DETERMINANTS OF DIVIDEND PAYOUT RATIO: A STUDY OF KSE MANUFACTURING FIRMS IN PAKISTAN

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ABSTRACT

Purpose: Motive and cause of this study is pursuing to examine the determinants of dividend payout ratios of KSE listed companies in Pakistan.

Design: This study used the data of ten sectors of cement industry and these companies are listed in Karachi stock exchange, and data is drives by 2003-2012, enlarge the current research on dividend payout policy. Panel regression model used to estimate the results. Corporate profitability has always been considered as a leading independent variable of dividend payout ratio.

Findings: There are multitudinal factors other than corporate profitability that influence dividend decisions of the firm like taxes, cash flow and debt to equity, sales growth. This research analyzes that profitability, tax, and cash flow have a significant relation with dividend payout ratio. And debt to equity and sales growth has insignificant relationship with dividend payout ratio.

Research Limitations: This research failed to collect the data of different sectors listed on KSE except Cement industry. And collect the data of only one sector (cement). There are other determinants exist that have a huge effect on payout ratio, than these which are included in the research.

Originality: Nobody has done the research on this particular model in Pakistan during the period of 2003-2012.

Key words- Dividends, Determinants, KSE, Pakistan

Jel Classification: A12, B26

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1. INTRODUCTION

1.1 Background:

The dividend payout ratio is the most debatable topic in the finance literature. It is most considerable thing in emerged markets and developed markets. Lots of researchers did struggle to break the dilemma with regard to the behavior of dividend or dividend policy ratio but unfortunately this matter is still has unacceptable detail/answer for the behavior of a firm’s dividend (Myers 2005, Allen and Michaely, 2003, Black, 1976 and Brealey).

Dividend payout is the portion of net income/net income, which an association or company pay to its shareowners in the form of dividend. The dividend payout ratio is a policy in which manger deciding the proportion/ pattern of cash distribution to shareowners over the specific period of time. Many researchers have provided insights empirical as well as theoretical, into dividend payout ratio puzzle. Several surveys (Empirical surveys) pointed that managers and investors both favor payment of dividend to shareholders, but the main point is, why firm pay dividend is yet un resolved and still Issue arises about the distribution of the dividends. Basically it depends upon the managers and on the firm’s situation. The firms/companies with boost growth rate in earlier life having minor or zero dividend payout proportion.

The dividend payout ratio is an important topic of discussion due to several reasons:

(i) The firms may use to dividend as a security or an instrument for signaling to outsider by the use of dividend. Dividend may show stability of the firm.

(ii) Dividend shows the positive impact on capital structure.

A famous theory “Residual dividend theory” said that associations are very conscious about payments and mostly associations pay the dividend in such conditions when they do not have any opportunity of profitable investment. Recent studies concluded that patterns of firms or company’s dividend policy differs in emerging countries and differs in developed countries, it differs across the time period and differs across the countries and it also differs in the different types of companies as well. Like For the companies which are running as joint stock, for those firms or companies a dividend is due as a fixed amount per share. That’s why; a shareowners get there dividend in amount to their shareholding. For these companies dividend payments are not assumed to be an expense of the company, it is the circulation of an asset among the shareholders. If we talk about Public firms, then these firms commonly pay dividends to the shareholders on a set plan, but its not a thumb rule of these firms may public firms announce a dividend at any time, most of the times known as a special dividend to differ it from a regular one.

Cooperatives companies distribute dividends to their shareholders of the company according to its members’ activity, that’s why the dividends of such companies are sometimes considered to be a pre-tax expense. Dividend can b delivered into many forms like Cash dividends, store credits dividends and shares in form of dividends in the firm, furthermore many public firms offer dividend reinvestment plans which use the cash dividend to buy additional shares of the firm for the shareholder. A few analyst expo the relationship among investment decision and firm dividend. Corporate most of the time does not want to reduce the dividend payment. Dividend can increase the stock price of the company.
1.2 Problem statement:
As we studied in background that dividend payout is the portion of net income/net income, which an association or company pay to its shareowners in the form of dividend. The dividend payout ratio is a policy in which maneger deciding the proportion/pattern of cash distribution to shareowners over the specific period of time. Dividend differs across time period, across countries. The history of dividend studies shows that for finding the results of dividends in both manufacturing and services industries, there is a hell of difference between the results of manufacturing and services industries, this variation occurs due to different nature of both of industries. The core of this research exploration is to scrutinize the dividend behavior of manufacturing companies which belongs to cement sector and these companies are listed in KSE (Karachi stock exchange). In this research we study the impact of corporate profitability, taxes, sales growth, Debt to equity and cash flow on dividend payout ratio of manufacturing firms of Pakistan. This research provides the current view of dividend payout ratio of Pakistan. The knowledge of dividend payout ratio is very important for the investors and current markets because the fluctuation of dividend of a firm provide a clear view about firm that how much a firm is leading to success and how much a firm is going towards failure. And which factors seriously affect the dividend and which factors are not affecting. Dividend payout ratio changes over time to time rapidly. Karachi stock exchange (KSE) is a vital arising market of the area between those countries which are developing in nature. (Nishat, 1999) stated that Karachi stock exchange (KSE) is entitling as higher risk and higher return market from where the investors of the firms get the higher risk premium. Some researchers analyzed the long lasting attitude of the related issues and market (Nishat and Bilgrami, 1994) but not a single one study done to find out the character of dividend yield and payout ratio in changing the share prices. (Nishat, 1999) stated that Pakistani investors have need to understand clearly about dividend ratio and dividend yield because the knowledge of dividend will expand vitality it in the current market. In Pakistan; specific dividend policies and general dividend policies are; taxes sealing on the dividend that are based on cash, pattern of the dividend payment shifting from cash dividend to share dividend. So the motive of the study is pursuing to examine the determinants of dividend payout ratios of KSE listed companies in Pakistan.

1.3 Objectives of the Study:
As we discussed earlier that motive of the study is pursuing to examine the determinants of dividend payout ratios of KSE listed companies in Pakistan. Our objective of this research is to find the following results:

1. Impact of corporate Profitability on Dividend payout ratio
2. Impact of Sales growth on Dividend payout ratio
3. Impact Taxes on Dividend payout ratio
4. Impact of Cash flow on Dividend payout ratio
5. Impact of Debt to equity on Dividend payout ratio

2. LITERATURE REVIEW:

2.1 THEORETICAL OVERVIEW:
If we talk about the theoretical principles that root the dividend payout policy can be portray in two terms like either in the term of dividend relevance theory or dividend irrelevance theory.
**Dividend Irrelevant theory:** Dividend Irrelevant theory that was presented by Miller and Modigliani (1961), suggests that investors of a firm are not affected with a firm's dividend payout policy since they may sell a proportion of their portfolio of the equities if they are willing to get cash. M&M argued that investor is aloof between capital gains and dividend payment. Dividend payout policy is irrelevant in a perfect capital market because it doesn’t change the firm’s value. M&M stated that firm’s value rather based on its earnings which become the cause of result from its investment policy. **Bird-in-the-Hand Theory/Dividend relevant theory:** The bird-in-the-hand theory suggests that dividend is relevant with the organization and market value. Total return that is denoted by \( k \) is equivalant to the capital gains and dividend yield.

\[
\text{Total return} = \text{Capital gains} + \text{dividend yield.}
\]

(Gordon/Linter) used this equation/formula and supposed that “\( k \)” will reduce as a firm's payout will expand. In this scenario when firm expands dividend, the investor of the firm affected that the firm's capital gains of the future will be abuse because the accumulated profits that also called accumulated profit that the firm again invests in the company/firm will be low. (Gordon/Litner) stated the investor value dividends are higher as compare to the capital gains when doing final opinion alike to stocks. The dividend relevant theory/ bird in hand theory can seem well known because it is derived by the old quotation: “a bird in the hand is worth two in the bush.” Dividend’s theory took this quotation in this sense that: “the bird in the hand” shows to dividends of the firm & "the bush" shows to capital gains. **Tax Preference Theory:** Another variable that is very important while we are discussing about dividend policy. Taxes are important element for investors. As compare to dividends, Taxes are at a lower rate in capital gains. Most of the time investors can adopt capital gains to the share’s dividend. This process called "tax Preference theory". When shareholders get dividend then they have to bear double taxation because firstly they bear tax on the investment then secondly they have to bear tax on receiving dividend. That’s why in this scenario many shareholders does not want to get dividend they rely on the firm and refuse to get dividend and sometimes they want to reinvest in the firm as receiving dividend.

**2.2 EMPIRICAL LITERATURE:**

Gill, Biger and Tibrewala (2010) stated about positive kinship among a firm’s cash flow and its dividend payout ratios. They also found some of the kinship between dependent and independent variables for the manufacturing industries are different from corporations in services industries. Anthony Flint, Andrew Tan, Gary Tian, (2010) stated that dividend ratio has significant and positive relation with future earnings growth and in their research, assessment of free cash flow hypotheses and cash flow signaling also failed to explain relationship. S. Franklin John and K. Muthusamy (2010) argue that Price earnings ratio and earnings per share have negative impact on payout ratio. Leverage also has an unfavorable impact on payout ratio. Timothy Mahalang’ang’a Murekefu, and Ouma (2009) argue that corporate performance has favorable kinship with payout ratio. They also argue that financial leverage profitability, legal rules pattern of past dividends, is major factors which affects payout ratio. Amidu and Abor (2006) developed a research paper in which they used the data by the financial statements of the firms listed on Ghana Stock Exchange during a 6 years period (1998-2003). They used Panel data method and for sampling of this research, there were 22 firms qualified for this study in Ghana and limited the sample to the twenty firms. They used DPR “Dividend payout ratio” as dependent variable and independent variables are profitability, risk, cash flow, corporate tax, institutional holdings, sales growth, and market-to-book value. Amidu and Abor (2006) found in their research that there is a favorable/positive kinship among payout ratios and tax, Company’s profitability and
company’s cash flow. Ivan Boban, (2011) developed a research paper bases DPR “determinants of dividend payout ratio” they analyzed 155 companies of United Kingdom as a sample size. Sample data of this study derived from the Bloomberg via original filing data. And used for analysis linear regression equation. Ivan Boban (2011) found that the “average forecasted growth of revenues and the average growth of revenues are negatively related with dividend payout’s profitability, while the number of common shareholders found to be positive with Dividend payout’s profitability”. Kashif Imran, (2010) developed a research paper in his paper he used “Last year dps, eps, Profitability, firm’s cash flow, Sales growth, Firm’s size; Liquidity. And dependent variable is dividend payout ratio”. Panel data technique is used in this paper like ordinary least square model. Secondary data is used in this paper. The data of these 36 companies gathered by the balance Sheet analysis that is obtained by the record of KSE from 1996 to 2008. Author found results from research that there is positive effect of previous year’s dividend per share, sales growth, cash flow, Profitability, earnings per share, and the size of the corporation are critical factors for determining firm’s payout policy. And it has an unfavorable link with firm’s cash flow. Pandey and Bhat, (2007) developed a research paper they examined “dividend payout behavior” of Indian corporations/firms by using the monetary policy restrictions. According to their research Hypothesis of this research stated that in “monetary policy restrictions, dividend payout policy changes and payouts reduce”. This research used 571 firm’s balanced panel data for years (1989 to 1997) together with, the GMM estimator. Pandey and Bhat (2004) stated that monetary policy has a favorable/positive and significant link with the payout policy. They advocate that the policies of macroeconomic have a great impact on financing decisions of firm. Musiega, Alala, Douglas, Christopher and Rober, (2010) wrote a research paper and the main theme of their paper was to find out the main factors that affect dividends policy decisions. The population size of NSE listed non-financial firms is 50 companies. Sample for this research derived from the companies listed on Nairobi Securities Exchange that is based on secondary data and Audited financial statements of the companies being used in this paper as a sample. Purposive sampling technique used to select samples from 9 sectors. In this paper Current earnings, Growth opportunities, Return on equity, Earnings per share, Current ratio, Short term debt to asset ratio, Long term debt to asset ratio, Institutional ratio are independent variable and dividend payout is dependent variable. Ebenezer Agyemang Badu, (2013) wrote a paper to find out the “determinants of dividends payout ratio policy of the listed financial institution in Ghana by using fixed and random effects”. Major data used for the paper taken by fact book complied by Ghana Stock Exchange. It includes the financial statements of selected firms from 2005 to 2009. In all 11 financial institutions listed on stock exchange considered for this study. These were made up of 9 major Banks & the only 2 Insurance companies listed on Ghana exchange. Dependent Variable is Dividend Payout that is the ratio of cash dividend paid to financial institutions and independent variables are Profitability which is measured by the Return on Assets, Growth which is measured by the Growth in firm net income, Firm Age which is measured by the log of firm age, Non linearity of Age which is measured by the square of log of age, Cash and cash equivalent to Net Total Assets (CTA) and Ratio of Net Fixed Assets to Net Total assets for Financial institutions (FTA).The results of this study showed “positive & significant link among liquidity & age but statistically insignificant relationship between dividend payment and profitability collateral”. Musiega, Alana, Douglas, Christopher, Robert (2013) found that firm’s growth activities, Return on equity current earnings are positively correlated to dividend payout Business risk and size. Atul K. Saxena (1996) argue that a dividend policy of the firm depend upon its, future growth rate, percentage of common stocks that is held by insiders, systematic risk, past growth rate, the and number of common stockholders of the firm. But the relationship is completely inverses in all, cases except the number of common
stockholders. Ernest Kingsley Enyan (2009) argued that profits, cash flows have positive impact on payout ratio. And it has inverse relationship with price to book ratio, retention ratio, and debt to equity. And they argue that there are positive relationships between earnings per share and dividend payout, market capitalization and current ratio and shows unfavorable link among payout and price to book ratio, debt to equity ratios, retained earnings, and price to book ratio. Gustav Hailstorm Gairatjon Inagambaev (2012) stated that payout ratios of large companies has an appreciable link to growth, risk and firm’s cash flow but payout ratios of medium entities have a significant link to leverage free firm’s cash flow, size and the risk. Kapoor and Anil (2009) stated that there is a favorable/positive link among firm’s profitability, firm’s cash flow and payout ratio. Theodor’s Knife (2011) stated that liquidity ratio has an unfavorable relation with payout ratio. Dividend payments directly/strongly related to firm lagged dividend per share, and size. Well there is no relationship of leverage, and growth, profitability, as independent variables with the payout ratio. Lloyd et al. (1985) stated that there is unfavorable link among payout ratio and historical firm’s sales growth and have negative relationship between the payout ratios firm’s risks.

2.3 Why companies pay Dividend?

As we studied in introduction that dividend payout is the portion of net income/net income, which a association or company pay to its shareowners in the form of dividend. The dividend payout ratio is a policy in which manager deciding the proportion/ pattern of cash distribution to shareowners over the specific period of time. Dividend differs across time period, across countries. Dividend payout ratio is very debatable issue for investors because dividends on the shares accommodate certainty about the firm's financial well-being. Dividends of a firm are also admirable and attractive for new investors seeking to safe and secure current income. Many examples provide hint that how the reduction and extension of dividend distributions may change the price of the security. The study of dividend is also beneficial for the current market and for the investors of as well. The dividend payout ratio is an important topic of discussion due to several reasons: (1) the firms may use to dividend as a security or an instrument for signaling to outsider by the use of dividend. Dividend may show stability of the firm. (2) Dividend shows the positive impact on capital structure

3. METHODOLOGY:

The portion of methodology seemed to be as a root of all research paper because it provides the final outcome of any study. Therefore the choice of best variables, techniques and method that being used for gathering the data should be very appropriate and well defined. The methodology will cover that what type of method we will select and from which source we will gather the data and which period will be appropriate for this research. This portion will discuss the broad problem area and rationale of this study and will discuss about measurement, population and sample size.

3.1 Broad Problem Area and Rationale

Many factors exist in the world that affect directly or indirectly to the payout ratio of dividends in the firm. The main motive of this present article is to detect different determinants which really affect the Dividend payout. Recent studies concluded that patterns of firms or company’s dividend policy differ across the time period and differ across the countries. It also differs in emerging countries and differs in developed countries. Many researchers have provided insights empirical as well as theoretical, into dividend payout ratio puzzle. Several surveys (Empirical surveys) pointed that managers and investors both favor payment of dividend to shareholders , but the main point is, why firm pay dividend is yet un
resolved. After various studies, still Issue arises about the distribution of the dividends. Basically it depends upon the managers and on the firm’s situation. Recent studies concluded that patterns of firms or company’s dividend policy differ across the time period and differ across the countries. Dividend payout ratio changes over time to time rapidly. This research provides the current view of dividend payout ratio in Pakistan. This is also beneficial for the current market and for the investors as well.

3.2 Sample and Measurement
In this research the Target population size is (31) Thirty one companies of cement sector these companies are listed on KSE (Karachi stock exchange) in Pakistan and Ten (10) companies out of 31 companies as sample. This research adopts secondary research method for this research and follows the panel regression analysis in this research. This research selects the EVIEWS Software for empirical analysis. This research based on Quantitative approach. And research objective is examining the determinants of payout ratio. This study collects the financial reports (year 2003 -2012) of selected listed companies from the website of State bank of Pakistan (SBP).

3.3 Selected Companies and their Period of Data: (Source; KSE Pakistan)

<table>
<thead>
<tr>
<th>Name of Company</th>
<th>Period of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bestway Cement Ltd</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Cherat Cement Ltd</td>
<td>2003-2012</td>
</tr>
<tr>
<td>D.G Khan Cement</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Fauji Cement Ltd</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Fecto Cement Ltd</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Gharibwal Cement</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Kohat Cement Ltd</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Lucky Cement Ltd</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Maple Leaf cement</td>
<td>2003-2012</td>
</tr>
<tr>
<td>Dewan Cement Ltd</td>
<td>2003-2012</td>
</tr>
</tbody>
</table>
3.4 THEORETICAL FRAMEWORK AND MODEL:

Theoretical Framework:

I.V

Corporate profitability

Debt to equity

Tax

Sales growth

Cash Flow

Dividend payout ratio

3.5 Research Model

As the data is derived from 10 cement industries period 2003 to 2012 that are listed in Karachi stock exchange KSE. So that’s why Penal regression analysis is being used in this research and used EVIEW software for conducting this research. Dividend payout ratio plays a role of dependent variable. And corporate profitability, Debt to equity, Tax, Sales growth, and Cash flow are the independent variables.

\[
PAYOUT = \beta_0 + \beta_1 \times PROFIT + \beta_2 \times GROWTH + \beta_3 \times TAX + \beta_4 \times D/E + \beta_5 \times EPS + e
\]

\[
\beta_0 = \text{intercept of the regression equation/Other factors}
\]

\[
\beta_1, \beta_2, \beta_3, \beta_4, \text{ and } \beta_5 = \text{Regression coefficients of PROF, GROWTH, TAX, D/E and EPS.}
\]

TABEL 3.4.1: Variables abbreviation, Definition & Predicted Sign/Relationship

3.5 Research Model

<table>
<thead>
<tr>
<th>Proxy Variables</th>
<th>Definitions</th>
<th>Predicted Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate profitability(PROF)</td>
<td>EBIT/Net total asset</td>
<td>+/-</td>
</tr>
<tr>
<td>Sales growth(SG)</td>
<td>Current Net Sales-Prior Net Sales</td>
<td>+/-</td>
</tr>
<tr>
<td>Taxes(T)</td>
<td>(Tax provision)</td>
<td>+/-</td>
</tr>
<tr>
<td>Debt to Equity(D/E)</td>
<td>(D/E ratio)</td>
<td>+/-</td>
</tr>
<tr>
<td>Cash flow</td>
<td>Net cash flow from operation-capital expenditure</td>
<td>+/-</td>
</tr>
<tr>
<td>Dividend payout ratio(DPR)</td>
<td>(Yearly dividends/EPS + depreciation)</td>
<td>+/-</td>
</tr>
</tbody>
</table>

As the data is derived from 10 cement industries period 2003 to 2012 that are listed in Karachi stock exchange KSE. So that’s why Penal regression analysis is being used in this research and used EVIEW software for conducting this research. Dividend payout ratio plays a role of dependent variable. And corporate profitability, Debt to equity, Tax, Sales growth, and Cash flow are the independent variables.

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\[
\beta_1, \beta_2, \beta_3, \beta_4, \text{ and } \beta_5 = \text{Regression coefficients of PROF, GROWTH, TAX, D/E and EPS.}
\]
3.6 Definition and Justification of Selected Variables

Many factors exist in the world that directly or indirectly affects the dividend payout ratio. But the present research select just five factors as independent variables which directly affecting the payout ratio:

3.6.1 Corporate profitability

Corporate profitability is a primitive pointer of a company's aptitude to pay its shareholders. Corporate profitability is a measure of financial performance that indicates the earnings after expenses and other deductions. There are several levels of the profit including net profit, gross profit and net operating profit after taxes. Firm’s Profitability may computed by operating profit divided by total assets of the firm. Amidu and Abor (2006) detect positive relation among profitability and payout ratio, Anil and Kapoor (2009) found positive relation among dividend payout and corporate profitability, Maniagi G. Musiega et al. (2013), and Kashif Imran (2012) also found significant and positive relation among profitability and dividend payout. The Positive relation between profitability and dividend payout ratio shows that if profitability of a firm will increase than dividend payout ratio become also increase automatically. So it is better for a company to increase its profitability if that company wants to satisfy more to its shareholder. If profitability of a company is very strong/high then investors will attract more towards that particular company for investment.

3.6.2 Debt to Equity

A ratio that point out portion of the firm’s equity and firm’s debt that used for financial affairs of the company called Debt to equity ratio (D/E). This is also called as gearing/leverage/ risk. Rozeff (1982), found negative relation between debt to equity and payout ratio, Collins et al. (1996), and D'Souza (1999) also found negative relationship of payout and debt to equity ratio in their studies.

3.6.3 Taxes

A specific sum of money that the government receives on goods or services for taking support or managing the government expenditures called Taxes. In the firms, liability of tax increases/decreases the selects the further decision for payout ratio. Amidu and Abor (2006) detect positive link among taxes and dividend payout ratio. Tax shows significant impact on the dividend, if tax increases than dividend payout ratio become decrease and when tax decreases the payout ratio become increases.

3.6.4 Sales Growth

A Process by which average sales of a firm’s goods or services boosts, normally from year to year called sales growth. Firm’s Sales growth can impact on dividend payout ratios. Sales growth can affect the payout ratio by increasing or decreasing itself. Amidu and Abor (2006), Collins et al. (1996), Lloyd et al. (1985) and Rozeff (1982), all detect negative relation among dividend payout and sales growth in their researches. Gill, Biger and Tibrewala (2010) also found negative relationship among sales growth and payout ratio in manufacturing companies as compare to services industries.

3.6.5 Cash flow

Cash flow is the entire amount of money being transmit out of and into a business, that particularly as affect liquidity of cash. Company pays dividends when firm has excess amount of cash and if firm does not have spare cash or have poor liquidity of cash then that firm will not be able to pay dividends to its shareholders. It shows that when cash liquidity
increases the payout ratio also increase when cash flow decreases the payout ratio become also decreases automatically. Hailstorm and Inagambaev(2012) found that Large and medium caps have a significant relationship to cash flow. Anil and Kapoor(2009), Kashif imran(2012) and Amidu and Abor(2006) also detect positive relation among cash flow and dividend payout ratios.

4. RESULTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF</td>
<td>0.060438</td>
<td>0.011639</td>
<td>5.192686</td>
<td>0.0000</td>
</tr>
<tr>
<td>TAX</td>
<td>-3.66E-05</td>
<td>1.63E-05</td>
<td>2.245888</td>
<td>0.0271</td>
</tr>
<tr>
<td>CF</td>
<td>-5.09E-05</td>
<td>3.77E-05</td>
<td>1.950663</td>
<td>0.0167</td>
</tr>
<tr>
<td>DE</td>
<td>0.000390</td>
<td>0.000859</td>
<td>0.454043</td>
<td>0.6508</td>
</tr>
<tr>
<td>SG</td>
<td>-4.25E-06</td>
<td>2.88E-05</td>
<td>-0.147499</td>
<td>0.8831</td>
</tr>
<tr>
<td>C</td>
<td>0.004707</td>
<td>0.002306</td>
<td>2.041250</td>
<td>0.0440</td>
</tr>
</tbody>
</table>

R-square is a value that provide the % of the response variable variation that explained by the linear model of the research. In the results Regression square is (0.87) that shows our variables are 87% sporting to our model. Adjusted R square is a value that shows the proportion of variation in the dependent variable that accounted for by independent variables. Adjusted regression square is (0.85) that shows 85% variation occurs in dependent variable by the independent variable. Standard error of regression is a value that measures the accuracy of the predictions. In this result standard error of regression is 0.01. Means only 1% prediction of error occurs. (0.01%) Sum of squares of residuals shows there is 0.01% discrepancy exists between an estimation model and data. In this result F-statistic shows (6.50%) goodness of fit of model as F-value should be greater than 5%. Durbin-Watson test
used to detect autocorrelation presence or absence in regression analysis. Durbin-Watson value is 0-4 where 0 shows no autocorrelation, 2 shows positive autocorrelation and 4 shows negative autocorrelation. As in this result Durbin-Watson is (1.15) it is between (0-2) which is acceptable. Significant/P-value should be less than 0.05, result shows (sig. 0.0000) significant level of Profitability means firms with more Profitability are likely to expand dividend payout ratio in the same direction. Tax shows (sig. 0.0271) means companies with more taxes are likely to expand more dividend ratio in the same direction. Cash flow shows (sig. 0.0167) means companies with more cash flows are likely to expand more dividend ratio in the same direction. Sales growth (sig. 0.8831) and Debt to equity (sig. 0.6508) shows insignificant relation with dividend payout ratio. Coefficient measures the frequency distribution of the variable, profitability shows (coefficient 0.060438) frequency distribution, Tax shows (coefficient -3.66E-05) frequency distribution, Cash flow (coefficient -5.09E-05) frequency distribution, Debt to equity shows (coefficient 0.000390) frequency distribution and Sales growth shows (coefficient -4.25E-06) frequency distribution. T-statistic shows the goodness of fit of independent variable with dependent variable. Its value should be greater than (1.96). Profitability shows (T-value: 5.192686) which indicate a good/perfect fit of predictor variable with predicted variable, Tax shows (T-value: 2.245877) which indicate a good/perfect fit of predictor variable with predictor variable, Cash flows shows (T-value: 1.950663) which indicate a good/perfect fit of predictor variable with predicted variable. Debt to equity shows (T-value: 0.454043) which indicate an imperfect fit of independent variable with dependent variable. Sales growth shows (T-value: -0.147499) which indicate an imperfect fit of the independent variable with dependent variable.

6. EMPIRICAL RESULTS AND DISCUSSION:

In results as it is mention above that dependent variable is Dividend payout ratio DPR and in dependent variables are profitability (PROF), cash flow (C.F), debt to equity (DE), sales growth (SG), taxes and earnings per share (EPS). The method which is being used here is the least square method. The results shows that profitability, cash flows and taxes have positive and significant relationship with dividend payout ratio while sales growth, debt to equity, and earnings per share have negative relation with dividend payout ratio.

6.1 Corporate Profitability:

Corporate profitability shows positive and significant relationship with dividend payout ratio as other researchers like: Amidu and Abor(2006) detect positive relation among profitability and payout ratio, Anil and Kapoor (2009) found positive relation among dividend payout and corporate profitability, Maniagi G. Musiega et al.,(2013) and Kashif Imran(2011) also found significant and positive relation among profitability and dividend payout. The Positive relation between profitability and dividend payout ratio shows that if profitability of a firm will increase than dividend payout ratio become also increase automatically. So it is better for a company to increase its profitability if that company wants to satisfy more to its shareholder. If profitability of a company is very strong/high then investors will attract more towards that particular company for investment.

6.2 Taxes:

Result shows the positive relation between tax and firm’s dividend payout ratio. Amidu and Abor(2006) found positive relationship among taxes and dividend payout ratio. Tax shows significant impact on the dividend, if tax increases than dividend payout ratio become decrease and when tax decreases the payout ratio become increases. So its shows that the tax has direct relationship with dividend payout ratio.
6.3 Cash Flow:
Result shows that there is a significant as well as positive relationship among Cash flows and payout ratio. Because company pays dividends when firm has excess amount of cash and if firm does not have spare cash or have poor liquidity of cash then that firm will not be able to pay dividends to its shareholders. It shows that when cash liquidity increases the payout ratio also increase when cash flow decreases the payout ratio become also decreases automatically. Hailstorm and Inagambaev (2012) found that Large and medium caps have a significant relationship to cash flow. Anil and Kapoor (2009), Kashif imran(2012) and Amidu and Abor(2006) also detect positive relation among cash flow and dividend payout ratios.

6.4 Debt to Equity:
Results detect insignificant relationship among debt to equity and dividend payout ratio. Rozeff (1982) found negative relation between debt to equity and payout ratio, Collins et al., (1996) and D'Souza (1999) also found negative relationship of payout and debt to equity ratio in their studies.

6.5 Sales growth:
Results detect insignificant relation among sales growth and payout ratio. Higgins detect negative link among sales growth and payout in manufacturing firms. He argues about this point that dividend payout ratio has negative relationship with firm's opportunities of finance growth of a company. Amidu and Abor (2006), Collins et al. (1996), Lloyd et al. (1985) and Rozeff(1982) , all detect negative relation among dividend payout and sales growth in their researches. Gill, Biger and Tibrewala (2010) also found negative relationship among sales growth and payout ratio in manufacturing companies as compare to services industries.

7. CONCLUSION
This research probes the determinants that affect the dividend policy of Pakistani Manufacturing firms that are listed on Karachi Stock Exchange (KSE) by using the data of cement industry from the year 2003 to 2012 with help of panel regression method. This research found that profitability has a significant relationship with dividend payout ratio. In our results we analyze that significant and positive relationship of profitability shows that if profitability of a company will increase the dividend payout ratio also become increase automatically. It is better for a company to increase its profits and it will become the cause of high payout ratio. If profitability of a company is strong then investors will attract towards investment in that particular company. Taxes and Cash flow also have a positive as well as significant relationship with dividend payout ratio. But Debt to equity and sales growth has an insignificant relation with dividend payout ratio. Sales growth in this research shows that it has no impact on dividend payout ratio. And debt to equity has no relationship with payout ratio of a firm/corporate. So in the light of results of this report, companies with higher cash flow and firm’s profitability have other sources and ample cash to pay more dividends among shareholders of the firm. So in short, profitability, taxes and cash flow of a company have great impact on dividend payout ratio. And Debt to equity and Sales growth has no impact on dividend payout ratio.

8. LIMITATION
This research failed to collect the data of different sectors listed on KSE. And collect the data of only one sector (cement). Ten company adopted determinants were included in study but it’s probable that there are other determinants exist that have a huge effect on payout ratio, than these which are included in the research. But in this research the company
selected factors included, are most commonly used factors in the previous studies, and therefore they should be relevant for the study.

9. **FUTURE WORK**

This research recommends the other various factors which can be apart from this research topic like some are mentioned below:

1. The behavior of determining dividend payout behavior of non-listed firms or listed firms of Lahore stock exchange etc.
2. More independent variables can be used to check the impact of dividend payout ratio like cash flow, market to book value.

10. **REFERENCE**