

## DOES DIVIDEND POLICY IMPACT STOCK MARKET PRICES? - EVIDENCE FROM OMAN

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**Abstract:** This research aims to investigate and examine the influence of dividend policy on stock prices of 28 industrial sector companies listed on Muscat Securities Market (MSM) in Oman, during the five year period of 2009 to 2013. A panel data approach has been used to examine and explain the effect of dividend policy on stock market prices using five determinants dividend yield, retention ratio, earnings per share, return on shareholders' equity and net profit after tax. The finding of the research establishes a significant positive relationship between earnings per share, return on equity and stock price. Variables dividend yield and retention ratio are positively associated with stock price but their influence is not statistically significant. Lastly the fifth determinant Profit after Tax has negative relation with Stock Price and its impact is also not significant.

**Key words:** dividend Policy, stock price, panel data approach, Oman

**JEL Classification:** G 35, G38, M41

### 1. INTRODUCTION

Dividend policy has always been considered as an important financing policy by all corporate due to its direct relationship with stakeholders and investors and has a significant impact on the stock market price in capital markets. Theoretical arguments are well documented in finance literature which presented two different opinions about the dividend policy. One school of thought followed the opinion of Miller and Modigliani (1961) who argued that an issuance of dividends would have little to no impact on stock price. The other view came from Gordon (1963) who considered the impact of dividend policy relevant on stock prices. Though both the theories were postulated during the middle of the last century the nagging question is whether the dividend policy does affects the stock price or not. Most corporate are still vary of the impact and implication of the declaration of their dividend policy on the stock price and hence on the valuation of the firm.

The study of the influence of dividend on stock price is still considered as an important issue in the field of finance and investment. Many researchers, since

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the last century have tried to establish a causal relationship between dividend and stock price due to its prime importance for the shareholders, investors, creditors, managers and other stakeholders but still no establish way of determining an optimal dividend payout ratio has been suggested till date. Al- Hasan *et al.* (2013) explained that though, different scholars have been done huge research efforts in determining what the optimal dividend policy is for firms; still there is no universally accepted theory throughout the literature explaining the dividend payout and retention choice of firms.

This research too is another attempt to evaluate the impact of dividend on stock price of some industrial companies' listed on Muscat Securities Market (MSM) the only capital market of sultanate of Oman. This research aims to provide investors with sufficient evidence to take informed investment decisions and formulate investment strategies which may result in optimal gains for them. This research is also an attempt to provide the corporate in Oman a basic understanding of the impact of the dividend policy on the stock prices which will be of immense help in formulating their future dividend policies.

The main objective of the research is to examine the influence of cash and stock dividend payout on market price to determine whether the dividend policy affects the market prices or not on the companies in the industrial sectors of Oman. The research analyzed the data of 28 out of 48 industrial companies listed at MSM who declared dividend for the period 2009 to 2013.

The organization of the research is as follows; section (2) discusses and review literature concerning the theoretical and empirical studies on the impact of dividend policy on market price, while section (3) provides a brief about data collection and variables definition, Section (4) illustrates the methodology used in the research, section (5) deals with the empirical findings and finally, in section (6) the conclusion of the research is discussed.

## **2. LITERATURE REVIEW**

Since the mid of the last century many studies have been done on dividend policies to examine to what extent the dividend policy impact the market price of stocks. Many studies have been conducted on dividend policies in the earlier years which explain the relationship between dividend policy and stock prices. Linter (1956) raised the question, which is still relevant, "what choices made by managers do affect the size, shape and timing of dividend payments?"

The relationship between the dividend and market price is quite significant as compared to any other variables (Suleman, Asghar, Shah & Hamid, 2011). As is well documented in the literature Miller & Modigliani (1961) introduced the concept

of dividend Irrelevance theory in which they explain that dividend policy does not affect the stock prices. Some other researchers such as Black & Scholes (1974), Chen, Firth, & Gao (2002), Adefila and Adesola & Okwong (2009) agreed with them and provided strong evidence that dividend is irrelevant and has no relevance for stock prices. Furthermore, Jensen *et al.* (1992) suggested that, dividend leads to reduction in stock prices. In United State of America since 1978, a decline in the share price as a result of announcement of dividend payments is well documented. Other scholars like (Amihud and Li, 2002) study the influence of dividend on stock price and they conclude that there was a significant negative relationship between share price volatility with two main measurements of dividend policy which are dividend yield and dividend payout.

On the other hand contrary to above mentioned opinions, some scholars believed that dividend policy is relevant. Murhadi (2008) illustrated that dividend policy has a positive effect on stock prices. In addition, Hampton (1996) said that more dividend leads to value increase of stock prices and stock remain undervalued by lower dividend policy. Benartzi *et al.* (1997), Ofer and Siegel's (1987) examined relationship between Dividend and share price and they found a positive relationship between them. Uwuigbe, Jafaru & Ajayi, 2012 tested the sample of companies in Nigeria and concluded that the performance of firms has a significant positive association with the dividend payment. In United States a study was conducted to assess the relationship between dividend policy and stock price and found a positive and significant relationship between cash dividends, retained earnings, earnings per share, and stock price (Asem & Tian, 2009). On the other hand the study also found a significant negative relationship between dividend yield and dividend payout. Al- Hasan *et al.* (2013) examine the effect of dividend on market price in Bangladesh. The result of the study supports relevant theory and the declaration of dividend leads to increase in market price. Al Masum (2014) examined empirically the relationship between dividend policy and stock market price in private commercial banks in Bangladesh which were listed on Dhaka Stock Exchange. He concluded that return on equity, earnings per share have positive relationship with stock price, while profit after tax and dividend Yield has insignificant negative impact on stock price

Hunjra *et al.* (2014) check the impact of dividend policy on earning per share (EPS), return on equity (ROE) on stock prices in Pakistan. The results shows that dividend yield and dividend payout ratio which are both measures of dividend policy have significant impact on stock price thus validating that these results are consistent with dividend relevance theory. Another study by Raballe and Hedensted (2008) examined the relationship between dividend policy and stock price in Denmark. The result of their study concluded that ROE showed a positive

relationship with stock price. Along the same line Liu and Hu (2005) examined the impact of EPS and ROE in 299 listed companies in China Exchange Market. They found that there is significant relationship between EPS and ROE of these firms and their stock prices. The study of Nishat & Irfan (2003) took a sample of 160 listed companies on Karachi Stock Exchange during the period of 1981-2000 and the results of the study concluded that dividend yield and payout ratio have positive relationship with share price.

Myers and Bacon (2004) made a survey to examine the impact of dividend policy on stock price on a sample of 483 companies from 'Multex investors' network'. Their results showed that there is a positive relationship between the price-earnings ratio (P/E) and dividend payout ratio (DPR).

It is obvious from the above discussion that there are different pictures concerning the impact of dividend policy on stock prices, some researches are consistent with relevant theory and reveals that the dividend policy has significant impact on market prices; other studies show that dividend policy has no impact on market price which indicates that these studies are against irrelevance theory. In many countries numerous studies have been conducted concerning the impact of dividend policy on stock prices, however, no studies have been done before in the Omani context to establish the relationship and impact of dividend policy on stock price movement.

### **3. DATA COLLECTION AND VARIABLE DEFINITION**

As we illustrated before, the main objective of this paper is to examine the influence of dividend on market prices. To achieve the research objectives, the data was collected from 28 out of 48 industrial companies listed on MSM who announced dividend Payout during the period of 2009 to 2013. The industrial sector companies that did not announce any dividend payout during the period of the study were excluded (20 companies).

In order to study the impact of dividend policy on market price of stocks the following dependent and independent variable are used:

#### **Dependent variable**

1. **Market Price (MP):** Market price is taken as dependent variable which is calculated by taking the average of high and low market prices of the shares as in the previous studies.

#### **Independent variables: Five independent variables are chosen for the study**

1. **Dividend Yield (DY):** Dividend yield of a stock indicates how much a company pays dividend relative to its stock price. It is calculated as a percentage between

annual dividends paid by the company and its stock price. Dividend yield is considered as an important variable.

2. **Retention Ratio (RR):** is calculated by subtracting Total Dividend from Total Earnings and then dividing the resulting amount by Earnings. Pani (2008) used dividend to Retention Ratio to see its effect on Stock Prices and found positive relation between them.
3. **Profit after Tax (PAT):** Profit after tax is used as a control variable.
4. **Earnings per Share (EPS):** Earnings per share is the amount of earnings per each outstanding share of a company's stock.
5. **Return on Equity (ROE):** Return on Equity is calculated by dividing profit after tax with shareholders' equity.

Some of the above mentioned variables were used by Nazir et al (2010), Ho (2002), Liu and Hu (2005), Raballe and Hedensted (2008), Al- Hasan et al. (2013).

On the basis of the relationship and variables discussed above, the following hypotheses were formulated and tested:

H1: Dividend yield has no significant relationship with market prices

H2: Retention Ratio (RR) has no significant relationship with market prices

H3: Earnings Per Share (EPS) has no significant relationship with market prices

H4: Profit after Tax (PAT) has no significant relationship with market prices

H5: Return on Equity (ROE) has no significant relationship with market prices

#### **4. RESEARCH METHODOLOGY**

The main purpose of this research is to examine the influence of dividend policy on stock prices in Oman and to determine whether the dividend policy is consistent with relevance policy or not. To prove the validity of the research hypotheses, the relationship between the dependent and independent variables were tested.

The relationship between dividend policies and market prices of the 28 industrial companies during 2009 up to 2013 is checked by using panel data approach. Using panel data methodology gives less co-linearity among the variables, more degrees of freedom and higher efficiency and a more informative data. The researchers assume that the industrial companies which have been used are homogeneous. Earlier researchers also adopted this methodology such as Ho (2002), Pani (2008), Rashid & Rahman (2009), Nazir *et al.* (2010)

For the purpose of testing the relationship between different variables the following model is used:

$$MP_{it} = \beta_0 + \beta_1 (DY_{it}) + \beta_2 (RR_{it}) + \beta_3 (PAT_{it}) + \beta_4 (EPS_{it}) + \beta_5 (ROE_{it}) + \eta_t + \lambda_t + \epsilon_{it}$$

Where, Dependent Variable=Market Price (MP),while Independent Variable include Dividend Yield (DY), Retention Ratio (RR), Profit After Tax (PAT), Earnings Per Share (EPS), and Return on Equity (ROE).Whereas  $\epsilon_{it}$  is a parameter for time dummy variables which is equal for all Industrial companies in each year but changes over time and is the error term.

## 5. THE FINDINGS

In this section the results of the impact of dividends policy and other different variable on stock price policy are presented. Descriptive statistical analysis, followed by Pearson's Correlation analysis was used to see the relationship between the stock price and all other independent variables. Panel data analysis with fixed and random effect models are also used in order to see the impact of the dividend policy on the market price of Industrial Company listed on MSM.

### 5.1. Descriptive Statistics

**Table 1**  
**Descriptive Statistics**

<i>Variables</i>	<i>Mean</i>	<i>Median</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std.Dev</i>
MP	31.044300	32.060000	36.1785	26.0515	4.6221981
DY	2.1814678	32.060000	2614.45515	1773.36801	310.72578137
RR	0.373142	0.376498	0.428344	0.334422	0.036430
EPS	3.279080	3.490000	4.9140	1.5090	1.3719225
PAT	109502.20	113747.00	125983	88831	13869.259
ROE	0.14559917	0.14217904	0.16353950	0.11922390	0.01800371

Table (1) shows the details of descriptive statistics of variables that affect the Market Price of the Industrial Companies listed at MSM during 2009-2013 including means and standard deviations of all the variables. The mean value of Market Price which represents dependent variable is 31.044300 and standard deviation is 4.6221981 and its range from 26.0515 to 32.060000. The mean value of Profit after Tax variable is the highest 109502.20 and standard deviation is (113747.00) its range from 88831 to 125983. The Return on Equity has recorded the lowest mean 0.14559917 and standard deviation is 0.0180037146 its range from 0.0180037146 to 0.1192239. The Dividend Yield variable with a mean value of 2.1814678 and standard deviation is 310.72578137 its range from 1773.36801 to 2614.45515 .Retention Ratio its mean is .37314202, and standard deviation is .036430434 its ranges from .334422 to 0.428344. Earnings per Share range from 1.5090 to 4.9140 the mean is 3.279080, and standard deviation is 1.3719225.

## 5.2. Correlation Analysis

Table (2) shows the correlation among the different explanatory variables and with dependent variable i.e. Market Price.

**Table 2**  
**Correlation**

<i>Variables</i>	<i>MP</i>	<i>DY</i>	<i>RR</i>	<i>EPS</i>	<i>PAT</i>	<i>ROE</i>
MP	1					
DY	-.900-*	1				
RR	.100	.200	1			
EPS	.900*	-1.000-**	-.200-	1		
PAT	.300	-.100-	.900*	.100	1	
ROE	.900*	-.800-	.200	.800	.500	1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

This correlation is tested at (0.01) and (0.05) levels of significance. Market Price has a negative significant relation with Dividend Yield (-.900-\*) at (0.01) level of significance, a positive significant correlation with Earnings per Share (.900\*) and Return on Equity (.900\*) at (0.05) level of significance, while Retention Ratio and Profit after Tax have insignificant relation with Stock Market Prices. The results from table 2 also show that there exists a positive significant relationship between Return on Equity and Retention Ratio at 1% and 5% level of significance.

## 5.3. A Panel Data Model

To check whether dividend policy has significant influence on stock price or not, panel data analysis is used. Both fixed effect model and random effect model were used to calculate the results for 28 Industrial companied listed in MSM. Al Masum (2014) argued that Fixed Effect Model provides statistically better results than Random Effect Model. The results from Table 3 and Table 4 exhibited the results of Fixed Effect Model and Random Effect Model respectively.

The results from tables 3 and Table4 show that Dividend Yield is positively associated with stock price and the influence is significant in both the Fixed Effect and Random Effect Model.

Retained Ratio has an impact on stock price in Fixed Effect model but negative impact as per Random Effect Model and the influence is not significant in both the models. The relationship between Dividend Yield and Stock Price is consistent with the findings of Nishat& Irfan (2003), Myers and Bacon (2004) but is in contrast of the findings of Amihud and Li (2002).

**Table 3**  
**Fixed Effect Model**

<i>Variables</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>t</i>	<i>P&gt;t</i>	<i>[95% Conf. Interval]</i> <i>Std.Dev</i>	
MP	416.743	264.6789	1.8	0.042	-16.0515	3622.1981
DY	-2763.345	720.5674	2.37	0.000	2663.368	2107.257
RR	-34.25641	287.9868	0.01	0.815	-312.2244	-464.304
EPS	-6789.375	3012.367	-2.4	0.000	231671	6.33192
PAT	4.45928	1.22167	3.09	0.910	2.0981234	14678.259
ROE	-.7689574	.0387631	-4.05	0.000	.1192239	.09453716

**Effect Specification**

F statistics= 7.27

R-squared = 0.4428

Prob&gt; F = 0.0000

Adjusted R-squared = 0.6344

**Table 4**  
**Random Effect Model**

<i>Variables</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>t</i>	<i>P&gt;t</i>	<i>[95% Conf. Interval]</i> <i>Std. Dev</i>	
MP	612.516	3414.7521	1.7	0.056	-13.067	1342.2419
DY	2943.784	901.6793	6.45	0.000	7461.901	8167.561
RR	-27.21274	301.7781	-4.76	0.715	-451.8711	-982.469
EPS	-9674.780	2018.342	.14	0.000	23167.1	326.3319
PAT	5.63023	1.5782	4.07	0.613	3.03576329	.783259
ROE	-.9876327	.0645963	-.315	0.000	-.23582953	-.06568931

**Effect Specification**

F statistics= 11.31

R-squared = 0.7532

Prob&gt; F = 0.0000

Adjusted R-squared = 0.4578

As for control variables the results from table 3 and 4 depicts that Earnings per Share and Return on Equity are positively associated with stock price and the influence is significant in both the Fixed Effect and Random Effect Model. This result is consistent with Ofer and Siegel's (1987) and Al Masum (2014), while Profit after Tax is negatively related to Stock Price in both Fixed Effect and Random Effect Models and the effect is also not significant.

The above mentioned results thus clearly conclude that with respect to Retention Ratio and Dividend Yield as associated with market price the hypothesis have been accepted.



While in the case of other three variables the results shows that Earnings per Share and Return on Equity have positively significant relationship with the stock price whereas Profit after Tax has a negatively related impact on Stock Price and the influence is also not significant.

## **6. CONCLUSIONS**

The research concludes that in case of the Omani companies dividend policy has an impact on the stock prices. The result shows that there is a significant positive relationship between Earnings per Share and Return on Equity and stock price. Moreover, Profit after Tax has negatively related to Stock Price but the influence is not significant. On the other hand remainder of the variables Dividend Yield and Retained Ratio are positively associated with stock price and their influence is not significant.

This research expects to fill in the void in literature on impact of dividend policy in Oman in particular and Middle East in general. Corporate in Oman should be able to understand that the dividend policy adopted by them will impact the stakeholder and can affect the investment decision and the investment climate in the country.

In this research only five dependent variables has been used to understand the impact of dividend policy on stock prices. In future researches attempts should be made to include more pertinent determinants so as to be able to explore the impact of those variables. Furthermore other sectors could also be included in future researches.

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