# The Impact of Dividend Policy on Share Prices – A Case from Pakistan

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**Abstract**

This investigates the effect of dividend policy on share (stock) prices. Objective of the study is to see if there exists any relationship between dividend policy and stock prices. We analysed 12 non-financial companies listed on KSE-100 index that have earned profits and paid dividend for a period of Seven-year w.e.f. 2010. Technique adopted for sampling adopted is convenience sampling. As the nature of data is panel therefore, pooled regression, fixed and random effect tests are run. Random effect results are focused after applying Hausman's test. Regression Results witness that Dividend per Share and Retention Ratio have an insignificant relationship with Share Market Prices. Dividend Payout Ratio has a significant positive relationship with Share Prices as supported by the Bird in hand theory suggested that owners give preference to a dollar of estimated dividends over a likely dollar of capital gains. Profit after tax, Earnings per share and Return on Equity are the three control variables. Profit after Tax has insignificant relation to Stock Prices. Earnings per Share have positive significant relation to Stock Prices. There is negative significant relation between Return on Equity and Share Prices. It is recommended that firms in the sample should regularly pay dividend as it will cause an upward movement in the stock market prices. Whereas profit retention by firms will result in a decrease in the value of the stock market prices.

**Keywords:** Dividend Policy, Dividend pay-out ratio, Retention ratio, Stock Prices

## 1. Introduction

Dividend policy is a very important topic in financial management and in corporate type of business. First of all, east India companies issue their bonds in 1613 and announce payment in 1661. Future on disbursement of dividend was on-going and procedures for dividend plan established. (Lintner, Distribution of profit of firms among dividends, retained profits, 1956) was effort on dividend plan. He displayed the issues which effect on dimension, nature and timing of share disbursement. The impact of dividend policy on worth of a company was specified important after the effort by Modigliani and miller (1961). They accessible the interpretation that a value of a company is not connected with its dividend policy and its receipts into account only its earning power. Modigliani and miller originate that there occurs no association amongst dividend and

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worth of any company somewhat stock policies entirely disturb the price of the company. The stockholders are not concerned in getting cash flows as dividend or capital gains, in a perfect market.

Gorden proved that there are some depositors which choose current cash streams rather than predictable upcoming cash flows in a procedure of capital gain. They specified that dividend pay-out influxes share price volatility (Gorden, 1963). Several theoretical systems have been recommended that displays that there is opposite relationship between dividend produce and common stock instability. Dividend policy affect amount of things like amount of profit, duration, arbitrage rating along with data consequence. Still we are studying just effect of dividend strategy on share price. According to period consequence high dividend yield delivers short period cash flow. In situation of steady dividend strategy dividends, share will have short period interval. According to Gordon model development forecasts, additional dividends will indication less response to change in the worth of reduction price and as end result indication lower price explosiveness. This view is true only under the condition if shareholder have the same information about financial position of company as do CEO have. But there are some shareholders which wish current cash streams rather than predictable upcoming cash flows on the procedure of capital gain.

Unlike public sector, nearly all private shareholders are concentrated on revenue cause which goals at having investments development to advanced levels. For firm listed on Karachi stock exchange, number of issues exist which disturb the conception of stockholder capital in as far as the dividend stock price atmosphere is concerned. Concerning share price, almost researchers in their different studies recommend that stock price is most affected by variables of dividend yield, retaining ratio, profits after tax, EPS and return on equity. Amongst the outline variables, it is exposed through an amount of studies that dividend policy has a important impact on share price of an object as it trades on share market.

## 1.1. Background of the Study

There is a percentage of real-world and theoretical effort in the ground of funding "dividend policy" has doubtful topic for a lengthy time between the specialists, researchers, authors and teachers. Supervisors take choices that how much dividend should be paid and at what time? And bondholders manage their personal assets collection. Dividend may a simple term by way of a source of revenue for stockholders and a suggestion of business concert. Concluded dividend policy administrators make an excellent about the consumption of income amongst dividend and reserved earnings. Suitable collection of dividend strategy for firm is very significant conclusion for administration and firm proprietors.

## 1.2 Dividend Policy in Pakistan

Karachi stock exchange (KSE) is one amongst the growing marketplace of emerging nations. According to Nishat at KSE stockholders face high threat and become high profit by receiving an

extra risk premium. Partial studies have directed to check the extended lasting conduct of the marketplace and also the connected matters (Nishat, 1991, 1992, 1995, 1999, 2001); Nishat & Bilgrami but the consequence of dividend yield and pay-out percentage on the worth of share values has been an undiscovered expanse  (Nishat, 1999).

It is important to check its role in Pakistan next to the introductory of developments throughout the period impartial previous to 21st century that harassed on the sincerity to external investment and opposition, which encouraged to more then, previously volatility in the marketplace. Nishat has reduced compassion of stock value impulsiveness to straightforward issues (Irfan & Nishat). Developments linking to dividend plan in Pakistan are; tax stopping over the disbursement dividend in shape of money, announcing exception for taxation of true and extra stocks, summary varying from the disbursement of dividend in the shape of money to matter of extra segment and administration controlling values of interpretation restrictions on program of market incomes.

## 1.3 Dividend Policy Word Wide

Jensen and Meckling recognized Activity Cost Fight; that dividend disbursement reductions prices of an organization and produces its currency movement. In easy words, dividends expense inspires administrators to throw out money rather than production a savings at a smaller amount than price or its expenditure on managerial inadequacies. Researchers have improved declaration that financial incomes are conveyed when declarations are tracked by enough dividends. If depositors have confident estimations, they answer less to less reliable statistics  (Jensen & Meckling, 1976).

## 1.4 Problem Statement

The major determination of business management is the expansion of shareholder capital with a strong balance in three basic conclusions which are investment, funding and dividend choices. Dividend decision actuality the core for dividend strategies is key resolution and attention of the research, changes around the purpose of payout strategy monitored by supervision in decisive the sum laterally with technique of currency distributions to stockholders. In this article the relationship amongst dividend policy and share price is restrained using multiple regression analysis.

Dividend strategy is very important for management as well for shareholders, for the reason that one set has to choose and create planning for the disbursement of dividend while the other individual has to collect it as a payment for their share. Dividend is a way of revenue for shareholders and as well as a picture of the firm presentation. Determining a suitable dividend strategy develops a core conclusion for administrators and stockholders. Shareholder similar both increasing EPS and dividend of the firm which is only likely by the reinvestment profit making of a firm. If a main percentage of earned incomes is reinvested, then distribution of acceptable flat of dividend will not be potential. On the other side if the main percentage of profit made by a company is circulated in procedure of dividend then reinvestment of income at a sensible level

will not be thinkable. A trade-off is difficult between the sum of dividend distribution and reinvestment out of incomes earning by a company. A stability strategy tactic is therefore very significant for this determination. Dividend strategy is a monetary policy all around for the deployment of incomes made by a form. It just monitors the administration concerning the percentage of disbursement of dividend and reinvestment of the incomes of the form. Dividend insignificance concept conditions that stockholders are not too greatly worried with the company dividend strategy as they can simply sell out some of their stocks if they are in necessity of money. This concept shows that dividend payment has litter to no influence on share price. Remaining, permanency and hybrid are the three key dividend procedures. The remaining dividend strategy permits dividend expenditures after conference all project assets necessities. This strategy is mostly used by all those companies which try to retain a balance amongst their debts to equity ratio. With the assistance of dividend stability policy, three-monthly dividends are waged as portion of annual incomes. As result doubt of owners may decrease as they grow the revenue. This policy is commonly used by companies which pay firms incomes to owners rather than creation more investments. Hybrid dividend policy is a mixture of remaining and steady dividend strategy. Dividend strategy is normally used tactic by a majority of dividend giving companies. Companies using this tactic, reflect debt to equity ratio as a goal. Companies using this tactic generally have one traditional dividend that may be paid simply actuality a minor portion of yearly firm revenue. Additional dividend is rewarded in case revenue crosses common levels.

## 1.5 Scope of the Study

The study covers non-financial firms registered in Pakistan stock exchange meant at period of 2010 to 2016. This research based on Pakistani corporations. First of all, all non-financial organizations registered in Pakistan stock exchange 100 index were nominated. Before, because of un-availability of information some of these companies were removed from study. Further, maximum these companies were nominated from taster which had received profit and distribute dividend. As of outcome sample included of 12 non-financial firms from Karachi stock exchange 100 index for a period of 7 years started from 2010. Variables of this studies are stock market price, share dividend per share, retention ratio, profit after tax, earning per share and return on equity.

## 1.6 Research Questions

➢ Does dividend strategy have any influence on share value?
➢ Is there any association between dividend policy and share value?

## 1.7 Objective of the Study

➢ To see the connection between dividend strategy and share values?

**1.8 Hypothesis**

1.      H0a: share dividend policy not affects share values

   H1a: share dividend policy affects share values.

2.      H0b: Relation ratio not affects share values.

   H1b: Relation ratio affects share values.

3.      H0c: Dividend pay-out ratio not influence on share values.

   H1c: Dividend pay-out ratio influence on share values.

## 2. Literature review

Dividend policy is simple. A firm has choice to Pay dividend to its owners or hold it and invest it in company growth. To continue the research about this issue, source a well build provision for the occurrence of an association among share prices and dividend policy. In finance field, the dividend policy is an important topic for research but at same interval it is base of consideration of scholars to show the value of this topic.

Lintner was observed the relationship between dividend policy and share prices. He interviewed top level management of twenty-eight different companies and studied different issues of company dividend policy and its concerns on the worth of company's market and he got result from this research that dividend policies effect on the firm's market value (Lintner, 1956). Another theory presented Shapiro & Gorden of the dividend strategy concluded introducing the concept of dividend importance. They detained that dividend policy profiles the worth of company and share prices at the similar period. They started that stock holders are usually not want to take risk and they wish to have current and steady returns (shapiro & Gorden, 1963). Scholes & Black held up the dividend irrelevance theory. According to them there is no variation I process. Investors earned profits consequently, no substance have become whichever of the securities  (Scholes & Black, 1973).

Modigliani & Millar play important role in research of dividend policy who offered the awareness of dividend insignificance. According to them the dividend strategy does not influence firm's value; the firm's worth changes due to company's earning; or investment policy. Dividend insignificance concept was keeping created in opinion circumstances of prefer market, zero operation cost, or unsatisfactory evidence, no beginning cost and no taxes. Several researchers was experienced this theory (Modigliani & Millar, Dividend policy, growth and valuation of shares, 1961).  Jhon & Williams presented an affirmative association between stock prices and dividend policy. They researched for investor's inclination for dividend in tax environment  (Jhon & Williams, 1985). Smith & Barclay researched and concluded that there is secondary connection

between dividend pay-out and debt relative. Therefore, needed additional dividend and reason it's not as much of a unsafe environment as capital gain (Smith & Barclay, 1995).

Baskin observed 2344 US common shares of 10 years of period from 1968 to 1977. He considered and established indirect association amongst dividend strategy and share price and calculated the below f dividend strategy and share price explosive nature. Further these issues like size of firm, debt to equity ratio, amount of earnings, level of development of firm and proportion of dividend disbursement have strength on earnings of stock and dividend yields (Baskin, 1989). Allen and Rachim (1996) observed 174 effect of dividend on share prices and concluded that there is no association in dividend strategy and stock values. The result of their research show that there is dividend policy have no impact on value of share values, rather shareholder's judgment affected it for select of great or minor yielding securities, through profit added by shares holders in whichever situation is same.

However the study approved but by many researcher like Myers and Frank (2004), Rashid and Raheem (2009) and Benartzi, Michaely and Thalar(1997) also did not grip up the dividend insignificance concept by starting that this concept is initiated on impractical instructions.

Tralos noted directly association between stock price and dividend policy who started that share prices raises with a growing in currency dividend and vice versa universal research journal of finance and economies matter 74 (2011) 79 (N.Tralos, 2001). DENIS & OSOBOV tested the corporation direction for security dividend policy. According to their result the common way in the US, UK, Japan, Canada, France, and Germany is that companies with healthier ratio of earnings and additional reserved profits to whole equity provide dividends to the holders. Where the companies which taking letter incomes ratio and minor retained profits to whole equity pay at a minor rate or do not pay dividend. Whether to shod out dividend or not depend upon totally the external and internal surroundings (DENIS & OSOBOV, 2008).

Chenet (2002) (Chowdhury & Uddin, 2005) , (Denis & Osobov, 2008) and (Okwong & Adesola, 2009) studied irrelevance theory of (Modigliani & Miller, 1961) . Directors have authority to use corporation inside information. For preparing and publishing annual reports, managers discuss this information with the company owners. The future projection of the corporation depends on invariant or growing dividends and firm's share prices grow upward. Likewise decreasing dividend or no dividend is cause of decreasing in stock process. (Irfan & Nishat, 2003) collected twenty year data from 160 corporations enlisted in Karachi stock exchange by using irritated sectional regression analysis decided direct relation amongst dividend price ratio and stock price. Pradhan researched on effect of dividend distribution and retained incomes on stock prices of firm of Nepal. According to his result dividend pay-out and retained earnings ratio has relationship with share prices correspondingly. He said that shareholders of Nepal wish dividend to capital increases (Pradhan, 2003).

Bacon & Myers analysed the data of 485 corporations and conclude that there is direct relationship of the amount incomes proportion with dividend pay-out percentage. They also observed direct association amongst debt to equity percentage and bonus pay-out (Bacon & Myers, 2004). Baker researched about boldness of Norwegian administration participants who planned dividend policy according to investigation procedure. According to the result of the investigation reliability of incomes current level of financial influence and liquescency are the central issues of the survey which management member's evaluator in the procedure of scheming dividend policies. This is their output judgment about the firm's dependency value on dividend policy (Baker, 2002).

Adefila observed the affecting variations in dividend strategy of Nigerian firms. They analysed that Nigerian corporations wish to compensation dividends without any cessations and that there is no relationship between net incomes, dividend expenses and stock values. Nigerian firms pay dividend to holders irrespective of incomes amount for the contentment of the holders (Adefila, 2004). Anand studied that dividends effort as an indication about the firm's achievement which influence the share price Raballe & Hedensted in Denmark recognized the direct relationship among the currency dividend value and corporation net incomes, ROE, retained incomes, size and previous year revenue. They did not at all discover an relationship of dividend decision and debt equity ratio in Denmark country (Raballe & Hedensted, 2008).

Rahman & Rashid observed the association amongst dividend strategy and stock price by researching companies in Bangladesh who absorbed straight but not monitoring association between share prices and dividend however observing issues like earning instability, debt level, company's size payout ratio and progress in assets (Rahman & Rashid, 2009). Pani collected five hundred companies' data out of six different segments of Bombay stock exchange and observed the connection between dividend strategy and share prices and came up with the facts that dividend ratio has direct association with share incomes (Pani, 2008).

According to some researcher dividend does not predict correctly about firm's profits. Drnis and Usobove(2008) and Chen and Dhiensiri(2009) check out the features of dividend giving corporation, according to their outcome the dividend policy of company's prospects rather than shed light on company's previous performance.

Baker & Powell concluded that managers of Indonesia look at incomes stabilities, level of current and potential incomes to be very important components of dividend policy. There survey was about Indonesian directors concerning the facts effecting dividend policy, dividend problems and clarifications for pay out business profit (Baker & powell, 2002). Hussainey conclude that there is indirect relationship in the dividend payout ratio and share prices and direct relationship amongst dividend yield and share price. They also mention that companies earning, level of influence, growth rate and greatness influence on stock price of UK (Hussainey, 2011).

Javed & Ahmad, 2009 studied the issue of dividend policy in Pakistan's market. They selected data of six years from 320 companies sample enlisted in Karachi stock exchange from 2000 to

2005. The consequence of their study concluded that Pakistani's majority companies make disbursement of dividend on the base of current of the previous year's incomes. In simple revenue issue additional dividends to their holders when firms earning increased. There is direct association of dividend pay-out ratio with market liquidity and indirect association between dividend disbursement and growth opportunities  (Javed & Ahmad, 2009).

Nazir studied about the influence of dividend policy on share prices. Their result conclusion verified that share prices depend on bonus disbursement and dividend profit proportions of stocks, size and influence have unintended insignificant, where growth and earning have a direct significant influence on stock prices. Akbar and Baig collected data from 80 institution enlisted in Karachi stock exchange of 4 years from 2004 to 2008. They researched the influence of dividend pay-out on share prices. Their result showed that dividend declaration has positive significance on share prices irrespective of the circumstance whether the dividend or blend of both of them  (Akbar & Biag, 2010). Khan analysed the impact of dividend disbursement on share prices. They observed 55 firms scheduled enlisted in Pakistan stock exchange and decided that there is direct association amongst incomes per share, dividend yield, return on equity and incomes after interest and taxes. Where there is indirect association between retention ratio and stock prices (Khan , 2011).

In short, the meaning of dividend policy is the policy of excellent in dividend disbursement and revenue retention that monitored by at all company. Influence of dividend strategy has continuously been provocative for times.  There are two institutes of through on this concept one reflects dividend strategy irrelevant to have an influence on share values whereas the other reflect it relevant to have a remarkable influence on share values. Several scholars verified either of both concepts. This subject has worked upon all over whole world.

## 3. Research methodology

Here I described the data collection technique and selection of sample. It is a very important topic in the finance field. 100 Sample was selected from 12 firms enlisted on Karachi stock exchange 100-index. I collected historical data of the month of July of every year. For data analysis I used Eviews8 software.

### 3.1 Universe of the Study

There are total three stock exchange in Pakistan, Pakistan stock exchange (KSE), Islamabad stock exchange (ISE) and Lahore stock exchange (LSE). This study is on Karachi stock exchange (KSO). Karachi stock exchange is a well-organized and leading Pakistani stock market, that's why I choice this stock market. Karachi stock exchange total 34 sectors and 652 total companies. The creation of the study contains of those firms which are enlisted in Karachi stock exchange for period of ten years.

### 3.2 Data Collection

I collected secondary data from Karachi stock exchange website and yearly financial reports of Karachi stock exchange 100 index firms. The period of the data is 2010 to 2016.

### 3.3 Panel Data

Panel data is the longitudinal data composed at different points in period. In this data we usually tested the fixed effect & random effect models of regression analysis.

### 3.4 Fixed Effect

Fixed effect model is statistically modelled realistic in regression & ANOVA. In this model we supposed that independent variable is fixed. Interpretation of conclusions applies to comparable standards of independent variable in population. It tested positive relationship, negative relationship and no association amongst descriptive and clarified variables in article. The fixed effect model removed study of net outcome of independent variable and period invariant features and it reduced standard error.

### 3.5 Random Effect

The statistical representations alike regression and ANOVA admit casual independent variable. We applied this classical in circumstances where the level of independent variable level is supposed a minor subsection of possible value. In this model we supposed the random distinction among the entities. In random effect models included the time invariant variables like gender. We applied that test initially. To concentration the outcomes of fixed and random effect we use Housman's test. If p-value of the test is less than .05 then there will be fixed effect, if the value is greater than .05 then there will be random effect.

### 3.6 Model

To appearance the result of dividend strategy and share prices this research monitors multiple regression analysis. In multiple regression analysis, there are total 3 independent variables (share dividend per share, dividend earnings and expenditure) against dependent variable (share price). There are other issues which effect the stock value, so the research also supposed different control variables to overawed this difficult. The below variables are comprised in regression calculation. The next regression equation will be implemented to develop an association amongst dividend policy and stock prices.

$$Yit = \beta1SDit + \beta2RRit + \beta3DPRit + \beta4PATit + \beta5EPSit + \beta6ROEit + \alpha i + \mu it.$$

Where;

$\alpha i,(i=1\ldots n)$ shows the unknown intercept for every entity (n entity – specific intercepts)

$\beta1SDit$ = Coefficient of Stock dividend per share,

$\beta2RRit$ = Retention ratio,

$\beta3DPRit$ = Dividend pay-out ratio,

$\beta4PATit$ = Profit after tax,

$\beta5EPSit$ = Earnings per share,

$\beta6ROEit$ = Return on equity,

$\mu it$ = Error term in the equation,

$i$ = ith company

$t$ = time period.

### 3.7 Theoretical Framework

**Dependent variable**

1. Stock market price

**Independent variable**

a) Stock dividend per share market
b) Dividend pay-out ratio
c) Retention ratio

| S.NO | Variable | Symbol | Formula |
|------|----------|--------|---------|
| 1 | Stock dividend/ shares | (SD) | Dividend/Number of share |
| 2 | Retention ratio | (RR) | (Net profit-dividend)/net profit |
| 3 | Dividend pay-out ratio | (DPR) | Dividend/net profit |
| 4 | Profit after tax | (PAT) | Gross Income – Operating expenses – Interest – Taxes |
| 5 | Earnings per share | (EPR) | Net Income available for Net Profit available for equity Stockholders/No of Equity |
| 6 | Return on equity | (RE) | (Net profit / shareholder's Equity*100 |

## 4. Variables

The objective of the research is to check the association amongst dividend strategy and share values. This research has three independent variables, one is depended variable and three are control variables. The depended variable is stock market price. Dividend/share, RR and dividend per share relation are independent variables whereas income after tax, incomes per stock and profit on equity are control variable.

### 4.1 Stock Dividend per Share (SD)

It is independent variable define is total share dividend/number of outstanding shares. Akbar and Baig use this variable because its effect on share prices. According to them there is direct relation between stock dividend and market share prices. This variable is one of the central variables calculated with below formula.

$$SD = STOCK\ DIVIDEND/NUMBER\ OF\ SHARES$$

### 4.2 Retention Ratio (RR)

It is independent variable and it is defined is the worth of dividend out of company's incomes. Retained ratio is an undistributed dividend of the firm and it is attributed to reserved incomes. It is also named plough back relation. Retained ratio of the firms calculated with the following formula.

$$RR= NET\ INCOME\ -\ DIVIDEND/\ NET\ INCOME$$

### 4.3 Dividend Pay-out Ratio (DPR)

Dividend pay-out percentage is an independent variable. Dividend pay-out percentage is the ratio of profit distributed amount of the firms as a dividend to their shares holders of the business. For the growth purpose, some earnings amount invested in the firm. These reinvested earnings of the firms called retained earnings. The formula is the dividend pay-out percentage is

$$DIVIDEND\ PAYOUT\ PERCENTAGE= DIVIDEND/NET\ PROFITS$$

According to dividend pay-out formula, the company net profits can be initiate on the basis of profit & loss account. In the time of purchase share, the investors see the dividend pay-out percentage of the firms. Dividend pay-out percentage is the steady earnings and reinvestment for possible forthcoming incomes.

### 4.4 Profit After Tax (PAT)

Profit after tax is a control variable of this research. According to AL-Kuwari (2010) research it is an independent variable. There is direct relationship between share values and profit after tax. Profit after tax is an impotent variable of the study. The purpose of the profit after tax COGS, operating expenses, interest and taxes all are subtracted from the company's sales earnings. We calculated profit after tax with the help of following formula

$$Profit\ After\ Tax= GROSS\ INCOME- OPERATING\ EXPENDITURES- INTREST- TAXES$$

### 4.5 Earnings Per Share (EPS)

Incomes per stock is a control variable. It is defined is funded on preferred stocks/ net profits and sharing the subsequent worth with the number of outstanding share. Formula of EPS is

$$Earning/Share= NET\ PROFIT\ AVAILABLE\ FOR\ EQUITY\ STOCKHOLDER/NUMBER\ OF\ EQUITY\ SHARES$$

According to GAAP (generally accepted accounting principles) public limited and private limited companies are bounded to display incomes per stock next to profits mark in their corresponding income and loss financial records. In financial ratio, earnings per Stock have its specific separate situation.

### 4.7 Return on Equity (RE)

Return on equity is a control variable and it is defined is profit of forms/ shareholders equity. Ling (2008) also used this variable in his study. According to their result there is direct association amongst profit on equity and share values. Return on equity is deliberate by the following formula

$$Return\ on\ Equity= (NET\ PROFIT/STOCKHOLDER'S\ EQUITY)\ MULTIPLY\ BY\ 100$$

**4.8 Stock Market Price**

Stock market price is a dependent variable of the study.

**5. Findings**

This is the section in which I make an attempt to estimate propose model. Here diverse groups of regression outcomes are exposed. Earlier applying pooled regression statistics is identified, this research used check to inspect the hetroscedascity and outcomes shown that statistics data is homoscedascity or new words no heteroscedascity problematic there is. In pooled PLS regression there is multi collinearity amongst the 2 variables; that is the bonus disbursement proportion and retaining ratio. That's why PLS regression with entirely variables and outcomes without retaining ratio and exposed only for the sake of judgement. The statistics is panel records. Panel data is a verified, by using fixed effect and random effect models of regression analysis. After it Housman test is applied to check their fixed and random effect outcomes. Like P-value of Housman test is greater than .05 that is why in conclusion random effect outcomes are selected for clarification.

Dependent Variable: PRICE
Method: Panel Least Squares
Date: 07/17/18   Time: 04:33

Sample: 2010 2016

Periods included: 7

Cross-sections included: 12

Total panel (balanced) observations: 84

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| DPR | 1.013278 | 0.126272 | -0.441216 | 0.6603 |
| DPS | -0.843511 | 0.881492 | 1.401930 | 0.1650 |
| PAT | -0.462109 | 1.822309 | 2.640788 | 0.0100 |
| EPS | 0.062498 | 1.271660 | 6.654684 | 0.0000 |
| RR | 1.301518 | 0.560449 | -0.356385 | 0.7225 |
| ROE | -1.016046 | 0.012871 | -4.229735 | 0.0001 |
| C | 1.119126 | 0.423721 | 0.385567 | 0.7009 |

| | | | |
|---|---|---|---|
| R-squared | 0.827565 | Mean dependent var | 81.53147 |
| Adjusted R-squared | 0.814129 | S.D. dependent var | 114.2611 |
| S.E. of regression | 49.26115 | Akaike info criterion | 10.71180 |
| Sum squared resid | 186852.9 | Schwarz criterion | 10.91437 |
| Log likelihood | -442.8958 | Hannan-Quinn criter. | 10.79323 |
| F-statistic | 61.59092 | Durbin-Watson stat | 1.912196 |

| | |
|---|---|
| R Squared | 0.827565 |
| DW Stat | 1.912196 |

T-Statistics is 4.229 which is greater than 2 its mean it is statistically significant.

R- squared is 0.82 which is greater than bench mark (statistically significant)

DW stat is greater than 1.65 (bench mark) which is statistically significant.

In this equation we are not facing the problem of auto correlation therefore the equation is statistically significant.

Table 1: Regression Outcomes of variables taken for the effect of dividend strategy on share values.

| VARIABLES | DPS | RR | DPR | EPS | PAT | ROE |
|---|---|---|---|---|---|---|
| Co-efficient | -0.843 | 1.301 | 1.031 | 0.062 | -0.462 | -1.016 |
| Std. error | 0.881 | 0.561 | 0.126 | 1.271 | 1.822 | 0.012 |
| P-Value | 0.1650 | 0.7225 | 0.6603 | 0.0000 | 0.0100 | 0.0001 |
| t-statistics | 1.4019 | -0.355 | -0.441 | 6.654 | 2.6407 | -4.2297 |

| | |
|---|---|
| R-SQUARED | 0.827565 |
| F-VALUE | 61.59092 |

"In the above table from top to bottom row 1 shows value for co-efficient, Row 2 represent standard error, row 3represent p-value, row 4 represents T-statistics and after it values of R-square & F-values are given. While from lift to right column 2 represent worth for dividend per stock (DPS), column three presents for (RR), column four presents dividend pay-out ratio (DPR), five presents Earning per stock (EPS), six shows income after tax (PAT) and last one presents return on equity (ROE)."

The above Table present the particulars analysis of the descriptive statistics and pooled regression result of non-commercial companies of Karachi stock exchange-100 indexed taking positive income and dividend disbursement all over for a period of 7 years beginning from 2010. According the outcomes P-value & T-statistics it is clear that share market value has straight relation with dividend pay-out percentage and income per stock. While variables alike dividend per stock, retaining percentage and income after tax have irrelevant association. F- value of regression table significant where total model is statistically important or not. If F-value is bigger than 2, then it displays that complete model is statistically important. R- square = 0.827565 indications that 82.75% change in dependent variable is due to of variation in independent variables.

Dependent Variable: PRICE
Method: Panel EGLS (Cross-section random effects)
Date: 07/17/18   Time: 04:35
Sample: 2010 2016
Periods included: 7
Cross-sections included: 12
Total panel (balanced) observations: 84

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| DPR | 0.58482 | 0.056094 | -0.413722 | 0.6802 |
| DPS | 0.28165 | 0.779197 | 1.314375 | 0.1926 |
| EAT | 0.06090 | 0.178809 | 2.540908 | 0.0131 |
| EPS | 1.42185 | 1.314921 | 6.389406 | 0.0000 |
| RR | -1.82811 | 0.061330 | -0.370838 | 0.7118 |
| ROE | -0.99661 | 0.039438 | -4.515902 | 0.0000 |
| C | 1.03345 | 0.219218 | 0.397904 | 0.6918 |

| Effects Specification | | | |
|-----------------------|--|-----|-----|
| | | S.D. | Rho |
| Cross-section random | | 14.19388 | 0.0813 |
| Idiosyncratic random | | 47.72843 | 0.9187 |

|  | Weighted Statistics |  |  |
| --- | --- | --- | --- |
| R-squared | 0.803972 | Mean dependent var | 64.07538 |
| Adjusted R-squared | 0.788697 | S.D. dependent var | 103.4731 |
| S.E. of regression | 47.56422 | Sum squared resid | 174201.3 |
| F-statistic | 52.63342 | Durbin-Watson stat | 1.972657 |
| Prob(F-statistic) | 0.000000 |  |  |

|  | Unweighted Statistics |  |  |
| --- | --- | --- | --- |
| R-squared | 0.937103 | Mean dependent var | 81.53147 |
| Sum squared resid | 187353.9 | Durbin-Watson stat | 1.994375 |

| R-Square | 0.803972 |
| --- | --- |
| DW-stat | 1.904375 |

T-statistics is 4.51 which is greater than 2 its mean it is statistically significant.

R Square is 0.80 which is closer to 1 its mean it is statistically significant.

DW-statistics is 1.90 which is greater than bench mark (1.65) it mean it is statistically significant.

So this equation is statistically significant.

Table 2: Random Effect Regression outcomes of variables taken for the effect of dividend strategy upon share values.

| VARIABLES | DPS | RR | DPR | EPS | PAT | ROE |
| --- | --- | --- | --- | --- | --- | --- |
| Co-efficient | 0.281 | -1.828 | 0.5848 | 1.4218 | 0.060 | -0.996 |
| Std. error | 0.779 | 0.061 | 0.056 | 1.314 | 0.178 | 0.039 |
| P-Value | 0.192 | 0.711 | 0.680 | 0.000 | 0.013 | 0.000 |
| T-statistics | 1.314 | -0.370 | -0.413 | 6.389 | 2.540 | -4.515 |

| R-Square | .80 |
| --- | --- |

F-Value        52.633

"In this table from top to bottom row 2 signifies worth for co-efficient, 3 signifies standard error, 4 presents p-value, 5 presents t-statistics. While from lift to right column 2 represents DPS, 3 represent RR, 4 represent DPR, 5 represent EPS, 6 represents PAT and last one represents ROE."

For the choice making purpose concerning choice amongst fixed and random effects Hausman's test is run. The p-value of the Hausman's test decides the choice between fixed effect and random effect. If p-value is less than 0.05 then we select fixed effect model, if p-value is greater than 0.05 then we select random effect model. Here p-value is more than .05 that's why we selected random effect model.

In the above table the value of R-square is .80 which means 80% change accrue in dependent variable when independent variable is change. The F value is 52.63 which statistically significant. More F Value the model is more statistically significant.

The table show the relevance of individually variable of the research. Result show that that dividend per share demonstrations unimportant relation towards stock market values. P-value demonstrations the level of significance. That is obvious from random effect consequences that level of significance is insignificant at 5%. That outcome is furthermore maintained by t- statistics as its worth is less than 2. That capacity because of the statistic that dividend per stock as a means loss of each for the industry. The outflow of dividend currency show that the organization lacks moneymaking reinvestment of revenue. The organization try to make opportunities for reinvestment of revenue to make more profit in corporate. Additional aim may be the improved quantity of dividend per stock means additional revenue for stockholders affecting an increasing in their amounts of tax. There is positive significant association between dividend pay-out ratio and market stock prices. When 1% change accrue in dividend pay-out ratio, market share price change 0.80%. here is positive relationship means if one is increase, other is also increase and vice versa. P-value indications level of significance. That is obvious from outcomes that level of significance is insignificant at 5% level.

Income afterward tax, income per stock and profit on equity are different control variables. A 1% change in PAT cause 0.60% change in stock market price and it is positive relation. A 1% change in RPR cause 0.401% change in stock market price. A 1% change in ROE cause 0.996% change in stock market price and it is indirect relation.

## 6. Summary, Conclusion and Recommendation

### 6.1 Summary

The basic objective of study is to notice the association connecting dividend strategy and stock values. The study research problems are whether dividend strategy has an influence on share values or not? The purpose of research is to see the association between dividend strategies with stock values and authenticate or contradict the hypothetical description of the repetition of giving bonus. Though the OLS regression analysis is used firstly, but to the cause of statistics existence panel, random and fixed effect of analysis are used. Hausman test choose whether the effect is random or faxed. When p-value is more than 0.05, the effect will be random otherwise fixed. There the effect is random because of p-value more than 0.05. The outcomes indication that out of variables individual income per stock and bonus disbursement percentage have an important positive association though profit on equity has negative noteworthy association through the dependent relationship with stock market price.

### 6.2 Conclusion

The purpose of conducting of the study is to see the influence of dividend strategy on share values. Result of the random result indications that among the variables simply earning per share, dividend pay-out percentage and profit on equity have statistically important association with share market value. 1 % increase in dividend disbursement percentage source 0.5858% in share market value. A 1% variation in earning per stock cause 1.4219% variation in share market prices. On the other side, 1 % improvement in the value in profit on equity cause 0.996% drop in the worth of share market values and opposite will the outcomes in opposite circumstances. Different overhead variables dividend per stock. RR beside with PAT have statistically minor relationship with market price.

### 6.3 Recommendations

On the basis of result recommendation

1. The companies need to observe their dividend payment regularly because it will reason a growth in market share price. On the further side income retention by companies will reason a decay in worth of share market values.
2. Researcher should increase numbers of analysis sample data of the companies on this topic.
3. As owners are involved in change in market share price so, concluded these types of research they correspondingly may get direction concerning the issues that reasons change in market share values and others component measured significant by in conclusion making at period of investment.
4. More research is recommended to request about and enhance in other features concerning dividend strategy.

5. Moreover, scholars are recommended to reason about different study project to make assured the reputation of all dividend concepts in Pakistan market environment.

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