

Does the Dividend Policy Affect Shareholders' Wealth of Bank Nifty Index Constituent Banks?

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Abstract:

India's banking sector is constantly growing. Since the turn of the century, there has been a noticeable upsurge in transactions through ATM's and also internet and mobile banking. There are many research studies conducted on corporate dividend policy on different sectors abroad. However, few studies are conducted on Indian banking sector with limited time. This paper aims to study the impact of dividend policy on shareholder's wealth in Bank Nifty index constituent banks. For this study, the sample of 10 listed banks out of 12 has been selected. The data is collected for the period of 12 years from the year 2003 to 2014. Analysis is done using descriptive statistics and multiple regression analysis using step method in SPSS by taking dividend per share (DPS), earnings per share (EPS), price earnings ratio (PER), retained earnings ratio (RR), lagged market price per share (LMPS), lagged price earnings ratio (LPER) as explanatory variables and market price per share (MPS) as response variable. The R^2 shows that in year wise analysis lagged market price per share (LMPS) and in bank wise analysis price-earnings ratio (PER) variables are highly influential on MPS. The p-value of the f statistic shows that EPS, PER and DPS are the repressors which have jointly significant relationship with dependent variable (MPS).

Keywords: *dividend policy, shareholder's wealth, earnings per share (EPS), dividend per share (DPS), market price per share (MPS), price earnings ratio (PER)*

Introduction:

In today's competitive world with globalization and privatization companies have to fit themselves for their survival. To cope with the rigorous competition companies focus more on value creation along with revenue generation. Value would be created only when the revenue generated is distributed to the stakeholders. For this today's finance, managers have to make critical financial decisions in terms of conjoining their objectives with sustenance. The objective of maximizing the shareholders' wealth is depicted in the market price of the company's share.

Market price of the share increases based on many factors, but predominantly most influential factor is the cash dividends as quoted by many researchers. In addition, shareholders like growth in earning per share, which is the result of retained earnings, invested in the company.

Dividend can be defined as the payment made out of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders in proportion to their ownership. The effect of dividend policy on shareholders wealth is important to management, investors who plan their portfolios. Some scholars believe that dividend policies are irrelevant in determining the wealth of shareholders while others argue that dividend policies are relevant and greatly influence the wealth of shareholders.

Miller and Modigliani, Lintner and Gordon, Arunprakash and Nandhini these scholars have contributed greatly to the ongoing debate on dividend policy effect on shareholders wealth.

Dividends can be in the form of cash, stock, stock split, stock repurchases, and regular dividend payment, etc. Dividend policy chosen by a firm should maximize shareholders wealth. Payment of dividend most often are made from the current year's profit and sometimes from the general reserve. Since the firm is faced with the decision of apportioning fund to retention for firm growth and paying out profit as dividend, it is the firm's earnings as opposed to dividend that determines the value of a firm. Shareholders subscribe to cash dividend but also subscribe to growth of earnings per share when profit are retained and ploughed back into positive investment programme. They are also of the view that this has affected shareholders that they are indifferent about earnings or capital gains. Dividends are used by management to maintain a certain level of earnings in a firm and sustain the prices of shares in the stock exchange. Investors on the other hand, are indifferent as regards to dividend payout by firms as they prefer the current year's dividend payment to future earnings and capital gains. Investors use this dividend situation as information to assess the profitability and growth of a firm.

Dividend policy is mainly of two types:

- a) Managed dividend policy
- b) Residual dividend policy

In residual dividend policy, the amount of dividend is simply the cash that is left after the firm makes investment decisions. In this case, the amount of dividend is usually very variable and it may be zero most of the times. If the manager believes dividend policy is important to their investors and it has positive effect on share price value, they will adopt managed dividend policy. The best dividend policy is one that increases the company's stock price, which leads to maximization of shareholders' wealth.

The dividend decisions can donate to the value of firm or not it is a controversial issue. Firms generally take up dividend policies that suit the stage of life cycle they are: High- growth firms with big cash flows and fewer projects have a propensity to pay more of their earnings out as dividends. The dividend policies of firms may pursue several interesting patterns adding further to the complexity of such decisions. Dividends are dependent on earnings that are, increases in earnings increases the dividend and decreases in earnings sometimes by dividend cuts. Firms are usually hesitant to change dividends. Especially firms avoid cutting dividends even when earnings drop. There are distinct differences in dividend policy over the life cycle of a firm, ensuing from changes in growth rates, cash flows, and plan funds in hand.

Managements' primary goal is shareholders' wealth maximization and this can be achieved by giving the shareholders payment on their investments. However, the effect of firm's dividend policy on shareholders wealth is still unresolved. Dividend policy is one of the most complex aspects in finance.

Literature Review:

Numerous researchers have conducted research on this topic and it is the vast area to research on. Lintner has conducted research in 1956 about dividend policy and raised questions, which are important in this field of study.

Lintner (1956) researched on what are the choices of management that influence the firm size, shape, and timing of dividend policy. After the Lintner's contribution in determining dividend policy decisions, **Miller and Modigliani (1961)** conducted

research in dividend policy decisions and presented the theory of dividend irrelevance, which showed that the dividend policy does not affect the stock prices. Many researchers evidenced the dividend irrelevance theory through their studies like **Black & Scholes (1974)**, **Chen, Firth, & Gao (2002)**, **Adefila, Oladipo & Adeoti (2004)**, **Uddin & Chowdhury (2005)**, **Denis & Osobov (2008)** and **Adesola & Okwong (2009)**.

On the other hand, many researchers support dividend relevance theory. They said dividend policy do affect the firm's value and market price of the shares. **Gordon (1963)** presented his view by supporting the dividend relevance theory. Studies conducted by **Travlos, Trigeorgis, & Vafeas (2001)**, **Baker, Powell & Veit (2002)**, **Myers & Frank (2004)**, **Dong, Robinson & Veld (2005)** and **Maditinos, Sevic, Theriou, & Tsinani (2007)** support dividend relevance theory. **Okafor & Mgbame (2011)** conducted a study to analyse dividend policy & share price volatility in Nigeria by taking sample of 4 banks & 2 firms each firm from food & beverage, petroleum & brewing sectors. Stock & financial related data of these firms are collected from annual fact book of Nigerian stock exchange over 8year period from 1998-2005. Dependent variable is price volatility & independent variable dividend yield, payout ratio, assets growth & earning volatility. The relationship between ordinary stock price volatility & dividend policy has been analyzed utilizing multivariate least square regression. The result of their study show that general effect of dividend yield on price volatility observed at higher significant levels, leads to acceptance of null hypothesis, which states that measure of dividend policy vary inversely with ordinary share price volatility over time.

Azhagaiah & Priya (2008) conducted study on the impact of dividend policy on shareholder wealth with a sample of 28companies in chemical industry out of 114 listed companies in Bombay stock exchange using multi-stage random sampling techniques for period of 1997 to 2006. Multiple regression & stepwise regression model was used for data analysis. Dividend per share, retained earnings ratio, lagged price earnings ratio and lagged market price per share are independent variables & market price per share is dependent variable. There is a significant impact of dividend policy on shareholder wealth in organic chemical companies while shareholders wealth not influence by dividend payout as for as inorganic chemical companies.

Habib et al, (2012) conducted study dividend policy & share price volatility evidence from Pakistan. To draw & establish relationship between dividend policy & shareholder volatility with focus on Pakistan stock exchange dividend yield, payout ratio, size, debt, earning & growth independent variable & share price volatility dependent variable. Cross sectional regression is used to analyze relationship of share price with dividend yield & payout ratio. The result of their study showed that dividend yield & share price is positive related but payout ratio is negative related.

Hashemijoo et al. (2012) study found the relationship between dividend policy and share price volatility on consumer Product Company in Malaysian stock market. They have taken a sample of 84 listed companies from the period of six years in 2005 to 2010. Share price volatility is the dependent variable and dividend yield or payout ratio is the independent variables.

Multiple Regression model were used and the results showed that the dividend yield or dividend payout has negative effect in share price volatility.

Zulkifli et al. (2012) explains that the impact of dividend policy in share price volatility in construction and material companies of Malaysia. The sample of 77 construction and material companies were selected out of 106 companies' for the period of six years in 2005 to 2010. Share price volatility as the dependent variable and dividend yield, dividend payout ratio, leverage, growth, size and earnings volatility are the independent variables. Least square regression model were used and result showed that the positive effect on the dividend yield in share price volatility.

Pani (2008) introduced the dividend policy and stock price behavior in corporate sector of India. They used the sample of 500 listed companies for the period in 1996 to 2006 and the sample is taken for six different sectors i.e. electricity, food and beverage, non-metallic, mining, textile and service sector. Fixed effect model and pooled OLS model were used. Market value of the firm is the dependent variable and the size of the firm, dividend to retained earnings ratio and debt to equity ratio are the independent variable. The study explores that the dividend paying companies are large, profitable and growth rate of the firm does not seems to deter the dividend payment. Net profit, Dividend, and Retention Ratio remain significant in other services, textile and mining industries.

Khan (2012) conducted research on the dividend effects on stock prices from two important sectors chemical and pharmaceutical industry of Pakistan. A data sample of 29 companies has been taken from the period 2001 to 2010. Price volatility is taken as dependent variable, which is calculated by using Parkinson (1980) method of extreme values while earnings per share, profit after tax and return on equity are taken as independent variables. Fixed and random effect models are applied on panel data to conclude the results. The experimental estimation based on the fixed and random effect model shows the significant positive relation between stock dividends, earnings per share and profit after tax to stock market prices while return on equity and retention ratio have negative and statistically in significant relationship to stock market prices.

Joshi (2011) examines the impact of dividend on stock prices in Nepal. The data for this study is taken as 210 listed companies taken for the year 2010-11. Out of 210, 163 companies were selected from banking and 46 from non-banking sector. Dependent variable was current market stock price and four other variables are taken as independent namely dividend per share, lagged price earnings ratio, lagged market price per share and retained earnings per share. The descriptive statistics and regression analysis were used and the result showed that dividend per share is a motivating factor and has strong effect on market price per share of the banking and non-banking firms. It is also analyzed that dividend per share has greater effect on stock prices than retained earnings per share. Finally the study shows that both dividend and retained earnings per share effect stock prices of banking and non-banking sector.

Sajid Gul, Muhammad Sajid et al. (2012) found that there has been significant influence of dividend policy on wealth of shareholder's, as far as the dividend paying companies are concerned. Lagged Price earnings ratio did not appear to have any influence on dependent variable, whereas lagged market value of equity has a significant impact on market price per share.

Mokaya.S; Nyang'ara.D and James. L (2013) explains how dividend policy effect market shares price in banking industry of Kenya. This study covered the

sample of 100 respondents represented a population of 47000 general public shareholders questioners were used to collect the data. Market share value is the dependent variable and dividend policy is the independent variable. Descriptive and inferential statistics were used to determine and explain variable's relationships. The study concluded that National Bank of Kenya had a dividend policy and this dividend policy is the major factor driving NBK share value. It has been seen that an increase in dividend payout may result an increase in share price.

Research Methodology:

Sources of Data:

For this study, secondary data is collected from Capitalize database maintained by Centre for Monitoring Indian Economy and concerned banks official websites. The data is collected for the period of 2003-2014 for the period of 12 years. The sample banks are the constituents of NSE Bank Nifty Index. Out of 12 banks, only 10 banks were selected based on the availability of required information for the study. Multiple regression analysis is used to check the behaviour of the variables and to check the impact of dividend policy on shareholder's wealth.

Objectives of the Study

- Analyzing the impact of dividend policy on shareholders wealth both year and bank wise.
- Assessing the impact of specific factors on shareholders wealth:
 - a. Year wise
 - b. Bank wise

Hypothesis:

Ho: There is no significant relationship between market price per share and dividend policy.

H₁: There is a significant relationship between market price per share and dividend policy.

Variables

Based on problem statement of the study the following variables are defined:

i. Response / Dependent Variable

Shareholder's wealth is dependent variable, which is measured with market price per share (MPS).

ii. Explanatory / Independent Variable

Dividend policy is taken as independent variable, which is measured with the help of six ratios namely price earnings ratio, earnings per share, dividend per share, retained earnings ratio, lagged price earnings ratio, lagged market price ratio.

Equation used for Analysis

In this study, descriptive statistics and multiple regression analysis are used to analyze the results.

Following regression model is used to show the relationship between dividend policy and shareholder’s wealth.

$$MPS = \beta_0 + \beta_1DPS + \beta_2EPS + \beta_3RR + \beta_4PER + \beta_5LMPS + \beta_6LPER + \hat{\epsilon} \text{ Where,}$$

MPS : Market price per Share

DPS : Dividend per Share

EPS : Earnings per Share

RR : Retention Ratio

PER : Price Earnings Ratio

LMPS: Lagged Market Price per share

LPER : Lagged Price Earnings Ratio

Results and discussions:

In order to prove the hypothesis and meet the stated objectives the results have been analysed and discussed in line with the model developed.

Table 1(a): Year wise Summary statistics of model pertaining to overall analysis between Market price as dependent variable and DPS, EPS, RR,PER, LMPS and LPER as independent variables

Year	α	R	R ²	Adj. R ²	Std. Error(μ)	Sig. F
2003	34.876	0.999	0.999	0.997	8.864	0.000
2004	143.867	0.999	0.999	0.997	11.163	0.000
2005	61.519	0.996	0.992	0.997	39.881	0.003
2006	457.950	0.992	0.984	0.952	80.912	0.009
2007	2060.921	0.998	0.995	0.986	76.501	0.001
2008	-127.926	0.999	0.997	0.991	33.848	0.001
2009	608.182	0.999	0.998	0.995	42.226	0.000
2010	-1708.335	0.998	0.995	0.986	88.826	0.001
2011	-824.764	0.995	0.990	0.971	72.361	0.004
2012	-1009.460	0.997	0.993	0.979	88.404	0.002
2013	2990.206	0.997	0.994	0.982	61.894	0.002
2014	-18.609	0.998	0.997	0.990	73.423	0.001

Table 1(b): Un-standardised co-efficient in terms of beta and t- statistics of independent variables DPS, EPS, RR,PER, LMPS and LPER							
Year	Un-standardised Co-efficient						Durbin Watson
	β_1 (t-value) DPS	β_2 (t-value) EPS	β_3 (t-value) RR	β_4 (t-value) PER	β_2 (t-value) LMPS	β_4 (t-value) LPER	
2003	2.238 (0.580)	6.296 (4.958)*	-1.611 (-1.649)	16.427 (6.923)*	0.502 (2.297)	-8.952 (-3.174)*	2.373
2004	-18.023 (-3.155)*	3.408 (1.308)	-2.140 (-1.127)	30.086 (5.114)*	1.051 (3.697)*	-21.339 (-2.722)	2.379
2005	1.561 (0.054)	10.470 (1.505)	-3.568 (-0.539)	10.432 (2.373)	-0.057 (-0.093)	16.971 (1.107)	1.409
2006	-12.569 (-0.194)	2.496 (0.432)	-6.220 (-0.987)	2.545 (0.522)	1.325 (1.612)	0.321 (0.031)	2.460
2007	-147.840 (-3.668)*	13.909 (2.420)	-20.360 (-1.598)	8.963 (2.447)	2.519 (5.502)*	-29.873 (-2.045)	2.773
2008	17.391 (-0.566)	11.149 (1.674)	-1.516 (-0.142)	17.898 (1.388)	0.247 (3.741)*	-1.154 (-0.548)	1.160
2009	-24.600 (-1.281)	7.439 (1.453)	-7.690 (-1.624)	27.174 (2.572)	1.735 (10.019)*	-58.301 (-2.449)	3.046
2010	18.293 (0.245)	2.078 (0.189)	17.306 (0.476)	32.301 (1.008)	0.845 (2.422)	-15.324 (-0.826)	2.891
2011	22.759 (0.778)	-0.405 (-0.110)	7.703 (0.462)	4.711 (0.535)	0.375 (2.740)	5.793 (0.511)	2.350
2012	53.123 (1.839)	-8.795 (-1.886)	12.967 (0.913)	3.639 (0.545)	1.226 (5.053)*	-4.117 (-0.595)	2.251
2013	-35.848 (-0.840)	8.8333 (1.177)	-39.976 (-1.634)	71.175 (1.424)	0.674 (3.265)*	-41.738 (-0.996)	2.901
2014	4.927 (0.287)	0.537 (0.171)	-0.813 (-0.055)	9.710 (0.728)	1.411 (11.002)*	-8.749 (-0.574)	2.059

*Significant at 5% level

To know the impact of dividend on shareholders wealth of bank nifty index banks with their implemented dividend policy, multiple regression analysis has been used to interpret the outcome. The above table 1 (a) and (b) reveals that dividend per share along with other explanatory variables like Earnings per share (EPS),

Price Earnings Ratio (PER), Lagged market price per share (LMPS), Retention ratio (RR), lagged price earnings ratio (LPER) are used as proxy to measure dividend policy and Market price per share (MPS) has been used as a measure of shareholders wealth.

It is found that in terms of year wise analysis all explanatory variables have significant impact on the dependent variable (MPS) as revealed by R². Durbin Watson values in most of the years are negatively auto correlated. However significance level at 5% shows that lagged market price per share (LMPS) have predominantly impacted market price i.e., increased shareholders wealth. Sig. F during the study period is less than 0.05 and hence we reject H₀ and conclude that during the study period constituents banks in Bank nifty index have considered independent factors as drivers to maximise shareholders wealth.

Table 2(a): Bank wise summary statistics of model pertaining to overall analysis between Market price as dependent variable and DPS, EPS, RR,PER, LMPS and LPER as independent variable

Bank	α	R	R ²	Adj. R ²	Std. Error(μ)	Sig. F
Axis	1362.344	0.976	0.953	0.896	41.135	0.004
BOB	-1057.690	0.987	0.975	0.944	68.491	0.001
BOI	-1990.194	0.979	0.959	0.909	36.078	0.003
Canara	-1272.436	0.988	0.976	0.948	33.205	0.001
HDFC	2422.150	0.984	0.968	0.929	69.516	0.001
ICICI	132.788	0.995	0.989	0.976	64.465	0.000
IndusInd	-224.022	0.978	0.956	0.904	65.976	0.003
Kotak	-280.274	0.979	0.959	0.910	98.309	0.003
PNB	-566.653	0.955	0.912	0.806	121.390	0.016
SBI	5999.770	0.987	0.975	0.944	190.706	0.001

Table 2(b): Unstandardised co-efficient in terms of beta and t- statistics of independent variables DPS, EPS, RR,PER, LMPS and LPER

Year	Unstandardised Co-efficient						Durbin Watson
	β_1 (t-value) DPS	β_2 (t-value) EPS	β_3 (t-value) RR	β_4 (t-value) PER	β_2 (t-value) LMPS	β_4 (t-value) LPER	
Axis	11.552 (0.584)	4.246 (1.259)	-20.189 (-1.339)	30.706 (3.410)*	-0.641 (-1.189)	19.016 (1.164)	2.314
BOB	36.086 (1.675)	7.345 (1.395)	7.565 (0.361)	33.867 (3.903)*	-0.809 (-2.524)*	17.803 (1.598)	1.972
BOI	47.576 (3.040)*	-2.086 (- 0.717)	22.149 (4.127)*	26.780 (7.139)*	0.160 (0.957)	-5.014 (-1.765)	1.975
Canara	31.747 (1.144)	6.419 (1.096)	9.841 (0.559)	43.776 (5.058)*	-0.738 (-2.195)	19.546 (2.047)	3.472

HDFC	-155.131 (-0.842)	40.274 (1.086)	-33.859 (-0.658)	30.890 (3.989)*	-0.580 (-0.993)	13.431 (1.641)	1.964
ICICI	-7.997 (- 0.160)	27.421 (2.186)	-14.778 (-0.850)	33.934 (11.421)*	-0.328 (-0.773)	10.087 (0.786)	2.667
IndusInd	-26.541 (-0.289)	31.330 (2.306)	0.560 (0.513)	4.376 (3.015)*	-0.058 (-0.110)	1.405 (0.679)	2.277
Kotak	146.160 (0.5000)	11.063 (0.515)	0.524 (0.058)	5.320 (5.141)*	1.081 (2.556)*	-3.973 (-2.257)	2.990
PNB	-8.501 (- 0.348)	11.383 (2.140)	-2.463 (- 0.121)	82.499 (3.862)*	-0.271 (-0.611)	6.648 (0.260)	1.169
SBI	43.292 (0.502)	1.563 (0.091)	-79.726 (-1.200)	101.463 (8.146)*	-0.315 (-1.115)	-3.524 (-0.168)	2.998

*Significant at 5% level

Bank wise summary statistics relating to impact exercised by explanatory variables on shareholders wealth have been stated in the above table 2 (a) and (b). The values of both R and R² indicate the relationship explained between MPS and independent variables has been strongly significant across all banks in Bank Nifty Index in all banks. Sig. F of the model is less than 0.05 in all the banks and therefore we reject H₀. However, amongst all explanatory variables, price earnings ratio has significant impact on shareholders wealth. Thus, conclude that banks prefer PER to increase shareholders wealth during the study period.

Conclusion:

Business enterprises fail to combat with structuring uniform dividend policy that can fit all economic entities due to size, nature, type and other complexities. Every enterprise has their own defined dividend policy. It is generally observed that dividend decision has significant impact on the value of the company and many studies strongly support it. Dividends act as the protective layer to shareholders investment and choosing an optimum dividend policy is a complex puzzle as the focus of management may even be on expansion and diversification in the proposals, which offer a better return.

The study focuses on dividend policy of constituent banks of NSE Bank Nifty Index and justifies the importance of dividend on shareholders wealth. In the examined period of 12 years from 2003-2014, it was found that there is collective influence of other determinant factors on creating shareholders wealth and conclude that dividend itself is not the one to decide the value of shareholders.

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