BEHAVIOR OF COMPANY PERFORMANCE IN RESPONSE TO DIVIDEND POLICY: A CASE OF PAKISTAN STOCK EXCHANGE

Thesis Submitted to
The Superior College Lahore
In Partial Fulfillment of the
Requirement for the Degree of
Doctor of Philosophy in Commerce and Finance

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Session: 2014-2017

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DEDICATION

To

My Mother.

I did it for YOU

ACKNOWLEDGEMENTS

In the name of Allah Who is the most Merciful and Beneficent Who taught man the use of pen and taught man what he did not know. I am thankful to Almighty Allah for giving me power and determination to complete this thesis. It was a journey full of learning, practical and personal growth. We extol our adored HOLY PROPHET (S.A.W.S.) whose spiritual motivation to seek knowledge always remained our passion which has enabled us to become part of this extraordinary family of research. I pay my gratitude to my supervisor Dr. Ahmad Raza Bilal, his extraordinary patience and support throughout the research enabled me to complete this journey. He provided me with guidance and strength whenever I needed them the most. I deeply appreciate and acknowledge the efforts of Dr. Khyzer Bin Dost and Dr. Salman Masood Sheikh. It was definitely not possible without his considerate motivation during the most critical time of my dissertation. I am thankful to my teachers who donated their valuable time, assistance, knowledge and experiences to array my thoughts and energies in the developmental stage of my career. Also, I pay the deepest of my tributes and regards to Prof. Dr. Ch. Abdul Rehman (Chairman, Superior Group of Colleges), who inspired me to choose this path.

I am thankful to my Wife, my Kids, and all my family members who supported me patiently and relentlessly during this long voyage. I must acknowledge all my friends who prayed, helped and encouraged me to achieve my goals.

ABSTRACT

The current study explains the relationship of dividend payout policy on the business performance of companies that exist in textile, cement, automobile, sugar and chemical sectors of Pakistan. 100 companies are selected from all five sectors. Relationship of dividend payout policy and business performance was controlled with four variables based on relevant theories. These variables include size of company, growth of company, leverage (debt to equity ratio) and corporate governance index. Panel data is collected from 2012-2017 (six years) and then analyzed with unit root, descriptive statistics, correlation analysis, OLS regression, Lagrange multiplier, Huasman test, Fixed effect and Random effect models. Following key findings for each research objective were obtained by applying the adopted research method on the data through the adopted method of analyses: The results of the study show that in textile companies, a negative relationship occurs between dividend payout policy and their profitability. Furthermore, size of the firm according to the pecking order theory and leverage as per the agency cost theory came out to have a significant controlling effect on this negative relationship. The same results were observed in case of cement companies. Only in the case of cement industry, another controlling factor that is growth of the company was found to have an effect on the relationship between dividend payout policy and profitability in light of Signaling theory. When the results were obtained from automobile companies to find out the nature of relationship between their dividend payout policy and profitability then it was found out that both dependent and independent variables are positively related in this sector and size, growth and leverage are the controlling predictors of the relationship. Sugar companies and chemical companies showed no sign of a relationship between their dividend payout policy and profitability and so there is no controlling factor effective due to the absence of any relationship.

Keywords: Dividend Policy, ROE, EPS, Tobin's Q, Size, Growth, Leverage, Corporate Governance Index.

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LIST OF ACRONYMS

PSX	Pakistan Stock Exchange
ROA	Return on Assets
ROE	Return on Equity
EPS	Earnings per Share
DPS	Dividend per Share
PCMA	Pakistan Chemical Manufacturers Association
GDP	Gross Domestic Products
OLS	Ordinary Least Square
LM	Lagrange Multiplier
MNC	Multi-national Corporations

CHAPTER ONE: THE INTRODUCTION

Privatization, globalization and liberalization in Pakistan economy along with the growing integration of information technology in business have caused intense competitive environment in every industry and business. On the other hand, this situation has also confused, dazed and bewildered Pakistani corporate stakeholders because they know that in order to thrive in this competitive environment, it is crucial for them to increase the value of their firms (Farrukh et al., 2017). In order to do so, finance managers of companies have to deal with the decisions related to the basic budgetary of business so they can meet the goal of increasing their firms' value by expanding the engagement of shareholders along with increasing the performance and profitability of their firms (Adediran and Alade, 2013).

Profitability of a business is the major economic drive for companies and they can attribute their profit towards two main heads. Either they can go for retained earning i-e can hold their earning in the firm to use it in future investment for growth purposes or they can distribute this earning to shareholders (Yegon, 2014). The distribution of profit is mainly done as dividends, this is why, it is crucial for firms to design a dividend payout policy to determine that whether to pay dividends and if yes then what should be the percentage of payouts or if it is more suitable for the financial benefits of business to invest the profit in future growth (Khan, et al. 2016).

It is evident that financial performance is very important and financial behavior of a firm revolves around number of key decisions including management of working capital, investments and dividend policy, among which dividend distribution holds a key position (Younis and Javid, 2014). Jaffe, Westerfield & Ross (2002) stated that the importance of dividend decision greatly lies in the fact that it helps the finance managers to forecast the fund amount that they can distribute in shareholders as dividend payouts and the remaining amount to be reserved for making investments in future time period. This policy also helps the stakeholders to obtain the information associated with the performance of a company because the major interest of an

investor in investing his or her savings in a business is to gain profit on them. The common source of income is seen in a dividend by the investors who are averse to in a setting where businesses operates in very competitive era and maintain its performance and quality to maintain their statuesque. All these matters make the making of dividend payout policy a very important decision as it helps in maintaining the attractiveness of an organization (Bhattacharyya, 2007). The dividend plans in corporate world varies according host country on the firm being industrialized or unindustrialized and other financial situations such as earning patterns, size and growth of the firm. It was found out that dividend payout policy varies from company to company based or internal situation and market pressure (Ramcharan, 2001).

The relevancy/irrelevancy of dividend payout policy for financial decisions in developed and developing countries has been studied in previous literature (Rahman, 2018; Hasan, 2015; Lai et al., 2016; Chauhan et al., 2019). Currently the focus has shifted to the determinants and control predictors to decide dividend policies and their significance to the business performance. It is evident that dividend policies in Pakistani stock market has a different behavior with performance of companies from that in other stock market including developed countries and other developing countries, even the behavior is different at industrial level (Khan et al, 2016). Therefore current study aims to further extend the debate related to dividend payout policy in Pakistan's industries with regards to the fact that which controlling predictors for the dividend payout ratio affects the dividend payout policy and how these predictors influence the financial performance at industrial level in terms of asset returns i-e generally abbreviated as ROA, earning per share or EPS and Tobin's Q. Textile, Sugar, Chemical, Cement and Automobile Sectors of Pakistan are taken under study to explore and investigate the predictors related to dividend payout policy that can define the behavior of company performance mainly in these industries.

1.1 Background of the Study

Despite the numerous studies done in the area of dividends, the common reason that why firms distribute dividends and the exact behavior towards types of dividends the shareholders

want to obtain is still not found out completely. Black, (1976) call this a 'dividend puzzle'. Numerous studies with a wide range of hypotheses are done to investigate and solve this puzzle. For example, a study was done to find some explanations that how dividend payments aim to pass on the information about to company's financial state to shareholders in order to attract their investments (Allen and Michaely, 2003). Later on, DeAngelo, et al., (2006) discussed in their study that what can be considered as the optimal dividend payout policy that should be adopted by organizations to distribute them dividends. They also discussed the life cycle theory about the dividend policy. According to this theory a firm usually do not pay high dividends in the earlier stages of establishment because these firms want to invest in future rather than spending the earnings for the dividend distribution. These firms also have more investment opportunities and lesser internal funds. All in all, there are numerous studies done in the field of dividends because it is an established fact now that dividend payout policy is the area of finance that is yet to be explored in finance literature for better and clearer conclusions.

This study also tries to contribute in the area with its finding so a better and clear picture can be achieved that how dividend policies influence the performance and finances of the firm, which determinants are important that make up the dividend policies of corporate sectors and how the organizational predictors such as governance practices, size, growth and leverage of the organization control the behavior of dividend payout policy that in turn have an influence on the financial performance of the firm. The study has selected various forms of dividend as independent variables to investigate their influence on financial performance of an organization in terms of ROA, EPS and Tobin's Q that are taken as dependent variables. The influence of independent variables is investigated according to their behavior with governance practices, size, growth and leverage of the company which are controlling variables of the study.

Dividend yield can be described as the ratio between the prices of the firm's share and the total amount of the dividends that firm have paid in the year. The dividend yield is obtained in form of percentage (Farrukh, et al, 2017). It is observed that investors often find higher dividend yield more attractive. Higher dividend indicates that the stock of the firm is underpriced and future dividends might not be as high as the past ones. Likewise, lower dividend yield indicates that the stock of the organization is overpriced and future dividends are most likely to be higher

(Morrison and James, 2017). While higher dividend yield is attractive for investors, it might have a reverse effect on organizational performance of the firm because the money that an organization uses to pay dividend to shareholders gets subtracted from funds that organization can use to reinvest in its growth to achieve capital gains (Chen, 2019).

The dividend payout policy is predicted by dividend per share. Dividend per share also abbreviated as (DPS) is the sum of dividends that company declares to issue for outstanding share. DPS is obtained by dividing total dividends that are paid out by a company in a year or so including the interim dividends by number of outstanding shares that are issued (Farrukh, et al, 2017). Dividend per share is a significant metric to shareholders and investors because the amount paid by the organization as dividends directly determine the income that the shareholder will earn. Moreover, dividend per share is the most direct and straightforward figure that an investor uses to calculate the dividing payment that he or she will get over a certain time period against the stock shares owned by the shareholder. Meanwhile, an increasing dividend per share over time also indicates towards the positive confidence of the organization that they have regarding the sustainability of their growth in terms of their earning (Oloidi and Adeyeye, 2014). However, how the behavior of this variable change with governance practices and current status of the company to enhance or destabilize its financial performance is yet to be further explored which this study aims to achieve.

Another important predictor is the ratio of dividend payout. This ratio refers to the ratio of total paid out number of dividends that are divided among shareholders in relation to net income of a company (Odum, et al., 2019). It is the proportional or percentage form of the net earnings of the firm that are to be distributed among its shareholders as dividends. The amount of earning that distributed as dividend to the shareholders is reserved by the organization from which it pays off debts or reinvests in core business operations. DPS shows the quantity of money that the organization is returning to shareholders against the amount that it is retaining to reinvest for the growth of organization, to pay off the pending debt, or to enlarge the cash reserves (Hamil and Al-Shattarat, 2012). There are several considerations that go into the interpretation of dividend payout ratio. One of the most important considerations is the level of organizational maturity. A relatively new organization which aims to grow and expand, penetrate

the new markets and develop new products would most likely reinvest most of its profits and can design their dividend payout policy around low or possibly even zero payout ratio. The payout ratio is obtained as 0% for organizations that do not distribute the dividends among its shareholders and is 0 % for those as well who pay out the total amount of net income as dividends (Bostanci, Kadioglu and Sayilgan, 2018).

Dividends policies are mainly industry specific. This policy may vary extensively according to the industry. The study has selected non-financial corporate sector of Pakistan to conduct the research study. Non-financial corporate sector includes all public and private enterprises that produce goods or offer their non-financial services in the markets. These are the capital markets of an economy and play a crucial role to mobilize the domestic resources and to channel them effectively for productive uses which leads to economic productivity. The development level of capital market is an important factor to determine the level of savings, effectiveness of investment and the growth of any economy (Tauseef and Lohano, 2017). Considering the importance of corporate sector and the significance of understanding its financial evolution, the current study underpins the following corporate sectors to evaluate the impact of dividend policy on firm's performance.

As the dependent variable of the study is organizational performance on which effect of dividend payout policy is being checked. Financial performance of an organization is measured by its profitability and profitability of an organization is evaluated by various profitability measures such as ROA, ROE, EPS, Tobin's Q and net profit margin. Organizations and financial institutions all around the world frequently use these measures to determine the financial performance of an organization (Khan and Ali, 2017). The current study is using ROE (return in equity), EPS (Earning per Share) and Tobin's Q to determine the financial performance of selected industries as these are the major profitability ratios and are most suitable in context of the current subject. The first selected profitability ratio of the study is return on equity. It is an important ratio to assess the profitability of organizations calculated when the after-tax profits are divided by the equity. This ratio indicates that how much profit an organization has generated on its equity (Kabajeh et al., 2012).

Earnings per share (EPS) is another measure or ratio to calculate the profitability or financial performance of an organization. This measure is usually reported by organizations on quarterly or annual basis. When some portion of the profit is allocated to every share (outstanding) of common stock, this is known as earnings per share. It is also a result when the organizations net income is subtracted from the dividends of the preferred stock. The result is divided by the average outstanding shares (Islam et al, 2014). Significance of earnings per share can be assessed by the fact that it can trigger a rise in stock rates which results into the profits of investors as well means they make more money. If an organization has higher earnings per share, it indicates that it has more funds available to distribute among stockholders as dividends and to reinvest in business operations which will lead to more future growth which is also an attraction for investors; therefore, it's a bounty for investor in both cases (Seetharam and Raj, 2011).

The third measure for financial performance in the present research work is Tobin's Q ratio which is obtained by dividing company's market value by the cost of firm's assets' replacement. Thus, equilibrium establishes when market value gets equal to its replacement cost. Tobin hypothesized that combined market value of organizations in the stock market should equals to the costs of replacements. Although, Tobin is mainly known as the creator of this ratio, but it was first introduced by Nicholoas Kaldor in an academic publication in 1966 therefore, in earlier literatures, this ratio is referred as "Kaldor's v" (Damodaran, 2002). If the stock price of a company which is measured by its market value is 2 dollars and the price of capital in current market is 1 dollar then it is indicated that $q>1$ and the organization can issue the shares and proceed to invest in the capital which results into the economic profit of the organization. The other scenario is when Tobin's q ratio is $q<1$ which shows that values of the assets that a firm hold is exceeding its market value. This implies that the market value is being lessened and company is being undervalued. This firm/company can boost its profits through sale of the capital stock or replacement of the capital stock (Hayes, 2019). The current study aims to investigate that how the corporate sectors design their dividend policies with dividend per share to attract the potential investors and existing shareholders and how this determinant is controlled by governance practices, growth and size of the organization to affect its financial performance Textile, Sugar, Chemical, Automobile and Cement sectors of Pakistan.

1.1.1 Sectors of Economy Selected

The textile industry of a country produces fabrics that are used in wide range of purposes from clothing to knitwear to carpeting and even medical equipment. It is observed that almost all kinds of fabric possess a ratio of cotton in them. Anyhow, industries that are associated with the textile materials including cotton, silk, chemical fiber and many more comes under the category of textile sector of the country (Shaikh and Siddqui, 2019). Furthermore, the downstream industries of this sector include household textiles, garment industry, etc. while the subdivision of textile sector consists of textile knitting, printing, testing, dyeing, chemical fiber etc. The enormity of the sector makes textile sector as a backbone of any economy in the world (Filho, et al. 2019).

Likewise, the textile sector of Pakistan is also contributing considerably in development of its economy. It is concluded that the total export made by this sector reached 9.6 billion US dollars in recent years. The contribution in terms of Pakistan's GDP by textile sector is 8.5% in total GDP of the country. The global contribution of Pakistan's textile sector can be judged by the fact that Pakistan is 8th largest among the countries who export textile goods in Asia (Javed, 2019).

Profit margin of the textile-based companies of Pakistan is evaluated on the basis of profitability ratio because they are most suitable means to demonstrate the profit-based information to potential investors, existing shareholders and other stakeholders who are more likely to invest in this sector. It is a good sign that with passage of time, the profitability of Pakistani textile sector is increasing when their net and gross profit margins, return on equity and asset returns as a whole which is an attraction for foreign and local investors (Sheikh and Siddique, 2019). The current study has steered its focus towards this sector because of the above-mentioned increase in profitability but also to address the fact that in current era of increasing competition, Pakistan's textile sector greatly needs to upgrade and polish its policies so that these policies can positively affect the profitability of firm and dividend profit of the stakeholders. Textile industry of Pakistan is among its major sources of earnings and therefore the industry must appeal to the interests of investors to gain substantial investment from the shareholders.

Therefore, stakeholders deem it crucial to evaluate the dividend payout policy of the sector to enhance the investment and thus profitability of this sector.

On the other hand, Pakistan is known as the 6th largest sugarcane producer of the world. Sugarcane is the major source to make sugar and Pakistan has utilized over 1mn hectares of land area to cultivate this major agricultural crop of Pakistan. Pakistan has also crossed the milestone of being the 9th largest producer of sugar itself and most of the sugar is produced by sugar. Pakistan also produces sugar with beetroot as well but the proportion of such production is only 1% of the total sugar production. This way cultivation and processing of sugarcane comes under the upstream industries of sugar sector in Pakistan (Sarwar, 2013).

Currently, more than 89 mills listed in stock exchange that are producing sugar having average capacity of crushing less than six thousand TCD. Cultivation of sugarcane and production of sugar production is constantly ascending in the country in last decade because government improved indicative prices on sugarcane which derived the farmers to cultivate more sugarcane which results into more crushing of sugarcane and ultimately leads to increased production of sugar (Abbasi Securities, 2019).

In 2017, Pakistan crossed the record of it highest production of sugar by producing 7 million tons which is approximately double of what the country produced in 2009-2010. This flight however took a slightly downward turn in 2018 when total production of sugar declined to approximately 6.5 million tons but the decline was marginally quite low, so it is not an alarming issue (Abbasi securities, 2019). However, the overall picture of the industry is good in terms of growth and so attractive for the investors and shareholders. But the industry needs more investment and resources to produce sugar according to the increasing demand of sugar mainly in local market because Pakistan is recently also observed as 8th largest consumer of sugar in world with around 25.7 kg consumption per capita. This makes the local demand of sugar up to around 5 to 6 million tons.

The study has aimed to conduct the research in sugar sector of Pakistan because sugar mills are the major driver of economic development in Pakistan mainly in rural areas as they have opened the line of development in terms of improved infrastructure such as roads, transportation and utilities in rural areas (Pakistan industry report, 2019). Also that majority of the sugar mills are operating under the ownership of private influential players and it is indicated that sugar sector perform in different way than the other industries in paying dividends (Yasmin and Javid, 2014). The study finds it interesting to explore the current dividend payout policy that is being adopted by sugar players in Pakistan and how their policies are affecting their financial performance to meet the growing local need of increasing local sugar consumption and how the private players are attracting the investors and shareholders to invest in their companies.

Another important sector is cement industry. The industry has expanded now to 29 total cement firms with 19 cement units in the northern region while remaining 10 are situated in the southern region. Each unit has the capacity to produce around 44.09 million tons of cement. Northern region contributes 80 % of the total sale while the southern region contributes with 20%. 23 companies are enlisted in Pakistan Stock Exchange with 4 foreign operated units, 3 owned by armed forces and 16 under private ownership (Akbar, 2010). Pakistan's cement sector plays a significant role in its economy. Although, Pakistan is not among the top ten producers of cement in the world but it is extensively recognized and accepted as the producer of best quality cement in world. Pakistan is among total 159n countries in world that produce cement but Pakistan is considered as a leading manufacturer when it comes to the quality of product. Pakistan exports best quality cement to Afghanistan, India (which is for the time being bound by enormous taxes imposed by India due to political conflicts between the countries) Iraq, South Africa, etc., (Ahmed, 2019).

Pakistan has increased its cement production in April 2019 up to 3945 Thousand Tons from that of 3566 Thousand Tons that was recorded in March 2019. The average cement production is observed as 2381.97 Thousand Tons in time period of 2003 to 2019. The production reached its highest capacity in March 2018 with 4049 Thousand Ton while lowest production was recorded in May 200 with 864 Thousand Tons. Pakistan is becoming a leading cement manufacturer by producing around 49 million tons and is planning to expand its

production to more than 70 million ton in coming years (Pakistan Cement production report, 2019).

The backlog of Pakistan's housing has reached ten millions which shows bright future of the cement industry of Pakistan as houses in the country are made with concrete. Also the plans for infrastructure development by Pakistan's incumbent government along with process of urbanization and industrialization are promising prospects for the cement manufacturers (Faraz, Ishfaq and Khan, 2017). As it is evident that cement sector of Pakistan is a thriving industry of the country but local demand for cement is difficult to fulfill without more investment and development. The domestic need for the cement is plentiful enough to influence the manufacturers of cement in Pakistan to go for more expansion plans and investment from potential investors and shareholders (Ahmed, 2019). Keeping this scenario in consideration, the cement sector is an interesting and informative choice of sector to explore and investigate the role of its dividend payout policy in the financial performance of cement factories in Pakistan; hence it is taken understudy for the current research. Another important sector, automobile industry of Pakistan is among the oldest in Asian automotive history. Pakistani automobile company General Motors began to semi produce the trucks, Bedford in 1949 and started the history of automobile industry after the independence from India and British (Mirza and Manarvi, 2011).

The automotive industry of Pakistan is a fastest growing industry contributing 4% in total GDP in Pakistan's economy and employing more than 1,800,000 people in the industry. 3,200 automotive plants are currently operating in the country, with investment of 92 billion PKR and producing 200000 vehicles and 1.8 million motorbikes in a year. The industry contributes around 50 billion PKR in Pakistan's national exchequer (Asghar, 2019).

Pakistan however cannot compete with other Asian Automobile industries but individually the country has accomplished a notable economic growth in recent years with the declining rate of unemployment and an increase in foreign investments. In spite the not so encouraging year of 2018, the purchasing power of Pakistani individuals has grown and so has the demand for commercial vehicles, motorbikes and cars. In order to meet the increasing

demand, Pakistan relies on import as Pakistan only assemble the vehicles and not manufacture them in the country. A massive amount of automobiles and auto parts are imported from foreign countries each year by spending a substantial foreign currency (Ansari, 2018).

It is evident that the vehicle consumption has significantly increased in the country in last couple of decades mainly due to the increasing population, increasing need of mobility from one place to another and improved infrastructure. In this scenario, Pakistan is bound to rely on importing the auto parts and reconditioned and new cars from foreign countries. Also the cars are only assembled in Pakistan and not fully manufactured. All these methods are not very effective way for the economy of the country. It is high time for Pakistan's automotive industry to strategize and expand their plans to manufacture automobiles in Pakistan (Asghar, 2019).

The possibility of expansion plans and increasing investment in the market of automobile sector in Pakistan is attracting local and foreign investors with the prospect of making potential profits in the sector. There are several foreign investors who are interested in making investments in Pakistan's automobile industry. The year 2018 ended with not so encouraging results but showed positivity in terms of elevating the interest of various foreign automobile players in Pakistani market. Many national and international automotive players are interested to invest in Pakistan's automobile sector considering the attractive incentives offered under auto policy of Pakistan (Ansari, 2018). Considering this scenario, Automobile is another massive and interesting sector to study that how the companies in Pakistan's automobile sectors are dealing with dividend payout policy to increase its financial performance and simultaneously to attract the shareholders and investors for more investments. Next, the Pakistan's chemical industry, Iqbal Kidwai, the Secretary General of PCMA (Pakistan chemical manufacturers association) stated the fact in Express Tribune that Pakistan's chemical industry is capable of bringing down trade deficit of the country by massive amount of $14 billion. Some major progresses are made ibithe area of basic inorganic chemicals such as caustic soda, chlorine, soda ash and sulphuric acid with an optimum capacity of production. However, there is substantial lacking in the production of other major chemicals including petrochemicals which leads to the dependency of Pakistan's chemical industry on imports (Monitoring Report, 2018).

Pakistan has in basic downstream chemical industries including refineries, fertilizers, polyester fibers and petrochemical based polymer producers which fulfill local demand. Pakistan produces the inorganic chemicals and at a low price caters the demand of local industry. Due to this instable scenario, investors are showing low interest in building Naphtha cracker due to costly intensive project, lack of sophisticated technology, limitations of export market, etc. (Paracha, 2012).

1.2 Problem Identification

The appeal of a suitable dividend payout policy is increasing rapidly in current years and stakeholders around the globe think that a dividend payout policy has a very significant and strong influence on performance of the firm. Pakistan being a developing country is not responding to these developments going around the globe. Uncertainty and potential risks are constantly associated with making investments which are unable to be predicted in clear way (Khan et al., 2016). A plethora of information associated performance of corporate sectors and manufacturing industries of the country is not clear to the potential investors which they need to know in order to reduce the intensity of risks and uncertainty that can jeopardize their investments. Dividend payout policy is considered as a big determinant of business performance in Pakistan (Farrukh et al., 2017). Financial management in any company has to focus on some major operational decisions including the one which is needed when an organization start to make profits. This is the time when finance managers face a crucial decision that how much portion of profits shareholders will get as dividend and how much needs to be reinvested in the operations. The decision making becomes trickier because finance managers have to consider the price of share which is affected due to the dividend payout policy of the organization (Younis and Javid, 2014).

Basically, dividends are distributed among shareholders after the organization has generated it profit so it does not come under the category of investment and therefore the corporate and industrial organization face problems regarding the decision making that what percentage of their profit they should pay as dividends. The organizations also have to consider

the satisfaction of shareholders which is another challenge in the decision making in terms of making dividend policies. Shareholders differ according to their desire for nature of income (Velnampy et al., 2014). While some need their income at the time of payment and therefore prefer high payout ratio of dividend, there are others who look forward to the long period profit and prefer to invest for future capital gains. The challenge of having to satisfy the competing needs of shareholders affects the dividend payout policy that an company adopts and this lead to positive or negative influence on organization's share prices. In this scenario, finance managers face difficulty to forecast the extent with certainty with which their adopted dividend payout policy can affect the share price of their organizations (Yegon, et al., 2014). Another problem is identified is the fact that very few studies are conducted on this particular issue and the ones that have addressed the issue have mainly focused on the influence of dividend payout policy on organizations' share prices. The determining predictors of this policy mainly the influence of corporate governance and organization's size and growth rate are yet to be discussed in detail to evaluate that how an organization's financial performance behave in response to the adopted dividend payout policy of the company.

Moreover, Pakistan has been ignored in the area of research on this topic even though the capital market of Pakistan and its advance corporate finance is facing issues in the area of uncertainty in deciding dividend policy. This is becoming a much disputable topic in the area of advance corporate finance particularly in big manufacturing industries of the country, but it still not concluded by the researchers to determine that how to make a dividend payout policy that is best suitable for a healthy financial performance of the corporate firms. Although, various studies have by various researchers have addressed the issue and provided the theories and practical evidences in terms of determining predictors of dividend payout policy in Pakistani corporate world but the major issue yet to be resolved due to the absence of a string arguments on the financial behavior of firms against the controlling predictors of dividend policy. It is still yet to cover the predictors such as corporate governance practices, size and growth of organization that derive the decision making of dividend payout policy and most of all how these predictors interact with the financial outcomes of the firm in terms of return on equity, earning per share and Tobin's Q.

1.3 Problem Statement

All the challenges which arise for financial managers of organizations in making dividend payout policy for a company and other dynamics that are mentioned in the above section makes it crucial for all the stakeholders to study that how the aspects of a dividend payout policy can influence the performance of an organization. Although number of researches are conducted to study the ups and downs of dividend payout policy but still a lot is known in terms that on what line of thoughts, an organization makes its dividend payout policy and to know that it is crucial to explore the effects that what kind of policy influence the company performance in what way. The current study has taken under study that how the companies need to interpret the controlling role of size and growth of the company, leverage and governance practices to the relationship of business performance and dividend policy.

1.4 Research Questions

a) What is the role of company's dividend payout policy on performance in terms of returns on equity (ROE)?

b) What is the role of company's dividend payout policy on performance in terms of earnings per share (EPS)?

c) What is the role of company's dividend payout policy on performance in terms of Tobin's Q?

d) Does size of company, corporate governance practices, leverage and growth of company control relationship of decided dividend payout and performance indictor returns on equity (ROE)?

e) Does size of company, corporate governance practices, leverage and growth of company control relationship of decided dividend payout and performance indictor earnings per share (EPS)?

f) Does size of company, corporate governance practices, leverage and growth of company control relationship of decided dividend payout and performance indictor Tobin's Q?

1.5 Aim and Objectives of Study

Yogen, et al., (2014); Khan et al., (2016); Farrukh, et al., (2017) & Chowdhury, et al., (2017) have emphasized that in the current scenario where organizations are striving to gain competitive advantages over each other in financial and operational growth, it is important for finance managers to keep revising the financial policies to remove any possible flaw and loop hole as soon as it is identified to gain the advantage of profitability and growth. In order to design new policies and revise the old ones, finance managers need to stay updated about every aspect and information in the rapidly changing corporate world so they can move towards the decisions and policy designs that are best for their respective organizations. Dividend payout policy in an organization is among the major financial policies and decisions to make. The best possible dividend payout policy attracts investment and helps the organization to keep up with the maintenance of capital for constant growth and development of the organization (Farrukh, et al., 2017). Considering the importance of dividend policy, it is important to determine the predictors that influence and make up the dividend payout policy of a corporation, which in turn control the decisions related to equity investment and decisions for individual investors. A better understanding of these building predictors and determinants can pull up the notion of investors to such an extent that might bring stability in the investment they make (Khan, et al, 2016). Keeping in mind, the important need of exploring dividends and related factors, this study aims to explore the determinants of dividend payout policy in form of independent variable and check their influence of the dependent variable of financial performance of organization with the controlling role of variables of company's size, its growth, its governance practices and its debt to equity structure. Thus, the current study intends to analyse the potential determinants of a dividend payout policy in nonfinancial corporate sectors of Pakistan. The sectors that are focused to conduct the research are textile, sugar, chemical, automobile and cement sectors which are all important and highly contributing industries for the economy of the country. The measures or profitability ratios that are selected in the study to assess the business performance of the chosen sectors are return on equity (ROA), earning per share (EPS) and Tobin's Q. Considering all the variables and aims of the study, following objectives can be highlighted as:

Considering all the variables and aims of the study, following objectives can be highlighted as:

1.5.1 Primary Objectives

a) To study the influence of decided dividend payout policy on performance of business in terms of returns on equity for selected sectors of Pakistan including Textile, Cement, Sugar, Chemical and Automobile

b) To study the influence of decided dividend payout policy on performance of business in terms of earnings per share for selected sectors of Pakistan including Textile, Cement, Sugar, Chemical and Automobile

c) To study the influence of decided dividend payout policy on performance of business in terms of Tobin's Q for selected sectors of Pakistan including Textile, Cement, Sugar, Chemical and Automobile

1.5.2 Secondary Objectives

d) To study the significance of size of company, corporate governance practices, leverage and growth of company to control over the association between decided dividend payout and business performance in terms of returns on equity for selected sectors of Pakistan including Textile, Cement, Sugar, Chemical and Automobile

e) To study the significance of size of company, corporate governance practices, leverage and growth of company to control over the association between decided dividend payout and business performance in terms of earnings per share for selected sectors of Pakistan including Textile, Cement, Sugar, Chemical and Automobile

f) To study the significance of size of company, corporate governance practices, leverage and growth of company to control over the association between decided dividend payout and business performance in terms of Tobin' Q for selected sectors of Pakistan including Textile, Cement, Sugar, Chemical and Automobile

1.6 Significance of the Study

This study has taken a range of sectors that are important for growth of economy in a country and the race of competitiveness is also causing tremendous twists and turns in the financial performance of these sectors. This scenario gives an interesting and significant touch to the study where the research is focused on the major industries including cement, textile, chemical, Automobile and sugar sectors of Pakistan. Industries in a developing economy operates in different and often in more challenging scenario. They need to keep the investors engaged in order to acquire the much needed investments to bring up the industries and on other hand they also need to feed their capital and retain funds from their profit to reinvest in the future growth of the company (Shaikh and Siddiqui, 2019). The current study has targeted Pakistan which is a developing economy with a challenging corporate environment to investigate that how the non-financial corporate sectors of the company design dividend payout policy to financially grow and perform in current challenging and competitive business environment of the country. It is observed that the past studies have focused on perspectives like prospects and problems of the underpinned sector related to dividend policy. But the dividend payout policy of industries concentrates on determining the level and ratios of dividends for the respective shareholders of the industries. This is the reason that a clear comprehension for dividend payout policy of a particular industry has significant bearings for stock market investors. Nonetheless, very few researches are conducted in past that focus on dividend payout policy of corporate sectors that can attract the attention of market investors. The significance of the study is therefore evident in this area because this study concentrated completely on cement, textile, automobile, sugar and chemical industries of Pakistan in order to comprehend and identify the relatively significance of dividend policy.

This research also instill value to financial literature of the current era especially those that are done in terms of corporate decision to decide the dividend policy. This research enlightens the investors as well by providing them understanding over the significance of determinants, predictors or predictors that methodically influence the decided dividend payout policy of businesses in nonfinancial sector of Pakistan and how in turn they can enhance or harm

the financial performance of the organizations which holds a big significance for the investors and shareholders who invest in these corporate sectors for better profits. The study holds important implications to improve the perceptions of investors which can help them in their decisions of regarding their investments in capital market. The current study also expects to provide an opportunity to financial management of the selected industries, regulators of capital market, stock dealers and brokers, academicians and other stakeholders in the area to apply the knowledge that they can gain from the current research findings to strategize in their respective areas of work.

The current study has tried to address and diminish the research gaps found in past studies in the area and looks forward to contribute to existing literature by analysing the influence of dividend payout policy on financial ratios of selected industries. In essence, finance managers and other stakeholders of various organizations will gain the advantages of the research findings in many different ways such as the fact that it will help finance managers to become capable of making optimal use of the provided resources for best interest of their respective companies. It will also help finance managers in designing their policies as per the behaviour and nature of its shareholders, suitable dividend ratios and basic structure and behaviour of the organization. If managers get awareness regarding the influence of dividend payout policy then they will be able to increase or decrease the payout level according to its influence on financial benefits of the company and shareholders as well. In case they don't find an influence of dividend payout policy on profitability of organizations then they use the spare capital to invest in other growth opportunities. For shareholders, the current study can provide more insights into financial performance of the organization which will help them to make investment related decision. They will be able to assess profitability of an organization after gaining knowledge about its payout ratio before deciding to invest or not invest it. Moreover, this study aims to help managers in deciding the selection of basic capital structure by considering its influence on profitability of their respective companies.

1.7 Delimitations

In the current research, unlisted companies are excluded since the study aims to target the behaviour of dividend payout policy of five largest non-financial corporate sectors of the Pakistan. Another reason of not focusing on the small companies is because they usually work under family owned shares however announce dividend based on their own requirements. Another major predictor excluded for present research study is types of taxes at personal or corporate level. It is done owing to the existing complexity in the dynamics of taxation. In order to explore the significance of policy decisions on dividend payout, the research has limited the sample to the selected five sectors of Pakistan Stock Exchange and has selected the predictors that are observed as having the influence over business performance. The research has chosen to determine the relationship of dividend payout ratio with financial performance of companies with the controlling variables of firm's growth, leverage, size and corporate governance practices. It is decided to limit the research to these predictors since it is concluded that the mentioned predictors bear significance for dividend payout policy of selected sectors. The study provides an extensive argument and discussion in chapter two (literature review) regarding the selected factors. Finally, when it comes to dividends, cash dividends as a dummy variable mostly used in previous studies (Bostanci, Kadioglu, & Sayilgan, 2018; Morrison & James, 2017) as it is one of the types of dividend mostly paid. Accordingly, the research has excluded all other types of dividends and other types of distribution of profits to shareholders like stock repurchases.

1.8 Thesis Outline

The study consists of 5 chapters where the first chapter is introduction of the research where a general introduction and background of the research topic and all the variables are given along with the problem identification and problem statement for the purpose of study. The objective, significance, delimitations and conceptual frame work of the study is also explained in this chapter.

Second chapter reviews the authentic literature published in reputed journals and publications which will provide the readers with a detailed theoretical background with most relevant arguments and theories that exist in previous studies.

Third chapter is comprised of methodology which will provide the overview of current research approach, research design and other methodological considerations of the research process. Fourth chapter deals with the analysis of the results while chapter five concludes the study followed by discussion on the research findings. The research will also discuss the limitation of current study and recommendation for further research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Decision on whether to pay dividend or not and its influence on organizational performance is considered as one of the debatable topics in financial management. Regardless of the extensive research carried out, researchers have not reached any general finding or acceptance in terms off dividend payout policy and its influence on business performance. Profit is earned by every successful business, however, in general, the question is raised that in the form of dividend, how much profit should be distributed to shares holders and how much should be retained for future needs. Such decisions are influenced by a firm's dividend policy. One of the key elements of corporate policy is the firm's dividend policy. Generally, dividend payout policy is the rules and principles which firm employs to decide payments of dividends to shareholders. As the dividend payout policy is important aspect of a company, the decision regarding optimal dividend is highly crucial. Fundamentally, dividends are the benefits awarded to shareholders in return of risking their investments in the business and it is determined by several predictors in a firm. These predictors include chances and choice of investment, size of firm, limitations of funds, regulatory administrations, shareholders pressure, and cash flows.

Generally, there are two schools of thoughts on dividend policy. Miller & Modigliani (1961) and Myers (1977) in their respective studies asserted that firm's value cannot be determined by its dividend policy, implying that dividend payout policy is irrelevant. On the other hand, the proponents i.e. Lintner (1956) and Fama & Babiak (1968) in their studies argued that in the developed stock markets, previous dividends influence the firms' dividend payout ratio. The irrelevance theory explains that if a firm generates profits under a fully competitive market, it does not have a positive influence on the value of the company. The value can be only increased if retained earnings are invested in projects with high yield, thus there exists no relationship between dividend payout and firm's value. Whereas, the relevance theory postulates that dividend payout are requested by investors with the anticipation that it will positively affect value of the firm. This chapter covers the literature review including the relevant theories

discussing the concept of dividend payout policy and its relevancy or irrelevancy to the business performance while other related theories discussing the concept of controlling influence of size, leverage, growth and corporate governance index. Next, this chapter also covers the empirical reviews on relationship between dividend payout policy and business performance with controlling influence of size, leverage, growth and corporate governance index.

2.2 What is Dividend?

In any corporation, the management decides whether to pay out earnings in forms of dividends to its shareholders or the amount must be retained to support internal operations. When the firms earn profits, they usually pay dividends to their shareholders. There are different proposed definitions of dividends. Dividends are paid after the declaration from Board of Directors (Toby, 2014). Dividends are earnings of the firms that are left after tax deduction and are distributed to shareholders (Rustagi, 2001). Dividends are the portion of the net earnings that shareholders get in form of cash or non-cash. Dividends are distributed to the equity shareholders and it is a sort of reward because they have invested in the company (Shah, 2015). Dividends are the return on the investment for shareholders because they have invested in the firm through purchasing shares (Maheshwari, 1999).

According to business jargons, dividend payout policy is another name of a financial decision that explains about how the earnings/proportion of earnings of the firm will be distributed among its shareholders (Business Jargons, 2017). This is on company's discretion that if it will distribute portion of profits as dividends or it will retain the earnings to plough it back into business and raise the price of share (Motley, 2017). Dividend payment ratio is the determinant of the investor's decision to invest (Omodero & Amah, 2017). The firms paying huge amounts of dividends are more likely to attract the investors. However, in perspective of firms, the high dividends are financial burden for the firm. To reduce this burden, the firms that pay high dividends tries to reduce the payments at a certain level so that financial position can be maintained (Tara & Raja, 2014). The performance of the asset is dependent on the policies of the managers. This performance of asset basically determines the dividend, and every financial

manager should work hard so that shareholder's wealth can be maximized, pay them a handsome dividend and gives a complete understanding of dividend payout policy to the shareholder (Omodero & Amah, 2017). Dividend decision is crucial decision out of all financial decisions a firm make. Dividend payout policy is a key that helps the manager to decide the allocation of financial resources. Dividend payout policy also helps the firms in maximization of the wealth of its shareholders (Kuzucu, 2015). If the dividend decisions are not opted well, it can affect shareholder's wealth (Tara & Raja, 2014).

Dividends have been the most debatable and core topic in the finance domain as it proposes answers to dividend-puzzle. There are a lot of financial aspects that can help in determining the dividends for shareholders. These aspects include the mergers, acquisitions, asset pricing, capital budgeting, and capital structure theories. There are various determinants of dividends and some predictors that can help the firms and researchers about the dividend-puzzle. These predictors include nature of industry, area of work, profit distribution ratio, additional capital and methods of financing, age of the corporation, trade cycles, policies of government, political stability, taxation policies, liquidity position and cash balance (Islam et al., 2017). The theoretical basis of the dividend payout policy and dividend models are agency costs, transaction costs, taxes, demands or preferences of shareholders, informational content and clientele effects. The firm-specific predictors usually influence the dividend-payout ratios and are the determinants of the dividends. Dividend payments can be affected by many predictors like size, capital structure, industry, profitability, maturity, firm's structure and ownership structure (Kuzucu, 2015). Dividends that a firm pays to its shareholders can be evaluated on the basis of the earnings. One of the earliest studies Lintner (1956) shows that earnings of the firm are core determinant of the dividend policy. This study proposed that expected earnings and changes in earnings are two main determinants of the firm's dividend policy. Earnings have been the most focused area in determining the dividend payout policy (Pruitt & Gitman, 1991; Fama & Babiak, 1968; Baker & Powell, 1999).

2.3 Miller and Modigliani's Dividend Irrelevance Theory

The M & M's Dividend irrelevance theory is the building block for corporate finance (De Angelo & De Angelo, 2006). Miller & Modigliani's irrelevance theory is the basis for the corporate governance and finance. According to dividend irrelevance theory, dividend payout policy along with capital structure, cash management, cross shareholdings, risk management policies, financing decision and diversification, all are irrelevant (Modigliani & Miller, 1958; Modigliani & Miller, 1961; Modigliani & Miller, 1963). Dividend irrelevance theory states that dividend payout policy is independent of the financial health of business. Only in case of emergency, shares of the company can be sold for cash (Modigliani & Miller, 1961). As per classification by J. M. Keynes, shares are the tool for transaction motive (Islam et al., 2017). Dividend irrelevance assumption states that dividend payout policy and the market value of firm are not dependent on each other (Modigliani & Miller, 1961) and indifferent investors' proposition mean that individual investors does not respond to firm's financial policy (Stiglitz, 1969). As per the second proposition, cost of equity of a firm rises when the debt-equity ratio rises. This is because when the debt increases, the equity becomes riskier and hence price of debt rises (Modigliani & Miller, 1958).

Franco Modigliani and Merton Miller proposed M & M Theory of irrelevance (Pagano, 2005; Pan, 2012). There were three main publications of Modigliani & Miller; 1958, 1961 & 1963 respectively. In all three publications, there were three main propositions that were the basis of their theorem; total value of the firm is not dependent on the dividend payout policy or firm's capital structure, cost of equity and debt-equity ratio are directly related to each other (Breuer & Gürtler, 2008). Proposition three claims that if markets are perfect then the value of the firm is least affected by the dividend policy. Rather, firm's value depends on risk and earning power of underlying assets (Miller & Modigliani, 1961). This proposition also emphasize that investors of the firms can make the investment decisions independently (Breuer & Gürtler, 2008). It is argued that dividend and capital structure are closely related. This is because when cash is paid as dividends they need for additional stock or debt is raised (Ang & Ciccone, 2011).

Why the firms should pay dividends is the question whose answers are still ambiguous in the literature. The dividend payout policy least affects the value of the firm under the assumption of no taxes and perfect markets (Pan, 2012; Ang & Ciccone, 2011; Toby, 2001). Firm can choose any two dividend policies and their results will be same. Therefore, dividend irrelevancy was supported when it comes to value of firm, but the earning power that firm's assets holds and investment policies are determinants for market value of the firm (Toby, 2014). Some other researchers supported the dividend irrelevance theory presented by MiMo in 1961 (Miller & Scholes, 1978; Black & Scholes, 1974). Some authors gave and supported dividend relevance theory in response to dividend irrelevance theory (Lee & Forbes, 1980; Blume, 1980; Djarraya & Lee, 1976; Bar Yusef & Kolodny, 1976). However, this anomaly was the basis for this question, *why or why not firms pay dividends* (Black 1976). There are three main decisions about the shareholder's wealth; investment, financing and dividend/distribution decision (Miller & Modigliani, 1961), The Sarbanes-Oxley Act of 2002, and Rule 702 of the Federal Rules of Evidence of 2000, 2011). Among these three decisions, MiMo (1961) argued that dividend payout policy plays no significant role to determine firm's value (Modigliani & Miller, 1961). After publication of a paper on dividend payout policy and share valuation, Myron Gordon presented a different view from Modigliani & Miller regarding the dividend payout policy in perfect markets. He argued that even in the perfect markets, there is uncertainty about the future that affects the prices of shares and makes them dependent on the dividend policy. It is claimed that generous dividend policies have direct association with prices of shares. Share prices and dividend payout are directly related and vice versa. Perfect markets are the markets in which taxes are not implemented, transaction costs are not present or are very less and all participants have same information. Uncertainty existence in the market however precludes the assumption of perfect information about the future (Gordon, 1963). However, the second view on dividend payout policy is view presented by Modigliani & Miller. They argued that in case, the investment policy is given, prices of shares are not sensitive to the dividend payments (Brennan, 1971). The main difference in these opposing views is the assumption of capital markets to be perfect. In actual, there is no perfect capital market and securities markets experience a lot of imperfections. Among these imperfections, the difference in tax brackets and transaction costs (on dividend and capital gains) are most important ones with reference of dividend policy. The difference in taxes applicable to dividends and capital gains is the factor that forces the investor

to choose between two income forms. Thus, Gordon and MiMo developed plausible theories from reasonable assumptions, but the conclusions of both were opposing. For denying the irrelevance theory of dividends, one must reject the assumption of rationality of the symmetric market and irrelevant information's independence. Rejecting assumption of information independence means that investors are irrational, past and expected future events are determinant of stock prices and no investor understands the security valuation process (Brennan, 1971; Walter, 1963).

2.4 Gordon's Bird in the Hand Theory

The theoretical model of the Dividend Payment Preference or Bird in Hand Theory implies that price of company's share value (also known as market value of company) is directly proportional to payouts of dividends. Moreover, payout of dividends is also a determinant of company's value. This can be explained as when the dividends payments in time increases, it vividly increases the prices of share (Tanushev, 2016). John Williams (1938) was the first economist who studied that the share's intrinsic value is the key determinant of the share price. The money which a share can bring determines its value. Intrinsic value of a share is also known as long-term value of the share. It is result of adding present value of the selling price and present value of company's expected future net inflows (dividends received) (Williams, 1938). John Lintner, James Walter and Myron Gordon are the supporters of the Theory of bird in hand. They assumed that if there is uncertainty in market and the information asymmetry prevails, then the capital gains and dividends are assessed in a different way. The main concept behind this theory is the idiom "a bird in the hand is worth two in the bush".

Following assumptions are basis of this model; company financing is done through equity only (no debt financing), earing flow perpetually, company's retention ratios are constant (constant growth rate), no corporate taxes are imposed and the growth rate is less than the capital costs (Tanushev, 2016; Lintner, 1956; Gordon, 1959). This theory claims that the investors do not want to take risk and they select dividend payments that are safe; cash today (bird in hand) is preferred over capital gains in future. The expected rise in prices of shares in the future is defined

as future capital gains. If the current dividends are higher, the investor's ambiguity about the cash flows in future decreases. This reduction in risk causes the reduction in ROI for shareholders. So, the cost of capital decreases and value of share increases for the firms that pay higher dividends. Therefore, the theory concludes that higher the dividend payment, higher is the company value (Tanushev, 2016). Following model presented by Gordon & Shapiro (1956) is the model that explains the dividend policy. Basis of this model is discounting the dividend payments of a company in future.

$$Vo = \sum_{t=1}^{\infty} \left(\frac{Dt}{(1+rt)t} \right)$$

Where, V_0 – Firm's Present value (value of shares) in period t = 0,

Dt – total dividend payments, in period t

rt – discount rate for period t.

According to this model, the share prices are increased due to payout of increasingly high dividends. When dividends are paid by the company the funds availability for the investments reduces hence; the growth rate of dividends is decreased. Contrary to this, if the dividends paid are less then discount rate increases. These high prices of shares (because of lower capital costs) counterbalance the decrease in share price due to low levels of growth. This model of Gordon and Shapiro is helpful in the financial valuation. Share values based on dividend payments are determined using dividend multiples (Gordon & Shapiro, 1956). Gordon & Lintner (1956) published their paper and concluded that dividends are most important for the shareholder's welfare and neutrality of dividend payout policy was challenged. If ceteris paribus holds (other things being constant), the firms that pays higher dividends to their shareholders have less risky shares that can be easily sold with high prices.

Contrast to this, share of the companies that pays no dividends or less dividends becomes risky and their shares cannot be sold at high prices. Then Modigliani and Miller put their criticism on “Bird in Hand” Theory. They argued that corporate risk has nothing to do with the dividend payments but is associated with operating cash flows and its risks (Tanushev, 2016). However, researchers also argued that size of the dividends is affected by the corporate risks. Inverse does not happen. This suggests that increasing the dividend payments have no effect on the corporate risk. But according to modern theories like signaling effects and asymmetric information, the firms that have uncertainty in their future cash flows will pay lower dividends (Bhattacharya, 1979). There are some researches in which results have shown an opposite relationship between risk and dividends. This implies that when corporate risks increase, dividend payments decrease. Theory of preference for dividend payment argues that investors usually want dividend payments rather than capital gains.

Before the Modigliani & Miller’s publication regarding dividend irrelevance, the bird in hand argument was prevailing that implies that higher the dividend paid by the company, higher is the company’s value and those shareholders prefer the dividends over capital gains as Graham & Dodd (1962) also stated that existence of a corporation is only for the dividend payments to shareholders. The share price of the company also rises if the dividends paid are higher (Frankfurter et al., 2002). This can be determined that dividend payout policy can influence the company’s value. The information asymmetries and uncertainty are the basis on which the investors value dividends more than retained earnings or capital gains. According to this theory, the investors will always choose the one bird in hand (cash payments in form of dividends) as compared to the two birds that are in the bush (capital gains in future) (Malkawi et al., 2010). There are numerous studies that favors Bird in Hand Hypothesis (Gordon & Shapiro, 1956; Gordon, 1959; Gordon, 1963; Lintner, 1962; Walter, 1963).

2.5 Tax Preference Theory and Dividend Payout Policy

The world of corporate finance was rattled when Modigliani & Miller published their paper in which they proposed the theory of irrelevancy and argued that value of the firm is

independent of the dividend payments. Dividend does not determine the future value of the firm. They proposed in the light of several assumptions that investors must not be sensitive to the dividend payments by companies. Investors are usually indifferent towards dividends and their paper published in 1961 was a sequel of their paper published in 1958 (Mburu, 2013; Zhou & Ruland, 2006). Miller & Modigliani proposed that capital gains and dividends are equal for the investors and earnings of the firm are determinant of its value. Earnings of the firm are determined by the investment policies of the firm. If the investment policy of the firm is known and it is public information industry then the investment will be attracted due to this information (Stulz, 2000). The M&M theory proposes that the cash flows can be generated by the investors from their own shares and they can meet their cash needs accordingly.

This does not depend on dividend payments by the company. This was explained as when the investor who has the dividend paying stocks of a company, do not need the money, he can plough back the money and will re-invest. In the same way, the investor who has stock which is not paying him dividend, he can meet his cash needs by selling the stocks (Zhou & Ruland, 2006). The theory of Modigliani and Miller (1961) argues that the determinants of market value of a company are risk of assets and return of assets. The capital structure (mix of issued securities) does not determine the market value. They claimed that in the real world, the market value is not affected by the dividend payout policy or capital structure. Shareholders are indifferent if the firm choses a specific capital structure or dividend policy. The core idea behind the theory is that firm should focus on the other important areas of the investment. The original M&M world has no taxes and information asymmetry (Tanushev, 2016) but in the actual markets and real world, the effects of taxes are always present and should always be considered. Modigliani & Miller assumed that there is no difference in taxes on the capital gains and dividend payments.

But in real corporate world, the tax treatments are different on dividends and capital gains. After-tax returns usually attract the investors; therefore, taxes can affect their decision of investment and dividend's demands (Mburu, 2013). According to tax preference hypothesis, cost of capital shrinks when the dividend pay-out ratios are low and this increases the share prices. In this way the firm's market value rises when the dividend pay-out ratios are low. This is based on

an important assumption that tax brackets of dividends are different as compared to capital gains. Also, the taxes on dividends are instantaneous while on capital gains, taxes are delayed unless shareholder sales the stock. In this way, difference in tax treatment of dividend and capital gains impacts the investors and they prefer the retained earnings rather than dividends (Farsio et al., 2004; Tanushev, 2016). In the real world of imperfect capital market where there is effect of taxes, information symmetry and agency costs, the managers can alter the company's value through dividend policy. In the estate situation and case of heir entitlement after the benefactor dies, capital gains won't be taxed. This is another argument in favor of the tax preference theory (Ahmeti & Prenai, 2015).

Tax preference theory claims that taxes effect the dividend decisions and dividend is taxed less than capital gain. Therefore, the capital gains are not personally taxed because retained earnings finance the investments. However, dividends payments are made out of the residual or profits minus investments. In some countries, the dividends are tax free while the capital gains are more taxable. In such scenario of tax treatments, were the taxes on dividends are lesser and capital gains are taxed higher, the dividend payout increases (Zagonel, 2018). The tax preference theory states that taxation is a key determinant of the investor's decision whether he will prefer capital gains (retained earnings) or the dividends. If the capital gains are taxed lesser than the cash dividends, then the investor is more likely to be attracted by the capital gains (Berman, 1977).

The changes in taxation structure by governments also affect the dividend policies of the firms (Wu, 1996). Tax obligation of the investor is affected by the dividends but whether investor receive dividend or capital gains, the taxes he has to pay does not change (Khan et al., 2017). There is a research on stock exchange that shows the influence of taxes on the dividend policies. Results concluded that there is no substantial effect of taxes on dividend payments hence proving tax preference theory wrong. This was because the investors preferred the periodic dividend payments over capital gains (Hassan et al., 2013; Khan et al., 2017). The taxes effect was diminished because of the preference patterns for dividends. Firms that are family-and-insiders-controlled firms usually do not pay dividends to the shareholders until and unless some strong external influencers force them to do so. Shareholders in such firms are least concerned

with taxes on capital gains and they try to extract the rents in some other forms but not dividends (Abdullah et al., 2012).

2.6 Signaling Theory and Dividend Policy

When Miller & Modigliani (1961) claimed that if the perfect market assumptions are ignored, then the actual world and real markets can take dividend payout policy for signaling positivity to the investors. Through dividend policy, the investors can get signals about the firm's future performance. These signals can affect the investor's decision and prices of shares as well. So, Akerlof (1970) proposed signaling theory that was further supported by Bhattacharya (1979). According to theory, if the information asymmetry prevails, then the firm has the chances for signaling a positive and favorable future prospect of itself so that this asymmetry can be lessened. Increasing the dividends is the positive signal that firms can send because it indicates that in future, firm's cash flows will increase and become stable. This implies that dividend payments are made so that firms can send positive signals about their future performance, only to mitigate information asymmetry (Bhattacharya, 1979).

Information asymmetry is the basic concept of the signaling theory because information usually alters the decisions that individuals make. Decisions are made based on the publicly available information as well as private information which are accessible only to a group or specific people (Ringborg & Dai, 2016). Stiglitz (2002) explained that when there is difference in the thoughts, knowledge and actions of different people, this is the source of creating information asymmetry. Information asymmetry arises between the people who do not hold the information and can perform better if that information was accessible and the people who have the information. Managers are the insiders while investors are known as outsiders in the firms. Dividend payout policy is designed by the managers because they want to share financial performance with the outsiders. Managers usually send these signals when according to them the stock value of the firm is decreased. Akerlof (1970) in his study gave signaling theory of dividends that proposes about signals given by the managers to the outsiders (investors).

With the example of lemons (bad cars) and cherries (good cars), he proposed that if information asymmetry prevails, both cars will be sold at same price because only the owner will know the actual quality of the cars. So, owner of cherries (good cars) will send signals through dividend payout policy to the investors that his firm has more chance to generate cash flows in future. Bhattacharya (1979) however, explained the theory given by Akerlof (Ringborg & Dai, 2016). Regardless of the tax disadvantage, if the firm has higher expected future cash flows, it wishes to pass positive signals to the investors so that they notice that this firm will be earning high profitability in near future (Bhattacharya, 1979). This theory was proposed in order to give a mechanism through which the decrease of information asymmetry is made possible among the principal (owners) and agents (managers) (Brian et al., 2011).

According to signaling theory, the dividend payout policy is the determinant of the financial performance and represents the company's future expectations about performance so that investors can decide about whether to invest or not. This theory states that dividend payout policy is a mechanism that can give signals about the future performance. If the company is paying cash dividends to its shareholders, then it is most likely to be assumed that in future, this company will perform better and hence it is the best tool to attract the investors. This is because the shareholders do not have the statistics about the performance and management has the info. It creates information asymmetry and paying the dividends can reduce the information asymmetry. This valuable information can be used by the investors to get an estimate about the stock prices in future and performance of the company in future (Rahman, 2018).

The firms need to disclose its performance to obtain funds, attract investors to finance the projects and increase value of shareholders. But disclosing this information can be a security and privacy threat because competitors can get informed and hurt firm's future profits (Verrecchia, 2001). Signaling theory is the solution to handle this dilemma. Any outsider cannot have info about the financial performance. This information can be beneficial for the outsiders. The investors or outsiders can use this data about the financial performance (in future) and buy the stocks of such firms. Insiders have the positive as well as negative signals regarding the firm's performance. It is up to them how they can disclose it. Signaling theory gives a strategic choice about this issue. According to this theory, only positive info is disclosed to the outsiders about

the financial performance so that quality of the firm can be revealed, and it is on the firm's discretion which information to disclose and which to hide (Spence, 1973). Disclosing the information can have benefits and demerits as well. Benefits include reduction in agency costs and asymmetry of information (Zhang and Wiersema 2009). Disclosing information in a capital market also have some positive consequences like reduction in cost of capital (Lambert et al., 2007), improvement in liquidity of stock (Leuz & Verrecchia, 2000) and satisfactory conditions in issues regarding equity (Healy & Palepu, 1995). This disclosure also attracts the financial intermediaries (Francis et al., 1998).

Signaling theory suggests that the signals that are efficient are also costly and observable. So, all firms are not able to bear the costs of the signals. Only some of them are in position to bear it. The firms having high quality will be able to signal their positive performance hence leading to a separated equilibrium (Spence, 1973). However, the firms having low performance do not positively report alternative performance measures (APMs) because they face the higher costs of disclosure. These firms do not want to disclose excess APMs and take risks (Isidro & Marques, 2016). Signaling theory suggests that managers can also signals the performance of their firms and unobservable quality to the investors. This can be done by the sharing the financial statements that depicts the observable quality of the firm (Zhang & Wiersema, 2009).

2.7 Pecking Order Theory of Dividends

Pecking order theory is the most important pillar of the corporate finance literature. After initial research conducted by Modigliani and Miller (1958), modern theories like Trade-off Theory and Pecking Order Theory were presented (Jibran et al., 2012). Pecking order theory deals with the cash management practices of the firm. This theory posits that for financing of investment plans, companies try to utilize the internal financing at first. Internal financing may include retained earnings and liquid assets. After internal financing, if more finances are needed, then debt financing is preferred while equity financing is used as a last resort. Firms that finance the investment needs from internal financing needs to hold high cash ratios and firm having higher profits are able to support pecking order theory (Uyar & Kuzey, 2014; Wasiuzzaman,

2014). Myres (1984) and Myers & Majluf (1984) presented this theory. It proposed that current levels of debt are not dependent on how the firms are financing the deficits and there is an order for the financing when the firm needs funds to be invested. At very first stage, the firm prefers to use the internal sources or funds to finance investments.

Secondly, firm tries to adjust the dividend levels even if the policies regarding dividends are sticky. Afterwards, firms will prefer to use the liquid assets or the external capital to be used as the last resort. In case of external financing the order to be followed is debt and then equity financing. Firms use debt financing and avoid using hybrid securities like convertibles. The issuance of equity to finance the investment is always the last option which any firm adopts (Myers, 1984). Theory of asymmetric information is the basis for preferring debt over equity financing. In any firm, the core objective of the managers is to reduce the costs. Managers are well aware of the investments needs and also, they know the exact net present value of the investments. These managers tend to act favorably for the current shareholders of the firm.

In this way, managers will try to sell the shares at higher prices. The equity investors who are aware of all these issues will demand high risk premium based on information asymmetry. This causes an increase in the investment costs in case of equity financing hence, firms prefer debt financing (Myers and Majluf, 1984). The effectiveness and efficiency of cash management practices in an organization is the important area of research because of the competition in financial environment. Cash holding behavior of the firm can be explained with the help of this theory and theory of free cash flows (Wasiuzzaman, 2014). The financial behaviors, dividend payout, working capital, cash flow management and investment plans all are very important in designing the policies of cash management and to maintain the cash flow at an optimal level (Tahir et al., 2016). Cash holdings are the key element in the pecking order theory and companies usually hold cash for investment and financing.

The cash flows are generally used by companies for two main reasons; financing the investments or repayment of the debt (when due). After this, the unused cash flow is accumulated and converted to cash balance (if convenient). If in case, the cash flows are not enough for the above-mentioned expenditure, then companies have cash reserves that can be

used as a buffer. This is done in order to avoid external financing at first instance. If cash flows and cash reserves, both are not meeting the requirement of the company, then companies go for additional financing (Tahir et al., 2016). In case there is no ideal level of cash holdings then cash inflows and out flows decides the level of cash holding (Opler, 1999). In the literature, the most ground breaking work on pecking order theory has been done by Opler (1999). Pecking order theory is the main theory that easily explains the cash that a firm holds but the difference between theory of trade-off and theory of pecking order is still ambiguous.

These two theories explain the change in cash holdings but the difference in both theories becomes more ambiguous when the cost of external financing increases. If the cash holdings have no specific optimal level then cash inflows and out flows are determinants of the cash holding level (Opler, 1999; Tahir et al., 2016). According to some studies, firms depending on the debt financing holds higher amounts of cash reserves and these firms have smooth dividend payment patterns. Some researchers have claimed that agency issues between investors and managers/owners may arise in case pecking order mechanism does not work well (Frank & Goyal, 2007). Cash management behavior of the firms has been studied in Malaysian contexts and researches have shown that static trade-off theories and pecking order theory were unable to explain the behaviors fully (Wasiuzzaman, 2014).

Some researchers have also shown that pecking order theory does not holds true all the time specially is the case with firms that have more opportunities to achieve growth. Such firms are more likely to hold huge amounts of cash. While the firms that are paying dividends to its shareholders or the firms that have huge capital expenditures usually do not have high cash ratios (Kim et al., 2011). There are different ambiguities regarding the cash management behaviors of the firms and no singling theory determines this behavior (Tahir et al., 2016).

2.8 Agency Theory of Dividends

Since the evolution of joint stock companies, world is experiencing the agency problem and it is considered as age-old problem even in contemporary era. Every organization suffers

agency problem in different forms and hence it is not possible to ignore this issue. There are various costs involved in the agency problem and these costs should be minimized (Panda & Leepsa, 2017). The very first economist who perhaps identified the presence of agency problem was Adams Smith. He in his book "The Wealth of Nations" forecasted that whenever an organization or firm is run by the people who do not own the firm in actual, there is a lot of chance that benefits of the owner are not considered (Smith, 1937[1776]). Among all theories of economics and corporate finance, Agency theory is indisputably the dominant one when studying the management and organizations.

The universal agency problem that exists globally is the challenge for the researchers and agency theorists are striving for the answers to this problem. There are two main parties in the firm having limited or unlimited contractual relationship; principal and agent. Owner of the firm is Principal while the ones who manage the business on behalf of owner is known as agent. Both of them have one firm but different interests and goals. This difference is the source of agency problem or conflict known as agency problem (Panda & Leepsa, 2017). The conflict of interest that arises between the principals and agents is the main cause that gives birth to agency problems (Pietersz, 2016). Agency problem arises when one party known as principal hires another party known as agent for value creation.

The main essence of the theory is that there is discrepancy in benefits of principal and agent and the principal does not have perfect information about what agent is contributing. The agency problem can result in costs and inefficiency. These costs are bore by both the principal and society as well. The main crux of theory is that agents are influenced by the principals to reduce the costs. Following are some important assumptions of the theory; every actor has a narrow self-interest and is bounded rationally and principals are less risk aversive as compared to agents who are more risk aversive (Bosse & Phillips, 2016). In some cases, if the CEO's of the firms are being paid with stock options, and then their interest gets aligned with the interests of the firm. However, some studies have also proved the above written statement false (Sanders & Hambrick, 2007). Whenever, the principal employs an agent for value creation, there are uncertainties regarding the efforts of agent that he/she will put and also some exogenous

predictors that makes it impossible for principal to know about how much value an agent will create.

According to researchers, the firms are principal while the CEO's are agents and agency problem arises when the agent (CEO) wants to increase the utility level at the expense of the firm. They can do this by self-dealing (increasing the level of their own compensation) or with holding their efforts (Jensen & Meckling, 1976). The agent also known as CEO can be self-interested, and he might hide his self-seeking actions from the principal. This can be a loss for the principal and firm bears the cost. There are several mechanisms that can be employed by principal in order to efficiently organize the exchanges with agents; incentive alignment and monitoring (Bosse & Phillips, 2016). The dividend irrelevance theory proposes that the shareholders and managers are on same page and there is no conflict of interest.

But Agency Theory states that managers and owners are not on the same page and there is a conflict of interest between them. If the company decides to give away the dividends to its shareholders, these conflicts can be minimized. This is because dividend payments can restrict the funds of managers hence reducing the intensity of agency problem (Rozeff, 1982; Lundgren & Lantz, 2016). There are two different models of dividend payments. In one model, the result of an efficient legal protection is the dividend payout. With this model, small shareholders also get a chance to get dividends. In the second model, dividend payout is a replacement for effective legal protection. In this way, the reputation of the firm is increased because firm entertains the investors in unprotected environments (La Porta et al., 2000). Firms known as principals hire the agents (managers) to run the business.

It also creates some agency costs like monitoring, residual expenditure and bonding. Dividend payout policy has an inverse association with agency problems and mitigates agency costs. Paying the dividends can increase reputation of the managers and is also appropriate to handle the minority shareholders. Dividends are paid by the insiders without any pressure or they can also be paid because the shareholders force the management to pay them. In either case, dividend payment can lessen the agency problem. Dividend payment is also very important factor if the firm wants to reduce its unnecessary cash (Chirombo, 2017). Managers can use the cash in payments of dividends,

and they must not invest in projects. This will help in reduction of agency costs. When the firm pays dividends to its shareholders, it is more likely to seek new funds through equity financing hence of opportunistic managerial behaviors can be alleviated which in turn reduces agency costs. The firms having good corporate governance practices pay more dividends to its shareholders (Michael, 2016).

2.9 Clientele Effect

The clientele effect basically sheds light on another side of the dividend relevance theory. According to it, share prices respond to dividend payout policy of the firm and when the dividend policies are changes, the share prices also reacts to these changes. In this way, the decision of investor is also dependent on the dividend policy. Investor's decision for investment is changed with the changes in dividend policies (Miller & Modigliani, 1961). Investor's usually go for those shares whose companies will pay satisfactory dividends (Farrukh et al., 2017). This effect basically states that there is some impairment in the economy and the markets are not perfect in actual world. Transaction costs and difference in tax regimes are realities of the physical world. This gives a rise to variety of capital gains. The shareholders have different preferences due to these impediments. MiMo called these preferences towards some payout-making securities as "dividend clientele effect".

The dividend policies of a firm can be attractive to some clienteles. In the markets that are efficient, all investors are equally important and hence the firm's value remains unchanged. So, dividend payout policy is not consequential for the value of company (Amollo, 2016). The shareholders of the firms face many issues like taxes and other costs like transaction costs and costs of changing portfolios. These predictors can help in building different clienteles; tax reducing enhanced clientele and cost of transaction reducing clientele. These investors and clienteles are more tempted to look for the dividend policies that are according to their needs. In the same way, firms also attract the clienteles on basis of their dividend policies. Dividend payments are usually low in the growing industries and stocks of these companies are attractive for the clienteles that are interested in capital gains not dividends. Contrarily, the investors and

clienteles that prefer high dividend payments will be attracted by the companies that have high payouts (Miller & Modligiani, 1961).

There are categories of clientele like corporate shareholders and retail stockholders. The corporate shareholders prefer the dividends over capital gains because dividends are taxed less as compared to capital gains (Allen et al., 2000). The regulations in the organizational structures affect these clienteles. Therefore, firms usually avoid buying the securities that are not or low-paid. Well-governed organizations pay dividends to their clienteles because they are well-informed. When the retail stockholders prefer the security portfolios having dividend payments, this is known as dividend clientele effect. Risk clientele is another aspect of this effect. The risks associated with the high paying securities are less as compared to the small paid securities. So, on basis of the risk preference, the clientele prefer dividends (Amollo, 2016).

Due to some personal considerations and fiscal hurdles, all investors do not have same preferences for their investment returns. Some investors want to invest in the regular paying securities while some prefer capital gains. The low-taxed investors want to invest in the high dividend shares. The investors that lie in the high tax bracket will be interested to invest in the higher capital gains and lower dividend payments. This is clientele effect that forces the investors to choose firms that satisfy fiscal needs of the investors. This effect will influence the dividend payout policy of the company. The taxes on the dividends are high as compared to taxes on capital gains (Lamyaa & Karima, 2017). According to MiMo (1961), the differential in tax on dividends and capital gains give rise to the clientele effect and this is the basic shortcoming of the capital markets (Miller & Modigliani, 1961). If the correspondence between the payout ratio's preferences of investors and distribution of corporate payout becomes same, it leads to the perfect market case. Every firm will try to attract clientele that prefer firm's payout ratio. So, differential of taxes helps the firms to attract the clientele of their own interest (Lamyaa & Karima, 2017).

2.10 Catering Theory of Dividends

In the literature of dividend payments, there are a lot of variables that explains the payout policies. Major explanatory predictors for payout policies are earnings and past dividends (Lintner, 1956), firm characteristics like profitability, size, cash holdings, future investments and leverage (Abdulkadir et al., 2014). Baker & Wurgler (BE) (2004a) originally presented this theory. As the MiMo (1961) assumed in their theory of dividend irrelevance that markets are efficient and perfect, the catering theory relaxes these assumptions. Baker and Wurgler assumed that in real world, the markets are inefficient and imperfect and they considered institutional as well as psychological reasons and gave the theoretical model of catering theory. They suggested that not all but some investors might demand dividend-paying stocks. This demand can be time-varying and uninformed. They also suggested that managers usually cater demands of investors. If the investors put high prices on payers, dividends are paid. Contrary to this, dividends are not paid if investors do not prefer payers (Baker & Wurgler, 2004).

According to the catering theory, in real financial world of inefficient and imperfect markets, company's decision about the dividend payment is dependent on investor's demand for dividends. Companies cater investor's demands for dividends and then initiate and continue to give dividends to shareholders. Corporate managers can observe the market-to-book ratios non-payers and the ones who pay through the financial markets. Demands for dividends can be traced by observing the difference between payer's M/Bs and non-payer's M/Bs. If this difference increases, then according to catering theory, corporate managers will decide to initiate the dividends and continue with this to cater demands of investors (Tsuji, 2010). According to Baker & Wurgler (2004), the demand for stocks that pays dividends is time-varying at the investor's side. This demand is basic determinant for the dividend payout policies.

According to the crux, dividend payment is mainly dependent on managers catering the investor's demands to pay dividends or not to pay dividends. If the investors desire dividend payment, it will be paid and vice versa. Investors' preferences for dividends and capital gains can vary and investors may place different values on dividend payers. The value that investors put on

the dividend payers is known as “dividend premium”. More dividends are being paid by the managers if the dividend premium is high and if the dividend premium is low, managers do not pay dividends (Baker & Wurgler, 2004(a); Abdulkadir et al., 2014). The major decline in dividend payments in US markets was also examined (Baker & Wurgler, 2004(b)). Other studies in different contexts like Karachi stock exchange, US stock market and Eurozone have also shown that investor’s demands for dividends are considered when companies formulate dividend payout policies.

Dividend initiation and dividend omission can be best explained with the help of catering theory of dividends. There is also an association between announcement returns and the dividend premium. An investor places higher value on the companies that consider the dividend premium in their policies (Haleem et al., 2011; li & Lie, 2006; Neves & Torre, 2006). However, not in all cases, the catering theory holds true. In cases where the dividend premium was recorded as high and positive, there was seen a more dividend omission if the risk factor is considered (Kuo et al., 2013; Denis & Osobov, 2008). Managers do not consider investor’s demand when designing the dividend payout initiation and catering does not explain the payout behavior of companies (Tsuji, 2010).

In some cases, the effect of premium on the maintenance of dividends is recorded as insignificant. Dividend premium does not explain the variation in the initiation rate (Turner et al., 2011). Catering incentives tends to be enhanced by certain predictors like legal protection, profitability and debt level, higher cash flows and market conditions. If the country practices common law then investors enjoy more rights and protection therefore the countries with common law responds more to dividend demands of investors while the civil law countries respond poorly to investor’s demands and do not cater them while designing payout decisions (Ferris et al., 2009). Companies that have higher profitability and debt levels are low responds to demands for dividends by investors (Anouar, 2012). In booming markets, the managers respond better to the investor’s demands for dividends while in market crashes, this response is slow (He et al., 2012).

2.11 Types of Dividend

Every company has some earnings and distributing these earnings or part of these earnings to the equity shareholders is known as dividend. Board of Directors usually decide that what amount should be paid as dividends. Dividends represent the financial soundness of the company and shareholder's value. If the distribution of earnings is good, then it's an indicator of positive future and strong performance. If the stable dividends are paid, it depicts that the company is performing well. There are different types of dividends like cash, bonus share, share repurchase, property, stock, scrip and liquidating dividends. Most common of all types is the cash dividend is paid to shareholders after decision on the date of declaration in form of cash (Borad, 2019). Property dividend is the non-monetary dividend that a company pays to its shareholders rather than paying stock or cash dividend.

Usually there is a difference in fair market value and the book value of the asset. This difference is recorded as gain or loss. Property dividends are issue to alter the taxable/reported income. If a company issues a promissory note to the shareholders in case in near future, company runs out of enough funds for dividend payments, this is known as scrip dividend. The scrip dividend may or may not include interest (Corporate Finance Institute, 2018). When the shareholders get back the capital they invested in form of dividends, this is known as liquidating dividends. These are distributed on decision of board of directors. Liquidating dividends are usually an antecedent of the business shut down. In accounting, the liquidating and cash dividends are entered as same entities (Bragg, 2018). Bonus share and stock dividends are same entities. When the companies have low operating cash, they issue bonus shares. Share repurchase is the phenomenon when the company buy backs its own shares. In this way the number of outstanding shares is reduced. This is an alternate to the dividend payments (Borad, 2019).

2.12 Stable Dividend Payout Policy

The question of dividend payout policy is still arguable in the world of corporate finance. Financial analysts are not sure that whether dividend payments should be made or company

should invest back the earnings in any beneficial projects to earn more. For this reason, top managers are always concerned about the dividend policies that can help in satisfying shareholders, increasing their wealth and achieving growth of corporation as well. Most of the times, shareholders are interested in cash dividends but they also prefer capital appreciation and growth of the company as well. They want the corporation to reinvest the earnings in favorable and productive projects. Stock prices of firm are affected by the dividend policy. If the payout ratio is high, investors can have quick cash flows but at the same time, the future growth is lowered. This means higher payout ratios are not good for firm in long run (Khan et al., 2018).

Dividend policies are a very crucial factor for any organization to achieve the objectives and perform efficiently. The dividend payout policy basically determines whether the firm will retain earnings or it will distribute the earnings among shareholders in form of dividends (Moyer, 2001). There are four policies identified from literature; regular, irregular, stable and no dividend payout policy (Khan et al., 2018). The regular dividend payout policy regularly pays the dividends to its shareholders at a normal rate. This policy is best applicable to the companies whose patterns of earnings are regular. There is issuance of a low dividend at a constant rate and when there are abnormal profits, company also pays extra dividends. In this policy, company pays a regular amount to shareholders and a reserve fund is also generated out of which the company pays fixed dividends if the earnings are not sufficient in any year (Nyandumo, 2016).

Constant pay-out ratio is another form in which constant percentage annually is made from the earnings (Fama & French, 2001). In the irregular policy, there is no regular payment of the dividend because of uncertainty of earnings, poor liquidity or too many projects implementation (Nyandumo, 2016). No dividend payout policy as name shows is the policy where no dividend is paid to the shareholders. This policy is usually adopted by the companies that wants growth and needs funds for achieving specific growth. Or in cases here companies want their working capital to enhance the investments no dividend payout policy can be adopted (Fama & French, 2001). If stable dividend payout policy is adopted, it maintains a stable and steady dividend payout even if its earnings are in flux. A stable dividend payout policy can also target the dividend-to-earnings ratio in long run. Firm is bound to pay a percentage to the shareholders. If in any case the earning base line changes, the nominal amount declared is

adjusted to the target (Kirk, 2016). A dividend payout policy which is stable shows that annual dividends are increasing at a constant rate and they are predictable too. If the firm adopts stable dividend policy, this means that dividends are not fluctuating and remains constant for a period of time (Mayech, 2012). Earnings of any firm can fluctuate so the firms also design a bonus policy for shareholders if in any year the firm makes windfall profits. This policy is the best policy because investors are sure about the earnings for all their invested funds (Ibrahim, 2017).

2.13 Residual Dividend Policy

Financial managers are usually the "agents" working for owners of the company. Therefore, the very first priority of them to work as agent to the wealth maximizes. This can be demonstrated by the value of share in the stock market. There are basically two decisions relevant to dividend policy. Either the company has option to pay dividends to shareholders or reinvest earnings to future prospect. Dividends are a source of present circulation while the retained earnings are the source of the future earning development. Dividend policies can be categorized as; regular, irregular, stable and no dividend payout policy (Khan et al., 2018). In residual policy, the shareholders are paid dividends from residual income.

Residual income is the one that is not needed for financing any new acceptable capital projects. So, the residual dividends fluctuate because they depend on the investment opportunities a company may have in future. In case the company has the residual dividend payout policy then dividends will be distributed to shareholders from the residual earnings. This implies that shareholders will get dividends if the firm is left with funds after financing all the suitable investment opportunities. Firm will first incur expenditure for achieving optimum level of capital and then it will pay the left-over amount (if any) in form of dividends. Focus of this policy is on investments and payments of dividends are irrelevant decision. Investments decisions of the firm are directly related with the value of firm hence the dividend irrelevancy holds true (Shah, 2015).

After major investment decisions are done, the firms then decide to payout the dividends to the shareholders from residual earnings. This makes the dividend payments variable over time. Firms can adopt dividend payout policy in order to invest in the series of the favorable and profitable investments. Firms may also announce low dividends to achieve the favorable reaction from market. The firms that have the residual dividend payout policy have more information regarding the future growth because of priority given to the investment decisions. These firms will first fulfill the capital and investment expenditures and then dividend payout will be decided. Due to this, the dividend payments become highly volatile but this volatility is unplanned. According to the residual dividend theory, the prices of stocks will increase if the dividend is decreased and vice versa (Park & Rhee, 2017).

2.14 How Dividend Payout Policy Effect the Business Performance

In the field of corporate financial management, dividend payout policy is one of the most controversial issues. Why companies should pay the dividends and why they do not pay dividends is still a debatable question for the financial managers and academia as well. There are numerous empirical and theoretical researches that explain the dividend policies and its effects on the organizational performance. However, no consensus is found on unresolved issue of dividend payment. Among the topic unresolved issues in the field of corporate finance, dividend policy decision as important one (Idewele & Murad, 2019; Velnampy et al., 2014; Brealey and Myers, 2003). Therefore Black (1976) claimed that dividend puzzle is most difficult puzzle to solve. This is why it has been regarded as a "dividend puzzle" (Black, 1976).

Now the dividend payout policy has become the global issue because it has been accepted that it affects the firm performance. Investors usually face a lot of risks and uncertainties that cannot be predicted at the time of investment. However, the economic conditions prevailing in country, political stability of a country and firm's performance are the predictors that can help in reducing the risks an investor takes. Financial reports of any company depict a true picture about the company's performance. Investors can take investment decision on the basis of these financial reports. If the company has capability to raise profits, it can attract investors. However,

dividend is announced for shareholders at Annual General Meeting (AGM) of the company. There are basically four decision areas of corporate finance; financing, management of working capital, investment and allocation of profits. If an investor or the stakeholder wishes to assess the company's performance, the dividend payout policy will provide the best information on this. This is because the investors usually invest for reasonable rate of return or source of income.

Dividend is the source of income and most of the companies strive to operate efficiently and adopt a favorable dividend policy. The profit gained is allocated in either dividend payout or retained earnings. The dividend payout policy basically determines where the profits should be allocated (Velnampy et al., 2014).

For companies, the dividend decision is very important because investors decide whether to invest or not based on dividend payout policy of firm (Ross et al., 2002). There are some predictors that can change the payments of the dividends including profits of past and current year, growth of earnings in past and current year and variability of past earnings and current year earnings (Pruitt & Gutman, 1991). Every firm does not pay dividends however, the firms that pay dividends usually have a constant dividend payout ratio. This is because they want to develop a trust with investors, meet expectations of shareholders and portray themselves as stable firm in the market. Performance of the firm can increase or decrease depending upon the dividend payout policy it adopts. Dividend payout policy can decrease agency-losses. Also, the auditing and bonding costs can be reduced. Ownership concentration and payout are negatively related to each other.

The more inside concentration is, better is the monitoring and hence the need to pay dividends decreases. Dividend payments are a strong gage of stability of future cash flows of firm (Kale & Noe, 1990). After-tax earnings also affect the dividend payments, liquidity, past practices of dividends, future earnings, and considerations about cash flows, returns on investment, interest rate, legal requirements, inflation and projection of future growth. Dividend payment is a compensation given to shareholders for the time risk and investment risk they took (Velnampy et al., 2014). Dividend payment represents the exhaustion of the cash assets of a company (Lipson et al., 1998). Dividend payout policy help in measuring the profitability hence,

it can indicate the firm's performance. Return on investment (ROI) (equity and assets) and sales growth are all directly related to the dividend payments and policies (Amidu & Abour, 2011). The controlling owners and minority shareholders of a company may grow a conflict and dividend payout policy is the signal for this potential conflict (Oskar et al., 2007). The famous M & M Theorem, proposed by Miller & Modigliani (1961) presented the theory of dividend irrelevance and assumptions of M & M Theorem were perfect market conditions, perfect certainty and rational behavior.

The dividend payout policy is not associated with the earnings per share. Dividend payout policy has no effect on firm's performance (Velnampy et al., 2014). In long run, the relationship between dividends and earnings becomes insignificant however in short run, the dividend payout policy has an influence on company's performance. This is the controversy that also misleads the investors. In long run, the dividend payments cause reduction in funds that can be used for future investments. This reduction in future investments can lead to lower financial performance. Hence, the dividend payout policy can significantly influence the performance of the firm in long run (Farsio et al., 2004). Asset returns is the surrogate of the financial performance of any firm. Dividend payout ratio is the proxy for the dividend policy. When the dividend payout ratio increases, the asset returns also increases and hence it encourages the financial managers to design robust dividend payout policy to attract and encourage investments.

This will also increase net present value (Kajola et al., 2015). Among the three main decisions of corporate finance include finance, investment and dividend decision. The dividend decision is the most important and controversial one. The cash payments that are made to the shareholders for their investments in the business are the ones that are hard to decide by financial managers. Not always, the dividends are in form of cash but there are non-cash dividends as well like stock or property dividends. Firms that pay dividends tends to shareholders have less chances to get default. They become safe from risk of being defaulter as compared to the firms that pays no dividends (Ong et al., 2014). Dividends have no influence over stock prices, so the investors and shareholders have no concern regarding dividend payout policy (Modigliani & Miller, 1961). Dividend policy's effect on firm performance is the question to which many researchers have tried to give answers. Dividend ratios and dividend plans are not same for all

economies. Dividend disbursement ratios in the developing countries are 2/3rd. The dividend payout policy and the firm performance are directly related and the firms that use their assets to increase stockholder's wealth or income are the ones who perform better.

The firm can use their net income (dividends and retained earnings) to increase their performance. The financial performance of the firms can be best predicted by examining the earnings of the firms and its future investments (Iqbal et al., 2018). Not only the dividends and retained earnings are the measure for the firm's financial performance but the return on investments (ROI), (ROA), return on equity (ROE) and EBT or net business profit are all measures for the firm's performance (Rahman, 2018). The timings and amount of the dividend payments are also the predictors that contribute in affecting the firm's financial performance. Some predictors like leverage and total assets have no significant influence on the performance of the company (Nduta, 2016). In case of a dividend policy, the dividend payout ratio has a significant influence on the asset returns and return on capital. This implies that dividend payout policy affects the financial performance of the firm (Enekwe et al., 2015).

Firm's dividend payout policy has a positive and strong association with the performance of the firm. Dividend payout ratio depicts the true picture of financial performance of the firm (Kanwal & Hameed, 2017). The firms with high dividend yields are the ones whose stock prices are high. While the low dividend yields firms perform low as compared to high dividend yield firms (Magnusson & Enebrand, 2018). Not all the time the relationship of firm's performance is positive with the dividend ratios and dividend yields. The relationship is significant yet negative in some cases and dividend yield shows inverse association with the earnings per share (Kolawole & Lucky, 2018). The firm's dividend payout policy can also be measured using leverage, firm size, dividend and earning per share and return on equity is used as a measure of performance.

The dividend per share and return on equity are positively related to each other showing that dividend payout policy affects the financial performance. Not only has the dividend per share but earning per share and firm size also had an influence on the financial performance of the firm. However, the financial leverage has no association with the performance of the firm.

So, dividend payout policy can affect the financial performance of company (Rahman, 2018). The large dividends can affect the value of the company and its performance in accordance to Gordon's Bird in Hand Theory. If the firms pay large amounts of dividends, the investors will be more attracted because of high stock prices (Harjito & Martono, 2005). Higher the dividend payout ratio of the firm, higher is the stock price that increases its value and financial performance. This implies that investors can trust in all such firms because their capital is not at risk. Investors according to Bird in hand theory do not prefer gains from capital appreciation because it is profit, they will get in future. They prefer dividends and hence, dividend payout policy is relevant with the financial performance of the firm (Alonso et al., 2005; Amidu & Abour, 2011).

Adequacy of the dividend payout policy can help the firm to achieve the financial goals and hence the performance is enhanced. The investor's level of perception about the success of the company is associated with the stock prices. Higher stock prices imply that the company is successful and performing well (Sudjoko & Soebiantoro, 2007; Ghosh & Ghosh, 2008). The theory of Gordon and Lintner (1956), Bird in Hand Theory suggests that investors are more interested in the immediate payments like dividends rather than the capital gains or capital appreciation (retained earnings). So, the dividend payout policy can attract the investors because it can improve the financial performance. Dividend payout policy is designed to assess the part of earnings that the shareholders will get and thus it provides the measure to examine the financial performance of the firm. This is because if shareholders are getting dividends, their welfare is increasing and hence the main objective of the company is achieved. The company that pays high dividends to the shareholders is the ones that are listed as the high performers. If the company is paying high dividends, it may be predicted that management is going to perform better in future. This can be a signal for the investors to invest in the firm. Dividend payout policy in this way can significantly influence the investor's decision of investment (Gunawan et al., 2018).

2.15 Relationship of Dividend and Business Performance

A study conducted in Pakistan examined the cement sector's performance. Data was collected from Pakistani public listed company for the period 2012-2016 and financial data of sample companies was used. OLS regression was applied for data analysis. Results showed that dividend per share (DPS) is positively associated with ROE but the relationship is insignificant. This was concluded that if the DPS is increased, the ROE also rises. The earning per share (EPS) and firm's size also tends to have a positive and significant association with ROE (Rahman, 2018).

Ghanaian Stock Exchange was also examined using the published audited annual reports of different firms. 6 years data was collected from period 2009-2014. Analysis method was OLS regression to study the relationship of business performance and dividend payout. This study revealed that GDP growth, interest rates, ROE, age of the firm, taxes and tangibility all predictors significantly explain the dividend policy. Shareholder's wealth is taken as a proxy for firm's performance. There is a positive strong relationship of dividend payout policy and shareholder's wealth and managers should focus on dividend payout policy as well as investment activities so that shareholder's wealth can be maximized (Ofri-Sasu et al., 2017).

The dividend payout policy also has a significant association with the Deposit Money Bank's performance. Analysis was done from 15 deposit money banks that were listed on Nigerian Stock Exchange and these were selected as a sample for study and panel data regression was used as analysis method. Dividend payout ratio was used as proxy for dividend payout policy and results indicated that as dividend payout ratio increases the financial performance gets better. So, the managers should focus on the healthy dividend policies by making investments in the projects that increases net present values and generate earnings. These earnings can be used to pay dividends (Idewele & Murad, 2019). In Pakistani context, the association of dividend policy and firm performance was studied. For this, data was collected from energy and textile sectors. Time span was from 1996-2008. ROA and EPS are proxied for business performance and analysis method used was logarithmic regression. In this study, the results are little bit

contradictory to general perception about dividend payout policy having positive influence on business performance. In this study, the dividend payout ratio tends to have negative influence on the business performance, hence giving new dimensions to researchers (Hasan, 2015)

The Casablanca Stock Exchange was also examined and data was extracted from comprehensive income statements and annual reports of selected 44 companies of Morocco. Sampling was done using judgmental sampling and time period for the study was from 2010-2014. Results revealed that dividend payout policy was relevant to the business performance and dividend payout policy is an antecedent for firm's performance. It was concluded that financial managers should design such policies that can enhance financial performance and shareholder's value by paying equity shareholder's huge dividends (M'rabet & Boujjat, 2016).

Dividend payout and its influence on the business performance was studied in Nigeria. Data was collected from time period 1997-2016 for 20 years. 21 listed companies were sampled by applying cointegration, unit root, Hausman & Wald tests. Results indicated that the performance of the firms affect the dividend payout policy and vice versa and results hold true both in short and long run. It was suggested that managers should be investing in projects that can increase the value of their equity. Profitable ventures should be focus of managers (Rafindadi & Bello, 2019).

Dividend dynamism is also studied in Pakistani context and data from 51 listed companies from period 2006-2015 was collected. Dividend yield and dividend per share were used as proxies for measuring the dividend payout policy (independent variable of study). The dependent variable was firm's performance which was proxied as return on equity (ROE). Results showed that with the healthier dividend policies, the firms perform better. This study was a support for dividend relevance theories signaling theory, bird in hand theory and clientele effect theory. This study suggests target oriented and managed dividend payout policy so that firm's performance can be enhanced (Farrukh et al., 2017).

Another study conducted in Pakistan collected the data from 2010-2015. Results were obtained using Ordinary Least Square (OLS) method. Asset returns were increased when the dividend payout policy was effective and stable. The firms listed on Pakistan stock Exchange must focus on the right investment choices to increase the asset returns. Capital market regulatory bodies must supervise the financial managers in order to uplift the performance of the firm and shareholder's wealth (Khan et al., 2016).

The controversy of dividend relevance was also studied in manufacturing industry of NASDAQ Stock Exchange, USA. The dividend payout ratio and dividend yield ratio are measure of the dividend payout policy while lagged price ratio, earnings per share, market share price and return on equity were the proxies for firm's performance. Data was collected in time span of 2011-2015 and sample consisted of 300 listed companies. Results concluded that firm's performance was enhanced when the dividend payout policy was stable and efficient (Sijol & Basit, 2016).

Another research in Nigeria studied the dividend relevance and firm's performance. Manufacturing firms of Nigeria including Nestle Nigeria, 7up Bottling Company and Unilever Nigeria. Time span of study was 5 years from 2011-2015. Techniques used for data analysis were OLS (ordinary least square), fixed effect estimation, random effect estimation and post-estimation like Hausman Test and restricted F Test. According to the results, dividend irrelevance theory was supported, and results showed that the dividend payout policy has no influence on business performance. Managers are recommended not to focus on distributing large portions of earnings on dividend. To avoid eroding the funds, an effective dividend payout policy must be designed so that balance between dividend payout and retained earnings could be well maintained (Akinleye & Ademiloye, 2018).

The consumer product firms and trading product firms were also studied in Malaysia. Sample data was collected from 2002-2011 from 200 firms. Business performance was measured with ROA and Tobin's Q. The dividend payout policy was proxied with dividend payout and dividend yield. There were some control variables including age of firm, growth, leverage and board size. The dividend payout policy in terms of dividend yield has no influence on firm's

performance however in terms of dividend payout. It has positive association with ROA and Tobin's Q. Also, in consumer product industry, dividend payout policy has much more effect on firm's performance as compared to trading/service industry (Lai et al., 2016).

There are a lot of problems like information asymmetry, agency costs, transactions costs and taxes that can influence significantly to the dividend payout policy and can serve as antecedents to affect firm's performance. Research in Nigeria studied the sample of agricultural firms and collected the data of EPS, DPS, PE ratio, as independent variables and share price value as dependent variable. Time span of study was between 2009-2015. Results revealed that the infant firms must be designing healthy dividend policies to enhance the profitability and attract the investors (Abdul, 2017).

Dividend policies are a mechanism that supports the financial performance of the firms through controlling the managerial opportunism. Data collected from 25 companies was analyzed using OLS regression. Results showed that business performance is positively associated with the dividend policies of the firms. Also, ROCE and firm's dividend payout policy has a direct and positive association. It was recommended that managers must invest the capital and earnings in profitable projects so that shareholder's dividends can be increased over time. Monitoring and supervision are also important elements to ensure accountability (Monogbe & Ibrahim, 2015).

This association was also studied and data was collected from Pakistan Stock Exchange selecting a sample of 15 manufacturing companies. Time span of study was from 2014-2017. For data analysis, techniques used were multiple regression, correlation and descriptive. Firm's performance was proxied with ROA and ROE. The dividend payout policy was measured with payout ratio. Results showed that ROA and ROE were significantly affected by the dividend payout ratio (Hafeez et al., 2018).

Oil and gas sector were also studied to find the effect of dividend policies on firm's performance. Oil and gas sector attract a lot of investors and they wish to maximize their wealth

in form dividends. The Variance Inflation Factor and Heteroskedasticity were used as diagnostic tests. The earnings per share have been affected by the dividend payout ratio and retained earnings. Conclusions said that oil and gas firms should focus on dividend payout ratio because it acts as a signal for good financial health of the firm (Kolawole et al., 2018).

Two firms in Nigeria and Finland were selected to make a comparative research for finding the association between performance of business and dividend payout policy in beverages and food sectors. Snellman was the firm selected from Finland while Cadbury was selected from Nigeria. This study was a comparison between a developed and an emerging market. Results showed that for developed market, the influence of dividend payout on performance was greater as compared to the emerging market (Nigerian). This was concluded that this difference was due to different economic conditions and predictors influencing dividend (Olufade, 2018).

Dividend policies have the influence on financial performance of breweries and banks. For testing this hypothesis, the data was collected from Breweries, Zenith Bank and Guaranty Trust Bank from period 2011-2015. Results for breweries showed that corporate performance (profit after tax and return on asset (ROA) was affected by dividend policy. For banks, earnings per share and return on asset (ROA) were positively associated with dividend payout policy in case of Zenith bank. This relationship was found to be negative in case of guaranty Trust Bank. This study concluded that managers should be focusing on the decisions of the investors when designing the dividend policies (Turakpe & Legaaga, 2017).

Association of company's performance and dividend payout policy has been widely studied by the researchers on empirical grounds. One such study was conducted on 3 firms and time span was from 2005-2015. Three firms included Unilever Nigeria Plc, First Bank of Nigeria Plc, and Royal Exchange Assurance Plc. OLS multiple regression analytical techniques were used to analyze the data. According to the results, the dividend payout policy had a strong influence on earnings per share (EPS), return on investment (ROI) and dividend per share (DPS) (Simon-Oke & Ologunwa, 2016).

Seven agricultural firms were also studied in another study from period 2007-2016. Data collected was of dividend payment, mode of dividend payment, financial leverage, asset structure, net income and total assets. Data analysis techniques were regression, correlation and descriptive statistics. Results showed that dividend payout policy and performance are strongly and directly related. So, it was recommended that firms should design adequate dividend policies and maintain a suitable dividend payout ratio (Ibrahim, 2017).

The Indian IT (information technology) based companies were also studied from 2012-2017. Data gathered from Bombay stock exchange (BSE). Market capitalization was sample selection basis. Independent variables were DPS, earnings per share EPS, payout ratio. Dependent variables in study were ROA and ROE. Techniques for analyzing the data were correlation matrix and panel regression model. Results revealed that there is very weak relationship of ratio of price earnings and dividend payout. Companies under study have no specific and consistent pattern for dividend payments. According to the Hausman test, the performance of the IT companies and dividend payout policy has strong positive association (Chauhan et al., 2019).

There was another study conducted in India in which cement sector of BSE was examined through annual financial reports. Data was collected from 2009-2017 and then analyzed with OLS regression. Relationship of dividend payout policy on performance was examined proxies dividend payout and asset returns respectively. Controlling influence of firm size and leverage was also examined. According to this study the dividend payout policy is inversely related to the performance of the firm. The asset returns and dividend payout are inversely related (Manjunatha & Akash, 2018).

Leasing and finance companies in India were studied from time period 2010-2015. Sample consisted of the 13 companies and basis for data collection was capitalization of market. This study focused on relationship of dividend payout policy with the business performance. The relationship of dividend with net profit and stock price was also studied. Data analysis tools were correlation and multiple regression analysis. Results were according to M & M Theory of

dividend irrelevance. Dividend payout policy and share price of the companies have no significant association (Thirumagal & Vasantha, 2015).

The study conducted on insurance companies listed in Nairobi Stock Exchange also examined the effect of dividend payout on the performance of share price. This study was supported by the M & M theory of irrelevancy and Gordon's Bird in Hand Theory. Study was descriptive in nature. Six insurance companies were the sample for study. Companies were CIC insurance group, British American investment company, Kenya re-insurance corporation, Pan Africa Insurance Holdings, Liberty Kenya Holdings and jubilee holdings. Financial reports of the companies were collected form period 2006-2015. Data analysis technique used was dynamic regression analysis. Results revealed that dividend payout, dividend yield and earnings per share have a significant association with value of share price. This was recommended that dividend payout policy should be wisely designed because it can affect the performance of the firms through share price.

2.16 Size of Firm and Dividend payout policy

Size of the firm is related to the dividend policy. Every firm has a different size and shape. It can be single owned, sole proprietorship, or large scale multi- national corporation (MNC). MNC's have large number of shareholders and they can be present in different geographical boundaries. The size of the firm usually affects the dividend policies of the firm (Ramachandran & Packkirisamy, 2010). Size of the firm notable is the important factor that can change the dividend payout policy and dividend behavior (Mehta, 2012; Nuhu, 2014). The association of size of the firm with dividend payout policy is direct and it also holds true for banking sector (Maladjian & Khoury, 2014). The firms that are larger in size can easily access capital markets. Hence, there are very less constraints on them to raise funds with low costs (Lestari, 2017).

Institutional shareholdings are high in case the firm is huge in size. Large sized firms have a better access to capital markets and as a result pay better dividends. They also pay higher

dividends to reduce the agency problems that arise between managers and shareholders (Labhane & Mahakud, 2016). There is positive association between firm size and dividend payout policy (Jabbouri, 2016). The size of the firm is directly proportional to the dividend policies because the larger firms have more capability to distribute the profits to shareholders as they can easily access the capital markets (Sheikh et al., 2016). The companies that are large in size have more ability to distribute the net profits in its shareholders as compared to the companies that are small in size (Fama & French, 2001). Large firms are owned by single entity and the information is heterogeneous therefore, the shareholders are not able to monitor managerial activities properly. If these shareholders are paid higher dividends then the agency problem can be solved as shareholders will be attracted by the monetary benefits (Sawicki, 2005). As the size is increased, the firms can easily access the capital markets and they can easily finance through debt and hence their cost of financing is lowered. When the cost is lowered, they are able to share the profits among shareholders in form of dividends. This holds true for multi-nationals that are larger in size and distribute more profits in form of dividends (Fatemian & Hooshyarzadeh, 2016).

In other view, the larger the firm size is, lesser the dividend it pays because it has more opportunities for investments and it cannot distribute the earnings in dividend payments (Lestari, 2017). According to some studies, the relationship of firm size with dividend payout policy is negative and smaller company's stock prices respond to dividend announcement more than the stock price's response of larger companies (Cristea & Cristea, 2017). Researchers have concluded that firm size is negative and firms with large size and profitability tends to give lower dividends so that capital can be retained for future (Jozwiak, 2014).

2.17 Size of Firm and Business Performance

Performance of the firm is related to the firm's size. Almost every firm strives to expand its size to gain competitive advantage. The theoretical support for increasing firm's size to achieve better performance can be best defined with help of economies of scale (Oyelade, 2019). The association of firm size and performance has been a controversial topic in the corporate

finance. This depends on the firm type and organizational economists are still working to find the exact relationship. The economies of scale are the main factor that can explain the negative relationship of firm size and performance. As the firm size increases, its resources pool is also expanded and hence performance can be increased (Valeiras, 2016). If the firm size increases, the asset return increases (Chaddad & Mondelli, 2013). It may also increase the return on equity or capital employed (Adenauer & Heckelei, 2011). The other theoretical grounds on which the firm size can have direct association with the performance are that profit margins and returns on scale increases (Garcia-Fuentes et al., 2013).

The market opportunities are also higher for the large firms that can cause the economies of scale Not only economies of scale, but the large firms have higher customer base, more negotiating powers with suppliers and customers and they can also access the international market easily. Large firms can save taxes and their market value and position is also greater than the small firms (Valeiras, 2016). There are many reasons in literature that explains the firm size as key indicator for judging the performance of the firm. If balance sheet is taken as proxy for the size of firm, increase in balance sheet results in better earnings. Small firms operating in a large number will act as a driving force for regulatory bodies. Securities and Exchange Commission will be active in implementation of policies like dividend payout policy, structure of capital and the corporate governance and thus improve performance. The diversification in size of firms will help in variation in performance of firms (Shah et al., 2016).

Not all firms can improve their performance by increasing the size. There can be many reasons for this negative association. Interests and personal benefits of the managers can be the main reason (Kouser et al., 2012). This view was also supported by the managerial utility maximization. This implies that instead of maximizing the profits of the firm, managers tend to increase personal utility (Maja & Josipa, 2012). Another reason defined is that when size of firm increases, the coordination becomes difficult and managerial responsibilities also increases. This results in inefficiency and reduced profits. The diseconomies of scale also help to explain the inverse association of size and company's performance. According to economics, due to economies of scale when the output grows, the average cost is decreased. There comes a point where the economies of scale are exhausted and the influence of diseconomies of scale starts to

affect the average cost. So, when the firm increases its size, the production cost also rises and hence the performance reduces (Oyelade, 2019).

If the size of firm increases the operating profit can decrease (H´yblov´a, 2014) and asset returns can also be affected negatively (Garcia-Fuentes et al., 2013). This can be said that smaller companies can achieve the goals of enhanced performance and the larger companies cannot experience better performance (Valeiras, 2016). Unit cost differential is over rid if the size of firm increases. Large firms of the capital-intensive sectors can have reduced profitability in terms of sales and capital (Grant, 1996). Global diversification and increasing the firm size can cause reduction in shareholder's value by 18-20% (Denis et al., 2002). The transaction costs also increase when the firm size increases (Garcia-Fuentes et al., 2013). Performance and the size of firm have been controversial when studying corporate finance and the main theory that supports positive association is economies of scale model (Kartikasari & Merianti, 2016; Kumar & Kaur, 2016). However, the optimal firm size hypotheses propose that there are a lot of determinants of the firm size. These determinants include the market structure (perfect, monopolistic, oligopolistic, monopolistic competition etc.)

This theory concludes that optimal size of the firm can deviate from the optimal cost position. These deviations are clearer when there are economies of scope (Olawale et al., 2017). When the firm size increases due to economies of scale, it brings some benefits along with some demerits like agency costs. Agency costs have direct association with firm size because of the increased number of agency conflicts and the contracting parties may have conflict of interests. Size of the firm is therefore important factor to enhance the firm performance. There is a trade-off between economies of scale and agency conflicts (Jensen and Meckling 1976). The larger firms tend to perform better than smaller companies because of diverse capabilities, usage of economies of scale and procedure formalization (Penrose, 1959). Corporate entrepreneurship gives benefits to the smaller firms while the larger firms try to enhance their profitability and productivity with the help of their market power and financial position (Shah et al., 2016).

Short term utilization of the resources depends upon the size of the firm. There are different sizes and capabilities of firms and thus they adopt different working capital policies.

According to variation in size, corporate governance practices are also different. These differences lead to different financial performances of the firms. Study was conducted on 153 firms listed at Pakistan Stock Exchange form period 2004-2013. Only non-financial firms were the part of sample and effect of size of the firm on performance was examined. Results revealed that size of the firm has significant association with the performance of the firm (Shah et al., 2016).

The cement sector of Pakistan was studied from period 2012-2016. Data was collected from annual financial reports of 19 cement companies listed on Pakistan Stock Exchange. Ordinary Least Square was the technique used for data analysis. Relationship of dividend payout policy with the firm performance was studied using size of the firm as control variable. Results indicated that firm size is associated with the firm performance in terms of return on equity (ROE) (Rahman, 2018). A study was conducted to examine the firm level predictors and industry level predictors of the performance of the firms. Nigerian firms listed on Nigeria Stock Exchange were selected as a sample for study. Financial and organization-specific data was used in this study. Results showed that firm level predictors have an association with the performance while industry level predictors do not have an association but firm size is the most important firm level factor that affects the performance (Adetunji & Owolabi, 2016).

Building industry of Nigeria was studied from 2004-2017 and relationship of firm performance with size of the firm was examined using panel analysis. Size of the firm is significantly related to the performance of the firm. Performance was measured using returns on assets (ROA) and return on equity (ROE). Size has an effect on the financial (accounting) and also on productivity (economic) performance (Oyelade, 2019). Size of the firm was also studied in American non-financial firms that were listed as fortune 500. Time span of the study was from 2009-2013. Multiple regression analysis was used to analyze the data. Relationship of firm size with the performance of the firm was studied and it tends to be positive. According to the results, profitability increases when the size of the firm increases (Tailab, 2014). The effect of size of the firm on economic performance of raising of swine sector firms was evaluated. Data was collected from Binsode company and data base of Albertina CZ Gold edition. The indicators of economic performance used were labor productivity and operating ratios. Linear regression

model was used for data analysis. Results showed that the firms huge in size perform better than the smaller firms. The economic performance of the firms is also affected by the economies of scale along with size of the firm (Kuncová et al., 2016).

The effect of dividend payout policy on performance of banks in Ghana was also studied with the effect of firm size as control variable. Time span of the study was from 2004-2013 and financial statements of the commercial banks were the data collected for study. Panel data analysis was the technique used. Results indicated that dividend payout policy is relevant to the performance of the firm in presence of the size as control variable. Bank's performance is determined mainly by the size of bank, CEO Duality and capital adequacy (Kennedy, 2015).

Researchers have claimed that food industries require more finances. This is because the food and beverage industry must be large in size so that better profits can be earned. Therefore, the dividend payout policy that can help in earning more profits can affect the performance (Gschwandtner & Hirsch, 2016; Kawshala & Panditharanthna, 2017). There is a direct relationship of size and performance of company. This is because the huge sized firms are diversified and their risk is spread on a larger size as compared to smaller firms. The stock price volatility is decreased as size of firm increases and hence performance is enhanced. However, size of the firm is irrelevant to the dividend payout policy (Nasimiyu, 2016). Relationship of dividend payout policy and firm performance was studied in Indian context. Data was collected from period 2009-2017 from cement companies listed on Bombay Stock Exchange. Regression and correlation analysis were used for data analysis. Firm size was studied as a control variable in this study. Results revealed that the relationship between dividend payout ratio and asset returns is negative in presence of firm size as control variable (Manjunatha & Akash, 2018).

Another study also examined the effect of dividend payout policy on the performance of the firms. 50 companies listed on Nigerian Stock Exchange were the sample for study. Data was collected from time period 2006-2011. Firm size was the main determinant of the dividend payout policy and in turn the performance of the firm (Uwuigbe, 2013). The dividend payout policy is determined by the various predictors like financial leverage, growth prospects and firm size. 97 non-financial firms of Nigeria were studied from period 1995-2012. System generalized

method of moments estimation technique was used for data analysis. Dividend payout policy affects the performance of the firm in presence of the firm size and board size (Odeleye, 2017). The relationship of dividend payout policy and firm performance was examined in Malaysia. Study was conducted from 2002-2011 and asset returns and Tobin's Q were the dependent variables. Independent variables were dividend payout and dividend yield. Control variables of the study were board size, firm size, firm growth, firm age and financial leverage. Usually the firm size is measured by the current employment, annual sales or total assets. In this study, firm size was proxied by the total assets. Results revealed that there is a positive association between firm size and performance. The increase in firm size can increase the asset returns (Lai et al., 2016).

2.18 Growth of Firm and Dividend payout policy

Dividends are paid to shareholders because shareholders seek some benefit out of their investments. If the business is growing, then investors may anticipate that firm will pay dividends to its shareholders. Growth in business makes sure that the dividend payout policy will be smooth overtime (Lintner, 1956). The payments of dividends are determined by several predictors including financial position, company policy and growth of the company. By no means, dividend payments are mandatory for any company however, if the company wants, they can pay dividends to its shareholders. Sometimes the companies do not pay dividends and invest the earnings in low-cost capital projects. Managers decide to invest these earnings into projects because of their personal interests due to which agency problem is raised. Annual sales growth of the company is often an evaluation parameter for managers and that is why managers do not want to pay dividends (Bushra & Mirza, 2015). However, literature says that more profitable the firm is, it pays huge dividends. If the firms have more opportunities for growth, its dividend payouts are less (Ahmad & Javid, 2009). Generally, if the firm is in the stage in which it is transitioning from growth to maturity, it pays more dividends.

Dividend payments are a unique feature of the business cycle. The firms that have achieved the maturity stage have fewer positive NPV (Net Present Value) projects but the cash

reserves are higher. So, financial managers of mature firms can favorably distribute dividends. Mature firms have more sticky dividends and this is why it is a positive signal for investors because variations in dividend payout are considered negative signaling for investors (Moyen, 2004). The sales growth of the firm also affects the dividend policies of the firm. In some scenarios, despite achieving the higher sales growth, firms still manage to pay dividends to its shareholders. Firms usually want sales growth so that their market position can be sustained and retained. If the sales growth is higher, it implies that profitability is increasing overtime so the financial managers have more cash to rewards their shareholders. To retain free cash flows (FCF), firms usually opt to increase their sales growth (Afza & Mirza, 2010). The firms that have higher opportunities for the growth and expansion, pay higher dividends form their free cash flows so that their reputation can be maintained (Bushra & Mirza, 2015).

The companies that have higher sales growth, they also have the need for extra funds, so that investments can be made. As, investments are cheapest financing source. Mature firms are already at the optimum level so they do not usually invest in high-growth projects. So, they pay their shareholders a huge amount of profits as dividends (Afza & Mirza, 2011). Mature companies usually have expanded to their maximum and their growth is slower so capital expenditure is also less. Growth opportunities are usually proxied by the market-to-book (M/B) Ratio. This is most popular measure to test the growth opportunities of a firm. Growth firm having higher M/B ratio pays lower dividends. This is because if there are investment opportunities for the firms that are in growth stage, they will prefer to invest and need retained earnings for this investment. So, in this way the dividend payout is less. Growth firms also depend on the internal financing for the investments so that costs of external financing can be avoided. So, these firms pay less dividends (Bushra & Mirza, 2015). The firms pay smooth dividends when they are growing rapidly because these firms usually want to send positive signals to the shareholder's regarding the value of firm (Epaphra & Nyantori, 2018).

Theory of cost transactions and theory of agency costs are main theories that can explain the effect of growth of firm (Rozef, 1982; Smith & Watts, 1992; Graver & Graver, 1993). A growing firm can be assessed with the increase in sales and revenues. Growth in sales shows that firm is in growth stage. Or financing the investments, the growing company will try to hold its

earnings and hence the dividend payout decreases. If these firms pay high dividends then it may be a threat to finance its investments and expansion projects. Investment policy is a substitute for the dividends because it decreases the agency problem and free cash flows. Some other theories like signaling theory, free cash flow theory and contracting theory also explains the relationship of growth and dividend payout. Signaling theory proposes that firms with the higher growth pays high dividends to signal positivity in market. Contracting theory says that growth firms pays less dividends because they have more future opportunities for investment. Because firms with high growth have lesser amount of free cash flows and can pay less dividend (Epaphra & Nyantori, 2018).

2.19 Growth of Firm and Business Performance

There are some theories that propose and explains the association between the growth of firms and their performance. These include managerial theory, neo classical theory, Penrose model and the theory of optimum firm size (Sangosanya, 2011).

2.19.1 Neo Classical Theory

According to neoclassical theory, firm is the perfect form of business and its core motive is generating profit. The existence of the firm is only for pure economic purposes of cost minimization and profit maximization. But there are some exogenous and environmental predictors that are not in control of the firm and profit cannot be controlled by the firm itself. According to neo classical theory, firms are entities that can change the atomistic inputs into merchantable outputs. Firms are corporate entities for which the profits are motivation for growth of firms and firms cannot solely control its objective of the profit maximization (Sangosanya, 2011; Bernadette & David, 2005). Neo classical theory was criticized in 1930s and this criticism gave birth to many alternative perspectives on growth of the firms (Olawale et al., 2017).

2.19.2 Managerial Theory

The complex nature of the modern firms was explained by the managerial theory. This theory also shed the light on the black box of neo classical theory. Baumol (1967) claims that firms hire managers to increase the sales. Motive behind hiring managers is revenue maximization, not profit maximization. In this theory, manager is an agent that only maximizes the revenues. The firms must increase their output so that market share can be grabbed. This will increase the sales and growth of the firm will result in improved performance. This theory is modernized form of neoclassical theory and critiques claim that profit maximization and cost minimization are core functions of the managers (Olawale et al., 2017).

2.19.3 Penrose Theory

Penrose model is based on the argument of managerial limitations to growth of firm. According to this model, each employee has a different skill set, specialties, team-specific skills and effort level. These employees are basis of management and collectively they perform activities coherently. According to the model, there is no optimum size or long-run predictors and firms focus only on current-period growth and sales (Penrose, 1959). Critiques of this theory claims that adjustments costs are not variable rather they are fixed. Reconstruction of the Penrose's argument is difficult. The cost of the expansion in management team is not dependent on the recruitment of the new managers in the team (Olawale et al., 2017).

2.19.4 Theory of Optimal Firm Size

The managerial limit theory proposed by Penrose had some inadequacies that were addressed in the optimal firm size theory. This theory states that there are number of considerations on which the size of firm is dependent including market structure. Market structure can be defined as the environment in which firm operates; oligopoly. monopoly, perfect market or monopolistic competition. According to the conclusions of this theory, the growth rate of large firms is less than the growth rates of large firms. Small firms when reach the minimum efficient scale, their growth rate can change. Until this point, they grow faster than the larger firms. If the firms have market powers because it is operating in an imperfect market, they may deviate from optimal cost position. Growth abilities of firms mainly depend on the innovations.

The growth of the firm is determined by its product uniqueness rather than the cost considerations (Olawale et al., 2017). Achieving growth is the main objective of almost every firm (Mishina et al., 2004; McKelyie & Wiklund, 2010). Growth has been identified as the two-sided strategy in which the firm can opt for diversifications remaining in the boundary of resources firm have. Penrose augmented that to achieve performance and growth, firms can enter new markets with its current products, or it can use new products into current markets (Penrose 1959). Ansoff (1965) afterwards supported Penrose's argument and proposed that firms can easily grow when expansion can be done in any dimension. There are different determinants of firm's growth that ultimately affects the performance of the firm. These predictors include workforce quality and innovation conditions (Barbosa et al., 2016). There has been seen a disparity in the performance of different regions and this disparity is said to be explained by growth of different regions (O'hara, 2013). Not all firms show a positive association in growth and performance. Some firms even show worse performance after achieving the high growth (Coad et al., 2014). Growth of the firm is an indicator for the increase in corporate performance of the firm in terms of finance. Growth of the firm is also an important indicator to consider the investment decisions and hence achieving the performance (Waluyo, 2017).

There was a study that provides evidence on relationship between size of firm, its growth and its profitability. 115 Non-financial firm of Nigeria were the sample for this study whose time

span was from 1998-2012. Data analysis was done using generalized method of moment results and secondary data was collected from financial statements and annual reports of the listed companies. Results revealed that as the profitability increases there can be seen a boost in growth of the company. This implies that profit and growth are directly related to each other while size also increases as growth is achieved (Razaq & Akinlo, 2017). The effect of growth strategy on the firm's performance was also studied in context of China. 263 manufacturing firms were the sample for the study. Market and product expansion strategies were studied and their effect on performance of the firm was examined. The product and market expansion strategies had a positive influence on the performance of the firm through market orientation (Filatotchev et al., 2016).

Another study conducted in Bulgarian firms for the consecutive three years periods of 2001-2010. This paper analyzes that whether the firms after achieving the high growth still perform better or not? Whether they create job after high growth periods. According to definition of Eurostat-OECD, the high growth firms are those whose growth does not stop after achieving the high growth and they still perform better. In the absolute terms, the high growth firms continue to create more jobs. If the firm exit is taken into account, then the firms having absolute high growth perform better than the average firm (Erhardt, 2018). Heterogeneous patterns of firm's performance are attributed to the growth of firms. The growth of the firms can be affected by number of predictors that also includes regional factors, business cycle fluctuations and resources embedded in the firm. The regional predictors that affect the growth and firm performance can be market conditions, human capital embedded and innovation conditions in those specific regions. 1492 firms were studied over the time span of 2008-2012. Data was collected from Census of Industrial Production (CIP) in Ireland. Quantile regression was used to analyze the data. This study showed that growth is affected by the firm's location, workforce quality, innovation and specialization of industry and these in turn affected the firm's performance (Firm growth and regional factors: evidence from Ireland, 2019).

There are different determinants or dimensions of the firm's performance like customer satisfaction performance, market value performance, profitability performance, employee satisfaction, environmental audit and growth performance, social performance and performance

of corporate governance. All these dimensions are representative of the different aspects of the firm's performance and all of them are equally important and can be used interchangeably. In every firm, the demands of stakeholders are different and managers have to manage these demands (Selvam et al., 2016). Growth can be external or internal based on the circumstances. Most of the corporate growth occurs internally and firms expand internally (Selvam et al., 2010). Stock exchanges facilitate the Indian corporate sector (Gayathri & Murugesan, 2014).

Another study in Spain was conducted from period 2000-2014. Data collected was from ESEE. This study examined the relationship of growth and profitability of the firm. The growth-performance relationship was analyzed using the innovation and export intensity of the firms. Spanish manufacturing companies were the sample of the study and technique was dynamic panel data model. In short run, the growth has positive influence on profit and performance. It also depends on the measures of growth. The employee's growth had a association with profits but the profits do not determine sales growth. Firms usually grow because of exports and hence their performance gets better. The influence of export intensity on the performance and profitability has an indirect association with the sales and employee's growth. However, unexpectedly innovation efforts do not significantly influence the performance and profitability (Fuertes-Callén & Cuellar-Fernández, 2019).

As the world has seen the corporate failures, the shareholders and other stakeholders are more interested to know the financial performance of the firms in which they have invested. The primary driver of sustainability is the sales growth of the firm that can help in achieving improved performance. For this purpose, agricultural firms in Nairobi were studied from period 2003-2013. Basis of the study was theory of firm growth that proposes about the increments in sales and its effects on the financial performance over the years. Sales growth was measured by the sales increments while firm performance proxies were return on assets (ROA), return on equity (ROE) and earnings per share (EPS). Data was analyzed with pooled OLS regression model. Results clearly show that there is a positive association between the sales growth and performance of the firm (Odalo et al., 2016).

2.20 Leverage of Firm and Dividend Payout Policy

The decision about source of financing a firm needs and dividend payout policy are the most important decisions, a firm ever makes. For financing, the firm always have a choice between internal financing and external financing. External financing includes debt and equity financing while the internal financing includes finances from depreciation and retained earnings. Therefore, a firm has to choose or evaluate two of its choices. First it must choose between the dividend payments and retained earnings. This implies that how much of the profits or earnings be kept within firm and ploughed back and how much amount must be paid as dividends. Second choice is about the capital structure/leverage. Either the firm will go for debt or equity financing (Sang et al., 2015).

Dividend payout policy is the determinant of the financing choice of the firm. This is basically decided by the financial managers that whether the firm will release the corporate earnings from the control of enterprise or not. This is because dividend payout policy can have influence on the corporate liquidity, liquid fund's flow, satisfaction of the investor and stock prices (Weston & Brigham, 1981). The major decision that a financial manager can face is the distribution of dividends (Franklin & Roni, 1995). Not only the capital structure but dividend payout policy is crucial to understand theories of asset pricing, acquisitions, mergers and capital budgeting. Capital structure can be defined as the ratio of the funding arrangement of the firm in terms of debt or equity financing. Capital structure may comprise of debt, equity and hybrid securities that the firm issues (Brealey & Myers, 2005). If the financial leverage increases, the returns to some shareholders can get better but at the same time, risk also increases because of the agency costs and financial distress (Jensen & Mecking, 1976).

There is a negative association between dividends and financial leverage (Sang et al., 2015). The main theory on the capital structure of the firm is based on WACC (Weighted Average Cost of Capital) principle. According to this principle, equity is costly mean of financing and that is why firms chose debt so that WACC can be reduced (Prace, 2004). Dividend payments send healthy signals to the investors about the financial position of the firm.

If the stream of dividends is constant overtime, then the asymmetry of information is reduced, and investors have enough information when they enter into equity markets. On the other hand, the firms paying dividends lack the internal finances and their demand for external financing increases (Bhaduris, 2002). If the firms have no intentions for investment in profitable projects, then dividend payout policy is the medium to release resources and signals good information in the capital markets.

There is a positive association between the dividend payout and debt financing (Frank & Goyal, 2004). Capital structure is associated directly with the dividend payout policy and it is concluded that firms having high gearing ratio tends to pay low dividends (Sierpinska, 1999). There is a relevancy between dividend payout policy and common stocks and dividend payout ratio is related to the value of the firm (Bittok, 2004). The basic of the capital structure and dividend payout policy can be traced back to the paper published by Miller & Modigliani (1958). The basis of this paper had some assumptions such as no agency costs, bankruptcy, asymmetric information and taxes and markets are efficient. Under these assumptions, value of the firm does not depend on the capital structure of the firm. But these assumptions were unrealistic and hence, the theory of irrelevancy was criticized.

Theories of dividend payout policy are different from the theories of capital structure because in the finance literature, dividend payout policy is separate entity to the capital structure. But there are some important and common predictors that affect both the variables (Faulkender et al., 2006). The cross-sectional variations between the theories of capital structure and theories of dividend payout policy are driven by the same underlying assumptions because both are determined by the allocations between investors and managers. Agency information and private information are very crucial predictors for the allocation of control between investors and managers (Sang et al., 2015). If the propriety information of the managers is signaled by the dividends, then there is direct relationship between stock prices and dividend payout. If the inefficiencies of free-cash-flow are reduced by the dividends, then the company's value will be increased by the increase in dividends because the excess cash is reduced.

This is concluded that the unanticipated rise in dividend payments have a positive influence on the prices. The decision of the dividend payout policy and capital structure is interrelated, and the decision of dividend payment is all about distribution of profit to shareholders while the decision of capital structure is about the choice between the financing source for investments (Sindhu, Hashmi & Ul Haq, 2016). The original MM theory proposes that total market value of the firm is not dependent on capital structure and is equal to the capitalization rate of a pure equity stream of its class and cost of equity of the firm is directly related with the debt-equity ratio (Modigliani & Miller, 1958).

The theory of modern business finance is based on the capital structure irrelevance proposition of Modigliani & Miller (1958) (Ahmeti & Prenaj, 2015). In their paper, Modigliani & Miller gave answers to many questions regarding corporate finance. Most of the researchers consider M&M theory as generally accepted theory of capital structure (Papescu & Visinescu, 2011; Luigi & Sorin, 2011, p. 315). According to the first assumption, any firm has an exacting set of estimated cash-flows at disposal. When any firm makes the decision about financing the assets, it selects the certain proportion from debt and equity. This selection helps the firm to split the cash flows between investors. Moreover, they assumed that investors and companies have same access to the financial markets. This same access enables homemade advantage (Ahmeti & Prenaj, 2015). Another researcher explained the Modigliani & Miller Assumptions. He explained that in case of mere change of debt-equity, there is no effect on the cost of capital (if the risk class is same). This implies that capital structure of the firm is independent of the costs of capital and value of the firm.

Also, the cut-off rate for investment is independent of the form of finance (Bose, 2010). According to irrelevance theory presented by Modigliani & Miller, the authors basically presented a summary of how financial decisions are irrelevant when the capital markets have perfect conditions. They proposed that markets are competitive (firms and individuals are price takers), frictionless and efficient having no taxes, transaction or bankruptcy costs (cash flows of the firm are independent of their financial policy). It also assumes that the information is abundant and available equally available to all agents. However, in 1963, both of authors incorporated taxes into the model so that it can come closer to reality. M&M's basic argument

after incorporating taxes was that firms can increase the debt percentage in its capital structure and hence can reduce the weighted average cost of capital (WAAC). This implies that ratio of corporate tax is equal to the current value of savings from taxes.

This is because these firms do not pay much taxes as per tax shield phenomenon (Brigham & Ehrhardt, 2010). According to proposition of irrelevancy of the capital structure, there are three main assumptions. Debt-equity ratio of the firm has no effect on market value of the firm under certain conditions only, capital market is perfect, capital structure irrelevancy with and without taxes. The authors basically studied two firms having different capital structures, one with mix of debt to equity and second only equity capital. They made a conclusion that market value of the firms is not affected by the financial decisions of the firms (assuming both firms having equal cash flows) (Brigham & Ehrhardt, 2010). There were some limitations of the M&M Theory. Stiglitz (1969) proved that assumption regarding "risk class" and firms having same income worldwide were not realistic. He stated that risk classes are crucial. There is not subjective prospect allocation over possible outcomes, rather objective. The basis of M&M Theory was partial equilibrium analysis and authors did not incorporate general equilibrium analysis. Stiglitz also criticized the assumption of same borrowing power of individual and firms. He argued that individuals have some limitation when borrowing as compared to firms (Stiglitz, 1969).

2.21 Leverage of Firm and Business Performance

When the companies decide to structure their finance, they face difficulty because its an important decision that can affect their performance. The capital structure is very important for survival and value of the firm. It is upon manager's discretion to decide about the capital structure. Managers decide whether to finance the investments through internal financing, debt or equity. Therefore, the decision of the capital structure is very important for enhancing the financial performance of the firms (Bhattarai, 2016). In literature, it is identified that debt ratio (capital structure) and performance of the firm are negatively associated (Pouraghajan et al., 2012; Salteh et al., 2012). Some researchers have concluded that capital structure and firm's

performance are directly associated (Kazempour & Aghaei, 2015; Adesina, Nwidobie & Adesina, 2015).In the developing countries where the stock exchange is barely functional and capital markets are inefficient, firms have only choice to finance its investments through debts.

Therefore, financing decisions of the firm may face irregularity (Eldomiaty, 2007). First theory regarding capital structure was given by Modigliani & Miller (1958, 1961) that is also known as irrelevance theorem. This theory proposes that under certain (unrealistic) assumptions like if there are no taxes and agency costs, there must be no bankruptcy and markets must operate perfectly, the capital structure is irrelevant, and it has nothing to do with the value/performance of firm. According to proposition of irrelevancy of the capital structure, there are three main assumptions. Market value of the firm is not related to and is not affected by the debt-equity ratio. But this is possible only under certain assumptions like capital market is perfect, capital structure irrelevancy with and without taxes. The authors basically studied two firms having different capital structures. One having debt while other without debt in its capital structure. They made a conclusion that market value of the firms is not affected by the financial decisions of the firms (assuming both firms having equal cash flows) (Brigham & Ehrhardt, 2010).

According to static trade-off theory of capital structure, the decision about the capital structure of the firm depends on the financial distress and the benefits of debt financing. Therefore, every firm must choose between the marginal benefits arising from debt and the cost of debt (Myers, 1984). Another theory is Agency Cost Theory that was proposed by Jenson & Meckling (1976). This theory proposes that with the separation of ownership, the agency cost increases and thus the conflict of interest also increases between the managers (agents) and shareholders (principals). It is concluded that only a tradeoff between agency cost of debt and its benefits can bring the optimal capital structure. Agency costs however can be defined as costs that arise due to the conflict of interest. This implies that if the managers (agents) are different than owners (principals) of the firm then their interests may be different and diverging in nature. Their goals are not aligned in one direction and this raises conflict among them.

The key-decision makers in a firm are managers and this decision-making power also increases the conflict. When there is threat of liquidation of a firm, risk of being defaulter or any other financial distress, this conflict can increase between equity shareholders and debt owners (Admassu, 2016). Pecking Order theory is also an important theory of capital structure that states about the capital structure being determined by the desire of firm for new investments (Myers & Majluf, 1984). It claims when the firm needs finance, it generates the funds internally at first, then goes for external financing including low-risk debts and after that equity financing (as a last resort). Both in case of accounting and market measures, the capital structure of the firm is positively associated with the performance of the firm (Abu-Rub, 2012). The conflict between the shareholders and the lenders is very common in any firm. This conflict arises because equity shareholders agree to invest in risky projects while the debt shareholders do not want an investment in risky projects.

Therefore, there is a negative association between leverage and firm performance. However, when more debt is borrowed and the debt-equity ratio of the firm increases, the chances of bankruptcy also rise, and performance may be increased so that the business can be safeguarded from bankruptcy (Soumadi & Hayajneh, 2012). Another theory on the capital structure is market timing theory. This theory was originally developed by Baker & Wurgler (2002). According to this theory, in favorable periods, the financing is done by issuing shares (equity financing) and in financial crisis, the firms tends to prefer debt financing. Therefore, it is basically the market timing that helps to determine the firm's capital structure (Khodavandloo et al., 2017). The decision of firm on capital structure (high or low leverage) can help in reduction of the debts and costs of debts. This is mainly dependent on the market conditions and competitive strategies of the firms that in turn increase firm's performance (Agnihotri, 2014). Positive association is found between performance of firm (that can be proxied by return on assets (ROA) and return on equity (ROE)) and capital structure (Tan & Hamid, 2016).

A study conducted in Nepal Stock Exchange examined the secondary data from period 2004-2014. Data was collected from eight manufacturing companies and multiple regressions were used for data analysis. The results showed that there is a negative association between capital structure and firm's performance in presence of control variables like tangibility, growth

rate and firm size. If the ratio of debt is higher in the capital structure, then the performance of company is reduced (Bhattarai, 2016). A study in Malaysia was also conducted to test the effects of capital structure on performance of firms. A sample of 50 industrial companies listed on stock exchange was selected and secondary data was collected from annual reports of the listed firms from period 2011-2015. Results revealed that the industrial product company has equity financing as a major portion of their capital structure. The equity financing tends to have a negative association with asset returns. Conclusively, if the industrial product companies raise finance through debt, their performance can be increases. It can also help to decrease agency problems and can provide chance to enjoy tax benefits. However, there is an optimum level of capital structure and if debt level is over this optimum level then performance is hurt (Basit & Irwan, 2017).

Taiwan Stock Exchange was also studied from period 2011-2016. Data was collected from 172 companies listed on Taiwan Stock Exchange (TWSE) to study the effect of capital structure on the firm's performance. Data analysis techniques used were correlation analysis and t-tests. Finding of the study were simple. It was hypothesized that whether capital structure is correlated to the profitability of firm, shareholder's wealth and capital market perception of firm. Only capital market perception of the firm has significant relation with firm's performance (Singh & Singh, 2018). During the period of financial crisis, researchers examined the relationship between capital structure and firm's performance in Bursa, Malaysia. 45 listed companies were studied as a sample for study and period of pre-crisis (2004-2006), crisis (2007-2009) and post-crisis (2010-2013) were studied. Technique used to analyze the data was simple regression analysis. Results showed that financial leverage is inversely related to the performance of the firm during global financial crisis (Khodavandloo et al., 2017).

Indian companies listed on Bombay Stock exchange were also studied from period 2003-2013. This data covered both the pre and post-recession periods (2008-2009). Sample of 422 listed companies was selected. Techniques of data analysis were panel data analysis and ratio analysis. Proxies for firm's performance were Tobin's Q, return on equity and asset returns. Results revealed that return on equity is negatively associated with the performance of the firm. Firm's financial performance was determined with the help of variables like size, age, tangibility,

sales growth, asset turnover and structure of ownership of the manufacturing firms under study. This study suggested that high sales growth firms will avoid long-term debts and prefer short term debts in capital structure. This helps in reducing agency costs (Chadha & Sharma, 2015).

Four consumer goods firms listed on Nigerian Stock Exchange were also examined through their financial reports from period 2002-2016. Data was analyzed using multiple regression and ordinary least square (OLS). According to the results, there was an insignificant but negative influence of the capital structure on the firm's performance. Capital structure was proxied by the debt ratio and performance was measured through the asset returns. This study claimed that capital structure is irrelevant in determining the performance of the firm. These findings were consistent with findings of Miller & Modigliani (1958) theory of irrelevancy of capital structure under some assumptions. Managers must take care while choosing debt as a financing source (Uremadu & Onyekachi, 2018). The relationship of the capital structure with performance of the firm has also been studied with the sample of 51 companies listed on Bucharest Stock Exchange (Romania) form period 2000-2016. The techniques of data analysis were multi-variate fixed-effects regression and dynamic panel-data estimations. The results revealed that leverage (proxy for capital structure) was directly associated to the size of the company and volatility of the stock price but the debt structure affects the firm's performance in a different way (Nenu et al., 2018)

Also, in UK, the SME's (small and medium enterprises) were studied from period 1998-2008. The firm's performance was measured by return on assets (ROA) and return on capital employed (ROCE) while leverage was proxied as capital structure. Pearson correlation and multiple regression was used for data analysis. According to results, there was a strong and inverse relationship between both variables. This implied that the financial performance gets better if the debt financing is not opted. This was recommended to SME's in UK to finance their operations and investments from retained earnings because SME's face difficulty in borrowing from banks (Abeywardhana, 2016).

Another study in Nigeria studied data from annual reports of 100 non-financial firms that were listed on the Nigerian Stock Exchange. Period of the study was from 2010-2014. Panel data

approach was used in order to analyze the data. Firm performance was measured in terms of asset returns and Tobin's Q. This study showed that the company whose cash flows are volatile uses equity financing and avoids debt financing. However, companies with stable income prefer debt financing (Dada & Ghazali, 2016). In Turkey, 136 industrial companies listed on Istanbul Stock Exchange were studied using their annual reports and financial statements. Time span covered in this study was from 2005-2012. Multivariate regression analysis was used for data analysis and to test relationship between capital structures and firm's performance. Capital structure was proxied by the debt ratio (DR) and earnings per share (EPS) while firm's performance was measured by return on equity and assets (ROE and ROA). According to the results, there was found a negative relationship between firm's performance and capital structure (Nassar, 2016).

2.22 Corporate Governance Practices of Firm and Dividend Payout Policy

Aligning the interests of managers and investors is known as corporate governance. With corporate governance, it is made sure that company exists for the benefits of investors and shareholders (Mayer, 2007). Corporate governance is a sort of promise that investor will get a return on the amount invested and that the firm will be operated with some specific rules and regulation in interest of the shareholders (Metrick & Ishil, 2002). Corporate governance was needed because there was a clear conflict between the interests of managers and shareholders. Corporate governance is the basic answer for agency problems. There are different corporate governance practices even in the same country. Different firms can operate under different regulations (Ikunda et al., 2016).

Managers usually retain the dividends so that risk of human capital loss can be mitigated. If the firm pays lower dividends, this implies that corporate governance is not up to the mark and hence the rights of shareholder's are not protected. The investors in the countries where rights are more protected and legal standards are high receive more dividends. However, in the countries where the legal protection is weak, dividend payout is low (La Porta et al., 2000). If the shareholder's rights are strong, then the severity of agency costs decreases (Gompers et al.,

2003). In the companies where the rights of the shareholders are repressed are more likely to be exposed to agency problems. There is a wide gap between property and control in such companies. This is claimed that better the corporate governance practices are, higher the dividends paid by the company (Bebczuk, 2005). Quality of corporate governance can be tested with the help of Transparency Disclosure Index (TDI).

Corporate governance code is the tool that helps in determining the dividend policy. Researchers found that the transparency disclosure index and dividend policy are correlated positively (Kowalewski et al., 2008). Agency problems become severe if the minority stockholder's rights are weak therefore, a separation is required between control and property of the firm. Managers usually prefer control and pays low dividends (Montalvan et al., 2017). Dividend policy and how it is affected by the corporate governance is what agency theory explains. The companies with stronger corporate governance are the ones that pays high dividends to its shareholders (Jang-chul & Young, 2011). If the ownership structure is highly concentrated, then the dividend payout ratio may decrease because there is absence of supervision mechanisms.

In this way the controlling shareholders can exploit the minority shareholders (S´aez & Guti´errez, 2014). The two basic perspectives that explains the relationship of corporate governance practices and dividend payout ratio are namely outcome hypothesis and substitution hypothesis. These two are theoretical perspectives (Al-Najjar & Hussainey, 2009; DeAngelo & DeAngelo, 1990; La-Porta et al., 2000; Sawick, 2009). According to the outcome hypothesis, the corporate governance regime determines the dividend payout because the managers of the firms that are not governed better have more interest in their interests rather than interested in maximization of the shareholder's wealth. They pay low or no dividends to the shareholders (Al-Taleb, 2012). Although the net present value projects are not sufficient but there is availability of free excess cash to these managers and they can easily invest and expand the company through mergers and acquisitions. However, the managers of the strongly governed firms usually act in benefit of the shareholders and pay large dividends to maximize shareholder's wealth. According to outcome hypothesis, the relationship between dividend payout policy and corporate governance is direct and positive.

The second hypothesis is the substitution hypothesis that suggests a negative relationship between dividend payout and corporate governance. According to this hypothesis, the companies whose corporate governance is not strong usually pay huge dividends to maintain the repute and firms with strong governance pays lower dividends (Elmagrhia et al., 2017). According to opportunistic management hypothesis, it is claimed that the managers usually pay low dividends to shareholders and invest the earnings into the projects that are more beneficial to them rather than the shareholder's wealth. Therefore, dividend payout and corporate governance tends to have an inverse association. However, the positive association of dividend payout ratio and corporate governance can be explained with the help of substitute model.

This model claims that if the shareholder's rights are strong, dividend payouts will be higher (Easterbrook, 1984; Montalvan et al., 2017). Agency theory is the basis that separates the ownership of the firm from its control. This separation causes the information asymmetries and hence agency problems. To reduce these agency problems, dividend payments are said to be an important tool (Jensen, 1986; Byoun et al., 2013; Van Pelt, 2013). This phenomenon is also proposed by Ross (1977) and Bhattacharya (1979) that the firms in which information asymmetry is high, pays higher dividends. This is because they want their stockholders to know only about the positive side of the firm.

Previous researches have shown that agency theory presents a mechanism that can help in mitigating agency costs that arise between principals and agents (Conyon, 1997). There are various mechanisms that help to explain the relationship and effectiveness of corporate governance on dividend payout policy and performance of firm. The strong mechanisms include independence and size of the board while CEO duality is the weak mechanism (Jenson & Meckling, 1976). Availability of cash, the payable amounts, regulations of government, availability of viable investments and business restrictions are some important determinants of the dividend payout policy of any firm. Most of the firms pays regular dividends as to attract the investors and retain the shareholders.

Firms are not dividend-aversive in most of cases and they prefer to pay high dividends to their shareholders. If the dividend payments are reduced, investors consider it a signal of poor

financial performance. Corporate governance practices as per Agency theory effects the dividend policies of the firm. The payments of high dividends make sure that agency costs and information asymmetries are reduced. This implies that if shareholders are getting high dividends, the managers won't invest the cash flows in unviable investments and hence there is alignment in interests of shareholders and managers (Michael, 2016). Scrutiny by the capital market is defined as when firms distribute dividends to attract the funds from outside. This scrutiny helps to reduce the agency costs and opportunistic behavior of the managers (Kowalewski et al., 2007). Shareholders according to agency theory prefer dividends over capital gains because they do not want their funds to be expropriated by inside management. If the I strategic shareholders have the control powers in the firm, then the minority shareholders are at risk. If the board is not independent, then firms can expropriate the minority shareholders (Shao et al., 2008). Dividend policies also address the agency problems between principals and agents. High dividend payments make sure that excessive cash is paid out as dividends that can otherwise be misused by the managers (Fluck, 1998). Another argument is that firms with large cash flows tend to be forced by market and predictors to accept the investments that can generate negative cash flows. Therefore, the firm pays high dividends to avoid such investments. In this way, future agency problems are also mitigated (Jensen, 1986).

2.22.1 Board Size

Number of directors in the board is known as board size and it is key determinant for the success and competence of the board (Ikunda et al., 2016). The bigger the board is, more effective is the company's management and reduced are the agency costs. If these agency costs rise, the poor management can lead to poor financial results and performance (Hamdouni, 2012). Board diversity increases as the size of board increases. Board diversity may include skills, gender diversity, nationality, experience and skills. Smaller boards do not have this diversity of experience and opinion (Dalton et al., 2009). But there are some costs related to the larger board sizes. There are costs related to coordination, planning, work coordination, decision-making and meeting costs. Holding meetings also become difficult when the board size is large.

Corporate governance was a solution for agency problems but with the larger board sizes, the agency problems may increase. The role of board of directors can become more conflicting rather than functioning as a part of management. The possibility of free riding by the directors can be reduced if the board sizes are smaller. This also increases decision-making process (Raheja, 2005). If the board size is large, then usefulness of the board can be enhanced because a larger board size brings the expertise and skills that can be used for decreasing agency problems. According to some authors, the efficient board size of the firm is eight or above eight members. Small board sizes can cause the decision-making of directors to be inclined towards the decisions that are beneficial to them only rather than the firm. But if board size increases the difference in opinion can make the decision-making more efficient and beneficial to the shareholders (Byoun et al., 2016).The larger boards with more directors is preferred over the smaller boards with lesser directors because more directors will hold more experience, knowledge, skills and external links (Pahi & Yadav, 2018).

Small board size and dividend payout policy are directly related however some studies also claims an inverse relationship between two (Bolbol, 2012). If the company's board has sufficient number of members, then the operations can run smoothly, and business may not face challenges. Sufficient number of board members also makes sure that opportunistic behavior of the management is monitored. Larger boards can help to enhance the performance and they can help in mitigation of agency problems. Boards that are larger in size also help in smooth dividend payout ratios. However, there are some issues that a firm can face if board size is large. The lack of coordination and communication is the biggest issue that a large board can face. This problem leads to poor governance and poor dividend payout policy (Dissanayake & Bandara, 2018). Researchers have suggested a direct association between the size of the board and the dividend payout policy (Kiel & Nicholson, 2003).

The size of the board is basically determined by the complexity of the business and the need for relevant skills or expertise. If the size of the board is very small then it may not deliver what is expected from the board. Smaller boards are fixed in nature but they can help in raising equity if needed because they can promise higher dividend payouts to attract the investment and to establish their reputation (La Porta et al., 2000). Contrary to this, larger boards can help in

increasing dividend payout ratios so that the agency costs can be decreased overtime. However, large boards can also become non-functional and does not help in reducing agency costs rather increase agency problems. Large sized boards can also increase conflicts between managers and shareholders (Amina, 2015). Boards are usually a substitute for the shareholder's rights. The protection of rights of the shareholders can be done effectively if the size is large. If the rights of the shareholders are weak, then dividend payouts are high so as to protect the rights of the shareholders. Greater is the size of board, better is the dividend payout ratio because in larger boards, the number of evaluators of CEO performance is more and hence monitoring becomes effective (Belden et al., 2005).

2.22.2 Board Composition/Independence

A board is considered as independent if its member/members have no direct association with the firm. In this way, the conflict of interest between shareholder's wealth maximization and management interest mitigated. This is because independent boards have no direct benefits or material interests associated with the firm (Ikunda et al., 2016). Independent directors must be preferred over inside directors because inside directors have interest in the resources of the firms that they can enjoy. However, independent directors have access to external information and to the resources that a firm enjoys outside (Dalton et al., 2009). Inside directors are always available to the CEO because its function of their employment. The independent directors can help in enhancing the performance of the firm (Ramdani & Van, 2009).

Independence of board and dividend payout has positive and significant relationship (Mansourinia, 2013) however, some researchers have shown that no significant influence of board independence can be seen on dividend payout ratio (Shehu, 2015). It is claimed that if the corporate governance mechanisms are strong, firms are more likely to pay higher dividends and the board independence also affects the dividend payout ratio (Adjaoud & Ben-Amar, 2010). If the board members have no other association with the company except of their directorship, they are regarded as independent non-executive directors. There are conflicting views about the association between board of director's independence and dividend payout. In some cases, the relationship is insignificant but, in some scenarios, there is seen a positive significant

relationship (Ajanthan, 2012; Abdelsalam et al., 2008; Abor & Fiador, 2013). The quality of corporate governance practices has an influence on the dividend payout ratio and if the quality of corporate governance is high companies pays the huge amounts of dividends (Adjaoud & Ben-Amar, 2010).

Independent boards of directors are also suggested by the Agency theory (Zahra & Pearce, 1989). This is because if the board has independent members, the conflict of interest can reduce and the influence of the corporate insiders can also be lessened (Dalton et al., 1998). Agency conflicts can be solved through efficient executive pay settings if the board is independent. Independent boards can increase the executive compensation and firm performance (Zhu et al., 2009). Independent directors can easily substitute CEO if the CEO is not performing well and up to the standards (Conyon & He, 2011). If the boards are powerful then CEO's will receive lower compensations. In this way the pay-performance link would be stronger (Van Essen et al., 2015). If the directors are independent and more in number, then the pay-performance relationship is strong. Independent directors help in effective monitoring, efficient check and balance and also they moderate the relationship between CEO compensation and performance (Yahya & Ghazali, 2017).

2.22.3 CEO Duality

If CEO is given the dual role of CEO as well as chairperson of the board, it can cause agency problems to become severe. This is because these dual roles force him to focus on his own benefits rather than make the most of the shareholder's capital. Merging the roles of CEO and chairperson can affect the scrutinization of the top management activities. In this way CEO can exploit the shareholder's rights and pays them low or no dividends (Dissanayake & Bandara, 2018). If companies hold a collective control, then the meager governance can be eliminated that was resulted from duality of CEO (Chen et al., 2006). The association of duality of CEO and dividend payout ratios is a bit controversial. Some studies have suggested a negative association (Abor & Fiador, 2013) however some have suggested no association (Dadashi et al., 2013). Most of the times, researchers have suggested that CEO and Chairperson's role should be different so that board independence is not at stake (Cadbury, 1992; Combined code, 2003).

Agency perspective has presented a very strong mechanism of the parting role of CEO and chairperson. Duality of CEO exists if the same person is CEO and chairperson of the board as well. If this is the case, then CEO is also the chairperson of the group of people that are monitoring and evaluating the performance of the CEO and his team. This affects the performance of CEO. Conflict of interest also rises in such situations. The monitoring group's independence can be impaired if this duality exists. The CEO is not able to exercise the independent self-evaluation (Amina, 2015). The companies that go for the dual ownership structure (separation of CEO and chairperson roles) performs better and pays high dividends (Fosberg & Nelson, 1999). But not every time, dual structure of ownership has a positive association with stockholder's return. In some cases, there is no association of duality of CEO and shareholder's returns (Rechner & Dalton, 1989). CEO duality and dividend payment can be substitute or complement (La Porta et al., 2000; Amina, 2015).

2.23 Corporate Governance Practices of Firm and Business Performance

The new normal period of China is in which the returns on investment (ROI) are slack. Corporate governance is the key priority in this period. Corporate governance can result in better management and enhanced productivity of the firms. Chinese stock market's evaluation to study the relationship was done using data from 1999-2015. According to the study, board independence has no association with the performance of the firms. In 2002, specifically, the rule was passed that one out of three directors should be independent and profitability increased after implementation. Results also showed that if the gap between salaries of executives and staff is wide, productivity is damaged but ROA and ROE increases hence the performance gets better. Excessive concentration of ownership is also harmful but up to a certain limit, performance is increased (Molnar et al., 2017).

To study the corporate governance essentials and financial performance of the firms, data was collected from securities and exchange board of India (SEBI). According to SEBI, the corporate governance practices must not be mentioned in books but should also be implemented and practiced. According to results, the Tobin Q ratio and the corporate governance scores were

highly correlated. But the individual corporate governance parameters have no significant association with the profitability and performance (Goel & Ramesh, 2016). Indian tourism sector was also studied to check the effect of corporate governance on the firm performance. 39 hotels that were listed on (Bombay Stock Exchange were the sample for the study. Time period of the study was 2013-2016 and ordinary least square and regression was used as data analysis technique. Results revealed that board's size and audit committee size are inversely related to hotel performance. Diligence and board's composition have a positive association with the performance of the hotels (Yameen et al., 2019).

Corporate governance makes sure that manager's and shareholder's interests are aligned. To study relationship between dividend payout and corporate governance practices, automobile sector of Pakistan was studied. Dependent variables were firm performance proxied by return on equity (ROE). Independent variables of the study were annual general meetings, board size, CEO duality and audit committee. Time period of the study was from 2010-2016 and multiple regression analysis was used for data analysis. Results showed that number of meetings, audit committee size and size of board are directly related to the form performance. However, duality of the CEO had negative association with the firm performance. It was suggested that top level position like CEO must not be dual in nature (Ansari et al., 2017).

Saudi banking sector from period 2014-2017 was studied to find an association between bank's performance and corporate governance practices. Performance was measured by return on assets (ROA), Tobin's Q and return on equity (ROE). Corporate governance practices were proxied by meetings, board size, independence and audit committee. However, size of the firm and age of the firm were the control variables. Multiple regression test was used for analysis of data. According to the results, size of the board, meetings of audit committee and size of the bank have a direct association with the return on equity (ROE). However, with asset returns, board size and bank size had a positive association, but meetings of the board have negative association with ROA. Board size and independence and bank's size were inversely related to the Tobin's Q (Almoneef & Prasad).

470 companies of Canada were studied from 2002-2005 to study the relationship of corporate governance and performance of the companies while considering shareholder's proximity. Shareholder's proximity is defined as if the controlling or dominating shareholders have top managerial positions at the firm or not. Lowest shareholder's proximity is when the ownership is dispersed in the firm. Highest level is witnessed where the dominating shareholder has the CEO or chairperson position. Corporate governance is proxied as Report on Business (ROB) Index. Results revealed that ROB is directly associated with the Tobin's Q and this association was independent of the shareholder's proximity (Bozec & Dia, 2014).

Croatian economy was studied from 2007-2010 and data was collected on Croatian Corporate Governance Index (CCGI) and Tobin's Q. The study was conducted to find an association between corporate governance and performance of the companies. Corporate governance was found to be important predictors that contribute in the performance of the firms listed on Zagreb Stock Exchange (ZSE) CROBEX (Croatian equity Index) (Korent et al., 2014). Corporate governance practices of Malaysian firms during the Asian Financial Crisis period in 1997 were studied. 100 firms listed on Bursa Stock Exchange were the part of sample. Performance was measured using return on assets (ROA) and return on equity (ROE). Corporate governance practices were proxy by board size and independence. Board size had a weak negative association with ROA but no association with ROE (Zabria et al., 2016).

A study was conducted that collected the data from 2012-2014. The effect of MCCG on performance of 100 firms listed in Bursa Stock Exchange, Malaysia was examined using multiple regression and correlation. Malaysian Code of Corporate Governance was first launched in March 2000. In revised MCCG, the limit of directors of the public listed companies was restricted to 5 only. According to results, there is a strong correlation between MCCG and firm performance (Shamsudin et al., 2015). Another study conducted in Pakistan investigated the effect of corporate governance practices like size of board and CEO duality on the performance of firms. Data was collected from 80 firms that were listed on Karachi Stock Exchange (KSE). Period was from 2010-2014. According to the research results, size of the board and audit committee are directly related to the return on assets and equity (ROA and ROE). However, board composition and CEO duality were inversely related to the business performance.

Conclusion were made that corporate governance practices affects the firm's performance (Muhammad et al., 2016).

2.24 Theoretical Model of Study

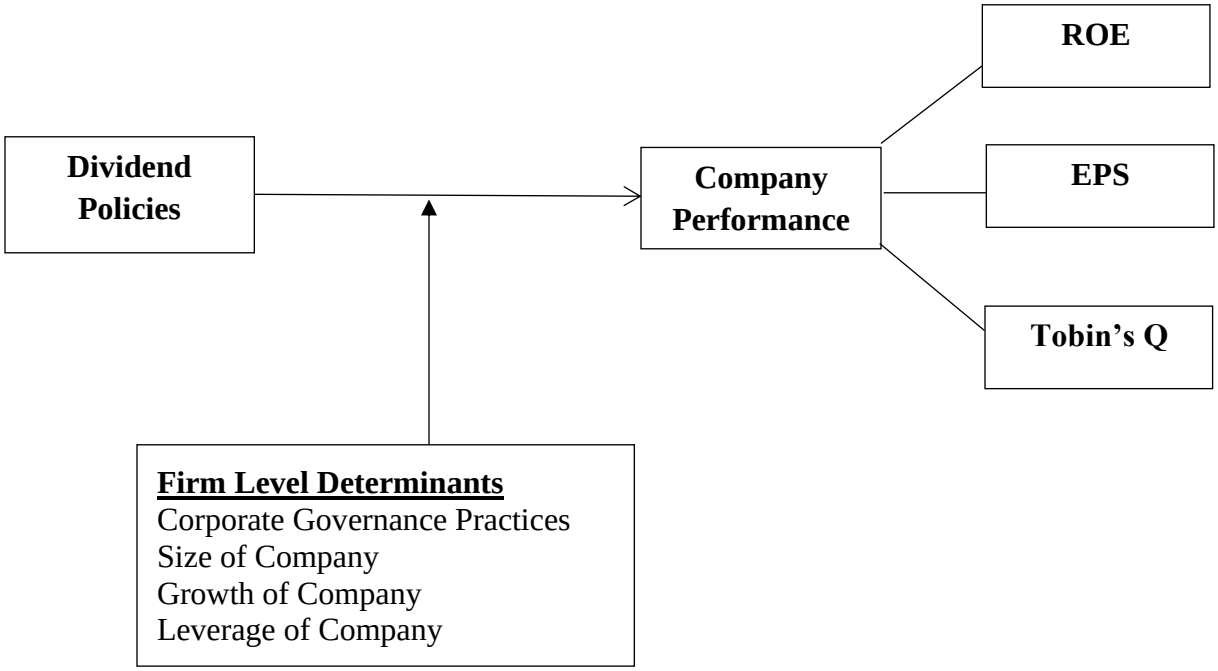

Figure 2.1: Theoretical Framework

2.25 Hypotheses of Study

H_{1a}: Dividend payout policy influences return on equity of Textile sector of Pakistan

H_2: Dividend payout policy influences return on equity of Cement sector of Pakistan

H_3: Dividend payout policy influences return on equity of Automobile sector of Pakistan

H_4: Dividend payout policy influences return on equity of Sugar sector of Pakistan

H_5: Dividend payout policy influences return on equity of Chemical sector of Pakistan

H_{1b}: Dividend payout policy influences earnings per share of Textile sector of Pakistan

H_{2b}: Dividend payout policy influences earnings per share of Cement sector of Pakistan

H_{3b}: Dividend payout policy influences earnings per share of Automobile sector of Pakistan

H_{4b}: Dividend payout policy influences earnings per share of Sugar sector of Pakistan

H_{5b}: Dividend payout policy influences earnings per share of Chemical sector of Pakistan

H_{1c}: Dividend payout policy influences Tobin's Q ratio of Textile sector of Pakistan

H_{2c}: Dividend payout policy influences Tobin's Q ratio of Cement sector of Pakistan

H_{3c}: Dividend payout policy influences Tobin's Q ratio of Automobile sector of Pakistan

H_{4c}: Dividend payout policy influences Tobin's Q ratio of Sugar sector of Pakistan

H_{5c}: Dividend payout policy influences Tobin's Q ratio of Chemical sector of Pakistan

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter consists of the details about the research design, methodology and approach that have been taken to conduct the current research. The study has employed panel data considering the number of companies that are taken understudy from each sector of research and the reading that is done for specific time period in each panel makes time line panel data. This chapter has been divided in segments in such a way that each segment is covering an aspect of methodology in detail such as population, data sources, variables of study and data analysis techniques. The sectors are already explained in detail in first chapter, but in this chapter, we have focused on the companies that are enlisted in stock exchange of the country and the ones that are being taken from each sector to conduct the research. Independent and dependent variables and the formulation of predictors that are functioning as controlling variables described in detail. Pooled OLS regression, fixed effect and random effect models are used as computation method to analyze the collected panel data. The details of data, data collection, population, variables and other measures are stated below in this chapter.

3.2 Population and Sample

The sample taken to conduct the research in this study is five non-financial corporate sectors of Pakistan including textile, sugar, chemical, automobile and cement sectors. 38 companies from textile sector, 11 from sugar sector, 10 from cement, 25 from chemical and 16 from automobile sectors are focused to collect the data from. This study has focused on the companies whose data were complete, those who were going through to pay dividend at least 4 years out of 6 years data collected. In total, the sample population of the current study includes 100 companies from all the sectors undertaken to conduct the research. This cumulatively forms the panel data of 100 companies with 600 numbers of total observations.

Following are the details of sectors that are chosen for the research:

3.2.1 Textile Sector

Textile sector of Pakistan is one of the largest in Pakistan which influence the economy of the country with healthy export revenue which reached 9.6 billion US dollars in recent years. The textile sector contributes 8.5% in total GDP of the country. Pakistan holds 8th position among the textile exporters in Asia (Javed, 2019). Considering that the textile industry is a major source of earnings in Pakistan, the industry needs to gain the interests of investors to engage substantial investment from the shareholders. Therefore, the current study seeks to evaluate the dividend payout policy of the sector which is main source to enhance the investment and thus profitability of this sector. According to State Bank Pakistan, total 144 textile companies are enlisted in the Pakistan Stock Exchange. The current study has selected the 38 companies out of these to keep as sample of the research.

3.2.2 Sugar Sector

Pakistan is known as the 6th largest sugarcane producer of the world which is the major source to make sugar. Pakistan has also crossed the milestone of being the 9th largest producer of sugar (Sarwar, 2013). As per the Pakistan's sugar industry overview by Lahore Chamber of Commerce and Industry (2013), Sugar sector is 2nd largest sector of Pakistan after Textile sector. The sugar sector gives 3.2% of total GDP in Pakistan's economy and constitutes 4.2% of Pakistan's manufacturing sector. The overall picture of the industry is good in terms of growth and so attractive for the investors and shareholders. But the industry needs more investment and resources to produce sugar according to the increasing demand of sugar mainly in local market because Pakistan is recently also observed as 8th largest consumer of sugar in world with around 25.7 kg consumption per capita. This makes the local demand of sugar up to around 5 to 6 million tons. The study has aimed to conduct the research in sugar sector of Pakistan because Sugar mill are the major driver of economic development in Pakistan mainly in rural areas (Pakistan industry report, 2019). Also that majority of the sugar mills are operating under the

ownership of private influential players and it is indicated that sugar sector perform in different way than the other industries in paying dividends (Yasmin and Javid, 2014). The study finds it interesting to explore the current dividend payout policy that is being adopted by sugar players in Pakistan and how their policies are affecting their financial performance to meet the growing local need of increasing local sugar consumption and how the private players are attracting the investors and shareholders to invest in their companies. For this reason, 11 sugar mills are selected as the sample to conduct the research.

3.2.3 Cement Sector

Pakistan's cement sector plays a significant role in its economy. Pakistan is among total 159 countries in world that produce cement and is considered as a leading manufacturer when it comes to the quality of product. Pakistan exports best quality cement to Afghanistan, India (which is for the time being bound by enormous taxes imposed by India due to political conflicts between the countries) Iraq, South Africa, etc., (Ahmed, 2019). Cement sector of Pakistan is a thriving industry of the country but local demand for cement is difficult to fulfill without more investment and development. The domestic need for the cement is plentiful enough to influence the manufacturers of cement in Pakistan to go for more expansion plans and investment from potential investors and shareholders (Ahmed, 2019). 10 cement companies are selected in the study for the research purpose.

3.2.4 Automobile Sector

The automotive industry of Pakistan is a fastest growing industry contributing 4% in total GDP in Pakistan's economy and employing more than 1,800,000 people in the industry. 3,200 automotive plants are currently operating in the country, with investment of 92 billion PKR and producing 200000 vehicles and 1.8 million motorbikes in a year. The industry contributes around 50 billion PKR in Pakistan's national exchequer (Asghar, 2019). The possibility of expansion plans and increasing investment in the market of automobile sector in Pakistan is attracting local and foreign investors with the prospect of making potential profits in the sector. Many national

and international automotive players are interested to invest in Pakistan's automobile sector considering the attractive incentives offered under auto policy of Pakistan (Ansari, 2018). Considering this scenario, Automobile is another massive and interesting sector to study that how the companies in Pakistan's automobile sectors are dealing with dividend payout policy to increase its financial performance and simultaneously to attract the shareholders and investors for more investments. The current study selects 16 companies from Automobile sector as a sample to conduct the research.

3.2.5 Chemical Sector

Pakistan has developed somewhat in basic downstream chemical industries including refineries, fertilizers, polyester fibers and petrochemical based polymer producers which fulfill local demand but overall sector is not much thriving as compared to other sectors. Due to this instable scenario, investors are showing low interest in building Naphtha cracker due to costly intensive project, lack of sophisticated technology, limitations of export market, etc. (Paracha, 2012). However, Pakistan's chemical industry is capable of bringing down trade deficit of the country by massive amount of $14 billion (Express Tribune, 2019). The different scenario of the industry might give a unique picture of suitable dividend payout policy that chemical players need to adopt or are adopting to enhance the financial performance of Pakistani chemical sector. Keeping this scenario in consideration, the cement sector is an interesting and informative choice of sector to study the role of its dividend payout policy in the financial performance of cement factories in Pakistan; hence 25 chemical companies are taken understudy for the current research.

In light of the facts that are stated above regarding each sector, there need to establish obstinate grounds is obvious for research analysis. In order to achieve this study has employed dataset from audited and authentic sources to presents sector wise financial information of listed firms associated with the given five sectors.

3.3 Data Collection Sources

The research is relying on the study the secondary data which is retrieved from authentic reports and financial statements of the selected companies. On the other hand, share price of selected companies are publically available at Pakistan Stock Exchange from where market capitalization data was collected. The data is retrieved for the time period of 6 years to construct the time series for each cross section. On the other hand, to develop the body of knowledge data was collected from reputed publications and comprehensive review of literature is conducted.

3.4 Period of Analysis

Data from selected companies was collected for the period of 6 years (2012-2017). The research design involves a time series and cross sectional data therefore the study employs the method that is used to analyze a panel data. There are several advantages to use panel data for this kind of study including that panel data technique provides more freedom and variability which reduces the issues associated with collinear nature among independent variables; it also controls the individual heterogeneity (Antoniou et al., 2008). Moreover, panel data techniques have a better ability to determine the effects that are difficult in fact impossible to be detected in pure time series or cross sectional data (Baltagi, 2005).

3.5 Formulation of Variables

The study aims to evaluate the influence of dividend payout policy on the financial performance of the selected companies. However, the study has associated certain measures with independent and dependent variables along with inducing the controlling factors. These controlling variables are selected to determine that how these predictors influence the dividend payout policy of a company or how dividend payout policy behave in the presence of these

predictors before influencing the financial performance of the respective firms. The measures for all the variables are stated below in detail.

3.5.1 Dependent Variable

The dependent variable of the study is financial performance of the firm as the influence of independent variable dividend payout policy is being checked on it in the research. The Financial performance of organizations is measured by the profit they make and this profitability is evaluated by calculating various profitability measures or profitability ratios such as return on equity, earning per share, and Tobin's Q. Financial and non-financial companies around the globe frequently utilize these measures to determine the financial performance of an organization (Khan and Ali, 2017). Following are the brief definitions of the ratios that are used as profitability measures to evaluate financial performance of the selected firms as these major profitability ratios are most suitable in context of the current subject.

- ROE: ROE or return on equity is calculated by dividing profit after tax with total equity. This ratio indicates that how much profit a company has generated against company's equity (Kabajeh et al., 2012).
- Tobin's Q: Tobin's Q ratio is equivalent to organization's market value divided by the cost of its assets' replacement cost (Damodaran, 2002). Or

Tobin's Q = A ratio comparing the market value of stock with equity book value of firm i in year t [(Equity market value + liability book value) ÷ (equity book value + liability book value)]

- EPS: Earnings per share can be explained as "the portion of organizational profit that is allocated to each outstanding share of its common stock". It can be calculated by taking difference of organization's net income and the dividends that the organization pays for preferred stock. The difference is then divided by average number of outstanding shares.

Earnings per share are usually reported by organizations on quarterly or annual basis (Islam et al, 2014).

3.5.2 Independent Variable

The independent variable of the study is dividend payout policy that a firm adopts as its influence is being checked on the financial performance of the respective firm taken in the study.

3.5.2.1 Dividend Policy

The policy that financial managers adopts in a firm to distribute their profit among shareholders as dividend or to hold their earning in the firm to use it in future investment for growth purposes is considered as dividend payout policy in the field of finance (Khan, et al., 2016).

- Dividend payout ratio refers to the ratio of total paid out amount of dividends that are divided among shareholders in relation to net income of an organization (Odum, et al., 2019). It can be also explained as percentage of net earnings paid to the shareholders in form of dividends. The amount of earning that distributed as dividend to the shareholders is reserved by the organization from which it pays off debts or reinvests in core business operations. The dividend payout ratio indicates the amount of money that the organization is returning to shareholders against the amount that it is retaining to reinvest for the growth of organization, to pay off debt, or to add in cash reserves (Hamil and Al-Shattarat, 2012). However, how the behaviour of this variable changes with governance practices and current status of the organization to enhance or destabilize its financial performance is yet to be further explored which this study aims to achieve.

3.5.3 Control Variables

The influence of independent variables is investigated according to their behavior with governance practices, size, growth and leverage of the organization which are controlling variables of the study.

- Size of the company for the current study is measured by using the natural log of company's total assets.
- Growth of the company for the current study is measured by using the natural log of company's total sales.
- Leverage is the equilibrium of Debt and Equity.
- Corporate Governance Index or Corporate Governance Practices Index is taken as follow: Sum of

BD = Number of directors on board, which used as natural log form

ID= Proportion of independent directors (# of independent director ÷ # of total directors on board)

BM= Total number of meeting held by the broad, which used as natural log form

CEO Duality = value of "0" assignment if the CEO and chairman position is held by same person or otherwise "1".

3.6 Model Specification

The model selection is done when the researcher needs to mathematically define relationship between dependent and independent variables. For a most suitable model selection, it is required to take Goldilocks balance approach by taking correct and suitable number of independent variables in regression equation. Too few variables make a model under specified and results into biased approach. Too many variables results into over specified models which are less precise. This is why appropriate number of variables should be taken to achieve a most precise model (Frost, 2019). The below model is specified for the current study for a more precise result.

3.6.1 Statistical Analysis

Statistical Models that are employed in the research are very instrumental to carry out the analysis. Descriptive analysis is required to check the behavior of the selected variables first which is done with Mean, Std. Deviation, Skewness and Kurtosis (Frost, 2019).

3.6.2 Pooled Ordinary Least Squares (OLS)

The current study employs Pooled Ordinary Least Squares (OLS) because it is a precise and accurate technique to estimate the dynamics of the model in panel assumptions (Hill et al., 2008). Pooled OLS tends to ignore panel structure of data and assumes that the companies taken for the analysis are homogenous, thus, the effect of cross sectional or time series is not significant (Shah & Khan, 2007). In nutshell, Pooled OLS assumes the coefficient and intercept as constant (Salahudin, 2011).

3.6.3 Fixed Effect Model

Fixed-effects (FE) method is used when the study is focusing on evaluating the influence of variables that are varying over time. In the current scenario the FE explores the relationship among predictors and outcome variables of financial variables within the selected companies with their individual characteristics that may have or not have an influence on the predicting variables. Using Fixed Effect will control the individual characteristics of the company that may influence the predictor and outcome. This possibility of influencing characteristic is also denoted as error term. With this rationale, fixed effect gives out the equation model (Stock and Watson, 2003).

$$Yit = \beta 1Xit + \alpha i + uit$$

Where

– *Yit is the dependent variable where i = company or any other entity and t = time.*

– Xit is one independent variable, i=entity and t=time

– β1 is the coefficient for that Independent Variable

- αi (i=1….n) is the unknown intercept for each entity and n entity-specific intercepts).

– uit is the error term

3.6.4 Random Effect Model

In Random effect (RE), the variation throughout the entities is assumed as random and not correlated with independent variables and predictors that are included in the model. In short, Random effect assumes that error term of the entity is not correlated with predictors which enable the time invariant variables to function as explanatory variables (Green, 2008). The equation of random effect is made as:

$$Yit = \beta Xit + \alpha + uit + \varepsilon it$$

Where uit= between entity error and εit= within entity error.

3.6.5 Statistical Computation

$$\text{Tobin's Q}_{(\text{Textile i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 1.1}$$

$$\text{EPS}_{(\text{Textile i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 1.2}$$

$$\text{ROE}_{(\text{Textile i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 1.3}$$

$$\text{Tobin's Q}_{(\text{Cement i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 2.1}$$

$$\text{EPS}_{(\text{Cement i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 2}$$

$$\text{ROE}_{(\text{Cement i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 2.3}$$

$$\text{Tobin's Q}_{(\text{automobile i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 3.1}$$

$$\text{EPS}_{(\text{automobile i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 3.2}$$

$$\text{ROE}_{(\text{automobile i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 3.3}$$

$$\text{Tobin's Q}_{(\text{sugar i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 4.1}$$

$$\text{EPS}_{(\text{sugar i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 4.2}$$

$$\text{ROE}_{(\text{sugar i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 4.3}$$

$$\text{Tobin's Q}_{(\text{Chemical i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 5.1}$$

$$\text{EPS}_{(\text{Chemical i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 5.2}$$

$$\text{ROE}_{(\text{Chemical i})} = \alpha + \beta 1\text{DP} + \beta 2\text{Size} + \beta 3\text{Growth} + \beta 4\text{Leverage} + \beta 5\text{CG index} + e \quad \text{Eq 5.3}$$

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter covers result of study along with interpretation. Firstly, descriptive statistics show the mean, std. deviation, skewness and kurtosis values for each sector separately. Secondly, unit root test is applied to find out whether data is stationary or not. Next, correlation statistics is applied to check whether there is multicollinearity issue in data or not then Lagrange multiplier is applied. After pre-estimation panel regression is used to predict the panel effect for each sector separately. Results of the study based on OLS regression, fixed effect and random effect and interpretation of for each sector is given separately.

Table 4.1: Descriptive Statistics (Textile Sector)

Raw Data	Mean	Max	Mini	Std. Deviation	Skewness	Kurtosis
Tobin's Q	0.684	2.686	0.031	0.531	1.55	5.088
EPS Rs.	20.25	188.44	-42.36	29.44	2.33	9.917
ROE (% Δ)	11.962	190.03	-149.54	20.566	1.07	3.310
Dividend Payout	0.359	18.529	-1.680	1.306	1.88	6.70
Size (Rs. 000)	10860451	107000000	92311	16360586	3.74	19.97
Growth (Rs. 000)	10425183	54444091	9217	10780883	1.84	6.51
Leverage	2.329	262.730	1.00	17.343	14.94	24.85
Corporate Governance	5.521	5.59073	7.273	4.475	0.59	0.310

It has been evidenced from descriptive statistics that Tobin's Q has mean (0.684) and the same deviates to (0.531). Earnings per share on the other hand have mean Rs. 20.25 (EPS) and the same deviates to the 29.44. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). Return on equity of textile companies reported mean value 11.92 % and the same deviates to the 20.56. Skewness and kurtosis values are quite normal (skewness = 1.07 & kurtosis = 3.31). To the dividend payout ratio textile companies had 0.359 average payout which deviates to the value 1.306.

Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). Size of textile companies is range in between *Rs.* 90 million to *Rs.* 107 billion (quite dispersed) with average size value = *Rs.* 10.8 billion. Here, skewness and kurtosis values are quite high (skewness = 3.74 & kurtosis = 19.97). In response to the growth (natural log of sales) of textile companies, it is evident that maximum sales were found *Rs.*54 billion and the minimum sales during the period were *Rs.* 9.2 million with average sales figure = *Rs.* 10.4 billion. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0).

To the capital structure of textile companies, it is found that average debt to equity ratio = 2.32 and it deviates to the value 17.34. Here, skewness and kurtosis values are quite high (skewness = 14.94 & kurtosis = 24.85). Corporate governance index of textile companies reported mean value 5.52 and the same deviates to the 4.475. Skewness and kurtosis values are quite normal (skewness = 0.59 & kurtosis = 0.310).

Table 4.2: Unit Root (Textile Sector)

Variables	Method	Static at level	p -value
Tobin's Q	Levin, Lin & Chu t	-17.1321	0.0000
Earnings per Share	Levin, Lin & Chu t	-8.38224	0.0000
Returns on Equity	Levin, Lin & Chu t	-33.8028	0.0000
Dividend Payout	Levin, Lin & Chu t	-10.2674	0.0000
Size	Levin, Lin & Chu t	-11.0442	0.0000
Growth	Levin, Lin & Chu t	-10.8211	0.0000
Leverage	Levin, Lin & Chu t	-48.7033	0.0000
Corporate Governance Index	Levin, Lin & Chu t	-9.84485	0.0000

Results from above table to the unit root based on Levin et al. (2002) show that all variables have t static values significant (p value < 0.05) at level. With assumption of common autoregressive coefficients (β) across the 25 cross-sections of textile companies (pi = p). It is found that (H0: $\alpha = 0$) does not support owing to the t static values are significant (p value < 0.050). Consequently, all variables including Tobin's Q, earnings per share, equity returns, dividend payout ratio, size of textile

companies, debt to equity ratio/leverage, growth of textile companies and corporate governance index do not contain unit root. It is therefore, data series are stationary at level ((H1: $\alpha < 0$).

Table 4.3: Correlation (Textile Sector)

	Tobin's Q	EPS	ROE	DP	Size	Growth	Leverage	CG
Tobin's Q	1	0.075	0.0150	-0.141	0.071	-0.103	0.164	0.188
EPS	0.075	1	0.129	-0.157	0.187	0.135	-0.210	0.089
ROE	0.015	0.129	1	0.1864	0.138	0.116	-0.047	-0.008
DP	-0.141	-0.157	0.186	1	-0.145	-0.068	0.000	0.073
Size	0.071	0.187	0.138	-0.145	1	0.662	-0.043	0.128
Growth	-0.103	0.135	0.116	-0.068	0.662	1	-0.021	0.117
Leverage	0.164	-0.210	-0.047	0.008	-0.043	-0.021	1	0.134
CG	0.188	0.089	-0.008	0.073	0.128	0.117	0.134	1

Pearson's Correlation matrix depicts level of multicollinearity of Tobin's Q, earnings per share, equity return of textile companies (25 cross sections) with dividend payout policy and other controlling factors. The highest level of multicollinearity of Tobin's Q found with corporate governance index (18.8 %). On the other side the lowest level of multicollinearity of Tobin's Q of textile companies was found with size (7.1 %). However, these multicollinearity static values are not causing serious problem, if correlation coefficients are = +/- 0.80.

The highest level of multicollinearity of earnings per share is found with leverage (21.0 %). On the other side the lowest level of multicollinearity of earnings per share of textile companies are found with corporate governance index (8.9 %). However, these multicollinearity static values are not causing serious problem, as correlation coefficients are not ≥ than +/- 0.80. On the other hand the highest level of multicollinearity of equity returns of textile companies are found with dividend payout ratio of companies (18.6 %) and the lowest level of multicollinearity of equity returns are found with corporate governance index (0.8 %). However, these multicollinearity static values are not causing serious problem of multicollinearity.

Table 4.4: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	178.55	0.000	OLS/Random Effect
Hausman Test	11.504	0.042	Random/ Fixed Effect

LM static value = 178.55 (p value < 0.05) therefore the variance across the 25 textile companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are significantly correlated with regressor in textile companies therefore fixed effect is appropriate.

Table 4.5: Regression Analysis: Tobin's Q (Textile Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	-0.18	-2.23	0.03	-0.31	-5.15	0.00	-0.34	-5.37	0.00
Size	-0.09	-2.52	0.01	-0.10	-2.01	0.05	-0.21	-2.65	0.01
Leverage	0.09	2.26	0.02	0.09	2.56	0.01	0.09	2.21	0.03
Growth	-0.07	-3.25	0.00	-0.02	-1.32	0.19	-0.01	-0.44	0.66
Corporate Governance	0.17	2.86	0.00	0.04	0.65	0.51	-0.01	-0.18	0.85
Constant	-0.68	-1.36	0.18	-0.66	-0.87	0.38	-2.27	-1.87	0.06
R Square	0.121			0.161			0.716		
Adjusted R Square	0.102			0.142			0.651		
F value	6.167		0.000	8.526		0.000	11.119		0.000

Based on fixed effect model adjusted R square predicts 65.1 percent variance in Tobin's Q owing the predictor dividend payout policy of textile companies with controlling role of company size and leverage ratio. F statistic = 11.11 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of textile companies causes indirect 0.18

unit change in Tobin's Q (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of textile companies, if size of company increases relationship is controlled negatively. Leverage on the other hand also controls the same relationship of negatively.

Table 4.6: Lagrange Multiplier (LM) & Huasman Test

	Chi Square	P value	Proposed Test
LM Test	237.85	0.000	OLS/Random Effect
Hausman Test	11.194	0.047	Random/ Fixed Effect

LM static value = 237.85 (p value < 0.05) therefore the variance across the 25 textile companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are significantly correlated with regressor in textile companies therefore fixed effect is appropriate for the model.

Table 4.7: Regression Analysis: Earnings per Share (Textile Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	-0.38	-2.26	0.03	-0.24	-2.08	0.04	-0.21	-1.83	0.07
Size	0.11	1.48	0.14	0.25	2.59	0.01	-0.53	-3.71	-0.00
Leverage	0.01	0.28	0.78	0.07	2.13	0.03	-0.09	-2.66	-0.01
Growth	-0.28	-3.42	0.00	-0.10	-1.38	0.17	-0.07	-0.93	0.36
Corporate Governance	0.21	1.70	0.09	0.23	2.16	0.03	0.24	2.11	0.04
Constant	0.08	0.08	0.94	-3.44	-2.25	0.03	-8.12	-3.62	0.00
R Square	0.106			0.124			0.766		
Adjusted R Square	0.085			0.104			0.711		
F value	5.269		0.000	6.290		0.000	14.346		0.000

Adjusted R square predicts 71.1 percent variance in earnings per share of textile companies owing the predictor dividend payout policy with controlling role of company size and leverage ratio. F statistic = 14.34 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of textile companies causes indirect 0.21 unit change in earnings per share (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of textile companies, if size of company increases relationship is controlled negatively. Same as leverage, it controls the same relationship negatively.

Table 4.8: Lagrange Multiplier (LM) & Huasman Test

	Chi Square	**P value**	**Proposed Test**
LM Test	84.75	0.000	OLS/Random Effect
Hausman Test	33.92	0.047	Random/ Fixed Effect

LM static value = 84.75 (p value < 0.05) therefore the variance across the 25 textile companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are significantly correlated with regressor in textile companies therefore fixed effect is appropriate for the model.

Table 4.9: Regression Analysis: Returns on Equity (Textile Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	-0.08	-3.25	0.00	-0.15	-7.40	0.00	-0.18	-8.30	0.00
Size	0.02	1.71	0.09	0.04	3.10	0.00	-0.12	4.61	0.00
Leverage	-0.01	-0.53	0.59	0.00	0.07	0.94	0.00	0.19	0.85
Growth	0.00	0.42	0.68	0.00	0.11	0.92	0.00	0.58	0.56
Corporate Governance	-0.01	-0.65	0.52	-0.03	-1.48	0.14	-0.03	-1.56	0.12
Constant	-0.12	-0.78	0.44	-0.37	-1.85	0.07	-1.66	-3.96	0.00
R Square	0.067			0.204			0.600		
Adjusted R Square	0.045			0.186			0.509		
F value	3.188		0.008	11.424		0.000	6.619		0.000

Adjusted R square predicts 50.9 percent variance in equity returns of textile companies owing the predictor dividend payout policy with controlling role of company size and leverage ratio. F statistic = 6.619 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of textile companies causes indirect 0.18 unit change in equity return (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of textile companies, if size of company increases relationship is controlled negatively.

Table 4.10: Descriptive Statistics (Cement Sector)

Raw Data	Mean	Max	Mini	Std. Deviation	Skewness	Kurtosis
Tobin's Q	1.795	3.447	0.000	0.804	0.237	2.471
EPS Rs.	12.806	53.780	-0.120	11.849	1.439	5.353
ROE (% Δ)	0.212	0.695	0.000	0.122	0.416	5.439
Dividend Payout	0.275	2.903	0.000	0.367	2.611	6.972
Size (Rs. 000)	17735216	87382525	2314211	20167145	2.114	7.319
Leverage	0.594	2.586	0.000	0.465	1.525	6.858
Growth (Rs. 000)	29535561	141000000	2172112	33755820	1.516	4.534
Corporate Governance	5.412	7.274	0.000	0.938	-2.720	18.224

It has been evidenced from descriptive statistics that Tobin's Q has mean (1.795) and the same deviates to (0.804). Earnings per share on the other hand have mean Rs. 12.80 (EPS) and the same deviates to the 11.84. Here, skewness and kurtosis values are quite normal (skewness < 1.0 & kurtosis < 3.0). Return on equity of cement companies reported mean value 21.2 % and the same deviates to the 12.2. Skewness and kurtosis values are (skewness = 0.416 & kurtosis = 5.43). To the dividend payout ratio cement companies had 0.275 average payout which deviates to the value 0.367. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). Size of cement companies is range in between *Rs.* 2.3 billion to *Rs.* 87 billion (quite dispersed) with average size value = *Rs.* 17.7 billion. Here, skewness and kurtosis values are quite high (skewness = 2.11 & kurtosis = 7.319). In response to the growth (natural log of sales) of cement companies, it is evident that maximum sales were found *Rs.*144 billion and the minimum sales during the period were *Rs.* 2.1 billion with average sales figure = *Rs.* 29.5 billion. Here, skewness and kurtosis values are (skewness = 1.51 & kurtosis = 4.53). To the capital structure of cement companies, it is found that average debt to equity ratio = 0.594 and it deviates to the value 0.465. Here, skewness and kurtosis values are (skewness = 1.52 & kurtosis = 6.85). Corporate governance index of cement companies reported mean value 5.412 and the same deviates to the 0.938. Skewness and kurtosis values are quite high (skewness > 1.0 & kurtosis > 3.0).

Table 4.11: Unit Root (Cement Sector)

Variables	Method	Static at level	p -value
Tobin's Q	Levin, Lin & Chu t	-2.8781	0.0020
Earnings per Share	Levin, Lin & Chu t	-10.6188	0.0000
Returns on Equity	Levin, Lin & Chu t	-21.1645	0.0000
Dividend Payout	Levin, Lin & Chu t	-72.3684	0.0000
Size	Levin, Lin & Chu t	-3.48664	0.0002
Growth	Levin, Lin & Chu t	-3.70142	0.0001
Leverage	Levin, Lin & Chu t	-11.1765	0.0000
Corporate Governance Index	Levin, Lin & Chu t	-4.51844	0.0000

Results from above table to the unit root based on Levin et al. (2002) show that all variables have t static values significant (p value < 0.05) at level. With assumption of common autoregressive coefficients (β) across the 11 cross-sections of cement companies (pi = p). It is found that (H0: $\alpha = 0$) does not support owing to the t static values are significant (p value < 0.050). Consequently, all variables including Tobin's Q, earnings per share, equity returns, dividend payout ratio, size of cement companies, debt to equity ratio/leverage, growth of cement companies and corporate governance index do not contain unit root. It is therefore, data series are stationary at level ((H1: $\alpha < 0$).

Table 4.12: Correlation (Cement Sector)

	Tobin's Q	EPS	ROE	DP	Size	Growth	Leverage	CG
Tobin's Q	1.000	0.356	0.441	0.329	0.285	-0.021	0.306	0.032
EPS	0.356	1.000	0.664	0.009	0.678	-0.081	0.690	0.206
ROE	0.441	0.664	1.000	0.019	0.611	0.317	0.634	0.135
DP	0.329	0.009	0.019	1.000	0.227	0.106	0.241	0.104
Size	0.285	0.678	0.611	0.227	1.000	0.455	0.998	0.298
Growth	-0.021	-0.081	0.317	0.106	0.455	1.000	0.450	0.004
Leverage	0.306	0.690	0.634	0.241	0.998	0.450	1.000	0.290
CG	0.032	0.206	0.135	0.104	0.298	0.004	0.290	1.000

Pearson's Correlation matrix depicts level of multicollinearity of Tobin's Q, earnings per share, equity return of cement companies (11 cross sections) with dividend payout policy and other controlling factors. The highest level of multicollinearity of Tobin's Q found with dividend payout (32.9 %). On the other side the lowest level of multicollinearity of Tobin's Q of cement companies was found with growth (2.1 %). However, these multicollinearity static values are not causing serious problem, if correlation coefficients are = +/- 0.80.

The highest level of multicollinearity of earnings per share is found with size (67.8 %). On the other side the lowest level of multicollinearity of earnings per share of cement companies are found with dividend payout (0.9 %). On the other hand the highest level of multicollinearity of equity returns of cement companies are found with size of companies (61.1 %) and the lowest level of multicollinearity of equity returns are found with dividend payout (1.9 %). However, these multicollinearity static values are not causing serious problem of multicollinearity.

Table 4.13: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	**P value**	**Proposed Test**
LM Test	10.100	0.001	OLS/Random Effect
Hausman Test	2.000	0.849	Random/ Fixed Effect

LM static value = 10.100 (p value < 0.05) therefore the variance across the 11 cement companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are not significantly correlated with regressor in cement companies therefore random effect is appropriate for the model.

Table 4.14: Regression Analysis: Tobin's Q (Cement Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	-0.45	-1.77	0.08	-0.55	-2.26	0.03	-0.59	-2.35	0.02
Size	-0.65	-2.34	0.02	-0.56	-1.55	0.13	-0.47	-1.04	0.30
Leverage	-0.30	-1.37	0.18	-0.47	-2.12	0.04	-0.55	-2.34	0.02
Growth	0.72	2.53	0.01	0.63	1.72	0.09	0.54	1.18	0.24
Corporate Governance	-0.05	-0.45	0.66	-0.01	-0.12	0.90	0.01	0.05	0.96
Constant	1.32	2.44	0.02	1.13	2.03	0.05	1.02	1.80	0.08
R Square	0.270			0.342			0.547		
Adjusted R Square	0.209			0.287			0.411		
F value	4.447		0.001	6.256		0.000	04.029		0.000

Based on random effect model adjusted R square predicts 28.7 percent variance in Tobin's Q owing the predictor dividend payout policy of cement companies with controlling role of company size and leverage ratio. F statistic = 6.256 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of cement companies causes indirect 0.55 unit change in Tobin's Q (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of cement companies, if size of company increases relationship is controlled negatively. Leverage on the other hand also controls the same relationship of negatively.

Table 4.15: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	38.451	0.000	OLS/Random Effect
Hausman Test	6.008	0.305	Random/Fixed Effect

LM static value = 38.45 (p value < 0.05) therefore the variance across the 11 cement companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are not significantly correlated with regressor in cement companies, therefore random effect is appropriate for the model.

Table 4.16: Regression Analysis: EPS (Cement Sector)

Models	**(OLS)**			**Random Effect**			**Fixed Effect**		
	β	**t**	**p**	**β**	**t**	**p**	**β**	**t**	**p**
Dividend Payout	-0.67	-2.91	0.01	-0.51	-3.11	0.00	-0.47	-2.78	0.01
Size	-0.62	-2.49	0.02	-0.28	-1.02	0.31	-0.15	-0.49	0.63
Leverage	-1.21	-6.13	0.00	-0.97	-6.36	0.00	-0.95	-6.04	0.00
Growth	0.85	3.30	0.00	0.47	1.70	0.09	0.33	1.08	0.28
Corporate Governance	-0.03	-0.34	0.74	0.12	1.56	0.12	0.14	1.79	0.08
Constant	0.08	0.16	0.87	-0.54	-1.35	0.18	-0.64	-1.69	0.10
R Square	0.817			0.726			0.806		
Adjusted R Square	0.802			0.703			0.778		
F value	53.668		0.001	31.838		0.000	32.194		0.000

Based on random effect model adjusted R square predicts 28.7 percent variance in Earnings per share owing the predictor dividend payout policy of cement companies with controlling role of company growth and leverage ratio. F statistic = 31.83 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of cement companies causes indirect 0.51 unit change in earnings per share (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with leverage of cement companies, if creditors' stake increases relationship is controlled negatively. Growth on the other hand controls the same relationship of positively.

Table 4.17: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	**P value**	**Proposed Test**
LM Test	19.384	0.000	OLS/Random Effect
Hausman Test	1.885	0.864	Random/ Fixed Effect

LM static value = 19.38 (p value < 0.05) therefore the variance across the 11 cement companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are not significantly correlated with regressor in cement companies, therefore random effect is appropriate for the model.

Table 4.18: Regression Analysis: ROE (Cement Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	-0.08	-2.81	0.01	-0.09	-3.54	0.00	-0.09	-3.51	0.00
Size	-0.16	-4.98	0.00	-0.16	-4.00	0.00	-0.16	-3.40	0.00
Leverage	0.03	1.04	0.30	0.02	0.85	0.40	0.02	0.73	0.47
Growth	0.18	5.43	0.00	0.18	4.39	0.00	0.18	3.74	0.00
Corporate Governance	0.00	0.39	0.70	0.01	1.04	0.30	0.01	1.17	0.25
Constant	-0.02	-0.31	0.76	-0.06	-1.04	0.30	-0.08	-1.25	0.22
R Square	0.592			0.681			0.778		
Adjusted R Square	0.558			0.654			0.712		
F value	17.440		0.001	25.67		0.000	11.722		0.000

Based on random effect model adjusted R square predicts 65.4 percent variance in return on equity owing the predictor dividend payout policy of cement companies with controlling role of company growth and size. F statistic = 25.67 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of cement companies causes indirect 0.09 unit change in return on equity (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of cement companies. Growth on the other hand controls the same relationship of positively.

Table 4.19: Table 4.19 Descriptive Statistics (Automobile Sector)

Raw Data	Mean	Max	Mini	Std. Deviation	Skewness	Kurtosis
Tobin's Q	2.849	12.024	0.163	2.219	1.554	6.852
EPS Rs.	29.256	165.410	-152.780	38.230	0.023	9.102
ROE (% Δ)	0.215	1.100	-1.936	0.302	-3.429	8.740
Dividend Payout	0.331	2.150	-0.458	0.343	2.893	6.098
Size (Rs. 000)	10292959	63879723	895117	13152237	2.333	8.230
Leverage	0.888	7.414	0.000	0.938	4.105	7.008
Growth (Rs. 000)	20354105	112000000	1111227	26792171	1.824	5.584
Corporate Governance	5.405	7.274	4.475	0.547	-0.052	3.958

It has been evidenced from descriptive statistics that Tobin's Q has mean (2.849) and the same deviates to (0.163). Earnings per share on the other hand have mean Rs. 29.25 (EPS) and the same deviates to the 38.23. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0).

Return on equity of automobile companies reported mean value 21.5 % and the same deviates to the 30.2. Skewness and kurtosis values are quite high (skewness = -3.429 & kurtosis = 8.740). To the dividend payout ratio automobile companies had 0.331 average payout which deviates to the value 0.343. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). Size of automobile companies is range in between *Rs.* 0.89 billion to *Rs.* 63 billion (quite dispersed) with average size value = *Rs.* 10 billion. Here, skewness and kurtosis values are quite high (skewness = 2.33 & kurtosis = 8.230).

In response to the growth (natural log of sales) of automobile companies, it is evident that maximum sales were found *Rs.*122 billion and the minimum sales during the period were *Rs.* 1.1 billion with average sales figure = *Rs.* 20.3 billion. Here, skewness and kurtosis values are (skewness = 1.82 & kurtosis = 5.584). To the leverage of automobile companies, it is found that average debt to equity ratio = 0.888 and it deviates to the value 0.938. Here, skewness and kurtosis values are quite high (skewness = 4.105 & kurtosis = 7.008). Corporate governance index of automobile companies reported mean value 5.405 and the same deviates to the 0.547.

Table 4.20: Table 4.20 Unit Root (Automobile Sector)

Variables	Method	Static at level	p -value
Tobin's Q	Levin, Lin & Chu t	-2.24985	0.0122
Earnings per Share	Levin, Lin & Chu t	-36.9782	0.0000
Returns on Equity	Levin, Lin & Chu t	-7.22772	0.0000
Dividend Payout	Levin, Lin & Chu t	-8.70388	0.0000
Size	Levin, Lin & Chu t	-18.6257	0.0000
Growth	Levin, Lin & Chu t	-13.0630	0.0000
Leverage	Levin, Lin & Chu t	-16.2804	0.0000
Corporate Governance Index	Levin, Lin & Chu t	-13.7443	0.0000

Results from above table to the unit root based on Levin et al. (2002) show that all variables have t static values significant (p value < 0.05) at level. With assumption of common autoregressive coefficients (β) across the 16 cross-sections of automobile companies (pi = p). It is found that (H0: $\alpha = 0$) does not support owing to the t static values are significant (p value < 0.050). Consequently, all variables including Tobin's Q, earnings per share, equity returns, dividend payout ratio, size of automobile companies, debt to equity ratio/leverage, growth of automobile companies and corporate governance index do not contain unit root. It is, therefore, data series are stationary at level ((H1: $\alpha < 0$).

Table 4.21: Table 4.21 Correlation (Automobile Sector)

	Tobin's Q	EPS	ROE	DP	Size	Growth	Leverage	CG
Tobin's Q	1.000	0.390	0.395	0.260	0.205	0.311	0.239	-0.089
EPS	0.390	1.000	0.579	0.352	0.576	-0.048	0.618	-0.091
ROE	0.395	0.579	1.000	0.447	0.241	0.076	0.306	-0.122
DP	0.260	0.352	0.447	1.000	0.282	0.095	0.292	-0.053
Size	0.205	0.576	0.241	0.282	1.000	0.262	0.994	-0.002
Growth	0.311	-0.048	0.076	0.095	0.262	1.000	0.272	-0.166
Leverage	0.239	0.618	0.306	0.292	0.994	0.272	1.000	-0.026
CG	-0.089	-0.091	-0.122	-0.053	-0.002	-0.166	-0.026	1.000

Pearson's Correlation matrix depicts level of multicollinearity of Tobin's Q, earnings per share, equity return of automobile companies (16 cross sections) with dividend payout policy and other controlling factors. The highest level of multicollinearity of Tobin's Q found with growth (31.1 %). On the other side the lowest level of multicollinearity of Tobin's Q of automobile companies was found with corporate governance index (8.9 %). However, these multicollinearity static values are not causing serious problem, if correlation coefficients are = +/- 0.80.

The highest level of multicollinearity of earnings per share is found with leverage (61.8 %). On the other side the lowest level of multicollinearity of earnings per share of automobile companies are found with growth (4.8 %). On the other hand the highest level of multicollinearity of equity returns of automobile companies are found with dividend payout (44.7 %) and the lowest level of multicollinearity of equity returns are found with growth (7.6 %). However, these multicollinearity static values are not causing serious problem of multicollinearity.

Table 4.22: Table 4.22 Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	37.549	0.000	OLS/Random Effect
Hausman Test	2.000	0.849	Random/ Fixed Effect

LM static value = 37.54 (p value < 0.05) therefore the variance across the 16 automobile companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are not significantly correlated with regressor in automobile companies therefore random effect is appropriate for the model.

Table 4.23: Table 4.23 Regression Analysis: Tobin's Q (Automobile Sector)

Models	**(OLS)**			**Random Effect**			**Fixed Effect**		
	β	**t**	**p**	**β**	**t**	**p**	**β**	**t**	**p**
Dividend Payout	1.19	1.90	0.06	0.29	-2.46	0.01	0.71	1.29	0.20
Size	-1.41	-2.78	0.01	-1.53	-3.21	0.00	-1.76	-2.79	0.01
Leverage	0.58	2.52	0.01	0.36	1.68	0.10	-0.26	-0.97	0.33
Growth	1.41	2.89	0.00	1.54	3.35	0.00	1.82	2.97	0.00
Corporate Governance	0.08	0.22	0.83	0.09	0.25	0.81	0.11	0.20	0.84
Constant	0.86	0.38	0.71	0.97	0.45	0.65	0.87	0.27	0.78
R Square	0.227			0.342			0.566		
Adjusted R Square	0.184			0.287			0.450		
F value	5.305		0.000	6.256		0.000	04.892		0.000

Based on random effect model adjusted R square predicts 34.2 percent variance in Tobin's Q owing the predictor dividend payout policy of automobile companies with controlling role of company

size and leverage ratio. F statistic = 6.256 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of automobile companies causes indirect 0.55 unit change in Tobin's Q (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of automobile companies, if size of company increases relationship is controlled negatively. Leverage on the other hand also controls the same relationship of negatively.

Table 4.24: Table 4.24 Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	31.325	0.000	OLS/Random Effect
Hausman Test	7.994	0.156	Random/ Fixed Effect

LM static value = 31.32 (p value < 0.05) therefore the variance across the 16 automobile companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are not significantly correlated with regressor in automobile compan companies therefore random effect is appropriate for the model.

Table 4.25: Regression Analysis: EPS (Automobile Sector)

Models	**(OLS)**			**Random Effect**			**Fixed Effect**		
	β	**t**	**p**	**β**	**t**	**p**	**β**	**t**	**p**
Dividend Payout	-0.71	-2.31	0.02	-0.75	-2.77	0.01	-0.82	-2.82	0.01
Size	-1.16	-4.65	0.00	-1.17	-4.55	0.00	-1.13	-3.86	0.00
Leverage	-0.42	-3.71	0.00	-0.40	-3.56	0.00	-0.39	-3.10	0.00
Growth	1.35	5.63	0.00	1.32	5.33	0.00	1.27	4.48	0.00
Corporate Governance	-0.11	-0.56	0.58	0.07	0.32	0.75	0.23	0.88	0.38
Constant	-0.01	-0.01	0.99	-0.46	-0.38	0.71	-1.17	-0.80	0.43
R Square	0.577			0.557			0.786		
Adjusted R Square	0.554			0.533			0.729		
F value	24.653		0.000	22.716		0.000	13.779		0.000

Based on random effect model adjusted R square predicts 53.3 percent variance in earnings per share owing the predictor dividend payout policy of automobile companies with controlling role of company size & growth and leverage ratio. F statistic = 22.71 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of automobile companies causes indirect 0.75 unit change in earnings per share (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with leverage and size of automobile companies, if creditors' stake increases relationship is controlled negatively and if size increases the relationship is controlled negatively. Growth on the other hand controls the same relationship of positively.

Table 4.26: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	**P value**	**Proposed Test**
LM Test	4.190	0.040	OLS/Random Effect
Hausman Test	9.321	0.080	Random/ Fixed Effect

LM static value = 4.190 (p value < 0.05) therefore the variance across the 16 automobile companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are not significantly correlated with regressor in automobile companies, therefore random effect is appropriate for the model.

Table 4.27: Regression Analysis: ROE (Automobile Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	0.31	4.56	0.00	0.31	4.89	0.00	0.30	4.09	0.00
Size	-0.39	-7.09	0.00	-0.44	-7.94	0.00	-0.60	-8.15	0.00
Leverage	-0.02	-0.68	0.50	-0.03	-1.08	0.28	-0.05	-1.52	0.13
Growth	0.39	7.34	0.00	0.44	8.17	0.00	0.60	8.36	0.00
Corporate Governance	0.00	0.10	0.92	0.01	0.19	0.85	0.01	0.20	0.84
Constant	-0.04	-0.16	0.88	0.31	4.89	0.00	-0.12	-0.32	0.75
R Square	0.514			0.537			0.680		
Adjusted R Square	0.487			0.511			0.595		
F value	19.085		0.000	20.884		0.000	7.998		0.000

Based on random effect model adjusted R square predicts 51.1 percent variance in return on equity owing the predictor dividend payout policy of automobile companies with controlling role of company growth and size. F statistic = 20.884 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of automobile companies causes indirect 0.31 unit change in return on equity (y) when dividend payout ratio increases by one unit. This relationship is controlled negatively with size of automobile companies. Growth on the other hand controls the same relationship of positively.

Table 4.28: Table 4.28 Descriptive Statistics (Sugar Sector)

Raw Data	Mean	Max	Mini	Std. Deviation	Skewness	Kurtosis
Tobin's Q	1.19	3.86	0.28	0.82	1.35	4.26
EPS Rs.	10.82	49.20	-7.62	11.99	1.29	4.90
ROE (% Δ)	0.16	0.45	-0.11	0.13	0.21	2.46
Dividend Payout	0.35	2.10	-0.22	0.37	2.20	10.05
Size (Rs. 000)	7066884	49255307	884371	9410580	2.99	11.40
Growth (Rs. 000)	8584647	51769326	1041050	10387186	2.81	10.18
Leverage	1.76	5.49	0.13	1.36	0.79	2.87
Corporate Governance	5.25	6.25	4.48	0.53	-0.34	1.68

It has been evidenced from descriptive statistics that Tobin's Q has mean (1.19) and the same deviates to (0.82). Earnings per share on the other hand have mean Rs. 10.82 (EPS) and the same deviates to the 11.99. Here, skewness and kurtosis values are (skewness = 1.35 & kurtosis = 4.26). Return on equity of sugar companies reported mean value 0.16 % and the same deviates to the 0.13. Skewness and kurtosis values are quite normal (skewness = 0.21 & kurtosis = 2.46). To the dividend payout ratio sugar companies had 0.35 average payout which deviates to the value 0.37.

Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). Size of sugar companies is range in between *Rs.* 0.88 billion to *Rs.* 49.25 billion (quite dispersed) with average size value = *Rs.* 7 billion. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). In response to the growth (natural log of sales) of sugar companies, it is evident that maximum sales were found *Rs.*51 billion and the minimum sales during the period were *Rs.* 1 billion with average sales figure = *Rs.* 8.5 billion. Here, skewness and kurtosis values are quite high (skewness = 1.82 & kurtosis = 5.584). To the leverage of sugar companies, it is found that average debt to equity ratio = 1.76 and it deviates to the value 1.36. Here, skewness and kurtosis values are quite normal (skewness = 0.79 & kurtosis = 2.87). Corporate governance index of automobile companies reported mean value 5.25 and the same deviates to the 0.53. Here, skewness and kurtosis values are quite normal (skewness = -0.34 & kurtosis = 1.68).

Table 4.29: Unit Root (Sugar Sector)

Variables	Method	Static at level	p -value
Tobin's Q	Levin, Lin & Chu t	-4.10821	0.0000
Earnings per Share	Levin, Lin & Chu t	-3.10557	0.0009
Returns on Equity	Levin, Lin & Chu t	-4.83886	0.0000
Dividend Payout	Levin, Lin & Chu t	-35.1694	0.0000
Size	Levin, Lin & Chu t	-2.38060	0.0086
Growth	Levin, Lin & Chu t	-5.88169	0.0000
Leverage	Levin, Lin & Chu t	-5.26866	0.0000
Corporate Governance Index	Levin, Lin & Chu t	-10.4202	0.0000

Results from above table to the unit root based on Levin et al. (2002) show that all variables have t static values significant (p value < 0.05) at level. With assumption of common autoregressive coefficients (β) across the 10 cross-sections of sugar companies (pi = p). It is found that (H0: $\alpha = 0$) does not support owing to the t static values are significant (p value < 0.050). Consequently, all variables including Tobin's Q, earnings per share, equity returns, dividend payout ratio, size of sugar companies, debt to equity ratio/leverage, growth of sugar companies and corporate governance index do not contain unit root. It is therefore, data series are stationary at level ((H1: $\alpha < 0$).

Table 4.30: Correlation (Sugar Sector)

	Tobin's Q	EPS	ROE	DP	Size	Growth	Leverage	CG
Tobin's Q	1.000	0.628	0.491	0.034	0.418	0.314	0.523	-0.097
EPS	0.628	1.000	0.788	0.042	0.323	0.192	0.445	-0.100
ROE	0.491	0.788	1.000	0.051	0.076	0.059	0.199	-0.105
DP	0.000	0.042	0.051	1.000	-0.063	-0.315	-0.092	-0.362
Size	0.418	0.323	0.076	-0.063	1.000	0.639	0.902	-0.278
Growth	0.314	0.192	0.059	-0.315	0.639	1.000	0.523	0.039
Leverage	0.523	0.445	0.199	-0.092	0.902	0.523	1.000	-0.180
CG	-0.097	-0.100	-0.105	-0.362	-0.278	0.039	-0.180	1.000

Pearson's Correlation matrix depicts level of multicollinearity of Tobin's Q, earnings per share, equity return of sugar companies (10 cross sections) with dividend payout policy and other controlling factors. The highest level of multicollinearity of Tobin's Q found with leverage (52.3 %). On the other side the lowest level of multicollinearity of Tobin's Q of sugar companies was found with corporate governance index (3.4 %). However, these multicollinearity static values are not causing serious problem, if correlation coefficients are = +/- 0.80. The highest level of multicollinearity of earnings per share is found with leverage (44.5 %). On the other side the lowest level of multicollinearity of earnings per share of sugar companies are found with dividend payout ratio (4.2 %). On the other hand the highest level of multicollinearity of equity returns of sugar companies are found with leverage (19.9 %) and the lowest level of multicollinearity of equity returns are found with dividend payout (5.1 %). However, these multicollinearity static values are not causing serious problem of multicollinearity.

Table 4.31: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	1.542	0.214	OLS/Random Effect

LM static value = 1.54 (p value > 0.05) therefore the variance across the 10 sugar companies is 0.00 and here the panel effect is not assumed.

Table 4.32: Regression Analysis: Tobin's Q (Sugar Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	0.22	0.80	0.43	-0.09	-0.41	0.68	-0.18	-0.71	0.48
Size	-0.50	-1.96	0.05	0.17	0.59	0.56	0.76	2.13	0.04
Leverage	0.14	1.46	0.15	-0.10	-1.03	0.31	-0.27	-1.97	0.05
Growth	0.86	3.44	0.00	0.47	2.01	0.03	0.26	0.49	0.62
Corporate Governance	-0.09	-0.49	0.63	0.06	0.34	0.74	0.13	0.63	0.53
Constant	-4.43	-1.72	0.09	-8.91	-2.97	0.00	-14.63	-1.83	0.07
R Square	0.316			0.178			0.689		
Adjusted R Square	0.259			0.109			0.595		
F value	5.550		0.000	2.603		0.033	7.387		0.000

Based on OLS regression model adjusted R square predicts 25.9 percent variance in Tobin's Q owing to the all predictors. F statistic = 5.550 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of sugar companies causes no significant unit change in Tobin's Q (y) owing to the p value > 0.05. On the other hand coefficient of size (control variable) cause significant negative 0.50 unit change in Tobin's Q due to significant p value = 0.00 < 0.05). And, coefficient of growth (control variable) cause significant positive 0.81 unit change in Tobin's Q due to significant p value = 0.00 < 0.05).

Table 4.33: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	1.611	0.204	OLS/Random Effect
Hausman Test	4.750	0.447	Random/ Fixed Effect

LM static value = 1.611 (p value > 0.05) therefore the variance across the 10 sugar companies is 0.00 and here the panel effect is not assumed.

Table 4.34: Table 4.34 Regression Analysis: EPS (Sugar Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	0.33	0.82	0.42	0.14	0.36	0.72	0.04	0.09	0.93
Size	-0.77	-2.22	0.01	-0.61	-1.22	0.23	-0.38	-0.59	0.56
Leverage	0.11	0.81	0.42	0.01	0.08	0.94	0.07	0.28	0.78
Growth	1.24	3.35	0.00	1.24	2.74	0.01	1.92	2.02	0.05
Corporate Governance	-0.15	-0.52	0.60	0.11	0.34	0.74	0.46	1.20	0.24
Constant	-5.14	-1.35	0.18	-8.79	-1.84	0.07	-24.62	-1.69	0.10
R Square	0.3248			0.162			0.484		
Adjusted R Square	0.186			0.092			0.330		
F value	3.971		0.003	2.326		0.053	3.136		0.001

Based on OLS regression model adjusted R square predicts 18.6 percent variance in EPS owing to the all predictors. F statistic = 3.971 & p value = 0.003 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of sugar companies causes no significant unit change in earnings per share (y) owing to the p value > 0.05. On the other hand coefficient of size (control variable) cause significant negative 0.77 unit change in earnings per share due to significant p value = 0.00 < 0.05). And, coefficient of growth (control variable) cause significant positive 1.24 unit change in earnings per share due to significant p value = 0.00 < 0.05).

Table 4.35: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	1.143	0.284	OLS/Random Effect
Hausman Test	4.052	0.541	Random/ Fixed Effect

LM static value = 1.143 (p value > 0.05) therefore the variance across the 10 sugar companies is 0.00 and here the panel effect is not assumed.

Table 4.36: Regression Analysis: ROE (Sugar Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	0.03	0.53	0.60	-0.01	-0.18	0.85	-0.03	-0.60	0.55
Size	-0.12	-2.46	0.02	-0.13	-2.15	0.04	-0.14	-1.97	0.05
Leverage	0.02	1.08	0.28	0.01	0.59	0.55	0.02	0.64	0.53
Growth	0.13	2.87	0.01	0.14	2.63	0.01	0.20	1.76	0.08
Corporate Governance	-0.04	-1.20	0.24	-0.02	-0.64	0.52	0.01	0.12	0.91
Constant	0.22	0.47	0.64	0.00	0.00	1.00	-0.76	-0.44	0.66
R Square	0.134			0.110			0.428		
Adjusted R Square	0.112			0.109			0.257		
F value	2.01		0.010	2.478		0.009	2.504		0.007

Based on OLS regression model adjusted R square predicts 13.4 percent variance in return on equity owing to the all predictors. F statistic = 2.01 & p value = 0.010 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of sugar companies causes no significant unit change in return on equity (y) owing to the p value > 0.05. On the other hand coefficient of size (control variable) cause significant negative 0.12 unit change in return on equity due to significant p value = 0.02 < 0.05). And, coefficient of growth (control variable) cause significant positive 0.13 unit change in return on equity due to significant p value = 0.01 < 0.05).

Table 4.37: Descriptive Statistics (Chemical Sector)

Raw Data	Mean	Max	Mini	Std. Deviation	Skewness	Kurtosis
Tobin's Q	3.16	12.95	0.37	2.49	1.67	3.16
EPS Rs.	12.44	91.26	-43.56	14.01	1.40	2.44
ROE (% Δ)	0.22	1.05	-0.07	0.16	-0.40	0.22
Dividend Payout	0.41	7.55	-2.59	0.78	5.65	7.41
Size (Rs. 000)	18677582	134000000	620791	30652898	2.37	8.61
Leverage	0.95	4.00	-1.00	0.82	1.44	1.95
Growth (Rs. 000)	16807100	122000000	740142	22241577	2.17	9.12
Corporate Governance	5.52	7.27	4.48	0.52	-0.06	5.52

It has been evidenced from descriptive statistics that Tobin's Q has mean (3.16) and the same deviates to (2.49). Earnings per share on the other hand have mean Rs. 12.44 (EPS) and the same deviates to the 14.01. Here, skewness and kurtosis values are (skewness = 1.40 & kurtosis = 2.44). Return on equity of chemical companies reported mean value 0.22 % and the same deviates to the 0.16. Skewness and kurtosis values are quite normal (skewness = -.40 & kurtosis = 0.22). To the dividend payout ratio chemical companies had 0.41 average payout which deviates to the value 0.78.

Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). Size of chemical companies is range in between *Rs.* 0.62 billion to *Rs.* 134.25 billion (quite dispersed) with average size value = *Rs.* 18 billion. Here, skewness and kurtosis values are high (skewness > 1.0 & kurtosis > 3.0). In response to the growth (natural log of sales) of chemical companies, it is evident that maximum sales were found *Rs.*22 billion and the minimum sales during the period were *Rs.* 0.74 billion with average sales figure = *Rs.* 16.8 billion. To the leverage of chemical companies, it is found that average debt to equity ratio = 0.95 and it deviates to the value 0.82. Here, skewness and kurtosis values are quite normal (skewness = 1.44 & kurtosis = 1.95). Corporate governance index of chemical companies reported mean value 5.25 and the same deviates to the 0.52. Here, skewness and kurtosis values are quite normal (skewness = -0.06 & kurtosis = 5.52).

Table 4.38: Unit Root (Chemical Sector)

Variables	Method	Static at level	p -value
Tobin's Q	Levin, Lin & Chu t	-37.2349	0.0000
Earnings per Share	Levin, Lin & Chu t	-62.7219	0.0000
Returns on Equity	Levin, Lin & Chu t	-12.2020	0.0000
Dividend Payout	Levin, Lin & Chu t	-3.26071	0.0006
Size	Levin, Lin & Chu t	-11.5397	0.0000
Growth	Levin, Lin & Chu t	-68.2575	0.0000
Leverage	Levin, Lin & Chu t	-8.99248	0.0000
Corporate Governance Index	Levin, Lin & Chu t	-11.6014	0.0000

Results from above table to the unit root based on Levin et al. (2002) show that all variables have t static values significant (p value < 0.05) at level. With assumption of common autoregressive coefficients (β) across the 25 cross-sections of chemical companies (pi = p). It is found that (H0: $\alpha = 0$) does not support owing to the t static values are significant (p value < 0.050). Consequently, all variables including Tobin's Q, earnings per share, equity returns, dividend payout ratio, size of sugar companies, debt to equity ratio/leverage, growth of chemical companies and corporate governance index do not contain unit root. It is therefore, data series are stationary at level ((H1: $\alpha < 0$).

Table 4.39: Correlation (Chemical Sector)

	Tobin's Q	EPS	ROE	DP	Size	Growth	Leverage	CG
Tobin's Q	1.000	-0.198	0.355	-0.055	-0.004	-0.163	0.164	0.026
EPS	-0.198	1.000	0.161	-0.061	-0.005	0.253	0.002	-0.036
ROE	0.355	0.161	1.000	0.045	0.111	0.022	0.230	0.236
DP	-0.055	-0.061	0.045	1.000	0.059	-0.025	-0.021	-0.134
Size	-0.004	-0.005	0.111	0.059	1.000	0.166	0.858	-0.040
Growth	-0.163	0.253	0.022	-0.025	0.166	1.000	0.088	-0.014
Leverage	0.164	0.002	0.230	-0.021	0.858	0.088	1.000	0.024
CG	0.026	-0.036	0.236	-0.134	-0.040	-0.014	0.024	1.000

Pearson's Correlation matrix depicts level of multicollinearity of Tobin's Q, earnings per share, equity return of chemical companies (25 cross sections) with dividend payout policy and other controlling factors. The highest level of multicollinearity of Tobin's Q found with leverage (16.4 %). On the other side the lowest level of multicollinearity of Tobin's Q of chemical companies was found with size of chemical companies (0.40 %). However, these multicollinearity static values are not causing serious problem, if correlation coefficients are = +/- 0.80.

The highest level of multicollinearity of earnings per share is found with growth (25.3 %). On the other side the lowest level of multicollinearity of earnings per share of chemical companies are found with size (0.20 %). On the other hand the highest level of multicollinearity of equity returns of chemical companies are found with corporate governance index (23.6 %) and the lowest level of multicollinearity of equity returns are found with dividend payout (2.2 %). However, these multicollinearity static values are not causing serious problem of multicollinearity.

Table 4.40: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	**P value**	**Proposed Test**
LM Test	1.719	0.000	OLS/Random Effect
Hausman Test	7.624	0.000	Random/ Fixed Effect

LM static value = 1.719 (p value < 0.05) therefore the variance across the 25 chemical companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are significantly correlated with regressor in chemical companies therefore fixed effect is appropriate for the model.

Table 4.41: Regression Analysis: Tobin's Q (Chemical Sector)

Models	(OLS)			Random Effect			Fixed Effect		
	β	t	p	β	t	p	β	t	p
Dividend Payout	-0.05	-0.23	0.82	-0.16	-1.09	0.28	-0.15	-1.02	0.31
Size	-0.76	-3.17	0.00	-0.45	-1.96	0.05	-0.43	-1.38	0.17
Leverage	-0.36	-1.69	0.09	-0.06	-0.33	0.74	-0.01	-0.05	0.96
Growth	1.05	3.88	0.00	0.59	2.61	0.01	0.51	2.05	0.04
Corporate Governance	-0.05	-0.17	0.87	-0.16	-0.56	0.58	-0.18	-0.60	0.55
Constant	-1.36	-0.48	0.63	1.43	0.36	0.72	2.46	0.42	0.68
R Square	0.123			0.091			0.782		
Adjusted R Square	0.092			0.059			0.729		
F value	4.044		0.000	4.603		0.000	14.881		0.000

Based on fixed effect model adjusted R square predicts 72.9 percent variance in Tobin's Q owing to the all predictors. F statistic = 14.88 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of chemical companies causes no significant unit change in Tobin's Q (y) owing to the p value > 0.05. On the other hand coefficient of growth (control variable) cause significant positive 0.51 unit change in Tobin's Q due to significant p value = 0.04 < 0.05).

Table 4.42: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	115.521	0.000	OLS/Random Effect
Hausman Test	36.222	0.000	Random/ Fixed Effect

LM static value = 115.521 (p value < 0.05) therefore the variance across the 25 chemical companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that

unique error terms (u*i*) are significantly correlated with regressor in chemical companies therefore fixed effect is appropriate for the model.

Table 4.43: Regression Analysis: EPS (Chemical Sector)

Models	**(OLS)**			**Random Effect**			**Fixed Effect**		
	β	**t**	**p**	**β**	**t**	**p**	**β**	**t**	**p**
Dividend Payout	-0.95	-0.64	0.52	-0.95	-0.64	0.52	0.92	0.58	0.56
Size	-1.08	-0.69	0.49	-1.08	-0.69	0.49	-17.44	-5.25	0.00
Leverage	4.50	3.21	0.00	4.50	3.21	0.00	2.33	1.05	0.29
Growth	0.82	0.46	0.64	0.82	0.46	0.64	-3.00	-1.14	0.26
Corporate Governance	1.20	0.56	0.57	1.20	0.56	0.57	5.82	1.99	0.03
Constant	19.10	1.05	0.30	19.10	1.05	0.30	365.47	5.81	0.00
R Square	0.072			0.075			0.380		
Adjusted R Square	0.039			0.049			0.230		
F value	2.237		0.053	2.243		0.041	2.539		0.000

Based on fixed effect model adjusted R square predicts 23.0 percent variance in earnings per share owing to the all predictors. F statistic = 2.53 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of chemical companies causes no significant unit change in earnings per share (y) owing to the p value > 0.05. On the other hand coefficient of size (control variable) cause significant negative 17.44 unit change in earnings per share due to significant p value = 0.00 < 0.05). And, coefficient of corporate governance index (control variable) cause significant positive 5.82 unit change in earnings per share due to significant p value = 0.03 < 0.05).

Table 4.44: Lagrange Multiplier (LM) & Huasman Test

	Chibar 2 (1)	P value	Proposed Test
LM Test	72.857	0.000	OLS/Random Effect
Hausman Test	10.576	0.040	Random/ Fixed Effect

LM static value = 72.857 (p value < 0.05) therefore the variance across the 25 chemical companies is other than 0.00 and here the panel effect is assumed. Next, the Hausman test posits that unique error terms (u*i*) are significantly correlated with regressor in chemical companies therefore fixed effect is appropriate for the model.

Table 4.45: Regression Analysis: ROE (Chemical Sector)

Models	**(OLS)**			**Random Effect**			**Fixed Effect**		
	β	**t**	**p**	**β**	**t**	**p**	**β**	**t**	**p**
Dividend Payout	0.02	1.33	0.19	0.00	0.20	0.85	0.00	0.12	0.91
Size	-0.04	-2.05	0.04	-0.02	-1.27	0.20	-0.05	-1.72	0.09
Leverage	0.01	0.47	0.64	0.03	1.72	0.09	0.04	1.81	0.07
Growth	0.06	3.23	0.00	0.04	1.77	0.08	0.01	0.58	0.57
Corporate Governance	0.07	2.87	0.00	0.11	4.27	0.00	0.13	4.54	0.00
Constant	-0.62	-3.03	0.00	-0.56	-1.95	0.05	0.07	0.13	0.89
R Square	0.137			0.136			0.640		
Adjusted R Square	0.107			0.106			0.553		
F value	4.598		0.000	4.538		0.000	7.368		0.000

Based on fixed effect model adjusted R square predicts 55.3 percent variance in return on equity owing to the all predictors. F statistic = 7.368 & p value = 0.000 < 0.05 hence coefficients in the model are different than 0.00. Coefficient of dividend payout ratio (χ_1) of chemical companies causes no significant unit change in return on equity (y) owing to the p value > 0.05. On the other hand

coefficient of corporate governance index (control variable) cause significant positive variation 0.13 unit change in return on equity due to significant p value = 0.00 < 0.05).

CHAPTER FIVE: DISCUSSION

5.1 Relationship of Dividend Payout Policy and Business Performance Textile Sector

From the above results, it is evident that textile sector's profitability and dividend payout policy is negatively but significantly correlated. Furthermore, this inverse association amid profitability and dividend payout policy of textile sector supports the theory of pecking order theory presented by Myres (1984) and Myers & Majluf (1984). The pecking order theory of capital structure suggests that firms at the early stage prefers to use internal financing and attempts to adjust the levels of dividend. Lastly, the firm will go for external financing or using liquid assets if the internal financing is not sufficient. Therefore, firms with high profits tend to support pecking order theory with the objective to finance investments needed by firms (Uyar & Kuzey, 2014; Wasiuzzaman, 2014).

Putting it simply, it is postulated by the pecking order theory of capital structure that in order to finance their investments, retained earnings are preferred by companies rather than opting for external financing. Therefore, such firms pay low dividends and when the earnings are retained the equity component of firm increases. Nevertheless, external financing may be required if a company pays large dividends. Therefore, a deviation from the optimal capital structure of a firm may occur if there is an increase in external financing without proportional upsurge in equity (Murekefu & Ouma, 2012). Overall, results regarding the profitability and dividend payout policy of textile sector support the Gordon's (1963) dividend relevance theory states that the firm's value is determined by its current dividends. The total return of the equity investors is provided future dividend growth and dividend yield and the model also claims that the important measure for total return to equity investors is dividend yield instead of the firm's dividend future growth. Capital gains and future growth cannot be evaluated with the precision and are not guaranteed at all since it may lose the entire stock market value (Panigrahi & Zainuddin, 2015).

The study conducted by Kaźmierska-Jóźwiak (2015) showed similar results about the effect of corporate's profitability on dividend payout policy that the negative but significant association between profitability and dividend payout policy suggests the use of retained earnings as a capital

sources and it is what pecking order theory indicates. A study conducted by Andersson & Minnema (2018) expressed the existence of significantly negative affiliation between profitability and leverage of a firm. This is similar to current findings, indicating that firms with lower degree of leverage have high profits. It means that textile firms are likely to have lower total debt levels and mostly internal funds i.e. retained earnings are used for financing activities to achieve higher profitability. It also supports the pecking order theory proposed by Myres (1984) and Myers & Majluf (1984).

On the contrary, research study conducted by Murekefu & Ouma (2012) revealed that firm's profitability and dividend payout policy have strong and positive association which contradicts the findings of current research study with reference to textile sector. Whereas, Findings of Hashemy & Akhlagy (2010) revealed a significant positive association between firm profitability and leverage which are not parallel to findings of the current study. Similarly, the study conducted by Hashemijoo, Ardekani, & Younesi (2012) found that there exists no significant relationship between firm's profitability and dividend policy. Whereas, Nduta (2016) concluded that there is insignificant relationship between the financial performance of a firm and dividend policy. Thus, result of these studies shows contradiction with findings of the current study and supports the dividend irrelevance theory proposed by Modigliani's & Miller's (1961) which states that dividend irrelevance theory as the company's market value is not dependent on the dividend policy. It is asserted that the value of the company can only be affected by the direct result of earnings and suggested that both capital gains and dividends are equal when return on investment is considered by investor. Therefore, the dividend irrelevance theory suggests that if the investment decision considered by the company is known to investors, then investors should not make their decision regarding investment based on the company's dividend policy (Panigrahi & Zainuddin, 2015).

5.2 Relationship of Dividend Payout Policy and Business Performance Cement Sector

Result of Lai et al. (2016) regarding firm size and Tobin's Q are contradictory with the conclusions of this paper and size of firm and Tobin's Q are found to have noteworthy positive correlation. The study presented by Dey, Hossain, & Rahman (2018) revealed results similar to the present study that both leverage and Tobin's Q are significantly negatively correlated. Whereas,

contradictory results are revealed by Farooq & Masood (2016) showing expressively constructive nexus amid leverage and Tobin's Q. A study conducted by Goel & Ramesh (2016) revealed that the individual governance parameters are insignificant to firm's profitability. Whereas, Almoneef & Prasad showed that corporate governance is in inversely related to Tobin's Q, which is persistent with current findings. The findings of Dey, Hossain, & Rahman (2018) are not in line regarding the nexus between growth of firm and Tobin's Q in the present research paper, as it is determined that there exists a positively significant association with Tobin's Q, whereas present research study supports vice versa.

Findings of Huang, You, & Lin (2014) are in line with present study findings that a negative but significant association is found between dividend yield and earnings per share, which the pecking order theory. The research study conducted by Ahmed (2018) showed contradictory results as compared to current findings and it is acknowledged that both dividend payout policy and earnings per share have strong positive association which implies that higher dividend payout will result in generating more earnings on its shares. However, dividend relevance theory is supported in the current research conclusion. Results of the study performed by Ahmed & Hamdan (2015) showed resemblances with this research work, and they revealed that there is no significant influence of corporate governance on firm's earnings per share. Whereas, Al-Haddad, Alzurqan, & Al-Sufy (2011) also concluded similar results that corporate governance is insignificant to earnings per share. Company's size on the other hand is found to have a significant negative association with return on equity, whereas corporate governance is insignificant to return on equity. Huang, You, & Lin (2014) replaced earnings per share by return on equity to check the results, however no change in the relationship occurred and found that there exists a negative but significant influence of dividend on equity's return.

The findings of Ahmed & Hamdan (2015) related to the nexus amid corporate governance and earnings per share contradicts with the current study findings that corporate governance has significant influence on earnings per share. This supports the Myers et al (1984) pecking order theory which states that internal financing is preferred by some firms as compared to external funding. As a result of information asymmetry, firms do not possess any optimal debt to equity ratio. A conservative approach is adopted by firms related to disbursements of dividends and debt financing is preferred in

order to increase value of shareholders. One of the important facets of the theory suggests that profitable firms prefer internal financing instead of taking up new debts or equity. Regardless of the fact that debt is cheaper than equity within certain proportions (Jibran, Wajid, Waheed, & Masood, 2012).

5.3 Relationship of Dividend Payout Policy and Business Performance Automobile Sector

The above results regarding the automobile sector, overall, support the dividend relevance theory proposed by Gordon (1959) that the profitability of a firm is affected by its dividend policy. Research study conducted by Lintner (1956) depicted that current years earning per share influence the dividends payment. It is asserted that change in dividend payout policy affects the future profitability of a firm. Therefore, results of the study revealed by Arnott & Asness (2003) illustrated that the high level of current dividend payout is associated with firm profitability. Amidu & Abor (2006) concluded that the relationship between dividend payout and firm's profitability support the dividend relevance theory. The study carried out by Thafani & Abdullah (2014) revealed that there exists a significant positive association between dividend payout and profitability.

This result also supports the dividend signaling effect, since it is argued that dividend may have a signaling effect. Information regarding the strategies of firm is maintained with the top management and they can also forecast company's future earnings. Thus, more information related to the firm is retained by managers comparatively to market's investors (Deeptee & Roshan, 2009). It leads to the information asymmetry problem, therefore dividend signaling mechanism is used by firms which sends information to investors in the market. The information signaled reflects the strategies of firm which is intended to employ in long or short-run. Expectations of investors can be changed by the managers with regards to firm's future earnings through dividends (Deeptee & Roshan, 2009). The agency theory of dividend payout policy is also addressed in the current research study, which deals with problems between managers and shareholders.

Agency theory was developed by Jensen and Meckling (1976) which states that agency costs are the sum of expenditures related to monitoring by the shareholders, the expenditures related to

boning between managers and shareholders by the managers, and residual loss. It is evidenced that dividends payout are considered as one of the important aspect in reducing the agency conflicts. For instance, mangers for their own interests use resources of the firm rather than in the interests of shareholders. However, managers' deals with wasted part of resources and remaining costs are provided to shareholders who help in solving agency problems, thus benefiting shareholders' value (Caelers, 2010).

Lastly, the study also support the bird in hand theory, as it is explained that bird in hand will have effect if dividends are used by investors for consumption or to purchase treasury bills, however if the received dividends by reinvesting in either the same or different firm, then their cash (less taxes paid) is committed to the similar risks as if no dividends exists, then the bird in hand will have no influence except any changes in the firm's investment policy. But if dividends are not received by the investors at their will at first, then it does not mean that investors have no desire for dividends since many investors are willing to wait for future dividends (Easterbrook 1984). Furthermore, results of the study overall shows that company's growth has significant positive influence on profitability and it is in line with the findings of Razaq & Akinlo (2017). Whereas, the study conducted by Aduralere Opeyemi (2019) revealed that firm size and profitability are significantly related, on the other hand results concluded by Azhar & Ahmed (2019) are contradictory to current findings and stated that firm size has no significant influence on profitability.

5.4 Relationship of Dividend Payout Policy and Business Performance Sugar Sector

Ordinary Least Square test during the analysis is considered appropriate on the basis of result of Lagrange Multiplier & Hausman tests related to the significance of dividend payout policy and controlling variable Tobin's Q, earnings per share, and return on equity as profitability variables in the sugar sector of Pakistan. Results of the OLS manifested that both dividend payout ratio and Tobin's Q are positively interrelated with each other, however it has no significant effect which postulates that dividend is irrelevant to Tobin's Q. Both, company's size and growth are discovered to have significant influence on Tobin's Q as a controlling variable however the relationship is inverse and

direct respectively. Entailing that increase in company size will deteriorate Tobin's Q, on the contrary increase in company's growth will result in high Tobin's Q.

Lastly, both leverage and corporate governance are found insignificant. Result of the OLS concerning the relationship and effect of dividend payout ratio on earnings per share indicated that company's dividend payout policy has positive association with company's earnings per share although the influence is found to be insignificant which entails that if the dividend payout is either high or low, it will not affect firm's profitability. Leverage and corporate as controlling variables are found to have insignificant, positive and negative influence respectively on earnings per share. Whereas, company's size and company's growth are significantly negatively and positively correlated to earnings per share in respective manner. This implies that increase in company size will decrease earnings per share, whereas increase in company's growth will result in higher earnings per share.

Findings for the effect of dividend payout ratio on return on equity through the OLS indicates the existence of dividends insignificance to return on equity because the relationship is positive but there is no significance in the association between dividend payout policy and return on equity. Company's size as a controlling variable is found to have significant but negative influence on return on equity, meaning that company's is relevant to return on equity in a negative fashion. On the other hand, company's growth is significantly positively correlated with return on equity, implying that company's growth will enhance return on equity. Whereas, both leverage and corporate governance, as similar to above results, are found to have no influence on return on equity.

Overall, result of the OLS regarding the dividend payout policy and profitability support the theory of dividend irrelevance presented by Miller's and Modigliani's (1961). Neither the capital's cost and nor the company's stock price has any effect on the shareholders wealth in the conditions of perfect market, investors are uninterested amid both dividends and capital gains as a result the wealth of shareholders is not affected by the decision regarding dividend between. The reason behind this irrelevance is that the wealth of shareholder is affected by the income decisions that firm takes to generate income, and not by how it distributes its income. Result of the study also support the clientele effects of dividend hypothesis which proclaims that the selections of portfolio available to investors

are affected by specific imperfections in the market for instance different tax rates and transaction costs to choose different mixes of dividends and capital gains.

As Miller and Modigliani (1961) contended that such market imperfections might cause investors to prefer securities that reduce these costs (Al-Malkawi, Rafferty, & Pillai, 2010). Although, it is expressed by Miller and Modigliani (1961) that the clientele effect may alter the dividend payout policy of a firm to attract confident positive clienteles, however each clientele is "as good as another" in a perfect market, therefore it does not affect the shareholders' value i.e. the dividend payout policy remains irrelevant (Al-Malkawi, Rafferty, & Pillai, 2010). Different dividend policies are preferred by different group of investors and the current group of investors is determined by the firm's past dividend policy. For instance, investors prefer to receive higher dividends if a firm's adopt higher dividend payout policy and the investors will purchase more of the company's stock which increases the company's stock. Thus, the clientele theory assumes that investors are partial to the company's dividend payout policy and changes in the policies will leads to either sale or purchase of the fundamental company's stock base on the preferences of investor.

The clientele regarding the dividend payout usually makes decision based on what is beneficial to them. Both age and income level are often used to categorize clientele groups, as mostly retired and old age investors prefers higher dividend income whereas the younger blood prefers that firm should use free cash flow to finance the company's growth rather than distributing dividends among shareholders (Genga, 2011). Findings of Kapoor, Anil, & Misra (2010) are in line with the findings of current study that dividends and profitability are not significantly correlated. Furthermore, the study conducted by Komrattanapanya & Suntrauk (2013) also revealed that dividend payout policy and firm's profitability are insignificantly related. On the other hand, Rehman (2016) presented results that contradicts with present study findings that dividend payout policy and profitability are significantly related. Results of the study related to the controlling variables i.e. company's growth and size are found consistent with the results revealed by Kouser, Bano, Azeem, & Masood-ul-Hassan (2012) that company's growth is significantly positively correlated with firm's profitability.

Whereas, company's size is found to have significant but negative association with firm's profitability. Coad (2007) also revealed that both growth and profitability are positively correlated. It

is asserted that the behavior of the management positively influences the nexus amid growth and profitability of the company i.e. employees perform well when managers motivate them which results in company's growth and higher profitability. However, the positive association can become a negative when firms do not diversify and reduce the profit margins from the existing market (Kouser, Bano, Azeem, & Masood-ul-Hassan, 2012).

5.5 Relationship of Dividend Payout Policy and Business Performance Chemical Sector

It is evident from the result presented above that dividend payout have no influence on firm's profitability, which supports the Modigliani & Miller (1961) dividend irrelevance theory, which claims that dividends are irrelevant when it comes to the firm's market value. The shareholders and investors have no concern regarding the company's dividend payout policy as dividends have no influence over stock prices (Iqbal et al., 2018). They expressed that the dividend payout policy of a firm provided with an investment policy does not have influence on shares current price and it also does not affect the shareholders' stock return. Putting it differently, the value of company is calculated by investors on the basis of future earnings capitalized value, and this is not affected, whether firms pay or not pay the dividends and how dividend policies are set by the firms (Al-Malkawi, Rafferty, & Pillai, 2010). On the other hand, the theory of dividend irrelevance presented by Modigliani & Miller (1961) stands true if one of its assumptions is agreed upon the non existence of any conflicts between managers and shareholders (Khan and Ramirez, 1993).

Result of the current study with reference to chemical sector are consistent with the results revealed by Okoro, Ezeabasili, & Alajekwu (2018) that dividend payout policy is irrelevant to firm's profitability because it has insignificant influence on profitability. Furthermore, it is also reported that both firm size, and leverage have insignificant influence on profitability. The study of Khan, Anuar, Ramakrishnan, & Malik (2015) also supported the current findings regarding controlling variables i.e. leverage and firm size that both have no influence on profitability. However, their results are contradicting regarding the significance of dividend payout policy and concluded that the influence of dividend payout ratio on profitability of firm is significantly positive. Ali, Batool, Khan, & Ali (2016) in their study explained that dividend payout policy is insignificantly correlated with profitability

which support the findings of current study, however it is evident from the study that firm size is significant positive effect and leverage is found to have insignificant negative impact, thus it illustrates that mixed results are produced.

CHAPTER SIX: CONCLUSION

The final chapter of this study features a detailed discussion on the key findings of the analyses that are aligned with research hypotheses. The findings are discussed against the hypotheses given in the first chapter of the study. Further in the chapter, recommendations for practitioners and future research are discussed along with the limitations that are observed in the current study. The conclusion of the study is finally stated with the summary of the results that is achieved through the study.

6.1 Key Findings

The current study explores the relationship of dividend payout policy on the profitability of firms that exist in the non-financial corporate sector of Pakistan. 100 companies are selected from all five sectors. Relationship of dividend payout policy and business performance was controlled with four variables based on relevant theories. These variables include size of company, growth of company, leverage (debt to equity ratio) and corporate governance index. Panel data is collected from 2012-2017 (six years) and then analyzed. Following key findings for each research objective were obtained by applying the adopted research method on the data through the adopted method of analyses:

The result shows a negative relationship between dividend payout policy and firms' profitability in textile sector of Pakistan. This means as per the test run on the collected data, when textile firms pay out dividend then their profitability is decreased. This aligns with the pecking order theory which was presented by Myers in 1984. Myers and Majluf (1984) concluded that shareholders gain more when companies build more funds by restricting dividend payment. The capital which is measure for size of the company controls the effect of dividend payout policy on firm's profitability and this is again in line with pecking theory which states that if a firm wants to expand then they have to retain their earning which can be done by constraining the dividend pay-outs. The other controlling factor in the dividend and profitability relationship of textile forms came out to be leverage.

Leverage in a firm is measured by the equilibrium of equity and debt. The leverage of the firm is observed as a controlling and effecting factor for the correlation of dividend and profitability. Earned equity basically has more significant influence on dividend decision in economical perspective because firms decide to make dividend pay-outs to mitigate agency costs linked with the capital structure of low debt/high cash that would be the result in the end if firms don't pay dividends (Manos, 2002). The result of the current study makes sense because Agency theory states that retaining the earnings on big scale doesn't maximize the value for shareholder. Dividends are then a useful financial tool for such firms because they aid the firms to avoid asset or capital structures that provide managers with a wide discretion in making the investments that is value-reducing. The evidence provided in this study strongly and uniformly supports this perspective of dividend policy.

The results generated regarding the dividend payout policy and profitability in the cement sector is as same as that of textile sector. Only there is one more controlling factor that is affecting the correlation of both the dependent and independent variables. In case of Pakistan's cement sector, besides size and leverage, firms' growth is also coming out as effective variable on the relationship which aligns with the signaling theory. Dividend signaling theory indicates that through dividend policy, firms send out the signals informing the prospective investors regarding the future prospect of the company. In this light it is observed that the growth of the firms that is measured by the total sales portfolio of the company effects the correlation of dividend and profitability if the sales portfolio of the company increases then investors catch the perception that the company has better chance of growth in the future and thus they realize that the less dividend pay-out of present can benefit them in future due to more profitability of the company. The result of the current study shows that a positive association exists between dividend payout policy and profitability of firms in automobile sector of Pakistan. The result aligns with the agency cost theory which means that the payment that firms make in form of dividends can be useful tool for financial managers of firms to control agency behavior. It can be said specifically that through induction of external funding, dividends can reduce agency costs and increase profitability of the firm.

The positive association of dividend payout policy and firm's profitability can be seen in light if signaling theory as well because the dividend payout policy which makes handsome pay-out ratio to firms investors send out the impression that firm is making profit and therefore can engage more funds

from the investors which will subsequently can be invested for firms growth and development which will eventually leads to the profitability of the firm.

The positive outcome of the correlation of dependent and independent variables mitigates with bird in hand theory which states that shareholders who are averse to risks prefer dividend payments over prospect of future benefits by the firms' growth in capital. This is because dividends are returns at a regular specified time while future growth of firm in terms of capital is not certain for such investors. That is why the theory is phrased as ''bird-in-hand'' theory. As per the developer of this theory Gordon and Miller, (1963) dividends reduce the uncertainty that makes the investors discount the future earnings of the company and thus increased the value and subsequently profitability of the firm (Gordon and Linter, 1963). The controlling variables of the study size, growth and leverage of the company effects the relationship of the dividend payout policy and profitability of automobile firms in same way as they function in cement sector of Pakistan.

The results generated for this particular sector indicates towards absence of relationship between dividend payout policy and profitability of the understudy companies. The result is in line with the theory of irrelevance which states that dividend payout policy has no effect on value or profitability of the firm in a perfect market and shareholders wealth is also not affected by the dividend payout policy implemented by the firm. That is why they are decision and therefore they indifferent towards capital gains and dividends (Miller and Modigiliani, 1961). The reason behind the result can be given that the profitability and value of a firm is not determined by the way in which chemical sector distributes its profit but instead it is defined by the investment decisions and earning power of the firms. According to the investment policy of chemical firms, the dividend payout policy they adopt will not affect the current share prices. It will also not affect the total returns that shareholders receive and it will also not affect the profitability of the firms.

The same result is also seen under the light of client effective theory which is basically a firm's tendency to appeal to the investors who like the dividend payout policy implemented by the firm (Petit, 1977). For example, an investor who is in the retirement age prefer to have current dividends while on the other hand, there are other long time investors who have the eye on future gains instead of the current dividend returns. In such case, firms' profitability has no association with dividend payout

policy as their policy is affected by their investors (Malombe, 2011). In case of chemical sector, it can be considered that many chemical firms believe dividend pay-outs are significant for the informational content as capital gained by external equity is more costly than the retained equity.

The controlling factor size, leverage and growth affect the observed relationship between dividend payout policy and profitability of according to the same theories of pecking order, agency cost and signaling respectively as in the pre house sectors. The results if the study regarding the dividend payout policy and profitability in the sugar sectors are as same as that of chemical sector. The relationship of dividend payout policy and profitability of sugar firms came out to be insignificant and mitigates the theory of irrelevance and client effect theory as in the chemical sector while size, leverage and growth also affect the outcome of relationship as controlling predictors as they do in chemical sector that is aligned with pecking order theory, agency cost theory and signaling theory of dividend policy.

Sector	Relationship of Dividend Payout and Business Performance	Theory Support	Hypothesis

6.1.1 Summary of Results

Textile	Negative	Pecking Order Theory	Supported
Cement	Negative	Pecking Order Theory	Supported
Automobile	Positive	Agency Cost Theory/ Bird in Hand Theory/Signaling Theory	Supported
Sugar	No Relationship	Irrelevancy Theory/ Clientele Effect Theory	Not Supported
Chemical	No Relationship	Irrelevancy Theory / Clientele Effect Theory	Not Supported
Sector	**Controlling Effect in Relationship of Dividend Payout and Business Performance**	**Theory Support**	**Hypothesis**
Textile	Size and Leverage	Pecking Order Theory Agency Cost Theory	Supported
Cement	Size, Leverage & Growth	Pecking Order Theory Agency Cost Theory Signaling Theory	Supported
Automobile	Size, Leverage & Growth	Pecking Order Theory, Agency Cost Theory & Signaling Theory	Supported
Sugar	Size, Leverage, Corporate Governance index & Growth	Pecking Order Theory, Signaling Theory & Agency Cost Theory	Not Supported
Chemical	Size, Corporate Governance index & Growth	Pecking Order Theory, Signaling	Not Supported

		Theory & Agency Cost Theory	

6.2 Conclusion

The current study investigates the influence of dividend payout policy on the profitability of companies by taking leading manufacturing industries of Pakistan under study. Companies from textile, chemical, cement, automobile and sugar industries are chosen for the purpose. The ratios of ROA (asset returns) and EPS (earning per share) are used to measure the profitability of the chosen companies. The study also includes controlling variables that might have controlling effect on the relationship of dividend payout policy and profitability of the firm. These variables are leverage of the company measured by the ratio of equity and debt, size of the company is measured by the total assets, growth of the company is measured by total revenue/sales and corporate governance index.

After the analysis, the results of the study show that in 38 textile companies, a negative relationship occurs between dividend payout policy and their profitability. Furthermore, size of the firm according to the pecking order theory (Myer, 1984) and leverage as per the agency cost theory (Meckling and Jensen, 1976) came out to have a significant controlling effect on this negative relationship. The same results were observed in case of 11 cement companies. Only in the case of cement industry, another controlling factor that is growth of the company was found to have an effect on the relationship between dividend payout policy and profitability in light of Signaling theory (Miller and Modigiliani, 1961). When same method of analyses that is used for textile and cement companies was used on Automobile companies to find out the nature of relationship between their dividend payout policy and profitability then it was found out that both dependent and independent variables are positively related in this sector and size, growth and leverage are the controlling predictors of the relationship.

The similar test on 10 sugar companies and 25 chemical companies showed no sign of a relationship between their dividend payout policy and profitability and so there is no controlling factor

effective due to the absence of any relationship. Thus the hypotheses were rejected in case of these two industries.

6.3 Recommendations

The results of current investigation make several implications and contribution to streamline the business practice regarding dividend payout policy in the non-financial companies from leading manufacturing industries of Pakistan. The positive influence of pay out based dividend payout policy on profitability of firms recommends the financial managers to build commitment with such policy and put consideration to stabilize their policy for dividend payments. The discussion and the results implicate that dividend payout policy in corporate sectors brings out information regarding the profit related prospects of the organization along with the estimation of growth that the firm may gain in future. This kind of information may engage the interest of potential investors which will in turn influence firm's value.

The study further indicates that both existing and potential investors when invest in a firm particularly that are committed in dividends consider proper information relevant to the profitability, size, growth and investment opportunities because these elements determine that whether the firm profitability and value will elevate in the future. It is recommended that an appropriate dividend payout policy should be designed and implemented so the financial managers are not left to make decision that how the dividends should be paid but they are guided by a properly designed policy. The results also recommend a constant percentage of profit in a dividend payout policy as it brings certainty for the shareholders. As the share market positively response to dividend, firms should make effort to consistently pay dividend so their shares can well perform in market. As for the shareholders and investors, it is reasonable for them to government good earning on the investment they make but they should also realize that the reason behind unfavorable dividend pay-out ratio cannot always be bad profit but it can also be the firm's investment in growth which eventually be beneficial for the shareholders in form of a better dividend pay-out in future.

As dividend payout policy affect firms' performance, therefore, companies must pay the dividend so that they gain a positive outlook in future. This scenario coincides with is bird-in-hand theory (Gordon and Linter, 1963), tax differential theory Litzenberger and Ramaswamy (1979), information signaling effect theory (MM, 1961) and agency theory (Meckling and Jensen, 1976). These popular theories states that dividend payout policy is significantly related to firm's performance when other factor of dividend payout policy is constant.

6.4 Future Direction

The study makes a path that can lead future research and studies towards more conclusive and contributing results. It would most probably interest the academic scholars and other stakeholders if research in future will investigate that how profitability and dividend payout policy may be affected by tax policy, legal rules, opportunities and pattern of past payout of dividends. Other controlling predictors including ownership structure, expectations and tax position of shareholders, access to share market and industry practice should be considered as well in the future studies to determine if they can be of importance in designing a dividend policy. Moreover, results that showed insignificant values can be reconsidered in future by academicians as inconsistent results are noticed among the researches in past as well.

The study moreover suggests that studies should be conducted to cover all types of financial and nonfinancial cooperative societies where researcher can make a comparison among the regression outcomes obtained to evaluate the variances in different types of financial and nonfinancial cooperative societies. Some more relationship that can shed more light on the proper dividend policies for different firms are relationship of dividend payout policy and managements' perception with financial performance of the firms and influence of external sources of funds on the dividend payout policy and profitability of companies. Furthermore, companies with various kinds of ownership and different structure such as private and public might use different means to communicate the future prospects of their earning to the shareholders. A study might come out to be useful if carried out on firms with highly dispersed and concentrated ownership to explore their dividend payout policy and its influence on their profitability.

6.5 Limitations

However, the study contributes immensely in the field of dividend payout policy and field of finance as a useful literature but like all other studies, it too has some limitations that can be covered in future. The study is entirely based on manufacturing companies or nonfinancial corporate sector of Pakistan which is a developing country. Therefore, the results reveal various financial aspects of manufacturing sector and that also in a developing country. The study cannot be deemed as conclusive for financial sectors as their dividend payout policy has totally different perspective and thus entirely a different influence on profitability. Moreover, there are very different predictors that may have a controlling effect on the relationship of dividend payout policy and their profitability (Yiadom and Agyei, 2011). Same is the case with the dividend payout policy and its influence on the profitability of firms that are located in developed countries (Aivazian and Booth, 2003). This is the reason that while the current study is conclusive and all-encompassing in nature in context of manufacturing sector in developing country but it doesn't cover the financial sectors or the prospect of developed countries.

Furthermore, in current study, the data represents the time period of 6 years (2012 till 2017) which is taken understudy for the current research but it can be considered as the limitation of the study because the time period is short when compared to others taken in the popular literatures. Academicians can increase the time horizon in order to overcome this particular limitation in future.

REFERENCES

Abdul, J. M. (2017). Impact of Dividend Policy on Shareholders' Wealth: A Study of the Agriculture Industry in Nigeria.

Abdulkadir, R. I., Abdullah, N. A. H., & Wong, W. C. (2014). Implication of Catering Theory of Dividend: Evidence from Financial Firms Listed on the Nigerian Stock Exchange. *Research Journal of Finance and Accounting, 5(18).*

Abdullah, F., Shah, A., & Khan, S.U. (2012). Firm performance and the nature of agency problems in insiders-controlled firms: evidence from Pakistan. *Pak. Dev. Rev. 51 (4),* 161–183.

Abeywardhana, D. K. Y. (2016). Impact of Capital Structure on Firm Performance: Evidence from Manufacturing Sector SMEs in UK.

Abu-Rub, N. (2012). Capital structure and firm performance: Evidence from Palestine Stock Exchange. Journal of Money, Investment and Banking, 23, 109-117.

Adediran, S. A. and Alade, S. O. (2013). Dividend Policy and Corporate Performance in Nigeria, *American Journal of Social and Management Sciences*, 4 (2), 71-77

Adesina, J. B., Nwidobie, B. M. and Adesina, O. O. (2015). Capital Structure and Financial Performance in Nigeria. International Journal of Business and Social Research, 5(2), 21-31.

Adjaoud, F., & Ben-Amar, W. (2010). Corporate governance and dividend policy: Shareholders protection or expropriation? *Journal of Business Finance and Accounting, 37(5/6),* 648–667.

Admassu, N. A. (2016). The Impact of Capital Structure Choice on Firms' Financial Performance: Evidence from Manufacturing PLCs in Tigrai Region, Ethiopia. Research Journal of Finance and Accounting, 7(15).

Aduralere Opeyemi, O. (2019). The Impact of Firm Size on Firms Performance in Nigeria: A Comparative Study of Selected Firms in the Building Industry in Nigeria. Asian Development Policy Review, 7(1), 1-11.

Afza, T., & Mirza, H. H. (2010). Ownership structure and cash flows as determinants of corporate dividend policy in Pakistan. *International Business Research, 3*(3), 210–221.

Afza, T., & Mirza, H. H. (2011). Do mature companies pay more dividends? Evidence from Pakistani stock market. *Mediterranean Journal of Social Sciences*, *2*(2), 152–161.

Agnihotri, A. (2014), Impact of strategy-capital structure on firms' overall financial performance. Strategic Change, 23(1-2), 15-20.

Ahmad, H., & Javid, A. (2009). Dynamics and determinants of dividend policy in Pakistan (evidence from Karachi Stock Exchange non-financial listed firms). *International Research Journal of Finance and Economics*, *25*, 148–171.

Ahmed, K. (2019). Promising future of Pakistan's cement industry, *Pakistan and Gulf Economist*, March 11, 2019

Ahmeti, F., & Prenaj, B. (2015). A Critical Review of Modigliani And Miller's Theorem of Capital Structure. *International Journal of Economics, Commerce and Management, 3(6).*

Aivazian, V. and Booth, L. (2003) Do emerging market firms follow different dividend policies from U.S. firms?, *The Journal of Financial Research,* XXVI (3), 371–387

Akbar, M. (2010) Determinants of Dividend Policy in Manufacturing Sector of Pakistan: A Case Study from the Textile, Engineering and Cement Sector, DSpace BU Repository, available at: http://111.68.99.22:8080/xmlui/handle/123456789/3366

Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics, 84(3),* 488-500.

Akinleye, G. T., & Ademiloye, D. S. (2018). Dividend Policy and Performance Of Quoted Manufacturing Firms In Nigeria. *International Journal of Scientific & Engineering Research, 9(7).*

Akinleye, G. T., & Ademiloye, D. S. (2018). Dividend Policy and Performance Of Quoted Manufacturing Firms In Nigeria. *International Journal of Scientific & Engineering Research, 9(7).*

Ali, L., Batool, S., Khan, Y., & Ali, A. (2016). Growth andProfitability of Private Commercial Banks: Major Indicator of Its Dividend Policy. The Discourse, 2(2), 55-62.

Allen, F. and Michaely, R. (2003) Payout policy, Handbook of the Economics of Finance, 1, 337-429

Al-Malkawi, H.-A. N., Rafferty, M., & Pillai, R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence. International Bulletin of Business Administration(9), 171-200.

Almoneef, A., & Prasad, D. (2019). Corporate governance and firm performance in the Saudi banking industry. *Banks and Bank Systems, 14(1).*

Al-Najjar, B., & Hussainey, K. (2009). The association between dividend pay-out and outside directorships. *Journal of Applied Accounting Research, 10(1),* 4-19.

Al-Taleb, G., Al-Shubiri, F.N., & Al-Zoued. (2012). The relationship between ownership structure and dividend policy: An empirical investigation. *Review of International Comparative Management, 13(4),* 644- 657.

Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. The Journal of Risk Finance, 7(2), 136-145.

Amidu, M., & Abor, J. (2011). Determinants of the dividend payout ratio in Ghana. *The Journal of Risk Finance, 7(2),* 136-145.

Amina, H. (2015). Dividend Policy and Corporate Governance in Saudi Stock Market: Outcome Model or Substitute Model? *Corporate Ownership & Control, 12(2).*

Amollo, K. O. (2016). The Effects of Dividend Policy On Firm Value For Commercial Banks In Kenya.

Ang, J. S., & Ciccone, S. J. (2011). Dividend Irrelevance Theory.

Anouar, K. (2012). The impact of the catering theory and financial firms' characteristics on dividend decisions: the case of the French market. Retrieved from http://www.halshs.archives-ouvertes.fr/halshs-00765931/

Ansari, B., Gul, K., & Ahmad, N. (2017). Corporate Governance and Firm Performance: Automobile Assemblers Listed in Pakistan Stock Exchange (PSX). *Journal of Business Strategies, 11(2),* 125–140.

Ansari, S. (2018) Major Investments in the Automobile Sector of Pakistan, *Car Spirit Pk*, September, 24, 2018, available at: https://www.carspiritpk.com/2018/09/24/major-investments-in-the-automobile-sector-of-pakistan/

Ansoff, I. H. 1965. Corporate strategy: An analytic approach to business policy for growth

Arnott, R. D., & Asness, C. S. (2003). Surprise! Higher dividends = higher earnings growth. Financial Analysts Journal, 59(1), 70-87.

Asghar, A. (2019) Overview of auto sector of Pakistan, *Pakistan and Gulf Economist*, January, 14, 2019

Azhar, K. A., & Ahmed, N. (2019). Relationship Between Firm Size and Profitability: Investigation from Textile. International Journal of Information, Business and Management, 11(2).

Baker, H. K., & Powell, G. E. (1999). How corporate managers view dividend policy? Quarterly *Journal of Business and Economics, 38(2),* 17-35.

Baker, M., & Wurgler, J. (2004a). A catering theory of dividends. *The Journal of Finance, 59(3),* 1125-1165.

Baker, M., & Wurgler, J. (2004b). Appearing and disappearing dividends: The link to catering incentives. *Journal of Financial economics, 73(2),* 271-288.

Barbosa, N., A. P. Faria and V. Eiriz (2014) Industry- and firm-specific factors of innovation novelty, *Industrial and Corporate Change, 23(3),* 865-902.

Bar-Yosef, S., & Kolodny, R. (1976). Dividend policy and market theory. *The Review of Economics and Statistics, 58(2),* 181-190.

Basit, A., & Irwan, N. F. (2017). The Impact of Capital Structure on Firms Performance: Evidence from Malaysian Industrial Sector –A Case Based Approach. International *Journal of Accounting & Business Management, 5(2).*

Baumol, W.J. (1967). Macroeconomics of unbalanced growth: the anatomy of urban crisis. *The American Economic Review, 57(3),* 415-426.

Be Elmagrhia, M. H., Ntimb, C. G., Crossleyc, R. M., Malagilab, J., Fosud, S., & Vuc, T. V. (2017). Corporate governance and dividend pay-out policy in UK listed SMEs: The effects of corporate board characteristics.

Bebczuk, R. (2005). Corporate Governance and Ownership: Measurement and Impact on Corporate Performance and Dividend Policies in Argentina. Documento de Trabajo 59, 55. Universidad Nacional de La Plata, Argentina.

Berman, P. (1977). Federal programs supporting educational change. Factors Affecting Implementation and Continuation, VII.

Bhattacharya, S. (1979). Imperfect Information, Dividend Policy, and "The Bird in the Hand" Fallacy. *The Bell Journal of Economics, 10(1),* 259.

Bhattacharyya, N. (2007) Dividend policy: A review, *Managerial Finance,* 33 (1), 4 – 13

Bhattarai, Y. R. (2016). Capital Structure and Firm Performance: Evidence from Nepalese Manufacturing Companies. Journal for Studies in Management and Planning, 2(3).

Bittok, J. (2004). "The effect of dividend policy on the value of the firms quoted at the NSE". Unpublished MBA project. University of Nairobi.

Black, F. (1976). The Dividend Puzzle. *Journal of Portfolio Management, 2(2),* 5-8.

Black, F., & Scholes, M. (1974). The Effect of Dividend Yield and Dividend Policy on Common Stock Prices and Returns. *Journal of Financial Economics, 1,* 1-5.

Blume, M. (1980). Stock returns and dividend yields: some more evidence. *The Review of Economics and Statistics, 62(4),* 567-577.

Borad, S. B. (2019). Dividends – Forms, Advantages and Disadvantages, e-finance management. Retrieved from https://efinancemanagement.com/dividend-decisions/dividends-forms-advantages-and-disadvantages

Bose, C. (2010). Fundamentals of Financial Management (2nd edition ed.). New Delhi, India: Asoke K. Ghosh, PHI Learning Private Limited.

Bosse, D. A., & Phillips, R. A. (2016). Agency theory and bounded self-interest. *Academy of Management Review, 41(2),* 276-297.

Bostanci, F., Kadioglu, E. and Sayilgan, G. (2018) Determinants of dividend payout decisions: A dynamic panel data analysis of Turkish Stock Market, *International Journal of Financial Studies,* 6 (93), 1-16

Bozec, R., & Dia, M. (2014). Governance practices and firm performance: Does shareholders' proximity to management matter? *International Journal of Disclosure and Governance, 12(3),* 185–209.

Bragg, S. (2018). Types of dividends. Accounting tools. Retrieved from https://www.accountingtools.com/articles/2017/5/16/types-of-dividends

Brealey, R. A., & Myers, S. C. (2003). Principles of corporate finance (7th ed.). New York: McGraw Hill.

Brealey, R.A, and S.C. Myers, (2005), "Principles of Corporate Finance, 6th Edition", New York: McGraw-Hill.

Brennan, M. (1971). A Note on Dividend Irrelevance and The Gordon Valuation Model. The *Journal of Finance, 26(5),* 1115–1121.

Breuer, W., & Gürtler, M. (2008). 50 years after MM: recent developments in corporate finance. *Journal of Business economics, 6.*

Brian, L., Connelly, S., Certo, T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management,* 37-39.

Brigham, E. F., & Ehrhardt, M. C. (2010). Financial Management: theory and practice. Cengage South Western.

Bushra, A., & Mirza, N. (2015). The Determinants of Corporate Dividend Policy in Pakistan. The Lahore Journal of Economics, 20(2),77–98.

Bushra, M. (2010), Existence, The chemical sector of Pakistan, available at: http://bushrasmania.blogspot.com/2011/10/chemical-sector-in-pakistan.html

Business Jargons Finance (2017). Dividend Policy. http://businessjargons.com/dividend- Policy.html. Retrieved: May 23, 2017.

Byoun, S., Chang, K., & Kim, Y. S. (2016). Does corporate board diversity affect corporate payout policy? *Asia-Pacific Journal of Financial Studies, 45(1),* 48–101.

Cadbury, A. Report of the Committee on the Financial Aspects of Corporate Governance. London: Committee and Gee, 1992.

Caelers, L. (2010). The relation between dividend: Evidence on European listed firms. Unpublished Thesis.

Chaddad, F.R., & Mondelli, M.P. (2013). Sources of firm performance differences in the US Food Economy. *Journal of Agricultural Economics*, *64* (2), 382-404.

Chadha, S., & Sharma, A. K. (2015). Capital Structure and Firm Performance: Empirical Evidence from India. *Vision, 19(4*), 295–302.

Chauhan, J., Ansari, M. S. Taqi, M., & Ajmal, M. (2019). Dividend Policy and Its Impact on Performance of Indian Information Technology Companies. *International Journal of Finance and Accounting, 8(1),* 36-42.

Chelimo, J. K., & Kiprop, S. K. (2017). Effect of Dividend Policy on Share Price Performance: A Case of Listed Insurance Companies at the Nairobi Securities Exchange, Kenya. *International Journal of Accounting, Finance and Risk Management. 2(3),* 98-106.

Chen, G., Firth, M., Gao, D., & Rui, O. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance, 12(3),* 424-448.

Chen, J. (2019), Dividend Yield, *Investopedia*, May 4, 2019, available at: https://www.investopedia.com/terms/d/dividendyield.asp

Chirombo, S. J. (2017). The relationship between agency costs and dividend policy amongst listed firms at Nairobi Securities Exchange.

Coad, A. (2007). Testing the principle of 'growth of the fitter': the relationship between profits and firm growth. Structural Change and Economic Dynamics, 18, 370-386.

Coad, A., Daunfeldt, S.-O., Hölzl, W., Johansson, D., & Nightingale, P. (2014). High-growth firms: introduction to the special section. Industrial and Corporate Change, 23 (1), 91-112.

Conyon, M. J. (1997). Corporate governance and executive compensation. *International Journal of Industrial Organization, 15(4),* 493–509.

Conyon, M., & He, L. (2011). Executive compensation and corporate governance in China. *Journal of Corporate Finance, 17(4),* 1158–1175.

Corporate Finance Institute. (2018). Dividend. Retrieved from https://corporatefinanceinstitute.com/resources/knowledge/finance/dividend/

Cristea, C., & Cristea, M. (2017). Determinants of corporate dividend policy: evidence from Romanian listed companies. TEC Web of Conferences 126.

Dada, A. O., & Ghazali, Z. B. (2016). The Impact of Capital Structure on Firm Performance: Empirical Evidence from Nigeria. *IOSR Journal of Economics and Finance, 7(4),* 22-30.

Dadashi, I., Mansourinia, E., Emamgholipour, M., Bagheri, S. B., & Arabi, M. (2013). Investigating the effect of growth and financial strength variables on the financial leverage: Evidence from the Tehran Stock Exchange. *Management Science Letters, 3(4),* 1125- 1132.

Dalton, D., Daily, C., Ellstrand, A., & Johnson, J. (2009). Number of directors and financial performance. *The Academy of Management Journal, 42,* 674-686.

De Angelo, H., DeAngelo, L. (2006). The irrelevance of the MM dividend theorem. *Journal of Financial Economics, 79,* 293-315.

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial economics, 81(2),* 227-254.

DeAngelo, H., et al. (2009) Corporate Payout Policy, *Foundations and Trends® in Financ*e, 3, 95–287.

Deeptee, P. R., & Roshan, B. (2009). Signalling Power of Dividend on Firms' Future Profits. International Interdisciplinary Journal.

Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics, 89(1),* 62-82.

Denis, D.J., Denis, D.K., & Yost, K. (2002). Global diversification, industrial diversification, and firm value. *Journal of Finance, 57* (5), 1951-1979.

Dissanayake, K. T., & Bandara, D. (2018). Board Characteristics and Dividend Policy -The Study of Banking and Finance Sector in Sri Lanka. *International Conference on Business Innovation,* 25-26.

Djarraya, M. and C.F. Lee (1981). Residual Theory, partial adjustment, and information content on dividend payment decisions: An integration and extension, BEBR, Faculty Working Paper 760, University of Illinois.

Enekwe, C. I., Nweze, A. U., & Agu, C. (2015). The effect of dividend payout on performance evaluation: Evidence of quoted cement companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research, 3(11),* 40-59.

Epaphra, M., & Nyantori, S. S. (2018). Analysis of the determinants of dividend policy: Evidence from manufacturing companies.

Erhardt, E. C. (2018). Firm performance after high growth: A comparison of absolute and relative growth measures.

Fama, E. F. & French, K. R. (2001). Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay. *Journal of Financial Economics,* 60, 3– 43.

Fama, E. F., & Babiak, H. (1968). Dividend policy: An empirical analysis. *Journal of the American Statistical Association, 63,* 1132-1161.

Faraz, Z., Ishfaq, S. and Khan A. (2017) Dividend policy and shareholder's wealth: Evidence from cement sector of Pakistan, *International Journal of Information, Business and Management*, 9, (3)

Farrukh, K., Irshad, S., Khakwani, M. S., Ishaque, S., & Ansari, N. Y. (2017). Impact of dividend policy on shareholders wealth and firm performance in Pakistan. Cogent Business & Management, 4.

Farsio, F., Geary, A., & Moser, J. (2004). The relationship between dividends and earnings. *Journal for Economic Educators, 4(4),* 1-5.

Fatemian, F., & Hooshyarzadeh, M. (2016). Role of dividend policy determinants in multinational and domestic companies, evidence from Iran. Problems and Perspectives in Management, 14(3-si), 332-340.

Ferris, S. P., Jayaraman, N., & Sabherwal, S. (2009). Catering effects in corporate dividend policy: The international evidence. *Journal of Banking & Finance, 33(9),* 1730-1738.

Filatotchev, I., Su, Z., & Bruton, G. D. (2016). Market Orientation, Growth Strategy, and Firm Performance: The Moderating Effects of External Connections. *Management and Organization Review.*

Filho, W. L. et al., (2019) A review of the socio-economic advantages of textile recycling, *Journal of Cleaner Production,* 218, 10-20

Fluck, Z. (1998). Optimal financial contracting: Debt versus outside equity. *Review of Financial Studies, 11(2),* 383-418.

Fosberg, R.H. and Nelson, M.R. (1999). Leadership structure and firm performance. *International Review of Financial Analysis, 8(1),* 83-96.

Francis, J., Hanna, J., & Philbrick, D. (1998). Management communications with securities analysts. *Journal of Accounting and Economics, 24*, 363-394.

Frank M.Z. and Goyal V.K. (2004). "Capital structure decisions: Which factors are reliably important?" EFA 2004 Maastricht Meetings Paper No. 2464, Tuck Contemporary Corporate Finance Issues III Conference paper.

Frank, M. Z., & Goyal, V. K. (2007). Trade-off and pecking order theories of debt. Handbook of Corporate Finance: Empirical Corporate Finance. North Holland: Elsevier. 135-202.

Frankfurter, G. M., Bob, G., & Wood, J. (2002). Dividend Policy Theories and their Empirical Tests. *International Review of Financial Analysis 11*, 111-138.

Franklin A and Roni M, (1995). "Dividend Policy," in Jarrow Et al Eds Handbook in OR and MS, vol. 9.

Friend, I., & Puckett. M. (1964). Dividends and Stock Prices. American Economic Review 54(5), 656-682.

Fuertes-Callén, Y., & Cuellar-Fernández, B. (2019). Inter-relationship between firm growth and profitability in a context of economic crisis. *Journal of Business Economics and Management, 20(1),* 86-106.

Garcia-Fuentes, P. A., Ferreira,G.F.C.,& Kennedy, P. L. (2013). Economic performance of U.S. Multinational agribusinesses: Foreign direct investment and firm strategy. *Agribusiness*, *29*, 242-255.

Gaver, J. & Gaver, K. (1993). Additional evidence on the association between the investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Accounting and Economics 16*(1-3), 125-160.

Gayathri, M., & Murugesan, S. (2014). Stock Market Reaction during the Global Financial Crisis in India: Fractal Analysis. Asia Pacific *Journal of Management Research and Innovation, 10(4),* 403-412.

Genga, N. A. (2011). Clientele effects in dividends distributions for companies quoted at the NSE. Unpublished Thesis, University of Nairobi .

Ghosh, S., & Gosh, A. (2008). Do Leverage, Profitability influence Dividend Policy and the Future Value of Firm? Evidence from India. *Finance e Journal.*

Goel, P., & Ramesh, R. S. (2016). Impact of Corporate Governance Practices on Firm Profitability: A study of Selected Industries in India. *Journal of Finance, Accounting and Management, 7(2),* 53-74.

Gompers, P. A., Ishii, J. L. & Metrick, A. (2003) Corporate Governance and Equity Prices. *Quarterly Journal of Economics, 118 (1),* 107-155.

Gordon, M. J. (1959). Dividends, Earnings and Stock Prices. *Review of Economics and Statistics, 41(2) - part 1,* 99-105.

Gordon, M. J. (1962). The Savings, Investment and Valuation of a Corporation. Review of Economics and Statistics, 45(1), 37-51.

Gordon, M. J. (1963). Optimal Investment and Financing Policy. *Journal of Finance, 18(2),* 264-272.

Gordon, M. J., & Shapiro, E. (1956). Capital Equipment Analysis: The Required Rate of Profit. *Management Science, 3 (1),* 102-110.

Graham, B. D., & Dodd, C. C. (1962). Security Analysis, New York: McGraw-Hill, 4th edition, 486-488.

Gschwandtner, A., & Hirsch, S. 2016. What drives firm profitability? A comparative of the US and EU food processing industries. https://www.kent.ac.uk/economics/documents/research/papers/2016/1612.pdf Accessed 6th January 2018.

Gunawan, I. M. A., Pituringsih, E., & Widyastuti, E. (2018). The Effect of Capital Structure, Dividend Policy, Company Size, Profitability and Liquidity on Company Value (Study at Manufacturing Companies Listed on Indonesia Stock Exchange 2014-2016). International Journal of Economics, Commerce and Management, 6(6).

H´yblov´a, E. (2014). Analysis of mergers in Czech agricultural companies. *Agricultural Economics*, *60* (10), 441-448.

Hafeez, M. M., Shahbaz, S., Iftikhar, I., & Butt, H. A. (2018). Impact of Dividend Policy on Firm Performance: (Evidence from the Manufacturing firms in Pakistan). International *Journal of Advance Study and Research Work, 1(4).*

Haleem, F., Rehman, I.V., & Javid, A.Y. (2011). The dividend policy in manufacturing sector of Pakistan: The perception of corporate managers. *Journal of Economics and Behavioral Studies, 3(1),* 63-75.

Hamdouni, A. (2012). Dividend Policy and Corporate Governance in Saudi Stock Market. *Archives Des Sciences Journal, 65,* 24-26.

Hamil, P. A. and Al-Shattarat, W. (2012) What Determines the Dividend Payout Ratio for Jordanian Industrial Firms?, *Journal of Emerging Market Finance,* 11 (2), 161-187

Harjito, D.Agus and Martono. 2010. Financial Management, Faculty of Economics Ekonisia UII, Yogyakarta.

Hasan, M. (2015). Dividend Payout Ratio and Firm's Profitability. Evidence from Pakistan. *Theoretical Economics Letters, 5,* 441-44.

Hassan, A.U., Tanveer, M., Siddique, M., & Mudasar, M. (2013). Tax shield and its impact on corporate dividend policy: evidence from Pakistani stock market. *Ibusiness,* 184–188.

He, Z., Li, K., & Lu, R. (2012) Catering to the illusion of Nominal share prices: Evidence from the high dividend payout of mutual funds in China. Retrieved from http://www.ccfr.org.cn/cicf2012/enrc_demo.php

Healy, P., & Palepu. K. (1995). The challenges of investor communication - The case of CUC International, Inc. *Journal of Financial Economics, 38,* 111-140.

Ibrahim, I. A. (2017). Effect of dividend policy on financial performance of agricultural firms listed at Nairobi securities exchange.

Idewele, I. O. E., & Murad, B. A. (2019). Dividend policy and financial performance: a study of selected deposit money banks in Nigeria. *African Journal of Business Management, 13(7),* 239-255.

Ikunda, C., Muiru, M., & Kamau, S. M. (2016). The Impact of Corporate Governance on Dividend Payout of Manufacturing Firms Listed at the Nairobi Securities Exchange. *Jo-urnal of Finance and Accounting. 4(5),* 254-261.

Iqbal, K., & Kakakhel, a. S. (2016). Corporate Governance and its Impact on Profitability of the Pharmaceutical Industry in Pakistan. Journal of Managerial Sciences, 10(1).

Isidro, H., & Marques, A. (2016). Signaling Financial Performance with Alternative Performance Measures.

Islam, K., Bilal, A. R., Rehman, C. A., & Ilyas, M. (2017). Literature Review on Dynamics and Determinants of Dividend Policy in Pakistan Evidences from Pakistan. *Review of Public Administration and Management, 5*, 218.

Jabbouri, I. (2016). Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets. RES International Business Finance, 37, 283–298.

Jaffe, F. F., Westerfield, R. W., and Ross, S. A. (2002) Administração financeira, Corporate Finance, 2

Jang-Chul, K., & Young, S. K. (2011). Dividend Payouts and Corporate Governance Quality: An Empirical Investigation. *The Financial Review, Eastern Finance Association, 46(2),* 251-279.

Javed, O. (2019) Textile Sector of Pakistan, *Global Village Space,* 17 January 2019

Jensen, M, C., & Meckling, W. H. (1976). Theory of the Firm, Managerial Behavior, Agency Costs and Ownership Structures, Journal of Financial Economics, 3(4), 305-360.

Jibran, S., Wajid, S. A., Waheed, I., & Masood, T. (2012). Pecking at Pecking Order Theory: Evidence. *Journal of Competitiveness*, 4(4), 86-95.

Jozwiak, B. K. (2014). Determinants of Dividend Policy: Evidence from Polish Listed Companies,Procedia Economics and Finance, 473-477.

Kabajeh, M. A. M.,et al. (2012) The relationship between the ROA, ROE and ROI ratios with Jordanian insurance public companies market share prices, *International Journal of Humanities and Social Science,* 2(11), 115-120

Kajola, S. O., Adewumi, A. A., Oworo, O. O. (2015). Dividend pay-out policy and firm financial performance: Evidence from Nigerian listed non-financial firms. *International Journal of Economics, Commerce and Management, 3(4),* 1-12.

Kale, J. R. & Noe, T. H. (1990). Dividends, uncertainty and underwriting costs under asymmetric information. The Journal of Financial Research, 13, 265-277.

Kanwal, M., & Hameed, S. (2017). The Relationship between Dividend Payout and Firm Financial Performance. *Research in Business and Management, 4(1),* 5-13.

Kapoor, S., Anil, K., & Misra, A. (2010). Dividend policy determinants of Indian FMCG sector: A factorial analysis. Journal of Modern Accounting and Auditing, 6, 50-64.

Kartikasari, D. and Merianti, M. (2016). The Effect of Leverage and Firm Size to Profitability of Public Manufacturing Companies in Indonesia, International Journal of Economics and Financial Issues, 6(2), 409-413.

Kawshala, H., & Panditharanthna, K. (2017). The effect of dividend policy on corporate profitability an empirical study on beverage, food and tobacco industry Sri Lanka. *International journal for accounting, 2(3),* 32-34.

Kazempour, M., & Aghaei, M. A. (2015). Capital Structure and Firms Performance in Tehran Stock Exchange. International Journal of Management, Accounting and Economics, 2(2), 149-152.

Kennedy, O. F. (2015). Dividend Policy and Firms' Performance: A Case of Listed Banks in Ghana.

Khalil, S. (2004) Automobile Industries in Pakistan will face the new challenges in the Post WTO Scenario, *Pakistan Institute of Quality Control,* 2004

Khan, M. N. et al., (2016) Impact of Dividend Policy on Firm Performance: An Empirical Evidence from Pakistan Stock Exchange, *American Journal of Economics, Finance and Management,* 2 (4), 28-34

Khan, M. N., Nadeem, B., Islam, F., & Salman, M., & Gill, H. M. I. S. (2016). Impact of Dividend Policy on Firm Performance: An Empirical Evidence from Pakistan Stock Exchange. *American Journal of Economics, Finance and Management, 2(4).*

Khan, M. S., Shah, S., & Baber, S. U. (2018). Impact of Dividend Policy on Shareholders' Wealth: An Empirical Analysis of Listed Insurance Companies in Pakistan. *Journal of Business and Tourism, 4(1).*

Khan, N. U., Jehan, Q. S., & Shah, A. (2017). Impact of taxation on dividend policy: Evidence from Pakistan. *Research in International Business and Finance, 42,* 365–375.

Khan, S., Anuar, M. A., Ramakrishnan, S., & Malik, M. F. (2015). A study on the effect of dividend payout ratio and firm profitability. Sci. Int, 27(2), 1403-1406.

Khodavandloo, M., Zakaria, Z., & Nassir. A. M. (2017). Capital Structure and Firm Performance During Global Financial Crisis. International Journal of Economics and Financial, 7(4). 498-506.

Kiel, G., & Nicholson, G. (2003). Board Composition and Corporate Performance: how the Australian experience informs contrasting theories of corporate governance. Corporate Governance, 11(3), 189-205.

Kirk, D. (2016). Dividend policy as a key part of capital management for insurers. Actuarial Society of South Africa.

Kolawole, E. M. S. S., & Lucky, O. (2018). Effect of dividend policy on the performance of listed oil and gas firms in Nigeria. *International Journal of Scientific and Research Publications (IJSRP), 8(6).*

Komrattanapanya, P., & Suntrauk, P. (2013). Factors Influencing Dividend PayoutinThailand: A Tobit Regression Analysis. International Journalof Accounting and Financial Reporting, 3(2).

Korent, D., Đunđek, I., & Čalopa, M. K. (2014). Corporate governance practices and firm performance measured by Croatian Corporate Governance Index (CCGI®). *Economic Research-Ekonomska Istraživanja, 27(1),* 221-231.

Kouser, R., Bano, T., Azeem, M., & Hassan, M. (2012). Inter-relationship between profitability, growth and size: A case of non-financial companies from Pakistan. *Pakistan Journal of Commerce and Social Sciences, 6(2),* 405-419.

Kowalewski, O., Stetsyuk, I. & Talavera, O. (2008). Does Corporate Governance Determines Dividend Payouts in Poland? *Journal Post-Communist Economies, 20(2),* 203-208.

KPMG (2013), Investment in Pakistan, URL: http://www.kpmg.com/PK/en/IssuesAndInsights/ArticlesPublications/Documents/Investment-in-Pakistan2013.pdf,

Kumar, N. and Kaur, K. (2016). Firm Size and Profitability in Indian Automobile Industry: An Analysis, Pacific Business Review International, 8(7), 67-78.

Kuncová, M., Hedija, V., & Fiala, R. (2016). Firm Size as a Determinant of Firm Performance: The Case of Swine Raising. AGRIS on-line Papers in Economics and Informatics, 8(3), 77 - 89.

Kuo, J.M., Philip, D., & Zhang, Q.J. (2013). What drives the disappearing dividends phenomenon? *Journal of Banking & Finance, 37*, 3499-3514.

Kuzucu, N. (2015). Determinants of Dividend Policy: A Panel Data Analysis for Turkish Listed Firms. International Journal of Business and Management, 10(11).

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. (2000). Investor Protection and Corporate Governance. *Journal of Financial Economics, 58 (12)*, 327.

Lai, T. K., Shan, L. H., & Mun, H. W. (2016). The Impact of Dividend Policy on Firm performance in Consumer Product and Trading/Services Sector in Malaysia. International *Journal for Research in Business, Management and Accounting, 90(2).*

Lamyaa, R., & Karima, T. (2017). Dividend Policy and Taxation: A Review. *International Journal of Economics, Commerce and Management United Kingdom, 5(3).*

lden, S., Fister, T. and Knapp, B. (2005). Dividends and Directors: Do Outsiders Reduce Agency Costs? *Business and Society Review, 110(2)*, 171-180.

Lee, C. F. (1976). Functional form and the dividend effect in the electric utility industry. *Journal of Finance, 31(5),* 1481-1486.

Lee, C. F., & Forbes, S. W. (1980). Dividend policy, equity value, and cost-of-capital estimates for the property and liability insurance industry. *Journal of Risk and Insurance, 47(2),* 205-222.

Lestari, H. S. (2017). Determinants of corporate dividend policy in Indonesia. IOP Conference Series: Earth & Environmental Science, 106.

Leuz, C., & Verrecchia, R. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research, 38,* 91-124.

Levin, A., Lin, C. F., Chu, C. (2002). Unit Root Testing in Panel Data: Asymptotic and Finite-Sample Properties. *Journal of Econometrics*, 108 (1), 1-24.

Li, W., & Lie, E. (2006). Dividend changes and catering incentives. *Journal of Financial Economics, 80(2),* 293- 308.

Lintner, J. (1956). Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes. *American Economic Review, 46 (2),* 97-113.

Lintner, J. (1962). Dividends, Earnings, Leverage, Stock Prices and Supply of Capital to Corporations. *The Review of Economics and Statistics, 64,* 243-269.

Lipson, M., Maquieira, C. P. & Megginson, W. (1998). Dividend initiations and Earnings surprises. *Financial Management, 24,* 36-45.

Lundgren, B., & Lantz, C. E. (2016). Ownership structure's effect on dividend policy; Evidence from publicly listed Swedish firms.

M'rabet, R., & Boujjat, W. (2016). The Relationship Between Dividend Payments and Firm Performance: A Study of Listed Companies in Morocco. *European Scientific Journal, 12(4).*

Magnusson, T., & Enebrand, A. (2018). Dividend policy and its impact on firm valuation: A study of the relationship between dividend policy and stock prices on the Swedish market.

Maheshwari, S. N. (1999). Elements of Financial Management, Sultan Chand and Sons, p. 71.

Maja, P. and V. Josipa, 2012. Influence of firm size on its business success. Croatian Operational Research Review, 3(1), 213-223.

Maladjian, C., & Khoury, E. R. (2014). Determinants of the Dividend Policy: An Empirical Study on the Lebanese Listed Banks. International Journal of Economics and Finance, 6(4), 240-256.

Malkawi, H. A. N., Rafferty, M., & Pillai, R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence, International Bulletin of Business Administration, 9.

Malombe, G. M. (2011) The effects of dividend policy on profitability of SACCOs with FOSAs in Kenya, University of Nairobi

Manjunatha, K., & Akash, S. B. (2018). Dividend Policy and Financial Performance of Indian Cement Companies –An Empirical Study. *Journal of Management (JOM), 5(6),* 157-165.

Manos, R. (2002) Dividend policy and Agency theory: Evidence on Indian Firms, *Finance and Development Research Programme,* Working Paper Series no. 41

Mayech, A. K. (2012). Effect of dividend policy on financial performance of companies quoted at Nairobi securities exchange.

Mayer, F. (2007). Corporate Governance, Competition and Performance, Enterprise and Community.

Mburu, K. N. (2013). Applicability of Tax Preference Theory for Companies Listed in The Nairobi Securities Exchange.

McKelvie, A., and Wiklund, J. 2010. Advancing firm growth research: A focus on growth mode instead of growth rate. *Entrepreneurship Theory and Practice*, 34(2), 261-288.

Meckling, W. H. and Jensen, M. C. (1976) Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure.

Metrick, A., & Ishil, J. (2002). Corporate Governance and Equity Prices. *Quarterly Journal of Economics, 113,* 653-691.

Michael, N. B. (2016). Corporate Governance Practices and Dividend Policies of Quoted Firms in Nigeria. *International Journal of Asian Social Science*, 6(3), 212-223.

Michael, N. B. (2016). Corporate Governance Practices and Dividend Policies of Quoted Firms in Nigeria. *International Journal of Asian Social Science, 6(3),* 212-223.

Miller, M. H. and Modigliani, F. (1961) Dividend Policy and the Valuation of Shares, *Journal of Business,* October, 1961

Miller, M. H., & Modigliani, F. (1961). Dividend Policy, growth and the valuation of shares. *Journal of Business, 34,* 411-433.

Miller, M. H., & Scholes, M. S. (1982). Dividends and Taxes: Some empirical evidence. *Journal of Political Economy, 96,* 334-391.

Mirza, M. S and Manarvi, I. A. (2011) Analysis of Technological advancements in Pakistani Automobile Car Industry, *Global Journal of Research in Engineering*, 11 (3)

Mishina, Y., Pollock, T. G., & Porac, J. F. (2004). Are more resources always better for growth? Resource stickiness in market and product expansion. Strategic Management Journal, 25(12), 1179– 1197.

Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Review, 48(3), 261-297.

Modigliani, F., & Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *American Economic Review, 53(3),* 433-443

Molnar, M., Chen, W., & Wang, B. (2017). Corporate Governance and Firm Performance in China Economics Department Working Papers No. 1421.

Monitoring Report (2018), Chemical industry seeks government assistance to establish petrochemical complex, *Pakistan Today Profit*, June, 9, 2018

Monogbe, T.G., & Ibrahim, A. A. (2015). Dividend Policy on Financial Performance: A Case Study of Selected Registered Firm in Nigeria. *Research Journal of Finance and Accounting, 6(20),* 1-7.

Montalvan, S. M., Barilla, C. D., Ruiz, G. D., & Figueroa, D. L. (2017). Corporate Governance and Dividend Policy in Peru: Is there any link? *Revista Mexicana de Economʹıa y Finanzas,12(2),* 103-116.

Morrison, T. and James, F. L. (2017) Dividend policy and corporate performance: A multiple model analysis, *Equatorial Journal of Finance and Management Sciences*, 2 (2), 1-16

Motley, F. (2017). What is earning per share? https://www.fool.com/knowledge-center/earnings-per-share.aspx. Retrieved May 28, 2017.

Moyen, N. (2004). Investment–cash flow sensitivities: Constrained versus unconstrained firms. *Journal of Finance*, *59*(5), 2061–2092.

Muhammad, H., Rehman, A. U., & Waqas, M. (2016). The Effect of Corporate Governance Practices on Firm Performance: Evidence from Pakistan. *East Asian Journal of Business Management 6(1),* 5-12.

Myers, S. C. (1984). The capital structure Puzzle. *Journal of Finance, 39(3),* 575-592.

Myers, S. C., Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13(2),* 187-221.

NainTarasarfarzRaja, A. (2014). Impact of dividend policy on shareholder wealth. *IOSR Journal of business and management (IOSR-JBM), 16(1),* 24-33.

Nasimiyu, K. V. (2016). Effect of dividend policy on share price of manufacturing firms listed on Nairobi Stock Exchange.

Nassar, S. (2016). The impact of capital structure on Financial Performance of the firms: Evidence from Borsa Istanbul. *Journal of Business & Financial Affairs, 5(2).*

Nduta C. N. (2016). The effect of dividend policy on the financial performance of firms listed at the Nairobi securities exchange. Master Theses - College of Humanities and Social Sciences.

Nenu, E. A., Vintila, G., & Gherghina, S. C. (2018). The Impact of Capital Structure on Risk and Firm Performance: Empirical Evidence for the Bucharest Stock Exchange Listed Companies. *International Journal of Financial Studies, 6(41).*

Neves, E. & Torre, C. (2006). Dividends: New evidence on the catering theory. " New Trends in Management. Retrieved from http://www.eco.uva.es/empresa/uploads/dt_14_06.pdf.

Nur Fazrina Sijol, N. F., & Basit, A. (2016). Impact of Dividend Policy on Shareholder's Wealth: A study on Manufacturing Industry listed in NASDAQ, America. *International Journal of Accounting & Business Management, 4(2).*

Nyandumo, E. O. (2016). The Effect of Profitability on Dividend Policy for Manufacturing Companied Listed at The Nairobi Securities Exchange.

O'Hara, P. (2013). What future for the regions, in B. Reynolds and S. Healy (eds.), A future worth living for: Sustainable foundations and frameworks, 147-172, Dublin: *Social Justice Ireland*

Odalo, S. K., Njuguna, A., & Achoki, G. (2016). Relating Sales Growth and Financial Performance in Agricultural Firms Listed in The Nairobi Securities Exchange In Kenya. *International Journal of Economics, Commerce and Management, 4(7).*

Odeleye, A. T. (2017). Quality of Corporate Governance on Dividend Payouts: The Case of Nigeria, Working Paper Series N° 250, African Development Bank, Abidjan, Côte d'Ivoire.

Odum, A. N. et al., (2019) Impact of Dividend Payout Ratio on the Value of Firm: A Study of Companies Listed in the Nigerian Stock exchange, *Indonesian Journal of Contemporary Management Research,* 1 (1), 25-34

Ofori-Sasu, D., Abor, J. Y., & Osei, A. K. (2017). Dividend Policy and Shareholders' Value: Evidence from Listed Companies in Ghana. *African Development Review, 29(2),* 293–304.

Ofori-Sasu, D., Abor, J. Y., & Osei, A. K. (2017). Dividend Policy and Shareholders' Value: Evidence from Listed Companies in Ghana. *African Development Review, 29(2),* 293–304.

Okoro, C. O., Ezeabasili, V., & Alajekwu, U. B. (2018). Analysis of the determinants of dividend payout of consumer goods companies in Nigeria. Economic Series.

Olawale, L. S., Ilo, B. M., & Lawal, F. K. (2017). The effect of firm size on performance of firms in Nigeria. *AESTIMATIO, THE IEB INTERNATIONAL JOURNAL OF FINANCE*, *15*, 2-21.

Oloidi, A. G. and Adeyeye, P. O. (2014) Determinants of Dividend per Share: Evidence from the Nigerian Stock Exchange, *International Journal of Economics and Empirical Research,* 2(12), 496-501.

Olufade, S. (2018). Impact of Dividend Policy on Firm Performance in the Food and Beverage Industry Comparison between Nigeria and Finland.

Omodero, C. O., & Amah, K. O. (2017). Analysis of Dividend Policy and Its Impact on Shareholders Wealth Maximization in Nigerian Firms (A Study of Brewery Industry). *Applied Economics and Finance, 4(5).*

Ong, A. S. K., Lim, A. S., Lim, M. Y., Ow, Y. P. Y., & Tan, L. L. (2014). The impact of dividend policy on shareholders' wealth: evidence on Malaysia's listed food producer sector. UTAR.

Opler, T. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics, 52(1),* 3-46.

Oskar, K., Ivan, S., Oleksandr, T & Diw, B. (2007). Does Corporate Governance Affect Dividend Policy? Evidence from Poland.

Oyelade, A. O. (2019). The Impact of Firm Size on Firms Performance in Nigeria: A Comparative Study of Selected Firms in The Building Industry in Nigeria. *Asian Development Policy Review*, *7(1),* 1-11.

Pagano, M. (2005). The Modigliani-Miller theorems- a cornerstone of finance. Centre for studies in economics and finance.

Pahi, D., & Yadav, I. S. (2018). Role of Corporate Governance in Determining Dividend Policy: Panel Evidence from India. *International Journal of Trade, Economics and Finance, 9(3).*

Pakistan Cement Production Report (2019) Trading economics, Available at: https://tradingeconomics.com/pakistan/cement-production

Pan, J. (2012). Evaluating theories of capital structure in different financial systems: an empirical analysis. Venezia: Universita Ca'foscari.

Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of Theory and Evidence on Problems and Perspectives. *Indian Journal of Corporate Governance, 10(1)*, 74–95.

Paracha, S. (2012) Comparative analysis of Pakistan and India chemical industry, *Pakistan Institute of Trade and Development*, Working Paper 2012

Park, K. S., & Rhee, K. J. (2017). Dividend Policy and the Sensitivity of Firm Value to Investment.

Penrose, E. T. (1959). The Theory of the Growth of the Firm, 1st edition, Oxford University Press, Oxford.

Penrose, E.T. (1959). The Theory of the Growth of the Firm. Oxford: Basil Blackwell.

Petit, R. (1977) Taxes, Transaction Costs and Clientele Effects of Dividends, *Journal of Financial Economics*, 419 – 436

Pietersz, G. (2016). Agency Theory. http://moneyterms.co.uk/agency/

Pouraghjan, A. A., Tabari, Y.N.A, Ramezani, A., Mansourinia, E. EmmaghoLipour, M. and Majd, P. (2012). Relationship between cost of capital and accounting criteria of corporate performance evaluation: evidence from Tehran Stock Exchange. World Applied Science Journal,

Prace, D. (2004). Inter-industry differences in capital structure: The evidence from Central Europe. Dissertation, Univerzita Karlova V Praze.

Pruitt, S. W., & Gitman, L. J. (1991). The interactions between the investment, financing and dividend decisions of major US firms. *Financial Review, 26(3),* 409-430.

Prusty, T., & Al-ahdal, W. M. (2018). Corporate Governance and profitability: Evidence from Indian IT companies. Financial Markets, Institutions and Risks, 2(3).

Rafindadi, A. A., & Bello, A. (2019). Is Dividend Payment of any Influence on Corporate Performance in Nigeria? Empirical Evidence from Panel Cointegration. *International Journal of Economics and Financial Issues, 9(2), 48*-58.

Raheja, C. (2005). Determinants of board size and composition: A theory of corporate boards. *Journal of Financial and Quantitative Analysis, 40,* 283-306

Rahman, A. (2018). Effect of Dividend Policy on Firm's Performance: A Case Study of Cement Sector of Pakistan. *SEISENSE Journal of Management, 1(5),* 6-15.

Ramachandran, A., & Packkirisamy, V. (2010). The Impact of Firm Size on Dividend Behavior: A Study with Reference to Corporate Firms across Industries in India. Managing Global Transitions, 8(1).

Ramcharran, H. (2001) Inter-firm linkages and profitability in the automobile industry: The implications for supply chain management, *Journal of Supply Chain Management,* 37(4), 11-17.

Ramdani, D., & Van, W. (2009). Board independence, CEO duality and firm performance: A quantile regression analysis for Indonesia, Malaysia, South Korea and Thailand. University of Antwerp Press.

Razaq, I. T., & Akinlo, A. E. (2017). Interrelationship Between Size, Growth and Profitability of Non-Financial Firms in Nigeria. *European Journal of Business and Management, 9(7).*

Razaq, I. T., & Akinlo, A. E. (2017). Interrelationship Between Size, Growth and Profitability of Non. European Journal of Business and Management, 9(7).

Rechner P. et Dalton D., (1991). CEO Duality and Organizational Performance: A Longitudinal Analysis. *Strategic Management Journal, 12,* 155- 160.

Rehman, O. U. (2016). Impact of Capital Structure and Dividend Policy on Firm Value. Journal of Poverty, Investment and Development, 21.

Ringborg, F., & Dai, J. (2016). Determinants of Dividend Policy in Sweden.

Ross, S. (1977). The determination of financial structure: the incentive-signaling approach. *Bell Journal of Economics, 8(1),* 23–40.

Ross, S. A., Westerfield, R. W., & Jaffe, J. (2002). Corporate Finance (6th ed.), McGraw-Hill Companies.

Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout

Rustagi, R. P. (2001). Financial Management, Galgotia Publishing Company, 806.

S´aez, M. & Guti´errez, M. (2014) Dividend Policy with Controlling Shareholders. European Corporate Governance Institute (ECGI). Law Working Paper No. 250/2014.

Salteh, H.M., Ghanavati, E, Khanqah, V.T. and Khosroshali, M. (2012). Capital structure and Firm performance: evidence from Tehran Stock Exchange. International Proceedings of Economic Development and Research, 43, 225 -230.

Sanders, W. G., & Hambrick, D. C. (2007). Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal*, *50*, 1055–1078.

Sang, W., Shisia, A., Gesimba, P., & Kilonzo, T. (2015). The Relationship Between the Dividend Payout Ratio and The Capital Structure of Listed Companies at Nairobi Securities Exchange, Kenya In the Industrial and Allied Sector. *International Journal of Economics, Commerce and Management*, 3(10).

Sangosanya, A.O. (2011). Firms growth dynamics in Nigeria's manufacturing industry: A panel analysis, *Journal of Applied Econometric Review*, 1(1), 1-18.

Sarwar, M.S. (2013) Effect of Dividend Policy on Share Holder's Wealth: "A Study of Sugar Industry in Pakistan, *Global Journal of Management and Business Research Finance,* 13 (7),

Sawicki, J. (2005). An Investigation into the Dividend of Firms in East Asia. Working Paper, Nanyang Technological University, Singapore.

Sawicki, J. (2009). Corporate governance and dividend policy in Southeast Asia pre-and post-crisis. *European Journal of Finance, 15(2),* 211-230.

Selvam, M., Gayathri, J., Vasanth, V., Lingaraja, K., & Marxiaoli, S. (2016). Determinants of Firm Performance: A Subjective Model. *International Journal of Social Science Studies*, 4(7).

Selvam, M., Vanitha, S., Gayathri, J. Bennet, E., & Nageswari, P. (2010). The Determinants of shareholders' wealth of acquiring firms in India. *Journal of Modern Accounting and Auditing*, 6(1), 46-54.

Shah, A. S. (2015). Dividend policy-A theory.

Shah, S., Tahir, S. H., Anwar, J., & Ahmad, M. (2016). Does Size Matter in Determining Firms' Performance? A Comparative Analysis of Listed Companies. *City University Research Journal*, 6(2), 344-353.

Shamsudin, S. M., Abdullah, W. R. W., & Osman, A. H. (2015). Corporate Governance Practices and Firm Performance after Revised Code of Corporate Governance: Evidence from Malaysia. The

6th International Conference on Governance, Fraud, Ethics and Social Responsibility (iConGFESR 2015).

Shao, L., C.C.Y. Kwok and Guedhami, (2008). Is national culture a missing piece of the dividend puzzle? Paper Presented on July 2, 2008 at the Academy of International Business Annual Conference, Milan. Available from www.aib.msu/events [Accessed 31/3/2010].

Shehu, M. (2015). Board characteristics and dividend payout: Evidence from Malaysian public listed companies. *Research Journal of Finance and Accounting, 6(16),* 35-40.

Sheikh, A. A., Naz, S., & Abbasi, M. N. (2016). Communal Determinants of Dividend Policy and Capital Structure: Evidence from Pakistan. Pakistan Journal of Social Sciences, 36(2), 771-780.

Sheikh, A. N. and Siddiqui, D. A. (2019). Effects of Textile Policy on Profitability and Dividend Payout Ratio of Textile Industry in Pakistan, *European Academic Research*, 7(2), 940-967

Sierpinska, M. (1999). Dividend policies of corporate firms. The Journal of Finance 24 (5): 97–121.

Simon-Oke, O. O., & Ologunwa, O. P. (2016). Evaluation of The Effect of Dividend Policy on The Performance of Corporate Firms in Nigeria. *FUTA Journal of Management and Technology*, 111-120.

Singh, S., & Singh, A. (2018). Study on the Relationship of Firm's Performance with Capital Structure-Evidence from Taiwan. *International Journal of Economics and Financial Issues, 8(3).*

Smith, A. (1937). The wealth of nations. Edited by Edwin Cannan, 1904. New York, NY: Modern Library.

Smith, C.W. & Watts, R, L. (1992). The investment opportunity set and corporate financing,

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics, 87 (3),* 355-374.

Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *The American Economic Review, 92 (3),* 434-459.

Stiglitz, J. (1969). A Re-Examination of the Modigliani-Miller Theorem. *American Economic Review, 59(5),* 784-93.

Stulz, R. M. (2000). Merton Miller and modern finance. *Financial Management*, 29(4), 119–131.

Sudjoko., & UgySoebiantoro, 2007. Effect of Shareholding Structure, Leverage, Factor Against Internal and External Factors Corporate Values, Economic Journal of Management, Faculty of Economics, University of Petra.

Tahir, M. S., Alifiah, M. N., Arshad, M. U., & Saleem, F. (2016). Financial Theories with a Focus on Corporate Cash Holding Behavior: A Comprehensive Review. *International Journal of Economics and Financial Issues, 6(S3),* 215-219.

Tailab, M. M. (2014). Analyzing factors effecting profitability of non-financial US firms. *Research Journal of Finance and Accounting, 5,* 17-26.

Tan, S.L., Hamid, N.I.N.A. (2016), Capital structure and performance of Malaysia plantation sector. Journal of Advanced Research in Social and Behavioural Sciences, 3(1), 34-45.

Tanushev, C. (2016). Theoretical Models of Dividend Policy. *Economic Alternatives, 3*.

Tauseef, S. and Lohano, H. D. (2017) Capital structure and profitability of firms in the corporate sector of Pakistan, *Business Review,* 12 (1), 50-58

Thafani, A. R., & Abdullah, M. A. (2014). Impact of Dividend Payout on Corporate. Advances in Economics and Business Management, 1(1), 27-33.

The combined code on corporate governance, Financial Reporting Council, London, 2003.

The Dividend Irrelevance of Miller and Modigliani (1961), The Sarbanes-Oxley Act of 2002, and Rule 702 of the Federal Rules of Evidence of 2000.

Thirumagal, P. G., & Vasantha, S. (2015). Impact of Dividend on Firm Performance with Reference to Leasing and Hire Purchase Industry in India. *International Journal of Engineering and Management Research, 5(4),* 249-255.

Toby, A. J. (2014). Empirical Test of the Dividend Policy Irrelevance Hypothesis in the Nigerian Context. *Research Journal of Finance and Accounting, 5(6).*

Tsuji, C. (2010). A test of the catering theory of dividends: The case of the Japanese electric appliances industry. *Journal of Management Research, 2(2).*

Turakpe, M., & Legaaga, F. J. (2017). Dividend Policy and Corporate Performance: A Multiple Model Analysis. *Equatorial Journal of Finance and Management Sciences, 2 (2),* 1-16.

Turner, J. D., Ye, Q., & Zhan, W. (2011). Dividend policy in an early capital market, Britain 1825-70. Retrieved from http:// www.efmaefm.org/0EFMAMEETINGS/.../2011-Braga/.../0088.pdf.

Uremadu, S. O., & Onyekachi, O. (2018). The Impact of Capital Structure on Corporate Performance in Nigeria: A Quantitative Study of Consumer Goods Sector. *Current Investigations in Agriculture and Current Research, 5(4).*

Uwuigbe O. R. (2013). Determinants of dividend policy: A study of selected listed firms in Nigeria. *Change and Leadership,* 107-119.

Uyar, A., Kuzey, C. (2014). Determinants of corporate cash holdings: Evidence from the emerging market of Turkey. *Applied Economics, 46(9),* 1035-1048.

Valeiras, E. L., Conde, J. G., & Rodriguez, T. F. (2016). Firm Size and Financial Performance: Intermediate Effects of Indebtedness. Agri Business, 00 (00), 1–12.

Van Essen, M., Otten, J., & Carberry, E. J. (2015). Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management, 41(1),* 164–202.

Van Pelt, T. (2013). The effect of board characteristics on dividend policy,' Unpublished working paper, Tilburg School of Economics and Management, Department of Finance. Tilburg University: The Netherlands, 1–62.

Velnampy, T., Nimalthasan, P., & Kalaiarasi, K. (2014). Dividend Policy and Firm Performance: Evidence from the Manufacturing Companies Listed on the Colombo Stock Exchange. *Global Journal of Management and Business Research: Administration and Management, 14(6).*

Verrecchia, R. (2001). Essays on disclosure. *Journal of Accounting and Economics, 32,* 97-180.

Walter, J. E. (1963). Dividend Policy: Its Influence on the Value of Enterprise. *Journal of Finance, 18(2),* 280-291.

Waluyo, W. (2017). Firm Size, Firm Age, and Firm Growth on Corporate Social Responsibility in Indonesia: The Case of Real Estate Companies. European Research Studies Journal, 20(4A), 360-369.

Wasiuzzaman, S. (2014). Analysis of corporate cash holdings of firms in Malaysia. *Journal of Asia Business Studies, 8(2),* 118-135.

Weston F and Brigham, (1981), “Managerial Finance” 7th Edition, The Dryden press.

Williams, J. B. (1938). The Theory of Investment Value, Amsterdam: North Holland.

Wu, C. (1996). Taxes and dividend policy. *International Review of Economics and Finance,5(3),* 291–305.

Yahya, F., & Ghazali, Z. B. (2017). Effectiveness of board governance and dividend policy as alignment mechanisms to firm performance and CEO compensation. Cogent Business & Management.

Yameen, M., Farhan, N. H., Tabash, M. I. (2019). The impact of corporate governance practices on firm’s performance: An empirical evidence from Indian tourism sector. *Journal of International Studies, 12(1),* 208-228.

Yegon, C. et al. (2014) Effects of Dividend Policy on Firm’s Financial Performance: Econometric Analysis of Listed Manufacturing Firms in Kenya, *Research Journal of Finance and Accounting*, 5 (12)

Yiadom, E. F. and Agyei, S. K. (2011) Determinants of Dividend Policy of Banks in Ghana, *International Research Journal of Finance and Economics,* 61 (2011)

Younis, D. and Javid, A. Y. (2014) Market Imperfections and Dividend Policy Decisions of Manufacturing Sector of Pakistan, *Pakistan Institute of Development Economics,* Paper 99-2014

Yusuf, B. R. (2015). Dividend Payout Ratio and Performance of Deposit Money Banks in Nigeria. *International Journal of Advances in Management and Economics, 4(6),* 98-105.

Zabria, S. M., Ahmad, K., & Wah, K. K. (2016). Corporate Governance Practices and Firm Performance: Evidence from Top 100 Public Listed Companies in Malaysia. 7th International Economics & Business Management Conference. Procedia Economics and Finance.

Zagonel, T., Terra, P. R. S., Pasuch, D. F. (2018). Taxation, corporate governance and dividend policy in Brazil. *RAUSP Management Journal, 53(3),* 304-323.

Zahra, S. H., & Pearce, J. P. (1989). Board of directors and corporate financial performance: A review and integrative model. *Journal of Management, 15,* 291–334.

Zhang, Y., & Wiersman F. (2009). Stock market reaction to CEO certification: the signaling role of CEO background. *Strategic Management Journal, 30,* 693-710.

Zhou, P. & Ruland, W. (2006). Dividend payout and future earnings growth. *Financial Analysts Journal*, 62(3), 58 – 69.

Zhu, Y., Tian, G. G., & Ma, S. (2009). Executive compensation, board characteristics and firm performance in China: The impact of compensation committee. In 22nd Australasian finance and banking conference (pp. 1–48). Sydney: Social Science Electronic Publishing, Inc.