the studies have used stock return as proxy of stock prices because of the nature of data. Banz (1981) found that size has positive influence on beta adjusted stock returns.. Further, Bhandari (1988) showed that stocks returns are directly related to debt-equity ratio controlling for firm size and beta. Fama and French three factor model given by Eugene Fama and Kenneth French in 1992 suggests that firm specific factors, size and book to market ratio play an important role in explaining variations in average

stock returns. This model was subsequently tested in various countries and produced different results. But besides book to market ratio and size of the firm, there are other company characteristics also that may affect stock return. Some researchers have adopted portfolio formation technique, alike in CAPM and Fama and French model, to assess the behaviour of stock prices whereas nowadays panel data technique has become more popular as it consider both time series and cross section data.

While appraising firm performance, the most common ratios are related to profitability and returns which are based on published annual reports and identified as Accounting-based ratios. Conventional accounting based ratios have been criticised for providing futile guidance while making strategic decisions. These deficiencies are dealt by market based ratios. Market price based ratios have drawn attention as substitutes to determine firms value (Sandoval, 2001). The impact of all such factor on stock return is discussed separately in the section as what could be its relationship with the stock prices/ return and what the review suggests. The empirical research work on influence of company specific factors on stock prices/returns is further divided based on the basis of results for each variable separately. The findings of the studies which show significantly positive, significantly negative and those which depict insignificant influence are clubbed together.

Influence of Accounting Based Ratios on Stock Prices

Accounting-based ratios are those ratios which depict the financial position of companies and based on published annual reports. It is relevant to understand their importance in influencing on stock prices. Table 1 show the result related to accounting based measures variables viz. debt-equity ratio, return on total assets, net profit margin, asset growth.

Table 1: Research Studies Depicting Relationship of Accounting based Ratios with Stock Prices

Variables	Positive Relation	Negative Relation	Insignificant Relation
Debt-Equity Ratio	Bhandari (1988, USA), Mukherji et al. (1997, Korea), Menon (2017, Oman)	Nirmala et al. (2011, India), Senyigit and Ag (2014, US)	Nazir et al (2010, Pakistan), Senyigit and Ag (2014, Turkey), Wijaya (2015, Indonesia),
Return on total assets	Wijaya (2015, Indonesia), Arkan (2016, Kuwait), Allozi and Obeidat, 2016, Jordan), Anwaar (2016, UK), Bustami and Heikal, 2019, Indonesia)	-	Iqbal et al. (2013, Pakistan)
Net Profit Margin	Syed et al. (2012, Pakistan) Anwaar (2016, UK)	Spathis (2002, Greece), Dimitropoulos and Asteriou (2009, Greece)	Naveed and Ramzan (2013), Pakistan), Musallam (2018, Qatar)
Growth of Total Assets	-	Xing (2008), Cooper et al (2009), Gray and Johnson (2011, Australia), Gautam (2017, Nepal), Machado and Faff (2018), Brazil)	Nazir et al (2010, Pakistan)

Source: Review of Literature

a) Debt-Equity Ratio

Financial leverage is calculated by debt-equity ratio and it tells the ratio of debt and equity used in the business to finance its assets. The relevance of debt-equity ratio in influencing stock returns was first documented by Bhandari in 1988. Bhandari (1988) exhibited that stock returns are directly linked to debt-equity ratio controlling for firm size and beta. Trade-off theory assumes that larger firms can easily get long term debt because of their lower bankruptcy costs. Larger firms make use of debt funds to take tax benefits. Thus, positive relationship between debt-

equity ratio and stock returns is expected (Idris and Bala, 2015). Mukherji et al. (1997) performed fundamental analysis of Korean stock return and found positive association of debt-equity ratio and stock returns. Menon also supports the findings of Bhandari (1988) and Mukherji et al. (1997) and suggest positive influence of debt-equity ratio on stock prices. Nirmala et al (2011) attempted to identify the factors that influence stock prices using panel cointegration technique and found that debt-equity ratio negatively influences stock prices in all sectors. Senyigit and Ag (2014) suggest that explanatory power of debt-equity ratio is relatively high in the United States, however it is not in Turkey. Wijaya (2015) exhibited that most of the investors in listed Indonesian manufacturing companies do not pay attention to debt to equity ratio since this variable does not significantly affect the stock returns.

b) Return on Total Assets

Return on asset is an accounting measure of profitability. Return on assets measures the effectiveness and efficiency of firms in using total asset to generate earnings. It illustrates the amount of earnings a firm makes from each unit of investment in assets (Palepu et al., 2010). Return on assets does not consider the sources used to finance the assets (Muhammad and Scrimgeour, 2014). Investors favour a higher return on asset because it is a proxy of firm's performance. Iqbal et al. (2013) investigated the relevance of historical accounting information as determinant of future stock returns and found ROTA is unable to predict stock returns. Wijaya (2015) in Indonesia, Arkan (2016) in Kuwait, Allozi and Obeidat (2016) in Jordan, Anwaar (2016) advocate positive and significant influence of ROTA on stock returns suggesting the firms making efficient and effective use of its assets are generating more returns than ineffective firms . Bustami and Heikal (2019) explored the influence of ROTA on stock returns of real estate and property sector firms in Indonesia and found its significant and positive effect on stock returns.

c) Net Profit Margin

Net profit margin is a good indicator of stocks strength. It is calculated by dividing net profit by sales. Companies with higher net profit margins are efficient and better equipped and stocks of such companies are able to revert to their fair values even if hit by short term volatility. Thus it is considered as an important determinant of stock prices/returns. It is expected to be positively related to stock prices/returns. Dimitropoulos and Asteriou (2009) examine the significance of financial reporting in Greece and found the negative effect of net profit margin on stock prices is explained by the fact that firms with low net profit margin try to manipulate the profit and loss statement by either escalating revenues or decreasing their expenses. The findings are constant with Spathis (2002), who found firms with negative net profit margin are more likely to misrepresent financial statements. Syed et al. (2012) in Pakistan and Anwaar (2016) in UK found significant positive impact of net profit margin on stock prices while Naveed and Ramzan (2013) and Musallam (2018) depicted insignificant impact of net profit margin in Pakistan and Qatar respectively. No studies in India considering net profit margin as a determinant of stock prices have found.

d) Growth of Total Assets

Investment and financing effect on stock return can be summarized by a simple measure of asset growth. Few studies have been found which considered asset growth as a determinant of stock prices. Annual firm asset growth rate is termed as a year over year percentage change in total assets. Xing (2008) and Cooper et al (2009) examined the relationship between asset growth and future stock returns in the U.S. firms. Their findings indicated inverse relationship between the asset growth and stock returns. Gray and Johnson (2011) analysed an average of 1248 firms-years observation using Fama and Macbeth (1973) regression, and found significant negative relation between asset growth and stock returns.

Machado and Faff (2018) suggest that those firms experienced fast growth through external financing and by making capital investments likely to portray poor performance and lower stock returns. No studies in India considering asset growth as a determinant of stock prices have found.

Influence of Market Based Ratios on Stock Prices

Market price based ratios have drawn attention as alternatives to assess the value of firm (Sandoval, 2001). These are those ratios which are calculated on the basis of market prices of shares. Table 2 show the result related to market based measures variables viz. price earnings ratio, dividend payout ratio, firm size, book-market ratio and earnings per share respectively.

Table 2: Research Studies Depicting Relationship of Market based Ratios with Stock Prices

Variables	Positive Relation	Negative Relation	Insignificant Relation
Price-Earnings Ratio	Nirmala et al (2011, India), Kumar (2017, India), Arslan and Zaman (2014, Pakistan), Sharif et. al (2015, Bahrain)		Senyigit and Ag (2014, Turkey and US), Musallam (2018, Qatar)
Size of the Firm	Srinivasan (2012, India), Nazir et al (2010, Pakistan), Arslan and Zaman (2014, Pakistan), Sharif et. al (2015, Bahrain)	Connor and Sehgal (2003, India), Manjunatha and Mallikarjunappa (2011, India), Sehgal and Balakrishnan (2013, India), Aziz and Ansari (2014), Banz (1981, US) Fama and French (1992, US), Mukherji et al. (1997, Korea), Naveed and Ramzan (2013, Pakistan), Almumani (2014, Jordan)	Monfared and Wasiuzzaman (2012, Malaysia), Shafana et al (2013, Sri Lanka), Muhammad and Scrimgeour (2014, Australia)
Dividend Policy	Nirmala et al. (2011, India), Malhotra & Tandon (2013), Sen and Ray (2013), Pradhan (2003, Nepal), Garba (2014)	Malhotra (1987), Khan et al. (2012),Srinivasan (2012), Menike & Prabath (2014), Nazir et al (2010, Pakistan), Almumani (2014)	Allen and Rachim (1996, Australia), Challa and Chalam (2015), Geetha and Swaminathan (2015),
Book to Market Ratio	Connor and Sehgal (2003, India),Manjunatha and Mallikarjunappa (2011, India), Srinivasan (2012, India), Sehgal and Balakrishnan (2013), Aziz and Ansari (2014), Mukherji et al. (1997, Korea), Kheradyar et al (2011, Malaysia), Monfared and Wasiuzzaman (2012, Malaysia), Almumani (2014, Jordan), Wijaya (2015, Indonesia)	Shafana et al (2013, Sri Lanka), Senyigit and Ag (2014, US)	Senyigit and Ag (2014, Turkey), Musallam (2018, Qatar)
Earnings Per Share	Obeidat (2009, Abu Dhabi), Glezakos et. al (2012), Tahir et al. (2013, Pakistan), Masum (2014, Bangladesh), Menike and Prabath (2014, Sri Lanka), Muhammad and Scrimgeour (2014, Australia), Almumani (2014, Jordan), Musallam (2018, Qatar), Srinivasan (2012, India), Kumar (2017, India)	Anwaar (2016, UK)	Sharif et. al (2015, Bahrain)

Source: Review of Literature

a) Price-Earnings Ratio

The PE (price-earnings) ratio is the ratio used to determine the value of a company by relating its market price in relation to its earnings per share. Stock with low PE ratio is observed as having low market price in relation to its earnings but expected to yield superior return in following period (Fun and Basana, 2012). A stock with high PE ratio is perceived to be overpriced as compared to its peers. A company with high PE ratio is the one where market expects rapid growth and is willing to pay a price for the shares beyond the price which is justified by its historical earnings (Galcheri, 2014).

In India, few studies explored the association between PE ratio and stock prices. Nirmala et al. (2011) and Kumar (2017) are among the few who found positive relationship of price earnings ratio. Arslan and Zaman (2014) and Sharif et. al (2015) suggest that investor can utilise price earnings ratio to earn abnormal returns because it is found to be directly associated with stock prices. Aiming to monitor the effect of price-earnings ratio on stock returns in Turkey and United States,

Senyigit and Ag (2014) conducted a study by applying panel regression and found no statistical relationship between price-earnings ratio and stock returns in both the countries. Musallam (2018) tried to assess the significance of price earnings ratio but failed to prove it.

b) Size of the Firm

Size of the firm plays an imperative role in an investment criterion. There are various measures to determine the size of the firm such as log of total assets, market capitalisation and net sales. The question of whether the size of the firm can be a value relevant variable in explaining stock prices is one that has attracted a lot of attention from researchers. Most of the studies employed market capitalisation as proxy of firm's size.

Size effect was first documented by Banz in 1981 in US and found that small sized firms of New York Stock Exchange (NYSE) had significantly superior risk adjusted returns than large NYSE firms; later Fama and French (1992) suggest that firm specific factor, size negatively and book to market ratio positively influence stock returns other than market beta. Further, Fama and French model was tested in various counties and found different results. The findings of Mukherji et al. (1997) suggest that for Korean stocks, smaller size of firm generally result in higher returns. There are some studies in support of fama and French model and some in against.

In Indian context, Connor and Sehgal (2003), Sehgal and Balakrishnan (2013), Aziz and Ansari (2014) supports the result of Fama and French model. Manjunatha and Mallikarjunappa (2011) in India considered four variables, beta, size of the firm, book to market (B/M) ratio and earnings-price (E/P) ratio by considering seven combinations of three variables at a time and overall results found that size of the firm is significant determinant of stock returns. Monfared and Wasiuzzaman (2012) tested the relevance of Fama and French three factor model in Malaysia and found the presence of value effect but don't support the existence of size effect. Shafana et al (2013) also rejected the presence of size effect.

The results of Naveed and Ramzan (2013) show that only size has negative and significant relationship with stock prices whereas dividend yield, asset growth and return on asset fails to be the significant determinant of stock prices. Almumani (2014) attempted to discover the factors affecting stock prices in Jordan and found significant positive effect of B/M ratio, EPS whereas size is negatively associated with stock prices. Arslan and Zaman (2014) found positive influence of size proxied by total assets on stock prices. Muhammad and Scrimgeour (2014) examined the relationship of accounting based and market based financial measures with stock returns and found absence of size effect in determining stock returns.

In respect of size, diverse outcome were produced. There is a group who favours size effect and suggest negative relationship with stock returns but there are also studies suggesting positive relationship while some studies fails to prove its significance.

c) Dividend Payout

The relationship between dividend payouts and stock price was first initialised by Modigliani and Miller in 1958. According to Modigliani and Miller, dividend policy is irrelevant in influencing firm's value. Cash flow/ overinvestment hypothesis of Jenson (1986) gives us another view and according to him, dividend payments are positively related to stock prices. As per Cash flow hypothesis, firms pay fewer dividends and manager for their own benefits invest the funds in negative net present value (NPV) projects which ultimately causes reduction in stock prices. But it should be consider that if a firm is having better opportunities, it should retain the profits.

Pradhan (2003) found positive impact of dividend payout on stock returns in Nepalese market. Allen and Rachim (1996) in Australia found insignificant association between dividend and stock prices. Nishat and Irfan (2001) proved the significance of both dividend payout ratio and dividend yield on stock price volatility. Nazir et al (2010) found that dividend policy has a strong significant association with the stock price volatility in KSE.

In Indian context mixed results in respect of relationship between dividend payments and stock prices/returns by considering different variables in the model, by considering different study period is observed by Nirmala et al. (2011), Malhotra & Tandon (2013) and Sen and Ray (2013) found positive association; Malhotra (1987), Khan et al. (2012), Srinivasan (2012), Menike & Prabath (2014) negative relationship whereas Challa and Chalam (2015), Geetha and Swaminathan (2015) fail to prove any significant association between dividend payments and stock prices in India.

d) Book to Market Ratio

Book to market ratio endeavors to discover the undervalued and overvalued securities and helps to find out the market value of a company relative to its book value. Company having higher book to market ratio

believed as value stock that means it is trading at cheaper rate as compare to its book value. Most of the studies found that value stocks generate higher return as compared to growth stocks.

Mukherji et al. (1997) suggest that returns of high B/M stocks are higher than low B/M stocks. Connor and Sehgal (2003), Manjunatha and Mallikarjunappa (2011),Srinivasan (2012), Sehgal and Balakrishnan (2013), Monfared and Wasiuzzaman (2012), Aziz and Ansari (2014), Wijaya (2015, Indonesia) also supports the presence of value effect and found that firms with higher book to market ratio earns higher returns than low B/M ratio firms. Similar findings in respect of B/M ratio was suggested by Muhammad and Scrimgeour (2014). Almumani (2014) attempted to identify the factors affecting stock prices for listed banks of Amman stock exchange and found significant positive effect of B/M ratio Kheradyar et al (2011) tested the predictability of stock returns with the dividend yield, earning yield and book to market ratio by applied generalized least squares (GLS) techniques and reveal that the selected financial ratios can predict stock returns but predictive power of B/M ratio is higher than other ratios. Shafana et al (2013) results are in contrast with the results of Fama and French as B/M ratio is found to be negatively significant whereas size found to be insignificant in influencing stock returns. Most of the studies review suggests the presence of value effect in estimating stock return. Senyigit and Ag (2014) found positive impact of price-book value on stock returns in United Stated whereas in Turkey it is found to be insignificant.

e) Earnings Per Share

Earnings per share (EPS) is one of the best measures of firms profitability. High EPS indicates growth of the firms. It is generally expected that there is positive relationship between EPS and stock prices or return. Obeidat (2009), Muhammad and Scrimgeour (2014) and Masum (2014) found the positive influence of EPS on stock prices. Almumani (2014) attempted to identify the factors affecting stock prices for listed banks of Amman stock exchange and found significant positive effect of B/M ratio, EPS whereas size is negatively associated with stock prices.

In Indian context, Srinivasan (2012) analyse the impact of fundamental factors on stock prices and found positive impact of EPS. Glezakos et al. (2012) used Ohlsons model (1995) by considering a sample of 38 companies listed in Athens Stock Exchange and found that explanatory power of EPS in stock prices increases over time. Menike and Prabath (2014) also adopted Ohlson's model (1995) and the found the similar results as Glezakos et al. (2012) by taking sample of 100 companies listed on Colombo Stock Exchange (CSE). Tahir et al. (2013) examine the influence of some firm characteristics on stock returns of listed non-financial firms of Pakistan for the period 2002 to 2012. The study found EPS have positive impact on stock market returns. Kumar (2017) concludes that earning per share has found to be a very strong predictor of stock prices of selected companies of Nifty auto sector index.

The review suggests that investor consider EPS as the indicator of firm's profitability which suggest that with the increase in EPS positive returns are generated.

Research Methodology

Companies constituting Nifty 500 index as on July 2019 is used for the study. Out of which 98 companies belonging to financial sector are excluded and out of the remaining 402 companies, companies with the missing data and companies having negative book values and negative or zero average earning per share of any three successive years during the period 2007-08 to 2017-18 are excluded to bring uniformity in the data. Thus, finally a sample of two hundred sixty three non financial firms belonging to different sectors is selected as described in Table 3.

Table 3: Description of Sample Companies for Company Analysis

Sample of the Study	No. of Companies
NIFTY 500	500
Less: Financial Companies	98
Non-Financial Companies	402
Less: Companies with the missing data, negative Book-Value per share and negative or zero earnings per share of any three successive years	139
Final Sample	263

Table 4: Description of Variables

Variables	Acronym	Construction of Variables	Data Source
Stock Returns	Stock Returns	Annual average of monthly stock returns	Prowess
Accounting Based Ratios	DE	Debt-equity ratio	
	ROTA	Return on total assets	
	NPMARGIN	Net profit margin	
	AG	Growth in total assets	
Market Based Ratios	PE	Price-earnings ratio	
	DP	Dividend payout ratio	
	LMCAP	Natural Logarithm of market capitalization	
	BM	Book to market ratio	
	EPS	Earnings per share	

Source: Result output of E-Views 9

Nine company specific factors considered are mainly ratios that assess company's performance and further these ratios are categorised into two categories i.e. accounting based ratios and market based ratios. Accounting based ratios include debt-equity ratio (DE) as measure of leverage, return on total assets (ROTA), net profit margin (NPM) and asset growth (AG) while market based measure used are price earnings ratio (PE), firm size as represented by natural logarithm of market capitalization (LMCAP), book to market (B/M) ratio, dividend payout ratio (DP) and earnings per share (EPS). Annual average of monthly stock returns are calculated and considered as a proxy of stock prices. All the data have been sourced from Prowess database provided by Centre of Monitoring Indian Economy (CMIE).

The timeframe of the study is of eleven years ranging from April 2007 to March 2018. Statistical Package for the Social Sciences (SPSS), Econometrics Views (E-Views 9) and STATA softwares have been used for the analysis.

Firstly, descriptive statistics namely mean, maximum value, minimum value and standard deviation of the stock returns and the selected company specific factors have been computed. Then, correlation analysis has been done to examine the correlation of the selected company specific factors with the stock returns of companies which is used as proxy of stock prices and the results are used to assess whether there exists any multicollinearity or not. Finally, panel data regression has been applied for investigating the influence of the selected company specific factors on stock returns.

Data Analysis and Interpretation

Broad description of the summary statistics of stock returns and company specific variables viz. debt-equity ratio (DE), return on total assets (ROTA), net profit margin (NPM), asset growth (AG), price earnings ratio (PE), firm size as represented by natural logarithm of market capitalization (LMCAP), book to market (B/M) ratio, dividend payout ratio (DPR) and earnings per share (EPS) have been given in Table 5. It shows the mean, maximum value, minimum value and standard deviation for a total of 2893 observations i.e. two hundred sixty three firms and eleven years data ranging

Table 5: Descriptive Statistics of Stock Returns and Company Specific Variables for a period from April 2007 to March 2018

Variables		Mean	Maximum	Minimum	Std. Dev.	bservations
Dependent Variable						
Returns		0.016	0.269	-0.189	0.046	393
Independent Variables						
Accounting Based Ratios	DE	0.515	6.190	0.000	0.598	393
	ROTA (per cent)	9.137	115.830	-31.790	7.733	393
	NPM (per cent)	10.445	80.140	-203.530	10.517	393
	AG (per cent)	16.424	668.278	-93.162	28.396	393
Market Based Ratio	PE	25.049	4406.250	-6685.000	190.989	393
	MCAP (INR Millions)	182167.4	5591596	350.91	450027.3	393
	DP	0.307	24.976	-13.515	0.958	393
	BM	0.623	6.871	0.000	0.648	393
	EPS (INR)	34.522	3936.630	-191.090	136.776	393

Source: Result output of E-Views 9

from 2007-08 to 2017-18.

Stock return is used in the present study as a proxy of stock prices. It is calculated as a change in price over previous period. Annual average of monthly stock returns are calculated and considered in the study. The average annual stock returns for the sample companies during eleven years study period is 1.6 per cent and standard deviation is 0.046. The highest stock return achieved during the sample period is 26.9 per cent by HEG Ltd. in 2017-18 whose shares went to the roof after the sudden surge in demand for graphite electrodes. The demand surged after China decided to shut down its polluting furnances due to environment concerns, whereas the lowest negative return of -18.9 per cent is generated by India's biggest iron-ore miner, NMDC Ltd. in 2008-09.

Ratio analysis helps to summarises the strengths and weaknesses of different companies from return, liquidity and growth perspectives (Muhammad and Scrimgeour, 2014). In this study, four accounting based ratios are determined. These ratios are debt-equity ratio (DE), return on total assets (ROTA), net profit margin (NPM) and asset growth (AG).

Leverage measured as debt-equity ratio (DE) indicates

the ratio of debt and equity that a firm is using to finance its assets. It measures the firm's dependency on debts. Debt-equity ratio has mean value of 0.515. The maximum debt-equity ratio is 6.190 of Thomas Cook (India) Limited in 2007-08 suggesting riskier stock to invest. The minimum debt-equity ratio is zero. There are many companies having zero debt-equity ratio such as 3M India Ltd., ABB India Ltd., Akzo Nobel India Ltd. etc. The standard deviation of debt-equity ratio is 0.598.

Return on total assets illustrates the effectiveness and efficiency of using firm total assets to earn profits. On the other hand, it illustrates the amount of profit a firm produces for each unit of investment in assets (Palepu et al., 2010). The average value of return on total assets is 9.137 per cent. During the period span of eleven years, the highest return on total assets is 115.830 per cent, which has been generated by Strides Pharma Science Ltd. in 2014 whereas the lowest return of -31.790 per cent is generated by Piramal Enterprise Ltd. in 2011. The standard deviation of return on total assets is 7.733

Net profit margin is a financial ratio used to compute the percentage of profit a company produces from its revenue. One of the strategies for equity investor is to consider stocks that have strong earnings potential. This potential is measured by looking at the net profit margin. Rising net profit margins over a period of time demonstrate the firm's ability to control its operating and overhead costs, which can help navigate periods of unexpected losses (Bhardwaj, July 29, 2019, ET Bureau). The mean value of net profit margin is 10.445 per cent. The minimum and maximum net profit margins are -203.53 per cent and 80.14 per cent was generated by Piramal Enterprise Ltd. in 2011 and I R B Infrastructure Developers Ltd. in 2009 respectively while its standard deviation is 10.402.

Investment and financing effect on stock return can be summarized by a simple measure of asset growth. Few studies have found asset growth as a determinant of stock prices. Annual firm asset growth rate is defined as a year over year percentage change in total assets. Asset growth rate has the mean value of 16.424 per cent. Highest growth in asset is recorded by Rain Industries Ltd. in 2007-08 of 668.278 per cent, whereas I C R A Ltd. documents the highest decline in total assets by 93.162 per cent. The standard deviation of asset growth rate is 26.787.

Conventional accounting based ratios have been criticised for providing futile assistance to make strategic decisions. These deficiencies are dealt by market based ratios (Muhammad and Scrimgeour, 2014). The market based ratios considered in the study are price earnings ratio (PE), firm size as represented by natural logarithm of market capitalization (LMCAP), book to market (B/M) ratio, dividend payout ratio (DPR) and earnings per share (EPS).

The price-to- earnings ratio (PE) is the ratio to determine the value of a company by relating current price to earnings per share (EPS). It indicates what the investors are ready to pay for company's earnings. Companies with high price-earnings ratio are often considered as growth stock. The mean value of price earnings ratio is 25.049. The lowest PE ratio recorded during the selected period is -6685 of Jai Corp Ltd in 2018 which is a result of negative EPS. Investors should be concerned about negative PE ratio when a company consistently reports negative PE ratio for long periods of time. The maximum PE ratio for the period is 4406.250 of P V R Ltd. in 2010. The standard deviation of PE ratio is 190.989 which indicate that individual data values are far from the mean value.

Another significant market based ratio considered in the study is market capitalisation which is used as a proxy of firm's size. There are various measures to determine the size of the firm such as log of total assets, market capitalisation and net sales. In the present study market, market capitalisation has been used to measure firm's size. The average value of market capitalisation is Rs. 182167.4 million. The minimum and maximum values of market capitalisation are Rs. 350.910 million of Cera Sanitaryware Ltd. in 2009 and Rs. 5591596.000 million of Reliance Industries Ltd. in 2018 respectively. Its standard deviation is 454719.8000 which is quite high and suggest that individual data values are far from the mean value.

Every company has to decide about dividend policy. Dividend policy is used by companies to determine how much of profits to be distributed and retained. Dividend payout ratio is the proportion of dividend paid by firm and net income of the company. Most of the companies consider dividend policy as an important part of the company strategy. The average dividend payout ratio is 0.307 times whereas the firm giving the maximum dividend out of profit i.e. of 24.976 times is P V R Ltd. in 2009-10. The minimum dividend payout ratio is -13.515 by Tamil Nadu Newsprint & Papers Ltd. in 2011-12. Negative dividend payout ratio indicates that firm had to pay dividend even in case of negative earnings. The standard deviation of dividend payout ratio is 0.958.

Book to market ratio is one of valuation parameters

that determine whether a stock is cheap or expensive. It is computed by dividing book value of a share with the current market price of stock. Value investors use it as tool to identify low priced stocks with high growth prospects. From the sample, firms with negative book value are excluded because it has no obvious interpretations. If the ratio is more than unity, it implies that the stocks are undervalue and vice-versa. If may be inferred that on an average the stock in Indian market are undervalued as the calculated average B/M ratio is 0.623. The maximum B/M ratio is 6.871 by KPR Mills Ltd. in 2009-10 while the lowest B/M ratio is zero. Companies having zero book-market ratio are N M D C Ltd., Navin Fluorine Intl. Ltd. and Nesco Ltd. etc. The standard deviation of B/M ratio is 0.648.

EPS is a key driver of stock prices.EPS is financial ratio which divides net earnings available to equity shareholders by number of outstanding shares. EPS indicates firm's ability to generate net profits to shareholders. Earnings per share ranges from negative EPS of -191.090 rupees to maximum of 3936.630 rupees. The firm generating negative earnings per share is by Piramal Enterprise Ltd. in 2011 while the maximum EPS of 3936.630 rupees is generating by M R F Ltd. in 2016. Mean value of EPS equals 34.522 rupees with standard deviation of 136.776.

Correlation Analysis

Correlation analysis is used to illustrate the extent to which one variable is linearly related to the other. Through conducting bi-variate Karl-Pearson correlation analysis as presented in Table 6, this study shall be able to identify the degree of association of the selected company specific factors i.e. debt-equity ratio, return on total asset (ROTA), net profit margin (NPM) and asset growth (AG), PE (price earning) ratio, firm size (natural logarithm of market capitalization), B/M (book to market) ratio, DP (dividend payout ratio) and EPS (earning per share) and stock returns of the companies.

The findings of correlation analysis reveal that stock return is negatively correlated with debt-equity ratio with the coefficient value of -0.034 which is low and also the association between the two is significant at 10 per cent level. The correlation coefficient between ROTA and stock return is 0.097 which is low but is significant at 1 per cent significance level. The degree of association between NPM and stock return is also low with the coefficient value of 0.035 and found to be significant at 10 per cent level. While there is no significant correlation found between asset growth and stock returns. Among the selected five market based ratio, LMCAP, BM ratio and EPS are found to be significantly correlated with stock returns at 1 per cent level and their respective correlation coefficients are 0.065, 0.368 and 0.049 respectively. AG, PE ratio and DP ratio are insignificantly associated with the stock returns with the correlation coefficient of 0.028, 0.007 and -0.005 respectively. Among the company specific factors, the highest significant correlation was found between PE ratio and DP ratio although both are positively associated with the correlation coefficient of 0.565 which is less than 0.80. Multicollinearity is not a problem as the value of significant correlation coefficients among independent variables is less than 0.80 which is considered as a threshold to determine multicollinearity among explanatory variables. DE ratio is found to be negatively and significantly associated with ROTA with the coefficient value of -0.469, NPM with -0.290, PE ratio with -0.041, LMCAP with -0.264, DP ratio with -0.072, B/M ratio with 0.295 and EPS with -0.092. AG fails to find any significant association with DE ratio.

Apart from DE, ROTA is significantly correlated with NPM and the coefficient value is 0.545 which is highest depicting that ROTA has more association with NPM i.e. higher the NPM, higher will be return earned by equity investors. The correlation coefficient between ROTA and AG is 0.153, between ROTA and LMCAP it is 0.242, between EPS and ROTA it is 0.158 and with BM it is negatively and significantly association and the coefficient value is -0.320. PE ratio and DP are insignificant in finding any association with ROTA. Other than DE and ROTA, the company specific factor which proves significant association with NPM are size of the firm as proxy by LMCAP, BM and EPS with the correlation coefficient of 0.230 , -0.177 and 0.059 respectively. AG found to be correlated with PE, DP and BM with the correlation coefficient of 0.038, -0.046 and -0.085 respectively. PE found significant association with DE, DP and BM and their respective correlation coefficients are -0.041, 0.565 and -0.038.

Size of the firm as represented by natural logarithm of market capitalisation is found negatively correlated with debt-equity with the coefficient of -0.264. The correlation coefficient between LMCAP and ROTA is 0.242, between LMCAP and NPM it is 0.230, between LMCAP and BM it is -0.384 and with EPS it is correlated with the coefficient of 0.105.

Table 6: Correlation Analysis of Stock Returns and Company Specific Factors for the Period 2008 to 2018

Variables		Accounting Based Ratios					Market Based Ratios				
		RETURNS	DE	ROTA	NPM	AG	PE	LMCAP	DP	BM	EPS
RETURNS		1									
Accounting Based Ratios	DE	-0.0340*	1								
	ROTA	0.097***	-0.469***	1							
	NPM	0.035*	-0.290***	0.545***	1						
	AG	0.028	-0.010	0.153***	0.025	1					
Market Based Ratios	PE	0.007	-0.041**	-0.003	0.011	0.038**	1				
	LMCAP	0.065***	-0.264***	0.242***	0.230***	0.022	0.051***	1			
	DP	-0.005	-0.072***	0.029	0.024	-0.046**	0.565***	0.030	1		
	BM	0.368***	0.295***	-0.320***	-0.177***	-0.085***	-0.038**	-0.384***	-0.031*	1	
	EPS	0.049***	-0.092***	0.158***	0.059***	0.021	-0.003	0.105***	-0.016	-0.041**	1

Note: ***, **, * indicate significance at 1, 5 and 10 per cent level respectively
Source: Result output of SPSS 16

DP is found to be associated with four company specific factors namely DE, AG, PE and BM, the correlation coefficient of -0.072, -0.046, 0.565 and -0.031 respectively. BM is the ratio which is found to be very important, as when considering stock return, it is find to highly positively correlated with the coefficient value of 0.368 and also because it is found to have significant association with the other explanatory variable. EPS is significantly positively correlated with ROTA, NPM and LMCAP and their correlation coefficients are 0.158, 0.059 and 0.105 respectively whereas with DE and BM, EPS is found to be negatively and significantly associated with the correlation coefficients of -0.092 and -0.041 respectively. The result of correlation among independent variables suggests the absence of multicollinearity. For further verification variance inflation factor has been used to detect multicollinearity and the result of the same is presented in Table 9.

Panel Data Regression

Data used encompasses both time series data of eleven years spanning from 2007-08 to 2017-18 and also cross section data of two hundred sixty three companies. Therefore, it is desirable to apply panel data regression which considers both time series and cross section effect. Using STATA software, both fixed and random effect model of panel data regression have been estimated and then, Hausman specification test is used to compare the fixed and random effects. The null hypothesis of hausman test is that that the individual effects are not correlated with the other independent variables in the model. If it is found correlated (H0 is rejected), and fixed effect model is preferred and vice-versa.

The panel data model is defined as follows:

Where,

Return it: Stock returns of 'i' th firm for period 't'.

αi = constant of i firm

$\beta 1, 2 \ldots 3$ = coefficients of independent variables

$$Return_{it} = \alpha_i + \beta_1 DE_{it} + \beta_2 ROTA_{it} + \beta_3 NPMARGIN_{it} + \beta_4 AG_{it} + \beta_5 PE_{it} + \beta_6 DP_{it} + \beta_7 LMCAP_{it} + \beta_8 BM_{it} + \beta_9 EPS_{it} + \mu_t$$

DEit: Debt-Equity Ratio of 'i' th firm for period 't'.
ROTAit: Return on Total Assets of 'i' th firm for period 't'.
NPMit: Net profit margin of 'i' th firm for period 't'.
Agit: Asset growth rateof 'i' th firm for period 't'.
PEit: Price earning ratioof 'i' th firm for period 't'.
DPit: Dividend payout ratioof 'i' th firm for period 't'.
LMCAPit: Natural logarithm of market capitalisation of 'i' th firm for period 't'.
BMit: Book to market ratio of 'i' th firm for period 't'.
EPSit: Earning per share of 'i' th firm for period 't'.
uit: Error term in the above model of 'i' th firm for period 't'.
i refers to number of firms and t refers to time period ranging from 2007-08 to 2017-18
i = 1, 2, 3,…….263 ; t = 2007-08, 2008-09, 2010-11,……2017-18.
There are some basic assumptions of panel data regression model that have to be fulfilled:

a) Data should be stationary
b) Data must be free from heteroscedasticity
c) Data must be free from multicollinearity.

The above assumptions are also tested in the present study before applying panel data regression.

a) Stationarity

Application of panel unit root tests is imperative before applying regression because regressing non stationary series results in spurious regression estimations. Levin Lin Chu panel unit root test is used to test the stationarity of the selected company specific variables and stock returns. The null hypothesis of Levin Lin Chu unit root test is that panel contains unit roots whereas alternative hypothesis of Levin Lin Chu unit root test is that panels are stationary.

Table 7: Results of Panel Unit Root Test: Levin Lin Chu

Variables		At Level	
		With intercept	With intercept and trend
Returns		-55.953***	-54.414***
Accounting Based Ratios	DE	-70.407***	-80.855***
	ROTA	-14.159***	-20.853***
	NPM	-13.292***	-22.868***
	AG	-12.885***	-21.428***
Market Based Ratios	PE	-12.506***	-28.805***
	LMCAP	-26.311***	-36.552***
	DP	-218.959***	-237.7111***
	BM	-17.625***	-52.263***
	EPS	-10.009***	-21.650***

Note: *** indicate significance at 1 per cent level
Source: Result output of E-Views 9

The results of Levin Lin Chu panel unit root test are shown in Table 7. The test is conducted at level with both intercept and intercept and trend. The findings suggest that null hypothesis of Levin Lin Chu panel unit root test is rejected for all variables with intercept and with intercept and trend. Thus, assumption of stationarity of panel series is fulfilled.

b) Heteroscedasticity test

Heteroscedasticity is the condition in which residual term in regression model varies. To test whether the error terms are homoscedastic, heteroscedasticity test, namely, using Breusch-Pagan- Godfrey test is used. Null Hypothesis (H0) of Breusch-Pagan- Godfrey test: Errors terms are homoscedastic.

Table 8: Results of Breusch-Pagan- Godfrey test

Heteroscedasticity Test: Breusch-Pagan-Godfrey	
Chi 2 value	75.920 (0.000)

Note: Value in the parenthesis () indicates p-value Source: Result output of E-Views 9

The Chi2 statistics of Breusch- Pagan- Godfrey test is 75.920 with the p-value of 0.000 which is less than 0.05 leading to the rejection of null hypothesis and suggesting the presence of heteroscedasticity.

c) Multicollinearity

The problem of multicollinearity arises if two or more explanatory variables are highly correlated. Apart from correlation analysis, Variance inflation factor (VIF) is used to detect multicollinearity in regression model. The VIF determines how much is the variance of the regression coefficient is inflated due to multicollinearity in the model. STATA 12 software is used to calculate VIFs. As a thumb rule if value of VIF exceeds 10, it suggests the presence of multicollinearity (Gujarati and Porter, 2009).

Table 9: Variance Inflation Factor

Variable		VIF	1/VIF
Accounting Based Ratios	DE	1.36	0.736
	ROTA	1.82	0.548
	NPM	1.46	0.685
	AG	1.05	0.955
Market Based Ratios	PE	1.48	0.674
	DP	1.49	0.673
	LMCAP	1.24	0.804
	BM	1.28	0.781
	EPS	1.03	0.966
Mean VIF	1.36		

Source: Result output of STATA12

Table 9 illustrates the variance inflation factors for all the independent variables. The mean value of VIF is 1.36, less than 10, which confirms the absence of multicollinearity and VIF of individual variables does not exceeds 10 and therefore there is no need to eliminate any variable from the model.

With the help of STATA software, both fixed effect model and random effect model of panel data regression have been predicted and then, Hausman specification test is performed to compare the fixed and random effect model. The findings of both the model are shown in Table 10. The findings of Hausman test have also been shown in order to compare the fixed effect model and random effect model. The chi square value of Hausman test is 3100.31 which is significant at 1 per cent level. Thus, null hypothesis that the individual effects are uncorrelated with the other regressors in the model is rejected and fixed effect model is preferred. R2 within of fixed effect model is 0.4840 whereas R2 between is 0.1758 and overall R2 is 0.1496 which states that overall around fifteen per cent variations in stock returns are explained by the selected independent variables. F-statistics is found to be significant at 1per cent level indicating the fitness of the model.

Table 10: Results of Fixed Effect Model and Random Effect Model

Model		Fixed Effect Model		Random Effect Model	
Variable		Coefficient	Std. Error	Coefficient	Std. Error
C		-0.3269***	0.0099	-0.0762***	0.0059
Accounting Based Ratios	DE	0.0056***	0.0021	-0.0036**	0.0014
	ROTA	0.0012***	0.0002	0.0012***	0.0001
	NPM	0.0023*	0.0012	0.0003***	0.0001
	AG	0.0012***	0.0002	0.0002**	0.0001
Market Based Ratios	PE	-0.0001	0.0001	0.0001	0.0001
	DP	0.0012	0.0008	-0.0007	0.0009
	LMCAP	0.0267***	0.0008	0.0058***	0.0005
	BM	0.0623***	0.0014	0.0374***	0.0013
	EPS	0.0002**	0.0001	0.0001	0.0001
R-sq: within		0.4840		0.3909	
R-sq: between		0.1758		0.0047	
R-sq: overall		0.1496		0.2305	
F-statistic		272.92***		863.23***	
Hausman Specification Test Chi-Sq.-Statistics		**3100.31 (0.000)**			

The result of fixed effect model as depicted in Table 10 suggest the significance of debt-equity ratio, return on total assets, growth in total assets, size of the firm and book to market ratio in influencing stock returns at 1 per cent level whereas net profit margin and earnings per share are also found significant but at 10 per cent and 5 per cent level respectively. Price-earnings ratio and dividend payout ratio fails to prove their significance in influencing stock returns. The results of random effect model are also presented which suggests the significance of return on total assets, net profit margin, size of the firm and book to market ratio in influencing stock returns at 1 per cent level while debt-equity ratio and growth in total assets are also significant but at 5 per cent level.

Because of the presence of heteroscedasticity, it is desirable to take some measure to remove it or lessen its effect on the results. One such way is to use robust standard errors also known as Whites heteroscedasticity corrected standard errors (Gujarati, 2004). As before doing so we must know which model we have to use, to do so we first estimate both fixed effect and random effect model and then we conduct hausman specification test to know which model to prefer. As from table 10, it is clear that fixed effect model is preferred. Thus, fixed effect model with robust standard errors is estimated and its results are presented in Table 11. The effect of using robust standard errors are not on coefficient, it impacts the t-statistics as heteroscedasticity corrected standard errors is larger than OLS standard errors. Thus, it affects the significance of the variables.

Table 11: Results of Fixed Effect Model with Robust Standard Errors

Variables		Coefficient	Robust Std. Error
C		-0.3269***	0.0144
Accounting Based Ratios	DE	0.0056**	0.0027
	ROTA	0.0012***	0.0004
	NPM	0.0023	0.0001
	AG	0.0001**	0.00003
Market Based Ratios	PE	-0.0001	0.0001
	LMCAP	0.0267***	0.0012
	DPAYOUT	0.0012	0.0007
	BM	0.0623***	0.0032
	EPS	0.0002**	0.0001
R-sq. within		0.4840	
R-sq. between		0.1758	
R-Sq. overall		0.1496	
F-statistic		99.221***	

Note: ***, **, * indicate significance at 1, 5 and 10 per cent level respectively.
Source: Result output of STATA12

Financial leverage is measured by debt-equity ratio and it tells the proportion of debt and equity used in the business to finance assets. The relevance of debt-equity ratio in influencing stock returns was first documented by Bhandari in 1988. Bhandari (1988) showed that stocks returns are positively related to debt-equity ratio controlling for firm's size and beta. Trade-off theory hypothises that larger firms can easily get long term debt because of their lower bankruptcy costs they have. Larger firms use debt financing to avail the benefit of tax shield. Thus, positive relationship between debt-equity ratio and stock returns is expected (Idris and Bala, 2015). Analysis of fixed effect model with robust standard errors revealed that debt-equity ratio positively and significantly influence stock returns with the coefficient value of 0.0056. A similar conclusion in respect of debt-equity ratio was reached by most of the previous studies such as Bhandari (1988), Mukherji et al. (1997) and Menon (2017) whereas the findings are in contrast with the results suggested by Nirmala et al (2011) and Senyigit and Ag (2014).

Return on total assets is a profitability ratio that measures the management efficiency in utilising total assets in generating profits. Return on assets shows the amount of profit a firm makes from each unit of investment in assets (Palepu et al., 2010). Return on assets does not consider whether equity or debt is used to finance assets (Muhammad and Scrimgeour, 2014). Investors prefer a higher return on asset because it is a measure of firm's performance. Return on total assets found to be positively related with stock returns at 1 per cent level of significance. The findings of the study are in line with Arkan (2016), Allozi and Obeidat (2016), Anwaar (2016) and Bustami and Heikal (2019).Companies with rising net profit margins are efficient and better equipped to survive economic contractions. The net profit margin is a good indicator of stock's strength. It is calculated by dividing net profit by sales revenue. As investment value erodes, the best strategy is to hold stock that is fundamentally strong. It is expected that firms with high net profit margin will generate higher returns. The coefficient of NPM is 0.0023 which is positive but is found insignificant in influencing stock returns. The results are against the findings of Delen et al. (2013), Anwar (2016), Arkan (2016). Musallam (2018) also found insignificance of net profit margin in influencing stock

returns.

Investment and financing effect on stock return can be summarised by a simple measure of asset growth. Few studies such as Cooper et al (2009), Gray and Johnson (2011), Gautam (2017), Machado and Faff (2018) have considered asset growth as a determinant of stock prices. Annual firm asset growth rate is defined as a year over year percentage change in total assets. The present study portrays positive significant impact of asset growth on stock returns at 5 per cent level and the regression coefficient is 0.0001. The findings of the study are in contrast with the findings of Cooper et al (2009), Gautam (2017) and Machado and Faff (2018).

PE shows the degree to which the earnings per share are covered by market price. It helps to determine the value of firm. High PE suggests that investors are anticipating greater future earnings potential in comparison to lower PE firms. Various researchers recommended that PE specifies the future market return. Therefore, it can be referred that PE ratio can be used to predict future stock return. Price earnings ratio with the coefficient of -0.0001 is although negative in influencing stock returns but it fails to show any significance impact by fixed effect model. Huang et al., (2007) and Rehman et al., (2010) also recommended that the PE ratio have negative impact on stock returns but there results were significant.

Size of the firm as represented by natural logarithm of market capitalisation is found to be an important determinant of stock return. The coefficient value of LMCAP is 0.026. The results suggest LMCAP is positively and significantly influences stock returns. The findings of the study are in contrast with the findings of Banz (1981), Fama and French (1992), Connor and Sehgal (2003), Sehgal and Balakrishnan (2013) and others who favours size effect and suggest firm with small size generally results in higher return. However, the findings are in agreement with the results of Srinivasan (2012) and Arslan and Zaman (2014).

The dividend payout ratio is a key decision variable that affects firms' future investments, cash flows, risk and stock returns. The coefficient of dividend payout ratio is 0.0012 but it is not significant. The results are in contrast with the results of Malhotra (1987), Khan et al. (2012), Srinivasan (2012), Almumani (2014). Allen and Rachim (1996) and Challa and Chalam (2015) also suggests insignificance of dividend as a determinant of stock returns.

Book to market ratio tries to find out the undervalued and overvalued securities. Companies having higher book to market ratio are perceived as value stocks that means they are trading at cheaper rate as compare to their book value. The fixed effect model with robust standard errors portrays positive influence on book to market ratio on stock returns at 1 per cent level of significance. The result ties well with previous studies where from similar conclusion is drawn. The findings are in line with the findings of Mukherji et al. (1997), Connor and Sehgal (2003), Manjunatha and Mallikarjunappa (2011), Srinivasan (2012), Aziz and Ansari (2014) suggesting that value stocks generate higher return as compared to growth stocks.

Earnings per share is used as a measure of profitability. The findings of fixed effect model with robust errors suggest that it is positively related with stock return at 5 per cent level of significance and its regression coefficient is 0.0002 and is supported by the evidences of most of the studies like Obeidat (2009), Srinivasan (2012), Masum (2014), Muhammad and Scrimgeour (2014) and Almumani (2014).

Conclusion

This research has been performed to investigate the influence of company specific factors on stock prices in India. A sample of two hundred sixty three firms of National Stock Exchange Nifty 500 index is used for a period of eleven years ranging from 2007-08 to 2017-18. First of all, descriptive analysis has been done to assess the basic properties of the data pursued by correlation analysis and panel data regression to achieve the objective of the study. The findings of correlation analysis of overall data depicts that the selected factors return on total assets, net profit margin, asset growth rate, book to market ratio and earnings per share are found to be positively and significantly correlated with stock returns while debt-equity ratio, price earnings ratio, size of the firm and dividend payout are insignificant in influencing stock returns. Among the independent variables i.e. selected company specific factors, the highest significant correlation was found between price earnings ratio and dividend payout although both are positively associated with the correlation coefficient of 0.565 which is less than 0.80 and it recommends the absence of multicollinearity. After the assumption of Stationarity, heteroscedasticity, multicollinearity have been tested using Levin Lin Chu panel unit root

test, Breusch-Pagan- Godfrey test and variation inflation factor respectively. The results of assumptions testing proposed that data is Stationarity and there is not any sign of multicollinearity but assumption of homoscedasticity is rejected and to overcome its impact, model with robust standard errors is proposed. The outcome of hausman test favours fixed effect model. Thus finally fixed effect model with robust standard error is estimated. The findings of the model suggest that among the selected company specific variables, debt-equity ratio, return on total assets, asset growth, book to market ratio and firm size are influencing stock returns positively while net profit margin and price earnings ratio and dividend payout ratio fails to prove their significance in determining stock returns.

The results of the present study are expected to provide a deeper insight to the investors and analysts to understand the role of these factors in influencing stock returns. The study would also help the analyst in taking informed investment decision.

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