



## What Determines a Dividend Policy of Listed Non-Financial Firms of Pakistan

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### Abstract

*This study is aimed at finding the key determinants of consistent dividend-paying non-financial firms of Pakistan. The study uses data of non-financial firms of Pakistan that are listed at the Pakistan Stock Exchange. The secondary data is collected for 91 non-financial firms from their annual reports from 2012 to 2018. Hypotheses have been tested using fixed effects regression technique which was confirmed through the Hausman specification test. OLS pooled regression was applied to investigate the impact of the ROA, financial leverage, corporate tax, and firm size on dividend payout ratio. The result of the study is as follows: DPR was found to have a positive significant relationship with financial leverage, corporate tax, and firm size whereas its association with profitability was found to be insignificant. There were few limitations to the current study; the foremost among them were resource and time constraints that somehow restricted the entire research to narrow down the scope and domain. At the same time, comparatively smaller sample size and consideration to specific non-financial sectors also restrained its generalizability to a larger proportion and applicability as well. Corporate managers should be more inclined towards retaining earnings in times of high taxes than paying out dividends making the financial health of the firm as their utmost priority. The firms should focus on the efficient use of its resources to improve performance as well as its ability to pay dividends without getting buried under debts. In the non-financial sector, most firms do not pay regular dividends. Firms should follow stable dividend policies to attract foreign and local potential investors.*

**Keywords:** Dividend Payout Ratio, Non-Financial firms, Panel Data Analysis.

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## **(1) INTRODUCTION**

The non-financial sector is an essential sector for any economy and this is the reason that foreign as well as domestic investors find them very attractive and intriguing. This importance makes it worth studying how these sectors deal with their finances and paybacks to their investors. This is where dividend policy comes into the picture. Dividend policy is believed as one of the most important policies of corporate finance. Dividend policy is a decision by which a pre-determined portion of earnings of the firm is paid as dividends. A company uses its Dividend Policy to not only structure that whether the dividend payment is to be made at all, but also the amount of dividend payout to shareholders, when to pay, and what pattern to follow. By definition, dividend and dividend policy may not seem very difficult to comprehend phenomenon; but it may not be so for the decision-makers like finance managers who have to make this tough call as this decision is not devoid of its consequences for the business, shareholders, and the managers themselves. It is considered a very critical decision for finance managers because they have to decide between paying dividends from the revenue earned by the firm at the end of the year or to reinvest it in the firm. The prime focus of the managers in taking any decision should be to add to shareholders' -wealth. Thus, the dividend decision is given due importance and attention by the primary stakeholders. Still, it persists as one of the ten unexplained issues in financial academics and this implies that there is still room for research and study. This study attempts to bring a little more clarification on how the dividend policies are formulated in non-financial firms of Pakistan.

Despite tons of research work, studies, and papers by numerous scholars and intellectuals targeted to find answers to questions relating to the importance of paying dividends, investors' inclination towards dividends, and the association of dividend and the firm, it remains one of highest ten unresolved issues relating to finance. From a plethora of theories that are aimed at solving this inexplicable puzzle, the theory by Miller and Modigliani is very much acknowledged. Miller and Modigliani found that dividend policy has no such relation with shareholders' wealth as low payment will result in more retained earnings and more dividend payment will lead to lesser retained earnings. This was completely opposed by Linter who believed companies devise their policy very cautiously. The more the theories, the more unsettling the issue becomes as each theory brings up a different dimension to this phenomenon making it more diverse. From the available literature, three beliefs have come to light relating to how dividends affect a firm's value. The first belief says that the firm is likely to get more valuable when the dividend payments are increased. Completely contrary to the first belief, we have the second belief according to which the firm's value suffers adversely if the dividend payments are raised and then there is this third theory that neutralizes the two theories left and right that it is completely unaffected by the dividend policy.

Dividend payout is an important financial decision because it is involved in determining the value of money that should be distributed to the shareholders as profit or internally reverted into the business. Fundamentals' economic factors - that are part of the capital structure and working capital companies also influence

dividend payout policy (Hudiwijono, Aisjah & Ratnawati, 2018). In the same manner, Dividend payment decisions serve as an indicator to the investors regarding, what the management has planned about the future of the company. Profits earned can be reinvested into the business or held back by the management to be used as an investment for capital expenditure in projects anticipated (Banerjee & Rangamani, 2016).

Going through the existing work done so far and the literature available, researchers have shortlisted elements that are directly related to the dividend payouts of a firm. These include total assets, ROA or ROE, sales growth, liquidity, age, leverage, liquidity, last year's DPS, and growth opportunities. However, they may differ from sector to sector. Besides these factors which are thoroughly examined in the literature to have a potential influence on devising a dividend policy for a firm, the factors of ownership concentration possessed by family or a limited number of hands, too much relying on funds, clientele effects, information asymmetry, and agency cost also have a significant effect. The investment opportunities available to the firms have also proved to be a determining factor for the dividend payouts by a firm (Ahkam, Imran & Hossain, 2014). Furthermore, the association of corporate governance with dividends can also not be overlooked here along with board independence and meeting frequency leads to the argument that, as board independence and the meeting frequency and dividends ease agency problems, sanctioning substitution with each other. Thus, it is expected that when with higher board independence and meeting frequency, the dividends tend to be much less in amount, and in case of less frequency of meeting and board independence, the dividends are expected to be higher (Benjamin, Zain, & Wahab, 2016).

Though an immense amount of research work is done on determining the factors that affect the dividend policies of developing countries than emerging countries like Pakistan, it is worth considering that from those limited number of studies done there was a huge difference observed and recorded in the dividend policies of two. Dividend policies of emerging markets have different natures, characteristics, and efficiency. This study specifically targets the non-financial firms listed in the KSE to examine if the same determinants recognized in the theoretical studies done so far on developed markets also hold for the emerging markets of Pakistan or we might have some puzzling results. Going through the literature and studies have done so far on both Pakistan and non-Pakistan firms one could see the huge amount difference in the results. For instance, if in some market's profitability is rendered as one of the most dominating factors influencing the dividends, in markets of Pakistan it has come out to be insignificant. This makes one realize that Pakistan markets are different and likely to behave and produce results different from other markets.

The study aims to bring to light the determinants that govern the dividend policy and subsequently the dividend payments of the non-financial firms of Pakistan using panel secondary data.

## **(2) RESEARCH QUESTIONS:**

This study focuses and goes about looking for answers to the questions that follow.

1. What is the impact of profitability on the dividend payout ratio?
2. What is the impact of firm size on dividend payout ratio?
3. What is the impact of financial leverage on dividend payout ratio?
4. What is the impact of corporate tax on dividend payout ratio?

The purpose of this study is to bridge the void visible in the literature reviews and studies on the determining factors of a dividend payout policy. This study aims to dig deeper to understand the dividend payout policy of Pakistan's non-financial firms. This will prove to be highly beneficial to the investors and policymakers in having a clearer vision about how the dividend policies work in Pakistan firms. Furthermore, this study will also be of great assistance to the future researchers and students, as well as the teachers to develop a profound understanding of the comparative analysis of dividend payout policy between the different sectors within the non-financial sector of Pakistan. The people who will be primarily benefitted from this study are investors, policymakers of the related companies, and the teachers, students, and potential researchers who will be gaining an understanding of the dividend payout policy of Pakistan's firms.

## **(3) LITERATURE REVIEW**

### **(3.1) THEORETICAL BACKGROUND OF DIVIDEND POLICY**

The issue underlining the dividend policy is not new in the corporate finance world. The managers of companies are faced with this dilemma of how to efficiently share earnings as dividends to stockholders and saving it for the firm. To solve the dividends vagueness, previous researchers brought forth a lot of theories. The most popular one is the one with the three beliefs. According to the first one, the dividend payouts uplifts the value of the firm, the other opposes the notion stating that no amount of dividend payments decrease the value of a firm. Then, the third one negates the influence of dividend payouts on the worth of the firm. The following are a few other popular philosophies on dividends.

### **(3.2) MM, IRRELEVANCE HYPOTHESIS:**

Miller and Modigliani (1961) is the founder of the Dividend Irrelevance Theory, according to which in a perfect capital market that has no transaction cost, taxes, or bankruptcy cost and where the investors have the right to use to the same information and investment opportunities, there are transaction costs, information asymmetry and taxes have to be paid and so they put forth this argument that a firm's value depends on its capability to generate positive cash flows only and not on the fact that the firm is paying dividends or not.

### **(3.3) BIRD-IN-HAND HYPOTHESIS:**

This philosophy implies that the dividend payout policy of a firm is symbolic of the worth of a firm and its shares both. This philosophy further postulates that

there is always a possibility that when it comes to future cash flows as the future is unpredictable so this leads to fact that the investors will prefer cash dividends- cash today (bird in hand) rather than retained earnings. So a higher dividend payout, therefore, will mean a reduced required rate of return and upsurge the firms' value (Miller & Modigliani, 1961).

### **(3.4) CLIENTELE EFFECTS THEORY:**

This philosophy proposes that there is no single theory that could explain preferred dividend policies by clienteles. If some investors demand high dividends, others would demand otherwise. Miller and Modigliani (1961) having gone through various literature and research presented this angle that some investors from clienteles where they beforehand quote their levels of dividend yield keeping in view the taxes. These preferences are influenced by tax implications that the person willing to invest must face. So if the dividend income is subjected to a very high rate even more than the capital gains, then an investor who is already facing a high tax issue will go for a stock that is maybe paying a low dividend or no dividend for that matter.

### **(3.5) THE SIGNALING THEORY:**

It asserts that dividends are a strong sign of any firm's performance in the times to come. Firms that are optimistic about a confirmed increase in their earnings will be using dividends to do their work of announcing to the investors about their anticipated upgraded performance. In the same way, a drop in dividend amount will give a red indication to the investors that things are not looking good in the times to come relating to future performance (Alli, Khan & Ramirez, 1993).

### **(3.6) DIVIDEND PAYOUT RATIO (DPR):**

DPR helps one to define the proportion of profit or income earned by the firm that has been paid out to shareholders as dividends. The ratio is useful for investors as they can easily figure out how any firm has been paying dividends in the past i.e. the past trend and to speculate the future dividend-paying trends. The investor will then be able to make a decision. The dividend payout ratio is presented as a percentage and can be positive or negative.

The dividend payout ratio is calculated by dividing the total dividends paid by net income for the period.

$\text{Dividend Pay-out Ratio} = \text{Total Dividends Paid} \div \text{Net Income}$
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### **(3.7) PROFITABILITY AND DIVIDEND PAYOUT RATIO:**

In this study, ROA is used as a proxy for a firm's profitability which is defined as a measure of a firm's capacity to produce a profit from the available assets efficiently as stated in the firm's balance sheet. ROA is a percentage, and the greater the

as high as 21.48828 and went as low as 0.000000. In the same way, the mean corporate tax is found to be 1234818, with the upper limit of 55039579 and a lower limit of -11207516.

Table 2: Descriptive Statistics for Variables Employed in Analysis

	Mean	Median	Maximum	Minimum	Std Dev
DPR	0.3655	0.2880	109.9624	-11.8620	3.9178
Prof ROA	0.1009	0.10353	0.918890	-11.31123	0.470613
Size LN	16.074	16.04741	20.31752	0.000000	1.611870
Lev	1.1299	0.751389	21.48828	0.000000	1.454222
Corporate Tax	1234818	206908.0	55039579	-11207516	4567961

## (6) CORRELATION ANALYSIS

Correlation analysis not only shows the relation between the dependent and the independent variable but also displays how other free variables are correlated to each other. The extent of correlation is deduced from the coefficient value which is between from -1 to +1. The greater is the value of the coefficient, the stronger is said to be the relationship between those two variables. If the coefficient value of any two variables is 1, then those two variables are said to be in a perfect relationship and vice versa if the value of the coefficient is 0. The coefficient sign provides the nature of the relationship between variables. If the coefficient is positive, this would mean the increase in one variable the other also increases and the same happens when one decreases the other also behaves in the same way. However, if the coefficient is negative it means one variable is increases and the other decreases.

	DPR	Tax	Lev	Prof (ROA)	Size LN
DPR	1				
Tax	0.596223	1			
Lev	0.0931443	-0.03402	1		
Prof (ROA)	0.023777	0.02635	-0.007532	1	
Size LN	0.3767733	0.41278	0.161937	0.00356	1

As per the results from the Correlation Matrix given above, these are the prominent findings. DPR is shown to have a positive correlation with all the independent

profitability ratio the greater is the competence level of the firm in utilizing its assets to produce a profit. ROA is calculated as:

$$\text{Return on Assets} = \text{Net Income} \div \text{Total Assets}$$

Jaara, Alashhab and Jaara (2018) employed panel regression on the non-financial sector of Jordan looking for the effects of the profitability, size, risk, investment provisions, dividends paid in the past, and leverage on respective dividend policies, declared that the impact of Profitability was positive implying greater and more consistent dividends were being paid by firms with high profitability as an indicator of their profitability. Similar results were reported by Gangil and Nathani (2018) in the context of the FMCG sector in India. The results complement the literature available and work done so far by backing up a positive power of profitability on dividend decisions. Contrary to the above two theories, the investigation of the link between policy imposed in textile firms and the profitability of the textile segment of Pakistan as a whole and also its dependence on the payout of dividend revealed that the policy change in 2015 had no impact on the dividends and likewise the DPR remained irrelevant by measures of the textile policy of the selected listed companies (Khan, Naeem, Rizwan, & Salman, 2016). In addition to these, Rafique (2012) rendered profitability as insignificant as a result of her study done on non-financial firms of Pakistan for the years 2005-2010. This theory happened to be high in contrast to the prior studies done in other markets other than Pakistan implying that the results can be unexpected relating to Pakistan. So, keeping these studies in view the following hypothesis is developed.

**H1: Profitability has a significant impact on the dividend payout policy of non-financial firms of Pakistan**

### **3.4) FIRM SIZE AND DIVIDEND PAYOUT RATIO:**

Firm size and Dividend Payout Ratio: As there is no specific formula for estimating a firm's size, proxies are used. This study has used the natural logarithm of the total assets as a proxy for the size of the firm. The firm size is one variable, the positive and significant relationship of which with DPR is backed up by several research studies and also statistically proved likewise (Sadia, 2018; Hudiwijono et al., 2018; Imran, 2011).

**H2: Firm size has a significant impact on dividend payout policy of non-financial firms of Pakistan**

### **(3.5) FINANCIAL LEVERAGE AND DIVIDEND PAYOUT RATIO:**

The financial leverage of a firm tells that how much a firm's total debt is as compared to the shareholder's equity that is its net worth. If the debt to equity ratio is high, it is not considered a good sign as this means that the firm's debts are way more than its net worth. So, it would be difficult for the firm to manage and arrange for reimbursing the debts. Thus, a value investor is going to look for a low debt to



equity value. The ratio is calculated as follows:

$$\text{Financial leverage} = \text{Total Debt} \div \text{Total Equity}$$

Financial leverage has been proved to be very controversial concerning its impact on the DPR of the firms. There are a large number of studies that have found DPR to be adversely affected by the leverage of the firm indicating significant undesirable relation between leverage and DPR. These studies indicated that the highly leveraged firms preferred maintaining their internal cash flows rather than paying dividends. However, in some studies DPR is also found to have a positive relationship with financial leverage as well (Yusuf, 2019; Orajekwe & Okegbe, 2020; Ajibade & Agi, 2020). Taking Pakistan's markets into consideration, Khan and Shamim (2017) found DPR to have an inverse relation with DPR as a result of their study in the Pharmaceutical sector. Tahir and Mushtaq (2016) also presented similar results for oil and gas firms of Pakistan relating to financial leverage and DPR. However, Rafique (2012) declared financial leverage as irrelevant when it comes to its effects on DPR as a result of her study done on the non-financial sector of Pakistan as a whole including both oil and gas along with pharmaceutical and the rest. Since most studies have resulted in declaring FL to have a negative relationship, the hypothesis developed is:

**H3: Financial leverage has a significant impact on dividend payout policy of non-financial firms of Pakistan**

### **(3.6) CORPORATE TAX AND DIVIDEND PAYOUT RATIO:**

In the history of tax, corporate tax is a recent development. When a business sells goods and services to a customer the business costs are deducted from sales and what remains is called the profit. It is from this profit that the government takes a prescribed percentage for corporate tax. Corporate tax can be extremely advantageous for countries that are in the development phase and have fewer sources of revenue. Corporations' taxes are very liberal, and they can be increasingly used for public services. Corporate tax is found to be in an indirect relation with DPR in most of the studies, however, the intensity of the relation may vary depending on the nature of the sector under observation (Gill, Biger & Tibrewala, 2010; Lin et al., 2018).

Since the study is about markets of Pakistan, Arif and Akbarshah (2013) carried out a study on the dividend policy determinants on all the sectors of Pakistan, declared that taxation is irrelevant for all the sectors together, but he also asserted that the results may be different if the sectors are evaluated individually to explore the relation of Tax with DPR. This was confirmed to a little extent by Khan and Ahmad (2017) whose study on the pharmaceutical sector of Pakistan revealed that the influence of corporate tax on DPR is negligible and can be termed as almost irrelevant. However, Ishaq, Amin and Khan (2018) in their study to discover the determining factors of dividend policy of the cement sector of Pakistan also verified the results of Arif and Akbarshah (2013) about tax influencing sectors differently



when they concluded that tax and DPR of cement sector have a linear relationship. Contrary to this, Rafique (2012) brought forth another dimension where tax had a positive significant relation with DPR for all the non-financial firms of Pakistan taken for the study.

#### **H4: Corporate tax has a significant impact on dividend payout policy of non-financial firms of Pakistan**

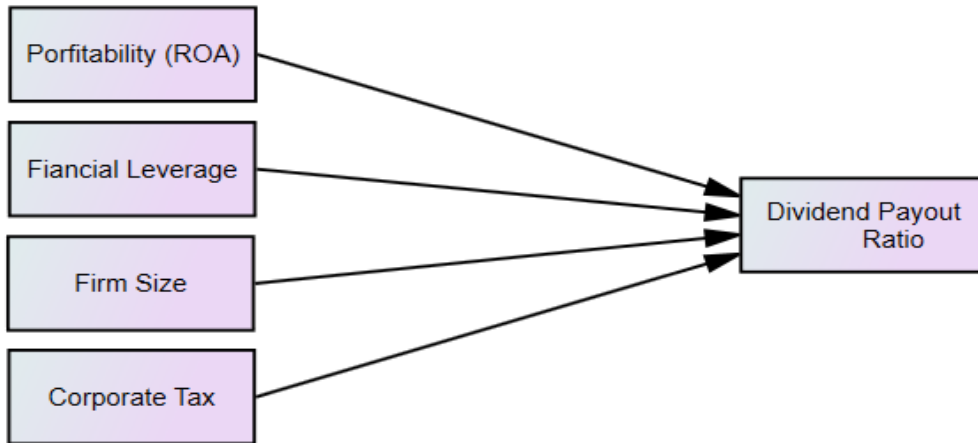


Figure 1: Conceptual Framework

#### **(4) METHODOLOGY**

In this study, data was obtained from appropriate websites and documents compiled beforehand so that makes it secondary. The study specifically focuses on the non-financial sector of Pakistan. The data for all the listed non-financial firms were analyzed and from there a total of 91 firms were shortlisted the ground for selecting these 91 firms was the consistent payment of dividends for 7 consecutive years. The source of data was Financial Statements Analysis of Companies (Non-Financial) Listed at Pakistan Stock Exchange (2012-2017). Apart from this, individual annual statements were also visited for the latest data. Hence, the data can be considered as apparent from the perspective of genuineness. Software Microsoft Excel 2007 was used for data collection and compilation. Details of these companies are given in the Appendix.

Table 1: The firms included in the study

S.No	Sectors	Firms paying consistent dividend
1.	Textile	22
2.	Sugar	4
3.	food	7
4.	Chemicals, Chemical Products & Pharmaceuticals	12
5.	Manufacturing	9
6.	Mineral Products	0
7.	Cement	7
8.	Motor Vehicles, Trailers & Auto Parts	10
9	Fuel & Energy	6
10	Information, Communication & transport Services	3
11	Coke and refined petroleum products	4
12	Paper, paperboard and products	3
13.	Electrical machinery and apparatus	2
14.	Other services activities	2
	Total	91

## (5) DATA ANALYSES METHODS

### (5.1) DESCRIPTIVE STATISTICS:

Descriptive statistics as the name indicates is used to define the fundamental features of the data in the study in a summarized form. The main purpose of descriptive statistics is to provide information about variables in the data and to highlight probable relationships between them. It presents data in an organized and meaningful way.

As given in the table below, the mean of DPR is 0.3655 with a standard deviation of 3.9178. The upper limit of DPR amongst total 638 observations was 109.9624 and the lower limit is -11.8620. For Profitability (ROA), the mean is 0.1009, between the highest value of 0.918890 and the lowest of -11.31123. The mean of the natural log of firm size is 16.07406, with the upper limit of 20.31752 and the lower limit of 0.000000. Financial leverage when analyzed gave the mean of 1.129932. It went

variables that is Profitability, Financial Leverage, Corporate tax, and the Size of the firm. Looking at Corporate tax, it is seen that it has a positive correlation with all the variables except for Financial Leverage with which it is negatively correlated. Focusing on Financial leverage, it is revealed to have a positive connection with all the variables including DPR but has a negative correlation with corporate tax and ROA. Similarly, ROA is only negatively correlated to Financial Leverage while with the rest it is positively associated. The size of the firm is positively correlated to all the variables.

Table 3: Correlation Matrix

	DPR	Tax	Lev	Prof (ROA)	Size LN
DPR	1				
Tax	0.596223	1			
Lev	0.0931443	-0.03402	1		
Prof (ROA)	0.023777	0.02635	-0.007532	1	
Size LN	0.3767733	0.41278	0.161937	0.00356	1

## **(7) ECONOMETRIC MODEL**

### **(1) PANEL DATA ANALYSIS:**

The panel data set is made up of both time-series data and cross-sectional data; the same has been applied to this study. When panel data have the same series of time observations for each cross-section of the variable is recognized as a balanced panel. When a series of time observations differ among cross sections the panel is known as an unbalanced panel (Gujarati, 2003). To evaluate the accuracy of the results, two models are used in this study, The Fixed Effects model and the Random Effects Model. so that suitable and accurate results could be found of the given data. Accordingly, the hypothesis is analyzed.

### **(8) FIXED EFFECT MODEL:**

This model states that intercept is different for all cross-sections.

General equation of fixed effect model:

$$\gamma_{it} = \alpha_i + \beta_1(X)_{it} + \dots + \beta_n(X)_{nit} + \mu_{it} \dots (3.1)$$

Where,

$n$  = number of individuals or cross-section (1, 2, 3...n)

$t$  = the number of time periods (1, 2, 3,...t).

$\gamma$  = dependent variable

$X$  = list of independent variables

$\mu$  = error term.

In this study, specifically, the model for dividend payout ratio can be written as follows:

$$(\text{DPR})_{it} = \beta_0 + \beta_1 (\text{Prof})_{it} + \beta_2 (\text{Size})_{it} + \beta_3 (\text{Lev})_{it} + \beta_4 (\text{Tax})_{it} + \mu_{it}$$

## (9) HAUSMAN TEST

Hausman data is also used for model misspecification. Whenever panel data analysis is being used, it can be helpful to decide whether to use a fixed-effects model or a random-effects model. This test determines the presence of a relationship between errors and the variables. The fixed effect uses this assumption that each unit is different from other units in terms of having its own distinct features. So, there must be no correlation in any unit. The fixed-effects model also asserts that at times some features might cause an element of biases on the effects of factors, and hence needs to be regulated. This model removes the possible effect of these features to recognize the effect of the predictors in an unbiased manner. To interpret the results of a Hausman test, the p-value is used. If it is less than 0.05, the null hypothesis is rejected and the alternate hypothesis of the model having fixed effects is accepted. So, keeping in view the value of the test results, the p-value is 0.00 so we will be using fixed effects.

This helps one to decide between random and fixed-effect models. If the F stat. and Chi-square of the cross-section is less than 0.05 then the fixed effect model is used if P-value is insignificant then the common random effect model is applied. The following table states the results of the Hausman test.

Table 4: Hausman Test Results

Test Summary	Chi Square statistic	Chi square df.	Prob.
Cross section random	28.427701	5	0.0000

## (10) RESULTS

Talking about the first variable Profitability, it has been observed as having a positive but insignificant association with DPR rendering that profitability is irrelevant when it comes to paying dividends. For profitability, hypothesis and regression results do not match so the hypothesis of profitability being significant with DPR will be rejected.

The result shows a positive but an insignificant relation between profitability and cash dividend which is against the studies of Gangil and Nathani (2018) and Bushra and Mirza (2015) who termed profitability as one of the most dominant factors among others to have a significant and positive relation with DPR backing up their results with this rationale that firms that have earned profits will be giving out dividends as a show of their financial stability as well as strength and confidence in future earnings and will be inviting more investors and investments likewise.

Table 5: Regression Results

Fixed Effect Model				
Variables	Coefficient	Std. Error	t-statistic	Prob.
C	-8879785.	2344866.	-3.786905	0.0002
Profitability(ROA)	140408.2	454718.5	0.308781	0.7576
Size LN	588417.1	148507.8	3.962197	0.0001
Financial Leverage	418 544.4	150267.7	2.785325	0.0055
Corporate Tax	0.811162	0.051760	15.67159	0.0000
R-squared	0.383807			
Adj.R-squ	0.378916			
F-statistic	78.48131			
Prob(F-statistic)	0.0000			
Durbin-Wat stat	1.955871			

Dependent Variable: CASH\_DIVIDEND\_PAYOUT

The results are in contrast to the studies of Kuzucu (2015) and Khan et al. (2016) which concluded with profitability maintaining a negative relationship with DPR. The explanation that was given to defend the negative relationship was that the firms that are earning profits but still choose not to pay dividends intend to invest the earnings back into businesses so that to fund new projects and expansion or even for paying debts. Especially the new firms or those in their growing phase would essentially save up their dividends to invest in their own growth as much as possible. The result of this study is, however, supporting the results of the studies by Rafique (2012), Ahmad, et al., (2018), Alber and Alhachtour (2017), and Malik et al. (2013) according to which the impact of profitability is insignificant on DPR. This shows that firms are more inclined to retain a greater proportion of profits rather than increasing its dividend when the firm has a higher profit. Higher retained earnings show that the firm prioritizes funding needs from internal financing through retained earnings (Rizqia & Sumiati, 2013).

The relationship between the size of the firm is both positive and significant with DPR. This has been deduced from, Coefficient 588417.1 which is positive, and probability 0.0001 which is less than 0.05. For firm size keeping in view these results, we will be accepting our hypothesis that it has a significant relationship with DPR which is also in line with the previous studies and literature. If one increases the other also increases. The results of the regression are favoring the previous studies of Rafique (2012) and Jaara et al. (2018). The rationale for this result as extracted from available literature is that large firms are mature firms

and have a comparatively easy way of reaching the capital markets and obtain funds from external sources without needing to touch the internal funds so they can easily manage to pay large dividends without any bankruptcy threats. However, the results are opposite to studies of Ali, Mohamad and Baharuddin (2018) and Ahmed and Javid (2008), according to them larger firms avoid paying dividends because they have a better know-how of the market and considerably better opportunities for investing so they will prefer utilizing their surplus cash flow on these areas and thus they are more likely to hold back their dividend payments or pay a very low amount. The results also negate the results of studies of Dang, Tran and Tran (2019), Khan et al. (2016), and Rizqia and Sumiati (2013) which had declared Firm Size to be irrelevant to DPR in every context.

Financial leverage is found to have a positive significant relationship with DPR as evident from the values of coefficient and probability which are 418544.4 and 0.0055 respectively. This indicates that the firms which have a high debt to equity ratio are expected to pay dividends than the ones with low debt to equity ratios. This is again highly in opposition to the studies done so far which state something opposite about the relationship of financial leverage of the firm and dividends being paid by that firm. The regression result for financial leverage states that it has a significant positive relation with the DPR. This result is though in line with the studies of Khan and Shamim, (2017) and Orajekwe and Okegbe (2020). According to Brav et al. (2005), management is extremely particular about paying dividends and they will go to any length to prevent cuts in dividends. They are ready to sacrifice assets, look for external funds, and will not even refrain from laying off employees or abandoning a seemingly profitable project only to afford to pay dividends at all costs. The managers are ready to go through all this only to avoid the bad name or a negative image of the company that may result if the dividends are not paid. A high leverage ratio may also imply that the firms are using the funds, obtained from outside as long term debts, to pay dividends to the shareholders so that they may not give out any distressing signal to the investors This result is high in contrast to the majority of the studies including studies by Alber and Alhabtour (2017), Sadia (2018) and Komrattanapanya and Suntraruk (2013) all of which stated financial leverage to have a significant negative relationship with DPR implying that firms with high debt to equity ratios have an obligation of paying off debts first so they are likely to use the earnings at the end of the year to pay off the debtors than pay out dividends.

In the table above, corporate tax is shown to have a positive and significant relationship with the Dividend payout ratio as implied by the Coefficient 0.811162 and probability of 0.0002. This means that as corporate tax increases and the amount of cash dividend also increases. The results are favoring the hypothesis developed and so it is accepted. The result of the hypothesis testing of the relation of DPR and tax is positive and significant. This result favors the results proposed in these studies of Ishaq, Amin and Khan (2018) and Rafique (2012) relating to Pakistan. This implies that firms of Pakistan remain consistent in paying out dividends no matter what amount of tax they must pay. It also implies that they may even increase the payment consequently with an increase in taxes. Logically, the managers should be more inclined towards retaining earnings in times of high taxes than paying

out dividends making the financial stability of the firm as their utmost priority. However, besides Pakistan when tax and DPR were studied in Indian companies, the results were observed to be different for large, mid, and small capital sectors. The large capital sectors showed a comparatively weaker correlation with dividend payouts compared to mid capital sectors. As far as the small capital is concerned it was found to be negative in a study by Ganesh and Suresh (2018). However, the fact is worth registering that the result is again found to be against many of the prior studies done like that of Arif and Akbarshah (2013), who stated that as the amount of tax increases the dividends decrease. The shareholders also avoid cash dividends because taxes imposed can significantly reduce the amount that will be received by the shareholders so they will also choose stocks over cash dividends only to avoid taxes. Dividends are taxed twice seeing from the perspective of shareholders. First, they will pay tax on the earnings at the end of the year as the owners of the firm. After getting the share of dividends they will again have to pay tax (income tax) as individuals too so they justified avoiding dividends.

## **(11) CONCLUSION**

This study was aimed at finding the key determinants of consisting dividend-paying non-financial firms of Pakistan. The key determinants which were selected after thorough in-depth reading of literature and studies that have been done before relating to the topic and keeping in mind the markets of Pakistan. Keeping the dividend payout ratio as the dependent variable and ROA, financial leverage, corporate tax, and firm size were taken as the independent variables. The result of the study is as follows: DPR was found to have a positive significant relationship with financial leverage, corporate tax, and firm size while with profitability the association was though positive but was insignificant. The positive insignificant impact of profitability on DPR suggests that firms do not base their dividend decision on whether they are earning profit or not and seemingly use another basis to decide the number of dividends to be paid. The positive significant relation of financial leverage with DPR of Pakistani firms implies that the firms, though being highly leveraged and under the obligation to pay off long-term debts, maintain consistent dividend payments to avoid giving a negative impression to the shareholders about the financial position of the firm. So, they might be using long-term debts as a source of conjuring up cash to be shared among the shareholders. Firm size was also found to have a positive significant relation with the DPR emphasizing that larger firms can make consistent dividend payments to the shareholders. This is owing to their ease of entry to the markets and can obtain funds without having to make use of their own funds. As a result of this, they have a huge amount of cash at their expense and they produce greater amounts of profits and can make big dividend payments to the shareholders. The result of firm size aligned with previous literature, unlike corporate tax which was found to have a positive relationship with DPR. This implies that firms of Pakistan remain consistent in paying out dividends no matter what amount of tax they must pay. It also implies that they may even increase the payment consequently with an increase in taxes. Logically, the managers should be more inclined towards retaining earnings in times of high taxes than paying out dividends making the financial stability of the firm as their utmost priority. Most of the pieces of literature have declared a negative relation with tax and DPR, but



studies were done on Pakistan only produced different results with both positive and negative relationships. The result was also observed to vary between different sectors as well. This discrepancy may be due to the collective results of all the sectors that were used in this study.

## **(12) RECOMMENDATIONS**

Managers should be more inclined towards retaining earnings in times of high taxes than paying out dividends making the financial health of the firm as their utmost priority. The firms should focus on the efficient use of its resources to improve performance as well as its ability to pay dividends without getting buried under debts. In the non-financial sector, most firms do not pay regular dividends. Firms should follow stable dividend policies to attract foreign and local potential investors.

## **(13) LIMITATIONS OF THE RESEARCH**

There were few limitations to the current study; the foremost among them were resource and time constraints that somehow restricted the entire research to narrow scope and domain. However, a comparatively smaller sample size and consideration to specific non-financial sectors and regions also restrain its generalizability to larger proportion and applicability comprehension.

## **(14) FUTURE RESEARCH**

For future research, including variables like last year's dividends, liquidity earning per share as well as some non-numeric variables too like policies imposed by the government and changes and its subsequent effects, the legal aspect will definitely add more clarification to the study on dividends. Using a longer time frame will also help to observe the trend of the dividend payouts for all the sectors. One more suggestion for future research can be to use dividend yield instead of the dividend payout ratio that might result in more precise and conclusive data. Future research may also consider ownership variables to test the agency theory. Also, some variables were found to be producing different results than the previous literature when determining sector-wise like a tax which had a negative relation with DPR in the context of the pharmaceutical sector but overall had a positive relation. So, future research may be done sector-wise.

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