Determinants of Dividend :
An Empirical Study

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Abstract

The purpose of this study is to scrutinize the effect of various determinants available as per literature on dividend payout ratio of companies in India. The focus is on finding the answer to the question "Has the dividend puzzle as stated by Black (1976) been resolved yet?"This study uses techniques of factor analysis to discover the relationship between key variables. In all, fifteen variables have been taken to make the study more exhaustive. The study is based on a sample of NIFTY companies listed on National Stock Exchange for the period of 2003-2014. Results reveal that leverage and profitability have strong bearing on dividend policy of selected companies under study whereas liquidity, ownership and growth do not show much impact on the dividends. It provides a comprehensive framework that can be useful to companies, investors and regulators of companies in India.

I. Introduction

THE FINANCIAL WORLD has yet to develop a model indicative of the process by which corporations create an effective dividend policy. Dividends are part of the profits that is paid to shareholders at some specific time. This all depends upon the declared earnings of the companies which are based on the recommendations given by it directors. Thus, in the absence of any profits, dividends are not acknowledged. The company pays the company tax and other statutory taxes to government in case if the firm earns the profits. For any profit making organization, paying taxes has become the prime responsibility. The levies, no doubt, condense the profits available at the disposal of the organizations. The profits are either to be maintained or dispersed as a dividend to shareholders of the company. Modigliani and Miller (1961) theory has

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raised the area for the mammoth debates and investigation on dividend policy. For decades, several hypothesis and conjecture have been made regarding whether such taxes paid by firms truly affect their model of dividend policy. Dividend policy is the swap between retained earnings and disbursement of cash or issuing new shares to shareholders.

The decision of the companies to pay or not to pay dividends depends on many motives. For example, the dividend payout is important for investors because (a) dividends provide conviction about the company's financial well-being; (b) dividends are eye-catching for investors looking to secure current income, and; (c) dividends assist maintain market price of the share. Organizations that have a long-standing history of stable dividend payouts would be negatively affected by lowering or omitting dividend distributions. These companies would be positively affected by increasing dividend payouts or making additional payouts of the same dividends. Moreover, companies without a dividend history are generally viewed constructively when they announce new dividends. Dividend decisions may enhance the market value of an organization but alternatively it may indicate the lack of availability of internal funds and dependence on the external sources for the expansion needs. Moreover, a good management always try to trade off between the shareholder's anticipation and the long term interest of the organization. There are many factors that influence the dividend policy of the firm. These determinants may considerably fluctuate from country to country. Dividend decision has always been considered as an important financing decision of a company. This has fascinated many academicians and researchers in both developed as well as developing countries. Earlier empirical studies have paid attention mainly on developed economies. The undertaken study examines the relationship between determinants of dividend payout ratios from the context of a developing country like India. The study looks at the issue from emerging markets perspective by focusing specifically on Indian manufacturing sector.

The present study is a comprehensive study as it adds to the accessible literature by investigating as many as nineteen financial variables. No previous Indian Studies, except very few (Gupta & Banga 2010), have examined so many variables in the area of dividend policy decisions.

II. Literature Review
There are many theories that explain the reason behind why an organization pays dividend. These include agency cost theory, clientele inclination for dividend income and signaling theory. Lot of empirical and theoretical work has been done by the researchers to provide a deep insight into the dividend puzzle. The first pioneer to study the dividend behavior was Lintner (1956) who study corporate dividend behavior of 28 well-established industrial companies for the period of 1947-1953. He used the technique of regression analysis and intensive interviews with managers who are accountable for the dividend decisions. Lintner initiated that managers prefer to have a constant flow of dividends and thus make partial adjustments for targeted dividend payout ratio instead of making huge changes in the payouts.

On the other extreme, Miller and Modigliani (1961), scrutinized the dividends and declare them as irrelevant. They are of the view that in the given perfect capital market, the dividend payments do not affect the value of the firms and thus it is irrelevant to pay or not to pay the dividends. He argued that value of the firm is affected by the distribution of cash flows that come from the investment undertaken. He finally made a point that it is earnings that affect the value of the firm. The distribution of earnings in form of dividends has nothing to do with the values of the firms.

There are different ways to find out the factors that affect the dividend policy decision. Some researchers used the empirical and secondary studies with help of data to find out the major determinants whereas the others used the behavioral approach and directly went to the managers to ask their consideration while making dividend decisions. The response from the various surveys is being compared with the theoretical models in order to state whether or not these decisions are consistent with the academic theory or not (Baker, Powell and Veit, 2001). Bernstein (1996) stated that "... dividends, in and of themselves, do not matter, provided managers avoid driving down the spread between return on earnings and the cost of capital."

Fama and Babiak (1968) during 1947-1964 studied the determinants of dividend payments by using a regression model analysis, simulations and prediction statistical tests. He declared that net income appears to give a enhanced measure of dividend policy than cash flow. The result given by Fama and Babiak (1968) and Fama (1974) are in line with Lintner's view that managers prefer a stable dividend policy, and are unwilling to increase dividends to a level that cannot be persistent. Consequently, these researchers made a remark that changes in per share dividends are mainly a function of a target dividend payout based on earnings and the last period's dividend payout.

Pattern of past dividends and projected future earnings are the key determinants of dividend policy as per research of Baker, Farrelly and Edelman, (1985) and Farrelly (1986). They analyzed the reaction given by companies under the different sectors of utility, manufacturing, and wholesale/retail firms. They concluded that managers are mainly concerned with the regular dividend payment and the payment pattern does affect the value of the firm. Kim (1992) scrutinized the impact of transaction costs and agency costs on dividend policy of 357 industrial firms during 1979-1981 through cross sectional tests of the models. Kim accomplished that transaction costs and agency costs effect firm's dividend payout decision. Bond and Mougoue (1991) observed whether the partial adjustment model that indicates the speed of adjustment and target dividend payout rates are a precise portrayal of corporate dividend policy. Bond and Mougoue agreed that the partial adjustment model does not produce exceptional measures of the dividend policy of the individual firm.

Pruitt and Gitman (1991) inspected the financial managers of the 1,000 largest US firms. Their results propose that current and past year profits, variability in yearly earnings and increase in earnings have significant influence on the amount of dividends paid. They also argued

that prior years' dividends have an imperative effect on current dividends. Sharma and Rao (1992) analyzed the signaling behavior of firm's dividend payout decision. They agreed that dividends are apparent as signals from performance, market and management's point of view. Karak (1993) studied the association of Indian Company's profits and dividend payout decision. This study concluded that Indian companies' follow the conservative dividend policy and prefer to use internal resources for expansion purposes.

Rozeff (1982) had commenced the acceptance of agency cost in dividend determinant. He tested the agency theory of Jensen and Meckling (1976) by building a model of optimal dividend payout in which increase in dividends led to decrease agency costs, but raise transaction costs. He demonstrates that dividend payout is negatively related to the percentage of stock held by insiders. In addition, he finds that outside shareholders claim a higher dividend payout if they own a higher portion of the common equity and if their ownership is more diffuse.

Alli, Khan and Ramirez (1993) discover that dividends do not communicate information concerning a firm's future cash flows. Their study states that there is an contrary relationship amongst beta, firm's capital expenditure and financial slack to the dividend payout. Han, Lee and Suk (1999) considered institutional ownership under agency cost and tax based hypothesis to examine the dividend policy behaviour. They report that tax-based hypothesis is more suitable in the case of institutional investors as they support a larger dividend payout. Mayers (2004) have noticed a valuable support for earnings, profit margin, institutional ownership and debt-equity ratio on the dividend decisions. Eriotis (2005) concludes that increase in earnings do not affect the dividend distribution pattern of firms. Kania and Bacon (2005) unearth that variables such as sales growth, expansion and insider ownership have a harmful impact on dividend decision but, opposing to the existing literature, institutional ownership has an converse relation with dividend payout. Denis and Osobov (2008) report that for countries such as United States,Canada, United Kingdom, Germany, France and Japan, the tendency for paying dividends declined during 1994-2002. They also conclude by stating that the international evidence does not support the investors' preference for dividend and they prefer the distribution of free cash flow as the ruler element of the dividend decision.

Fama and French (2001) studied and concluded that firm's size, profitability, and investment opportunities are main element that affects the dividend policy. They said that larger and profitable firms are more likely to pay dividends, whereas firms with added investment opportunities are less likely to pay dividends. Narasimhan and Vijayalakshmi (2002) studied the relationship of insider ownership and dividend behavior of firms and saw no influence of the ownership on dividend policy. Aivazian, and Booth (2003) found that profitability affects dividend payments, higher debt ratios correspond to lower dividend payments, and market-to-book ratio has a positive effect on dividend payments for both U.S and emerging firms.

There are many Indian studies in respective context. As per the research by Mahapatra and Sahu (1993), current earnings, past dividends and cash flows are chief factors that have a brunt on the dividend decision. The results of this study are in contrast to Lintner's model. As per the study of Bhat and Pandey (1994), Current year's earnings, past dividends pattern, expected future earnings; changes in equity base of the firm have a bearing on the dividend decisions.With a unique approach, Narasimhan and Asha (1997) study the changes in dividend tax regime projected in the Indian Union Budget of 1997-98. They analyze the brunt of dividend tax on the dividend decisions of the firms. Mohanty (1999) deliberated on almost 200 Indian companies for a period of fifteen to recognize the connection between dividend-paying and bonus-issuing behaviour of companies. He concluded that in the Indian context, dividend rate is an important determinant of dividend policy instead of the dividend payout ratio.

Anand (2002) recognizes the factors that CFOs think in formulating dividend policy of corporate India. The study takes a sample of 474 private sectors and top 51 public sectors top firms of corporate India based on market capitalization. He discovers that Indian companies employs dividend policy as a signaling mechanism to transmit information about their present and future prospect and thus, affects their market value. Thus, dividend policy really does matter to the CFOs and the investors. Reddy (2002), analyzes trends and determinants of dividend policy of Indian corporate firms. The period of this study is from 1990 – 2001 and the main aim of this study is to scrutinize the dividend behavior of Indian corporate firms. Three factors viz., number of firms paying dividend, average dividend per share and the average payout were investigated by him. His study makes it clear that not all the firms consistently pay same level of dividends. Initiators have always paid higher dividend as compared to other payers. He concludes that the information content in omission of dividends is different from information content in dividend initiations. The companies expect lower earnings in the future in case of omission of dividends whereas the same is not true in case of dividend initiations.

Kumar (2006) examines the connection between dividends payout policy and corporate governance for a group of Indian corporate firms for the period 1994–2000. He finds a positive relationship of dividends with earnings and dividends trends. Debt-equity ratio has emerged as a factor which was negatively connected, whereas, past investment prospects show a positive impact on the dividends. Corporate and directors ownership is found to be positively related with dividends but the Institutional ownership has an inverse effect. But in this study he does not find any evidence in favour of a relationship between foreign ownership and dividend payout growth.

Bhayani (2011) examines the dividend policy of 1428 listed manufacturing companied in India. The study concludes by supporting Lintner Models & shows that an Indian firm relies both on past dividends & current earning in deciding the current period's payment of dividend. Gupta and Banga (2010) reexamines the various factors that have an influence on dividend policy of the firms. This study has taken 15 financial

variables to assess the effect of those variables on dividend decisions. The broad areas for these variables were liquidity, financial leverage, ownership, profitability and growth. The result of the study shows that leverage, liquidity, ownership structure and growth showed expected signs whereas profitability did not behave as expected. Leverage and liquidity, the two factors, were having a strong association with dividend rate of Indian companies but leverage found to be negatively related. Kanwal and Kapoor (2008) study examines the factors affecting dividend payout ratios of CNX IT listed companies in India. They report that only cash flows indicating liquidity and beta indicating risk are the foremost determinants. Thus over the years diverse strings of research have materialized in the area of dividend policy both in India and abroad.

III. The Study : Objective, Data and Research Methodology
3.1 *Objective of the Study*
To determine the prominent factors affecting dividend policy of the companies listed under Nifty.

3.2 *Data and Research Methodology*
3.2.1 *Data and Sample Selection*
The dividend payment patterns of all the companies that are listed for trading on National Stock Exchange (NSE) during the period 2003 to 2014 are employed for analysis. NIFTY has been chosen for the study purpose as it is a stock index that is exceedingly well diversified including 50 stocks which cover companies ranging from 23 diverse sectors of Indian economy. It is utilized for benchmarking funds, index funds and derivatives on the basis of index. Nifty is a key indicator that indicates the dynamics of India's Stock Exchange as well as it represents approximately 60 % of entire market capitalization in NSE (National Stock Exchange).

The data has been taken from Prowess database of the Centre for Monitoring Indian Economy (CMIE). Only the final cash equity dividends paid by the companies have been considered for the study purpose.

3.2.2 *Descriptions of Variables*
Researchers have employed various financial variables over the years that have a probable effect on the dividend policy (A list of the same is given in the Annexure 1). Out of such variables, present study reflects fourteen variables. DPR (Dividend Payout Ratio) is a dependent variables and rest of the variables are independent in nature. This study is analyzing the impact of these independent variables on the dividend decisions. The validation for choosing such variables is as follows.

Profitability has always been a dominant factor that affects dividend policy of any firm. Profitable firm are willing to pay higher amounts of dividends to transmit their good financial performance (Ho, 2003; Aivazian et al., 2003). Thus, a positive relationship is anticipated among firm's profitability and its dividend payments. We take Net Profit Ratio (NPR), Profit after tax as % of Net Worth (PAT-NW), Return on Investment (ROI) and Return on Equity (ROE) as a proxy for profitability. Thus, they represent our first, second, third and fourth variables in study.

The relationship between the ownership control and dividend payment is also valuable. The control of the firm may lie with the promoters (insider owners) or the directors or with foreign investors. The insiders would like to shun surplus payment of dividend whereas institutional investor can be indifferent towards the demand for the dividend (Han, Lee and Suk, 1999, Kumar 2006). Thus, promoters' shareholding (PS) and Institutional shareholding (IS) represent the fifth and sixth variables respectively.

The availability of cash tells a lot about the dividend policy of the companies. More the availability of cash, more are the chances to pay dividends. And since most of companies prefer to pay dividends in cash, it becomes important for them to have enough liquidity with them so as to be solvent after the dividend payment. In our study, CFO (cash from operation) and Current Ratio (CR) are indicators of liquidity position of the firm and thus becomes our seventh and eighth variable.

The firm with high leverage will lead to huge fixed payments for external financing and will pay less dividends (Alli, Khan and Ramirez, 1993 and Rozeff, 1982). The fixed payment on account of external financing will also lower the dividend payment. (Rozeff,1982). The firm with high leverage will be termed as risky one. Whereas if the retention rate is high, there will be less need for external financing and thus will result in more dividend payments. Similarly, more return will reduce the burden of firm to depend upon the external financing. So, we take Debt Equity Ratio (DE ratio), and Ratio of Retained Earning to Equity (REE) as our ninth and tenth variables.

In dividend payment, it is proven that growth opportunities play a very important role. The firm with the high operational growth and growth in profits will pay more dividends (Kania and Bacon, 2005). The growth factor is represented by annual sales growth (ASG) and earnings per share (EPS) growth. The growth rates of ASG and EPS are taken as eleventh and twelfth variable.

Market Capitalization and net worth are the indicators for size and expansion of the firm and thus have been taken as thirteenth and fourteen variables.

IV. Empirical

In this study we have acknowledged fourteen variables from the present literature that are considered while designing a dividend policy. In the first step we employ factor analysis on the data to extract the governing factor from these nineteen variables and then on the factors extracted, the multiple regression is performed.

4.1. *EmpiricalResult*

The technique of Factor Analysis implies the correlation amongst the observed variables. After that, Kaiser-Mayer- Olkin Test (KMO) which is a measure of sampling adequacy was conducted for each variable and the results indicated that it was acceptable as its value is more than 0.5. Value of less than 0.50 implies that factor analysis will not produce distinct and reliable factors. Our analysis gave (a) value of 0.548 that

shows that pattern of correlation amongst the variables is compact enough and thus factor analysis can provide us reliable broad factors. (b) all variables in research had eigen values larger than 1; (c) The Principal Component Analysis (PCA) has been used as the factor extraction method to recognize distinctive clusters of experimental variables. The large factors are again exposed to Equamax orthogonal rotation (Alli, Khan and Ramirez, 1993). Bartlett's test of Sphericity in Table I show that Bartlett's test has a chi-square value of 360.480 which is significant for $p < 0.01$ and this substantiate that factor analysis is appropriate.

Table I
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.548
Bartlett's Test of SphericityApprox. Chi-Square	360.487
Df	91.000
Sig.	0.000

Source: Self Computed

Table II provides the rotated factor matrix via Equamax Orthogonal Transformation i.e., a matrix of factor loading for each variable upon each factor. The factor loadings of less than 0.30 have been concealed and are not exhibited.

Table II
Rotated Component Matrix

	Components				
	Profitability	Ownership Control	Liquidity	Leverage	Growth
CR Times	-0.779	—	—	—	—
NPR%	0.788	—	—	—	—
PAT as%-NW	0.690	—	0.498	—	0.333
ROE	0.935	—	—	—	—
CFO	—	—	0.812	—	—
MC	—	—	0.885	—	—
NW	—	—	0.866	—	—
DE ratio times		—	—	-0.829	—
ROI	0.576	—	—	0.604	0.366
REE	—	—	—	0.839	—
EPS-Growth %	—	—	—	—	0.756
ASG	—	—	—	—	0.681
Promoter Shareholding %	—	-0.612	-0.600	—	—
Institutional Shareholding %	—	0.676	0.425	—	—

Source: Self Computed

The very first broad factor is given as Profitability. This consist of Net Profit Ratio (0.788), ratio of profit after tax to net worth (0.690), return on equity (0.935) and current ratio (-0.779). This factor indicates that higher the profit of a firm, greater will be the dividend payout. The negative current ratio is an indicator of high profitability. Thus there exist a positive relationship between profitability and dividend payment (Denis and Osobov 2008, Myers 2004). Our result justifies the same.

The promoters' shareholding (-0.612) is negatively correlated and the institutional shareholding (0.676) is positively correlated to our first factor Ownership Control. It is evident that higher control tends to reduce the

dividend payment. A company having a high inside ownership will propose a low dividend payout (Bacon, 2005) whereas institutional owners are keen to influence the high payouts in order to enhance the control to monitor their matter of external financing (Myers, 2004; Han, Lee and Suk, 1999). The foreign institutional shareholding is not been taken due to lack of data for NIFTY companies and thus ownership impact can be further studied taking all the shareholding together.

The next factor include high positive loading for Cash from Operation (0.812), Market Capitalization (0.885) and the Net Worth (0.866). We name this factor as Liquidity. The availability of cash helps the firm to distribute the dividend easily and thus more liquid the firm, easy would be the dividend payments. And it is also believed that larger the size of the firm, the greater the availability of free cash flows and the greater will be the dividend payout.

The fourth factor incorporates high negative loadings for Debt Equity Ratio (-0.829), Ratio of Retained Earnings to Equity (0.839) and Return on Investment (0.604). We coin this factor as "Leverage". Larger the ratio of retained earnings to equity more will be availability of free cash flows within the organization (Benito and Young, 2001). The firms who are utilizing their retained earnings would like to pay high dividends as compared to firms who are dependent upon the external financing (equity and debt). Thus, payment of high interest (fixed charge) will result in lesser dividend payment (Alli, Khan and Ramirez, 1993 and Rozeff, 1982). Therefore, results signify there is an inverse relationship between dividend rate and leverage of firm.

The last factor termed as "Growth". It comprises Annual Sales Growth (0.877) and Earning Per Share Growth (0.667) which has a positive relationship with this factor. Growth opportunities play an important role. Higher the operational growth and growth in profits of a firm, higher shall be the dividend payments by the firm (Kania and Bacon, 2005).Signaling theory showed that it is smoother for higher growth firms to payout dividends to the shareholders.

4.2 *Empirical Result of Regression*

Once the factor analysis is performed on fourteen variables, multiple regression is performed to monitor the brunt of the fourteen independent variables on the dividend payout. The dividend Payout ratio is a dependent variable and the five factors extracted from factor analysis viz. Profitability, Ownership Control, Liquidity, Leverage, and Growth are taken as the independent variables. Since the factors used in the regression model are resulting through the orthogonal transformations, they are free from multi-collinearity problems (Ali, Khan and Ramirez, 1993).

Additional tests for normality, heteroscedasticity and autocorrelation show that data is normally distributed and there are no related problems.

Table III provides the regression model result. The R-square is 0.399 i.e. around 40 per cent of the variability in dividend payout ratio is explained by the independent variables tested. The F Statistic of 7.507 is significant at 5% level of significance. The Durbin-Watson result of 2.105 signifies that autocorrelation is not present among independent variables.

Table III
Regression Model Summary

R-Square	F	Durbin-Watson
0.399	7.507	2.105

Source: Self Computed

Table IV shows the regression result. We have analyzed five factors. The table shows that factor, Liquidity, Leverage and Growth of the firm have the negative relationship with the dividend payout ratio whereas the factor ownership and profitability and have the positive relationship with the dividend payout ratio. Tuned with the literature, leverage position of the firm has a negative relation with the dividend payout (-1.650) and is significant at 5%level of significance. More the firm bend towards external financing, more and more risky it will be and thus lesser would be the dividend payments.

Table IV
Regression Results

Variables	Standardized Coefficient Beta	t-value	Sig.
Equity Dividend	—	3.638	0.001
Ownership Control	0.122	1.091	0.281
Leverage	-1.650	-5.879	0.000
Liquidity	-0.009	-0.083	0.934
Profitability	1.590	5.430	0.000
Growth	-0.011	-0.088	0.930

Source: Self Computed

Similarly profitability (1.590) shows a positive relation with the dividend payout and is significant at 5% level of significance. The ownership control representing promoter and institutional shareholding has a positive coefficient (.122) but is statistically not significant. Liquidity shows the negative relationship (-0.009) with the dividend payment but not significant. Contrary to the literature, growth has shown a negative relation with the dividends (-0.011) but is statistically not significant. Thus, finally the result of our study signifies that there are two important determinants of dividend policy i.e. Leverage and Profitability.

V. Conclusion

Despite of the voluminous research on dividend policy, no momentous result can be judged. The present study reexamines the factors of corporate dividend decision of Indian companies listed on the National Stock Exchange during the period March 2003–March 2014. The study uses Principal Component Analysis for scrutinizing fourteen variables that have a bearing on the dividend decision of a firm. Our results provided five broad factors viz., Liquidity, Leverage, Growth, Ownership, Control and Profitability. These factors were then subjected to multiple regression with dividend payout ratio as the dependent variable. The results of the regression analysis showed that only two factors i.e. Leverage and Profitability have a strong relationship with the dividend payout of the

companies under study. Leverage was found to be negatively associated with the dividend payouts whereas profitability is positively related with the dividend decisions. Our study is based on the result drawn from all the financial factors. There can be non financial factors like collaboration, corporate governance, attitude and behavior of the shareholders and management and some other that can influence the dividend policy decisions of any company. The same can be study for the further analysis and inference about the dividend policy decisions of the companies.

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Annexure I
Definition of Variables

Variables	Variable Abbriviation in study	Depiction
1. Dividend Payout Ratio	DPR	It is percentage of dividend given by the company in a year out of its earnings (Profit after Tax). The average for 10 year is used.
2. Current Ratio	CR	This is calculated by dividing the amount of current assets by current liabilities. The average for 10 year is used
3. Net Profit Ratio	NPR	This is calculated by dividing net profit (amount left at the end of the accounting year for appropriations) by net sales. The average for 10 year is used.
4. Debt-Equity Ratio	DER	Calculated as total debt of the company divided by its total equity. The average for 10 year is used.
5. Return on Investment	ROI	Computed as ratio of profit before interest, tax and dividend by capital employed of the firm. The average for 10 year is used.
6. Cash From Operations	CFO	Measured by net profit before tax and extraordinary income adjusted to non-cash charges and receipts and working capital changes. The average for 10 year is used.
7. Annual Sales Growth	ASG	Measured by taking the ratio of change in net Sales. The average for 10 year is used.
8. EPS Growth	EPS	Calculated as the change in Earnings Per share (EPS) in an accounting period of the company. The average for 10 year is used.
9. Ratio of Retained Earnings to Equity	REE	Calculated by dividing retained earnings of firm by equity of a firm. Retained earnings are amount of net profit after dividends are paid. The average for 10 year is used.
10. Promoter's Shareholding	PS	It is the percentage of holdings of Indian promoters, foreign promoters and persons acting in concert in a company. The average for 10 year is used.
11. Institutional Shareholding	IS	It is the percentage of holdings of financial institutions, banks, mutual funds and other institutions in a company. The average for 10 year is used.
12. Market Capitalization	MC	It is defined as the multiplication of the yearly closing price on 31st December and the number of outstanding equity shares. The average for 10 year is used.
13. Net Worth	NW	It is the amount by which the assets of the company exceed its liabilities. It is an important indicator of how much the entity worth is. It gives the snapshot of history of the company. The average for 10 year is used.
14. Return on Equity	ROE	The amount of net income returned as a percentage of shareholder equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. The average for 10 year is used.

Source: Self Compiled