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# Dividend Policy of BSE Indexed Firms – An Analysis of Determinants and Trend

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Abstract: The current paper critically examine the dividend pattern of Indian companies listed in SENSEX (represent top 30 financially sound and stable companies of Bombay stock exchange, BSE) for the period of 2012-2016. The paper explains the observed dividend pattern with the help of defined determinants and statistical method. The statistical study of trend of dividend payout ratio and dividend per share ratio of SENSEX shows no increasing or decreasing pattern; rather they follow a sticky or predefined payout dividend pattern. The dividend payout ratio or dividend per share ratio is not much affected by the changes in the financial ratios of companies. Further, companies which are paying more dividends are profitable, larger in size and higher growth doesn't seem to be true in context with SENSEX firms. There are companies with larger size are paying less dividend while with lower size paying higher dividend. The paper will examine factors or determinants of dividend policy which are outcome of previous researches in context with Indian companies listed in SENSEX. Concepts developed by previous researches may or may not be applicable for SENSEX.

Keywords: Dividend policy, SENSEX, dividend payout ratio, dividend per share ratio

## **INTRODUCTION**

In corporate finance, dividend behaviour has a significant impact on its various stakeholders, whether it is manager or any investor. Dividend is the term coined for the profits being distributed among stakeholders. For Investors, dividend distributed today or in future date is a source of income, so they value the firm accordingly. For managers, dividend decision has impact on the future investment, higher the dividend lesser fund for investments. For lenders, dividend amount has impacted on their claim to the firm, higher the dividend lesser amount left with firm to pay their claims. So, each stakeholder has different perspective regarding dividend payout, they evaluate the firm as per their interest.

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However, Modigliani and Miller (1961) stated that in perfect condition, dividend behaviour of firms has no impact on the valuation of the firm. So investors and lenders may act indifferent as the value of the firm remains unchanged. Managers may be indifferent as they can manage funds for future investment by other means like borrowings.

But the situation is different when we talk about real and practical scenarios, as no condition is perfect. The imperfect conditions arise when there is differential tax treatment of dividend payment and capital gain, higher the tax on dividend lesser the interest of investors. Similarly, if borrowing cost increased imperfect conditions may arise. It may result in lower payout of dividend payout. Further information asymmetry and floatation costs can create imperfect conditions. These are the factors which are used by managers to give positive or negative signal to outside investors. So MM theory fails when imperfect condition arises, other factors has to be defined and discussed in those scenarios.

Dividend behaviour in the corporate sector is governed by a number of determinants. Various researches have been done across borders to establish and study those determinants and their relationships with dividend behaviour. The details about the research have been discussed in length in the literature review of this section. Below is the list of key variables identifies as per available literature along with the relationship with dividend payout ratio of the firm.

Profitability: The profitability or capacity to earn plays an important role in determining dividend payment. It has positive relationship with dividend payout capacity of a firm. Higher the earning or profit of a firm higher its payout capacity.

Cash flow: Actual cash flow also has a positive impact on the dividend payout ratio of the firm. Earnings before depreciation actual consider as the earning as depreciation depends upon others factors, so considering profit ratio, actual cash flow i.e PAT + depreciation has to consider.

Lagged behaviour: Lagged behaviour has also positive impact on the dividend pattern of the firm. The past dividend helps in determining stable dividend behaviour. If a firm has to achieve a certain and stable dividend in long run then the past dividend behaviour has to consider.

Debt equity ratio - External finance is a general requirement of a firm depending upon the firm requirement. If the internal resources are not much, the external requirement of fund increases. Higher the internal flow of money, lesser the requirement of external finances and vice versa. It can be interpreted in two ways. First if dividend is higher and the internal resources are less, then demand for borrowing will be large and the debt equity ratio will also be higher. Similarly lower debt equity ratio firms may avoid borrowing capitals so dividend payment will be less. Second, if the debt equity ratio is high then firm will pay fewer dividends as they have to first clear their debt so amount for dividend available will be less. It can be concluded as debt equity ratio has both positive and negative impact on the dividend behaviour of the firm.

Sale growth - An increase in sales signifies there is an increase in working capital requirement which results directly in the fewer funds available for investments, dividend or others. So, sales growth has a negative impact on the dividend payout ratio.

Liquidity – Liquidity position of a firms determine the availability of funds with the firm for its activities. More liquid position more funds for dividend payment. Current ratios and quick ratios can be used for this study. It has positive relationship with dividend.

Share price behaviour – Researches have concluded that the share price of current year has a positive relationship with the current dividend payout ratio.

Capital expenditure – It has negative impact on the dividend as more fund required for capital expenditure, less fund available for dividend.

Retained earnings – If a firm decides to retain its earnings for future investment, less fund will be allocated for dividend payout. So it has adverse effect on dividend payout.

Size of the firm – A larger firm has stable cash flow and diversified portfolio which enables the firm to distribute more funds as dividend. So a positive relation is expected.

Beta – Higher the beta, lower the dividend behaviour.

Tax rates – If the tax rates are high on dividend payment, then less dividend will be distributed. So increase in tax rates adversely affects the dividend payment.

There are other factors also like managers perspective, asymmetric information which are not discussed in this paper. This paper has restricted its determinants in respect of financial ratios of a firm only. The scope of research is wide here to consider other determinants other than financial position of the firm.

# **SENSEX (BSE INDEXED FIRMS)**

The S&P BSE SENSEX (S&P Bombay Stock Exchange Sensitive Index), also called SENSEX or BSE 30 is a float market weighted stock market index of 30 financially sound and well established companies listed on Bombay Stock Exchange. These 30 companies are most actively traded and are representative of various sectors of the Indian Economy. It is regarded as the pulse of the domestic stock markets in India. The base value of SENSX is 100 taken on 1979. Today the value is above 28000 points.

The BSE has some reviews and modifies its composition to be sure it reflects current market conditions. The index is calculated based on a free float capitalisation method, calculation based on market capitalisation variations. Instead of using a company's outstanding shares it uses its float, or shares that are readily available for trading. Free floating capital implies total capitalisation less Directors shareholding. As per free float capitalisation methodology calculation, the index at any point of time reflects the free float market value of 30 established company stocks relative to a base period. The market capitalisation of a company is determined by multiplying the price of its stock by the number of shares issued by corporate actions, replacement of scrip. The long run rate of return on the SENSEX works out to be 18.6% per annum. The present study will consider 28 companies which are common throughout the study period.

#### LITERATURE REVIEW

A number of significant determinants have been identified in till date research studies which impact the dividend pattern of the firm. Profitability ratios have long been considered as the most significant indicator of the firm's capacity to pay dividends. Linter (1956) developed a model which was based on 28 industrial US firms and the determinant identified were lagged dividend i.e previous dividend and current earning. Managers decide dividend distribution by considering those factors.

Pruitt & Gitman (1991) surveyed financial managers of the 1000 U.S. firms and reported that profits is the important factor and found that future risk of earnings also determine the firms' dividend policy. Higgins (1981) indicated a positive relationship between growth and financing needs: rapid growing firms have more external finance needs because sales does not suffice its working capital needs. Rozeff (1982), Lloyd, Jahera & Page (1985) and Collins, Saxena & Wansley (1996) all documented that there is significant negative relationship between historical sales growth and dividend payout.

Fama and French (2001) studied the decline pattern of dividends paid by corporate firms in US and the factors responsible for such behaviour. They concluded the decline reason as firm characteristics of changing size, their earnings and its growth. A decline in dividends, according to Fama and French, may also be due to lower cost of transaction, the preference towards capital gains and improved corporate governance practices.

In Indian studies, a number of researches have been carried to determine factors affecting dividend policy of companies. Kevin (1992) undertook the dividend distribution pattern of 650 non-financial companies which has net sales income of more than one crore rupees. He documented that a sticky or same dividend policy was in practice and also concluded that a change in profitability has less or no significant on the dividend pattern. Profitability does not impact much to the dividend payout rather they follow a same dividend payment pattern per year.

Bhat and Pandey (1994) undertook the managers' perceptions as major determinant of dividend policy. Their study was focused on 425 Indian companies. They documented that on an average profit-making Indian firms have distributed about one-third of their net earnings contributing 43.6 % as average dividend payout ratio. They also found variation in dividend pattern of different industries. Further, they concluded that the managers perceive current earnings as the most important factor influencing their dividend policy followed by patterns of past dividends. They also add that two other variables growth and expected future earnings have significant influence.

Mishra and Narender (1996) examined the dividend policies of 39 state-owned enterprises in India for the period of 10 years from 1984-85 to 1993-94. They conclude that earnings per share (EPS) i.e profitability ratio are major determinants in decision of dividend payout of State of Enterprises.

Krishnamurty & Sastry (1971), Dhameja (1976) also found cash flows as a major factor followed by net earnings in determining dividend policy of firm. Anand (2002) examined the results of 2001 survey of 81 CFOs of Business today-500 companies in India to zero down the factors of the dividend policy decisions of the corporate India. The findings concluded that most of the firms have target dividend payout ratio i.e. they are sticky with their dividend policy and were in sync with Lintner's model on dividend policy. CFO's use dividend behaviour as a signalling mechanism to spread information on the present and future prospects of the firm, affecting its market value. The dividend payout of firm will speak about company's financial health. The managers frame dividend policy after taking into consideration the investors' preference for dividends and clientele effect.

Reddy (2002) studied dividend behaviour of Indian corporate firms for the period 1990-2001, concluded more profitability, large in size and higher growth has not much effect on higher dividend payout. Tax preference theory, differential tax rates of dividends and capital gains also not hold true in the Indian context. Further dividend omission is related to future earnings. Reduction in dividend payout is related with the current loss of the firm.

Oza (2004) analysed 30 non-financial Indian companies dividend policy. He concluded firm's current earnings has much significance followed by pattern of past dividends i.e lagged dividend on deciding dividend payout ratio.

Reddy & Rath (2005) analysed dividend pattern for large sample of stocks traded on Indian markets documented that dividend–paying companies were less likely to be larger and more profitable than non-paying companies and growth opportunities do not seem to have significant impact on the dividend policies of Indian firms.

Singhania (2005) studied Dividend Pattern of Indian firms in the 590 listed Manufacturing firms of India over the period of 1992-2004. The study marked that average dividend per share increased significant during the study period. Bhayani (2007) has undergone a study on the dividend pattern behaviour of BSE 30 companies of India for the period of 1996-1997 to 2004-2005. The results reflected that the firms follow Litner model of dividend.

Following Reddy (2002) and Fama and French (2001), the current analysis also tries to examine the impact of growth, size and profitability on the dividend payout or pattern of firms. Hence the present study will analyze the impact of profitability, size and growth on dividend policies of BSE indexed firms.

# **OBJECTIVES**

The objectives are

- A) To examine the trends in the dividend payment pattern of BSE indexed firms.
- B) To anatomise the impact of firm characteristics like growth, size and profitability on the dividend payment pattern of firm

The objective will helps to focus the present study to analyse dividend paid trends and attempts to analyze the various determinants of these trends with the help of statistical tools and other financial ratios like profitability etc. The other determinants like lagged dividends, beta, transaction costs, asymmetrical information, agency cost etc will not be included in the present study, considering the limitation of the study.

## **HYPOTHESIS**

The following hypothesis will be framed and tested with the help of correlation and regression analysis.

- a) There is no relationship between size and dividend payout of firm (H01)
- b) There is a relationship between size and dividend payout of firm (H11)
- c) There is no relationship between growth of firm and dividend payout of firm (H02)
- d) There is a relationship between growth of firm and dividend payout of firm (H12)
- e) There is no relationship between profitability ratio and dividend payout of firm (H03)
- f) There is a relationship between profitability ratio and dividend payout of firm (H13)

#### DATABASE AND METHODOLOGY

#### **Database**

Financial data including ratios of SENSEX (BSE indexed companies) traded in Bombay Stock Exchange during the period 2012-2016 are employed for analysis. The data has been sourced from BSE website. For the purpose of this study, only final cash dividends are considered. Indian companies pay once dividend during a year. There are 30 companies listed in SENSEX, but investigations are based on 28 companies which are consistent inclusion in SENSEX list during the study period. They are as below:

- 1. Adani ports
- 2. Asian paints
- 3. Bajaj Auto Ltd
- 4. Bharti Airtel Ltd
- 5. Cipla Ltd
- 6. Coal India Ltd
- 7. GAIL
- 8. HDFC
- 9. HDFC Bank
- 10. Hero Motorcorp
- 11. Hindustan Unilever Ltd
- 12. ICICI Bank
- 13. Infosys
- 14. ITC
- 15. Larsen
- 16. Lupin Lts
- 17. Mahindra & Mahindra
- 18. Maruti Suzuki
- 19. NTPC Ltd
- 20. Oil and natural gas corporation Ltd
- 21. Power Grid corporation of India
- 22. Reliance Industries Ltd
- 23. State Bank of India
- 24. Sun pharmaceutical Ltd

- 25. Tata motors Ltd
- 26. Tata Steel Ltd
- 27. Tata consultancy ltd
- 28. Wipro Ltd

## **METHODOLOGY FOR ANALYSIS OF TRENDS**

To study the trends in dividend payment pattern, 28 companies were taken (which are common throughout the study period), dividend per share and dividend payout ratio are computed for the period 2012-2016. Dividend per share and dividend payout ratio (NP) i.e net profit has been considered in trend analysis.

#### **DIVIDEND DETERMINANTS**

For each year 2012-2016 different characteristics on firm dividend payment pattern are estimated as per Fama and French method.

The explanatory variables are: Return on assets (ROA) shows profitability, it indicates the percentage of how profitable a company's assets are in generating revenue; Revenue from Operations/Share reflects growth in revenue and working capital. Enterprise value (EV) reflects size and is calculated as market capitalisation plus minority interest, debt and preferred shares minus total cash and cash equivalent.

Relevant data is computed for each year and associated p values are analyzed to infer the influence of profitability, growth and size.

#### **ANALYSIS AND RESULTS**

The charts explained below shows the dividend behaviour (dividend per share and dividend payout ratio) of 28 companies listed in BSE.

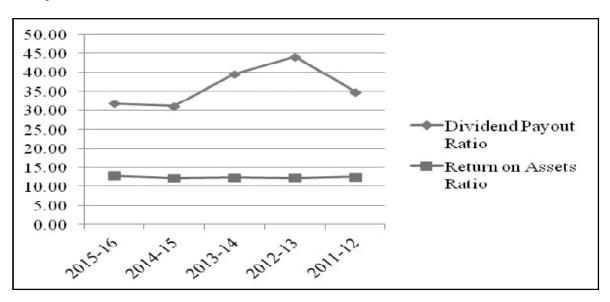


Chart 1

Chart 1 shows trend of dividend payout ratio (DP ratio) and return on assets ratio (ROA) of SENSEX. There is no significant change has been observed in ROA in these years. DP ratio has increased to 34% from 31%. There is not much deviation in DP ratio. SENSEX companies are stable and follow a definitive or sticky pattern in their financial ratios.

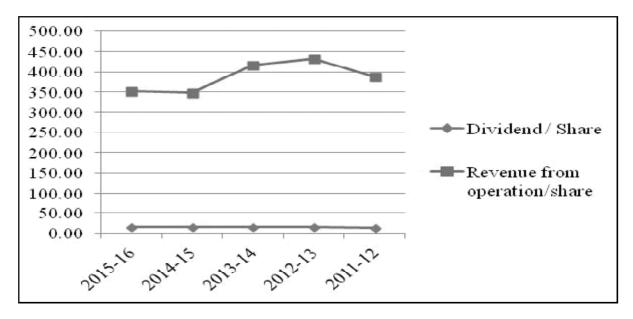


Chart 2

Chart 2 shows trend of dividend per share (DPS) and revenue from operations per share of SENSEX. There is no significant change has been observed in DPS in these years. Revenue from operation per share is also almost constant. SENSEX companies follow a sticky dividend pattern. No sharp edges have been observed. SENSEX companies are stable and follow a definitive pattern in their financial ratios.

All the mean values of enterprise value, revenue from operations per share and return from assets ratio of SENSEX (excluding financial companies) has been computed against dividend per share of 5 years. It explains the regression analysis between enterprise value, revenue from operation per share and return on assets (independent values) with dividend per share (dependent value). The results are tabulated in table 1 as below:

Table 1 Regression Statistics

	Multiple R	R Square	Adjusted R Square	Standard Error	Observations	P-Value
Enterprise value	0.36	0.13	-0.16	0.94	5	0.01
Revenue from operation/share	0.23	0.05	-0.27	0.98	5.00	0.08
Return on Assets	0.71	0.51	0.35	0.70	5.00	0.07

In case of Enterprise value (representing size of firm), the P value is less than 0.05, so we do not accept the null hypothesis (H01). Alternate hypothesis is accepted (H11). There is a significant relationship

between enterprise value i.e size of the firm and dividend per share of firm. Further the R square is 0.13 means, implies 13 % variability between enterprise value and dividend per share has been accounted for and the remaining 73 % of variability is still unaccounted for.

In case of revenue from operations per share (representing growth of firm), the P value is more than 0.05, so we accept the null hypothesis (H02). Alternate hypothesis is rejected (H12). There is no significant relationship between revenue from operation per share i.e growth of the firm and dividend per share of firm.

In case of return on assets ratio (representing profitability ratio of firm), the P value is more than 0.05, so we accept the null hypothesis (H03). Alternate hypothesis is rejected (H13). There is no significant relationship between return on assets i.e profitability ratio and dividend per share of firm.

## **CONCLUSION**

The present study of dividend behaviour of SENSEX companies does not reveal much trend. The trend of dividend per share and dividend payout ratio concluded that the dividend behaviour is not much in fluctuation mode. They follow a sticky and defined pattern of dividend distribution. The financial ratios are neither in increasing or decreasing order. SENSEX companies are financially sound and stable companies which are not affected by the little deviations in the economy.

The dividend behaviour of SENSEX has no relationship with profitability ratio (ROA) and growth of firm (revenue from operations per share) in the year 2012-2016. It has also been observed that the firms with high profits and higher growth don't distribute higher dividends. It has shown significant relationship between enterprise value i.e size of the firm and the dividend pattern of firm. Size of the firm impacts dividend distribution.

Further scope of research can be designed in other sample sizes and considering other determinants of dividend behaviour.

#### REFERENCES

- Miller, M. & Modigliani, F. (1961), Dividend policy, growth and the valuation of shares. *Journal of Business*, 34(4), 411-433.
- Lintner, J. (1956), "Distribution of Incomes Corporations Among Dividends, Retained Earnings and Taxes", *American Economic Review*, Vol. 46, No.2, May, pp. 97-113.
- Pruitt, S.W. and Gitman, L.J. (1991), "The Interactions between the Investment, Financing, and Dividend Decisions of Major U. S. Firms," *Finance Review*, 26, 409-430.
- Higgins, R. C. (1981), Sustainable Growth under Inflation. Financial Management, Vol. 10, pp 36-40.
- Rozeff, M. (1982), Growth, beta and agency costs as determinants of dividends payout ratios. *The Journal of Financial Research*, 58(3), 249-259.
- Lloyd, William P., John S. Jahera, and Daniel E. Page (1985), "Agency Costs and Dividend Payout Ratios", *Quarterly Journal of Business and Economics* 24, 19-29.
- Collins, M. C., Saxena, A. K. & Wansley, J. W. (1996), The role of insiders and dividend policy: A comparison of regulated and unregulated firms. *Journal of Financial and Strategic Decisions*, 9(2), 1-9.
- Fama, E.F. and K.R. French (2001), "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?", *Journal of Applied Corporate Finance*, Vol. 14, No. 1, Spring, pp. 67-79.

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- Kevin, S. (1992), "Dividend Policy: an Analysis of Some Determinants", Finance India, Vol. VI, No. 2, June, pp. 253-259.
- Bhat, R. and I.M. Pandey (1994), "Dividend Decision: A Study of Managers' Perceptions", *Decision*, Vol. 21, No.s 1 & 2, January-June 1994.
- Mishra, C. and V. Narender (1996), "Dividend Policies of SoEs in India An Analysis", Finance India, Vol. X, No. 3, September, pp. 633-645.
- Krishnamurty, K. & Sastry, D. U.. (1971), Some aspects of corporate behavior in India: A crossection analysis of investment, dividend and external financing for the chemical industry: 1962-1967. *Indian Economic Review.* 6(2).
- Reddy, S. & Rath, S. (2005), Disappearing dividends in emerging markets? Evidence from India. *Emerging Markets Finance and Trade*, 41(6), 58-82.
- Reddy, S. (2002), Dividend policy of Indian corporate firms: An analysis of trends and determinants. NSE Research Initiative, Serial No.19.
- Oza, H.. (2004), Dividend decision: A managerial approach, a survey of selected enterprises. Executive Company Secretary, 40-45.
- Sighania, M. (2005), Trends in dividend payout: A study of select Indian companies. Journal of Management Research, 5(3).