Impact of Ownership and Board Structure on Dividend Payout Under High and Low Growth Opportunities: Evidence from Textile Sector of Pakistan

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

In **BUSINESS ADMINISTRATION**

To

FACULTY OF MANAGEMENT SCIENCES

NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

November, 2018

NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF MANAGEMENT SCIENCES

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ABSTRACT

Thesis title: Impact of Ownership and Board structure on Dividend payout under high and low growth opportunities; Evidence from textile sector of Pakistan

The equilibrium among management and shareholders can be formed by improving the quality of corporate governance, as it can mitigate agency conflicts by compelling the management to follow an optimal dividend policy. Dividend is one of the rewards to the shareholders for their contribution in raising funds for a company and for bearing the relevant risks. The objective of this study is to examine the impact of board structure and ownership structure on dividend pay-out under high and low growth opportunities of manufacturing firms listed at Pakistan stock exchange. Board structure is measured in terms of board independence and CEO Duality, and ownership structure is measured in terms of managerial ownership, foreign ownership, institutional ownership, and minority ownership. This study used panel data of 82 manufacturing firms that covers the period of 2011 to 2016. Purposive sampling technique is applied to select firms as a sample for analysis. The firms that paid consistent dividends from 2011 to 2016 are selected from the population. After screening of data on the bases of above criteria, there were 92 firms that comply with that benchmark. After that 10 firms out of these 92 firms were excluded due to abnormality issues in the data and finally the data of 82 firms was used for the analysis.

The study applied descriptive statistics, correlation and panel regression on panel data. Among random effects, fixed effects, and common effects model, fixed effects model is used to run the regression analysis. The study also applied panel unit root test to find whether the data is stationary or not. Furthermore to examine the impact of board structure and ownership structure on dividend pay-out of listed manufacturing firms under high and low growth opportunities, the data is divided into high and low growth categories. The median value of Tobin Q is used for classification of data. Firm size, debt ratio, return on asset, and Tobin Q were used as control variables in this study.

The final results revealed that under high growth opportunities, all the dimensions of board and ownership structure except minority ownership are positively and significantly

related with the dividend pay-out. While under low growth opportunities only foreign ownership, board independence and minority ownership are significantly related with dividend pay-out. These findings suggest that the impact of board structure and ownership structure on dividend pay-out is more significant and positive under high growth opportunities as compared to low growth opportunities.

Keywords: Board structure; Ownership structure; dividend pay-out; institutional ownership; managerial ownership; foreign ownership; minority ownership; CEO Duality; board independence.

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ACKNOWLEDGEMENTS

First of all, I yearn to sender my indebtedness to impregnable and unassailable Allah who is the composer of this firmament. He is the lord of time from first to last syllable. If his blessings had not been the comrade of my resilience, this treatise would not have seen the light of day. Then my meek gratitude to adulated prophet Hazrat Muhammad (PBUH) is due who is pedagogue of erudition and discernment, for all ages to come.

This thesis is the upshot of one semester research as MSBA student at NUML at the department of management sciences at Faisalabad Campus. There are esteemed personality whose compassion & untiring labor has been the beacon house for me in completion of this thesis.

First of all, I offer my heartiest regard & respect to my supervisor Mr. Muhammad Kashif Khurshid. He has been an incessant source of encouragement & appreciation for me. His mind blowing ideas & brain storming suggestions have been the torch bearer for me in this journey of knowledge.

After that, I want to express my gratitude for Mr. Adnan Afzal. He has endeavored has best to facilitate me in my accomplishment of thesis work.

My hearts also want to extend bundle of thanks to Mr. Shakil Ahmed, Mr. Atiq-ur-Rehman, Mr. Parvaiz Akhtar, Mr. Naveed Rabbani, Mr. Shahid Khan, Mr. Imtiaz Zahid and Mr. Akmal khan Waince wherever I consulted them & sought their guidance, they were there to welcome me & provide me every type of assistance which I wanted. I found caring friends, a conscientious mentor, a protecting big brothers and enthusiastic teachers who were always ready to teach, to serve, to facilitate and to accommodate.

I also want to salute the all teachers of my university those has been molding force to nourish and chisel my character. Those teachers have produced personalities who always strive to an ideal human being and whose ultimate goal is to live and die for the service of humanity.

MUHAMMAD ILTAF

DEDICATION

I dedicate my meager thanks and reverence to my dear and loving parents and all family members who are an unending fountain of affection, mercy and jubilee for me. They are the glistening shadow and shelter for me in the sun and wildness of this life.

CHAPTER NO. 1

INTRODUCTION

1.1 Background of Study

The corporate world has an interesting aspect of being managed and controlled by the employees rather the owners of the corporations. Berle and Means (1932) delivered ownership structure that is dispersed among small shareholders and the control is concentrated in the hands of managers. This form of ownership structure is found in developing countries and it is strongly backed by the most of the finance literature. Since it suggests that the function of control and ownership is separate from each other, therefore it leads towards the conflict among managers and shareholders, which is known as agency problem. It is also known as principal-agent conflict. In contrast, some studies conducted in developing countries provided evidences that are not in line with the above statement of ownership and control. They concluded that concentrated share ownership is a common form of ownership in developing countries. For instance, (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999) investigated the form of ownership that is prevailed in developing countries and concluded that most of the firms in these areas are family controlled firms and the concentrated share ownership is the most popular form of ownership there. Shleifer and Vishny (1997) said that when the block holders have the controlling rights more than their voting rights and as this difference is increase, they tend to generate personal benefits by using firm resources. They give the top positions in management to their family members irrespective of their professional capabilities. They also provide huge salaries to themselves and transfer firm wealth. Therefore the agency problem here is the conflict among majority and minority shareholders, which is also known as principal-principal conflict.

Big corporate governance scandals like Xerox and Enron etc. put a question mark on the transparency and governance mechanism of companies. These scandals also effect the confidence level of investors. In response to these situations, the investors and other stakeholders demanded a mechanism and practices that can protect the stake of all stakeholders of the

company. Establishing a new venture or running existing business, it all require investment and investors are very important for that. Therefore it was necessary to create once again the lost confidence of investors by establishing independent bodies and such regulations in the firms that serve for the stake of all the stakeholders equally. The Sarbanes Oxley Act (2002) provided the practices of good corporate governance for the purpose of returning back the confidence of shareholders and for the creation of transparency and dependability of the financial statements of the institutions. As the expropriation attempts made by the controlling authorities made these practices obligatory for the existence of large corporations. Similarly Coskun and Sayilir (2012) stated that a strong mechanism of governance in the firms is associated with many increments, such as competitive advantages through reduction in product cost, increase in the value of firm and easily and cheap availability of external funds etc. A lot of studies provided empirical evidences that firms with poor corporate mechanisms face so many problems in managing finance and other materialistic activities. Economic growth of a country is also largely linked with the conditions of the governance systems prevailed in the institutions of that country because it promote performance and value of the firms and make the flow of capitals in the market relatively easy. It mainly deals with the affiliation among the management and all the other stakeholders of the firm. It consists of a vast range of activities like accounting methods, releasing of financial information, remuneration of executives and the nature of the board of directors. The idea of the corporate governance postulates a conflict of interest among the shareholders and management. Return on capital and maximization of the firm value are the main goals of the shareholders. The objectives of the management are relatively different as they want extreme powers, managing a large corporation, and other privileges. As shareholders are dispersed and hold no position to get access of the information, it makes the management to have an upper hand.

Jensen (1986) presented the free cash flow theory; he argued firms that generate excessive free cash flows which is required by managers to finance all positive net present value projects are always prone to agency problems. Once the managers fulfilled all the obligations with funds generated by operations, use the remaining cash flows for their own benefits rather than for shareholders benefits. When managers lacking positive net present value projects, they even invest the remaining cash flows in non-value maximization projects in order to maximize the resources under their control. This is called over investment behavior.

Many studies provided number of solutions regarding that problem. For instance, Jensen argued that increasing the number of independent directors can make the management to act for the stake of the shareholders rather for the stake of their own. Easterbrook (1984) stated that agency cost can be minimized by an increase in the dividends payments of the firm. As more dividends means low retain earnings and the management will go to the capital markets in order to arrange finance required for firms investment projects. Where management performance is monitored effectively.

Grossman and Hart (1982) argued that an increase in the existing level of debt also moves up the threat of bankruptcy. Hence the management try to use the resources of the firm in efficient manner in order to protect the firm from being bankrupt.

According to La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000) "Corporate governance is, to a certain extent, a set of mechanisms through which outside investors protect themselves against expropriation by the insiders." The insiders mean the major shareholders and managers of the firm.

The security and exchange commission of Pakistan has issued the code of corporate governance in March 2002 for the betterment of the governance structures of Pakistani companies and bring a transparency and improvement in the financial reporting of the firms. SECP collaborated with the ICMAP and the other stock exchanges to introduce that code. The references counted in that code are according to the international codes of corporate practices. All the registered firms are required to attach a statement with the annual reports which will show either the firm is complying with the practices of corporate governance or not. SECP is working on the real implementation of these codes and for that purpose it introduces a project in alliance with the UNDP and EADP. SECP carried out a survey on these codes. The findings of this survey suggest that there is need of understandings the benefits associated with these codes by the directors of the companies.

The common structure of share ownership in Pakistan is the concentrated share ownership. Usually more than 50% shares are held in the hands of few people. These are usually the families that run and control most of the businesses in Pakistan. Ghani and Ashraf (2005) stated that external shareholders perceive the firms controlled by families or groups less transparent and

poor with respect to the governance mechanism and that is why they wanted the discounted values of the shares of these firms even they perform better as compared to others in the markets. They concluded that concentrated share ownership mechanism in Pakistan provide opportunities to majority shareholders to expropriate the wealth of outsiders.

A large amount of studies are conducted in developed economies on agency conflict. Since the nature of agency, conflict is different in developing countries from developed countries. Daily, Dalton, and Cannella (2003) provided that agency theory behaved differently in developing countries as compared to developed countries, and the findings of widely-held ownership corporations cannot be generalize in to concentrated ownership corporations. Therefore, it is important to study the ownership structure of companies in emerging markets and its impact on dividend payout.

1.2 Dividend Policy

After conducting a huge amount of theoretical and empirical studies on dividend policy, the controversy regarding it is yet to be ended. Black (1976) argued that if we look deep into the dividend policy, it become more difficult just like a riddle. The effective policy regarding dividend need many attentions like which form of dividend should be selected, how much earnings should be given as dividends to the shareholders. Firms pay dividends to protect their capital providers from losses, as low or no payments of dividends influence the value of the firm adversely. Therefore to benefit the shareholders, the payments of dividends are necessary.

The first well established model regarding dividend policy is made by the (Lintner & Butters, 1955) in which they argued that management tried to increase the payments of dividends in order to reflect the increase in firm earnings. According to him the most substantial determining factor of dividend is the ratio of payouts of the preceding year.

Dividend can be defined as “A distribution of a portion of a company’s earnings, decided by the board of directors, to a class of its shareholders”. Payments of dividends can be made in the form of cash, stock, or property.

Different proxies are used for the measurement of dividends. Among them two are commonly used in most of the studies. Dividend per share; which is quoted as total dividends divided by the

net earnings, and dividend yield; which is quoted as total dividends divided by the market price of the shares. Some additional measures are also used for the measurement of dividends, like total dividend divided by the net sales of the firm (Kim & Lee, 2008) and dividend divided by the market capitalization ratio (Mancinelli & Ozkan, 2006). Among all these measures the dividend over earnings is the mostly used proxy of dividend- payout but the problem of manipulation and inability to record true earnings in many occasions made it unfavorable (La Porta et al., 1999). A firm may decide to distribute its earnings to the shareholders in the form of dividends or retain it in the company in the form of retained earnings. Retaining the company's profits rather to distribute it depends upon the investment projects of the company. If the firm has investment projects with the positive net present value, the firm may prefer to invest the earnings in these projects rather to give it to shareholders. The profits can be retained when the firm wants to repurchase it shares back from open market.

1.2.1 Review of Dividend Policy in Pakistan

Pakistani markets are comparatively different and interesting to investigate as they pay stable dividends even in the times of growth. But they pay fewer dividends as compared to what they can pay because they presume the external financing more expensive than internal. Therefore they usually used their earnings to fulfill their investment needs rather to distribute it among shareholders

In Pakistan, there is no compulsory regulations regarding the payments of dividends and there is also no strong mechanism for the protection of external shareholders and the firms only voluntarily distribute earnings. So it is a matter of interest to determine that how these firms appeal their shareholders. The base of these firms is the rules implemented in British. Therefore these are expected to run their activities likewise. But as a matter of fact they could not comply with the British firms because of the poor corporate governance. The lack of the code of governances make the management to look after their own benefits rather than shareholders benefits.

Mehar (2005) found that firms in Pakistan are hesitant to distribute earnings but the shareholders still invest because of the benefits provided by the taxation. Cheema, Bari, and Saddique (2003)

concluded that only 35% of the total firms in Pakistan distribute their earnings and these payments are on irregular bases.

1.2.2 Dividend Irrelevance

Modigliani and Miller (1958) presented a model which is also known as dividend irrelevance model. They argued that under the assumption of perfect capital market where there is no tax, no brokerage cost, the payments of dividends have no influence on the value of the shares and the cost of the firm financing. They said that external financing is a perfect substitute for internal financing and payment of dividends has no relevance with the value of the firm.

1.2.3 Theories (why firm pay dividend)

The theories that answer the question why firms distribute dividends are following.

1.2.4 Bird in Hand theory

Lintner (1962) Presented this theory. He argued that preferences of investors are different in attaining capital gains or dividends. They said that most of the investors prefer dividends over the stock holdings return because the uncertainty associated with the capital gains. According to this theory the stocks that pay consistent dividends are more attractive to investors and hence show a high market value.

1.2.5 Signaling Theory

Brealey, Leland, and Pyle (1977) presented theory which is known as signaling theory. They claimed that dividends are used by management to deliver information to the shareholders, as the management possess internal information that is not known by the outsiders. When a firm pays dividends consistently or makes an increase in the dividends, it sends an optimistic signals to the outsiders about the financial situation of the firm. This theory suggests that when the firm generates sufficient profits from its activities, the management will want to make outsiders know about the financial soundness of the firm, and hence dividend is available tool for transferring this message to outsiders, as the value of the firm depends upon how a stock is attractive to the investors. Miller and Rock (1985) and K. Li and Zhao (2008) said that the role of dividend is

very vital because it can decrease the information asymmetry among the management and the outsiders.

1.2.6 Agency theory

Jensen (1986) presented the free cash flow theory; he argued firms that generate excessive free cash flows which is required by managers to finance all positive net present value projects are always disposed to agency problems. Once the managers fulfilled all the obligations with funds generated by operations, use the remaining cash flows for their own benefits rather than for shareholder's benefits. When managers do not have the projects with the positive net present value, they even invest the remaining cash flows in negative net present value projects in order to maximize the resources under their control. This is called over investment behavior. Jensen (1986) provided that firms with excessive cash flows face more agency problems. Wang, Manry, and Wandler (2011) argued that agency cost of free cash flows decreases the firm value. Harvey, Lins, and Roper (2004) concluded that shareholders of firms with excessive cash flows monitors the activities of management in order to avoid the wasteful expenditures, which increases the agency cost that in turn decrease the value of firm.

This theory suggests that the agent is hired by the principal to fulfill the task which in turn benefit the principal. But when the agent start following his own benefits rather to follow the benefits of principal, the agency problem takes place. Therefore, it is necessary for the firms to have a strong mechanisms of corporate governance in order to avoid the agency conflicts. Several researches provided empirical evidences that firm with good governance structures demonstrate a high market value and generate maximum profits from their activities.

The main objective of this study is to determine the connection among the corporate governance variables such as ownership structure and board structure and dividend-payout of the firms listed at the PSX. Additionally this study tries to investigate the association among these variables in the presence of high and low growth opportunities.

1.3 Ownership Structure

Which nature of ownership structure contributes in the betterment of the corporate governance of the firms is a vital issue in the governance literature. Ownership structure is an effective tool

which is used to minimize the agency conflicts caused by the separation among the management and the ownership. Corporations that are owned by small and circulated shareholders and the controlling function is performed by the managers are under-performing (Berle & Means, 1932).

Jensen and Meckling (1976) and Shleifer and Vishny (1986) investigated the affiliation among the firm share ownership and performance. La Porta et al. (2000) provided that in countries where the investors are not protected well legally, as a result they tend to hold maximum shares in the firms in order to protect themselves, which caused to the concentrated share ownership in developing countries. Berkowitz, Pistor, and Richard (2003) argued that the structure of financial markets in developing countries is poor and provide a limited funds to the firms which caused the dominance of family share ownership in these countries. Cheema et al. (2003) provided that a large proportion of Pakistani companies are owned by the families.

Ownership characteristics are very vital as they can be used as a corporate governance mechanisms in reducing the agency problems of the firms. Previous studies like (Harada & Nguyen, 2011; Maury & Pajuste, 2005; Pindado, Requejo, & Torre, 2012) etc. provided that there is a substantial affiliation among ownership structure and dividend pay-out. Many researchers concluded the dividend as a monitoring device which can be used to make the controlling bodies unable to use firm resources. The focus of this study is to investigate whether the share ownership structures in Pakistan matters in the implementation of the codes of governance by increasing or decreasing the dividends pay-out of the firms. The ownership structures included in this study are "institutional ownership, director ownership, foreign ownership, and minority ownership".

1.3.1 Institutional Ownership

Rozeff (1982) and Easterbrook (1984) provided that firms which pay consistent dividends are entering the financial markets due to the need for external financing, and hence their monitoring by these markets increased. Though Demsetz and Lehn (1985) and Shleifer and Vishny (1986) said that financial institutions such as investment companies, pension funds, insurance firms and banks can monitor the activities of the management effectively and hence the need for dividend as a monitoring purposes decreases.

Zeckhauser and Pound (1990) claimed that rather to monitor the management activities directly by participating in the board of directors, the institutional shareholders force the management to pay maximum dividends in order to get them monitored by the external markets. Farinha (2003) provided that when the institutions perceive their monitoring insufficient and expensive, they tend to put pressure on the management to pay great amount of dividends in order to enhance their monitoring by the capital markets. According to the above two studies, a direct link among dividend pay-out and institutional share ownership is anticipated.

Kouki and Guizani (2009) provided that higher institutional share ownership result in low dividends in Tunisian firms. This study is in line with the effective monitoring role played by the institutional shareholders.

Abdelsalam, El-Masry, and Elsegini (2008) recorded a positive affiliation among dividend and institutional share ownership for Egyptian companies. Likewise Manos (2002) provided that institutional share ownership results in higher payments of dividends in Indian firms. These studies are in line with the argument that the institutional shareholders prefer monitoring of external markets over their own direct monitoring.

Hence the affiliation among payout and institutional share ownership is not conclusive and different researchers provided different point of views regarding that relationship.

1.3.2 Foreign ownership

Foreign investors possess better expertise and monitoring skills, therefore they can play a vital role of monitoring for their companies. Jeon, Lee, and Moffett (2011) argued that foreign shareholders demanded more transparency in financial recordings from the management and provide more monitoring on the management actions and hence they do not need dividend as an tool for their protection. They concluded adverse influence of foreign share ownership on pay-out of the firms. Previous studies provided that the investors of developed economies usually hold a sufficient shareholding in developing economies and the purpose of their investment is capital gain not a short term income streams, which also suggest an adverse association among dividend and foreign shareholding.

Manos (2002) said that it is a matter of fact that foreign shareholders possess a great experience of worldwide investments and they know well how to evaluate firm financial performance, despite of holding these skills they often find the monitoring of management actions costly and difficult because the differences in the political environment and cultural environment. Therefore they depend upon the dividend as a tool for the monitoring purposes, which suggest a positive connection among foreign shareholding and dividend.

(La Porta et al., 1999; C. H. Lin and Shiu (2003)) explored the foreign shareholding in Taiwan and concluded that they prefer the shares that offer low dividends.

Jeon et al. (2011) studied the preferences of foreign investors regarding dividends in Korea and found that they often invest in the firms that consistently pay dividends. They suggested that large foreign investments in the Korean firms is the main reason behind their consistent dividend paying policies.

1.3.3 Minority Ownership

The differences in interests among insiders and outsiders particularly minority shareholders leads towards agency problems and it is among the most investigated areas in the modern studies of corporations, (Jensen & Meckling, 1976). The insiders in the developed countries where the ownership is spread are the managers who perform the controlling functions of that corporations, and the insiders in developing economies where the concentrated share ownership is common are the large shareholders usually the family owners.(La Porta et al., 1999)

Jensen (1986) provided that insiders usually follow their own benefits and do not bother to look for the interests of the minority shareholders. They expropriate their wealth in the form of asset transferring, providing top positions to their relatives, and making investments in non-value maximizations projects only to make large resources under their control. La Porta et al. (2000) argued that the shareholders with minor shareholdings are always the sufferers whether there is the managers or large shareholders performing controlling functions.

The minority shareholders who belong to the nations where the legal environment is strong and sufficient rules are there for their protection are also demand high payout from their firms.

Easterbrook (1984) said that minority shareholders have a very weak position in the controlling functions of their firms therefore they require high dividends.

Shleifer and Vishny (1997) delivered that in the countries with weak investor's protection, large shareholders usually have upper hand on the management. But it failed to give any security to the minorities in the companies. Therefore they tried to avail their wealth in the form of dividends and to make sure there is nothing left in the hands of the controlling bodies.

Wang et al. (2011) said that there are states like china where capital gains are exempt and dividends are taxed. The small investors their desire for capital gains rather for dividends. Gang Wei, Zhang, and ZeZhong Xiao (2004) explored an adverse association among dividend and small investors. They said that majority of the small investor's only bother for the increase or decrease in their shares values and do not look after the dividends payments.

1.3.4 Managerial Ownership

The agency problem caused by the separation of control and ownership has been investigated by many researchers and many possible solutions of this problem are given by them. These solutions include leverage, dividend, and managerial share ownership.

Jensen and Meckling (1976) provided alignment effect of managerial ownership. They argued that the managerial share ownership with low level in the firms can be used as a mechanism to line up the interests of managers with the shareholders. This is because when the managers hold shares of the firm, their own wealth is associated with the value of the firm, and they tried to follow the policies which results in the appreciation of the value of the firm.

Contrary to this hypothesis, Stulz (1990) on the other hand presented the entrenchment effect of managerial share ownership. He said when the managers hold substantial amount of shares in the firm that is beyond to a certain limit as prescribed by the different researchers, they tend to follow their own interests as their expropriation powers were increased.

Ozkan and Ozkan (2004) investigated the size of the cash holding of the firms with respect to the different levels of managerial share ownership. The findings of the study also support the entrenchment behavior of managers. They concluded that as the level of managerial share

ownership increases in firm, the managers tries to withhold maximum cash at the expense of dividends payments to outside shareholders.

1.4 Board structure

The interaction among firm's board, shareholders and management is the important function of corporate governance that in deed set the overall direction of the firm. Corporate boards play a vital role in controlling and evaluating the performance of the management, therefore there is a need for an effective and skillful board. Following are the board characteristics that are addressed in this study.

1.4.1 Board Independence

Independence is another important characteristic of the board as only a neutral and independent board can make it sure that the stake of all shareholders is being served equally. Now a days the introduction of two tier boards in the corporations has increased the independence and efficiency of the boards as these boards include a sufficient numbers of both the executive and non-executive directors.

Farinha (2003) argued that independence of board and dividend can act as a substitute for each other in minimizing agency cost and monitoring the management, therefore the presence of sufficient number of independent non-executive directors on the board of directors lower the need for dividend induced monitoring device. He also said that when the independent non-executive directors feel their monitoring inefficient, they can put a pressure on the management to pay out high dividends so that their monitoring can be done by the external equity markets.

1.4.2 CEO Duality

CEO is the head of management and chairman is the head of non-executive directors. There should be separate persons who perform these two responsibilities in order to maintain the balance and independence of the board. If one person hold both the offices of CEO and chairman, then the responsibilities of that person will be increased as he has to deal with the duties associated with both the positions, and as a result it can reduce the supervisory role played by the board which in turn leads towards an increase in the agency cost.

Mansourinia, Emamgholipour, Rekabdarkolaei, and Hozoori (2013) provided that one of the stuffs that can help in creating independence and neutral board is the separating the role of CEO and chairman which in turn lower the need for dividend induced monitoring device.

1.5 Growth Opportunities dividend pay-out and corporate governance

Firm with high growth opportunities pay low or no dividends (Fama & French, 2001). Firm with low growth opportunities suffer from agency problems, therefore investors demand high dividend. Benjamin, Wasiuzzaman, Mokhtarinia, and Rezaie Nejad (2016) concluded that family firm pay high dividends under low growth opportunities and low dividends under high growth opportunities.

La Porta et al. (2000) provided that the impact of growth opportunities on dividend pay-out is not consistent as given by the above mention studies. They said that growth opportunities influences dividend pay-out differently depending upon the quality of corporate governance practices. They came with two hypothesis in order to explain this relationship, the first one is outcome model and the second is substitution model. According to first hypothesis, dividend is an outcome of good shareholder protection. When shareholders got good protection, then under high growth opportunities they are willing to leave the earnings with the management as they know that they will have share in the returns of that good investment projects latter on. Therefore firms with high investor protection pay low dividends under high growth opportunities than under low growth opportunities. On the other hand they concluded that there is no significant association among growth opportunities and dividend pay-out for the firms with poor governance practices.

According to their second hypothesis namely substitution model, the dividends are substitute for governance practices. The firms with poor governance systems have to pay more dividends under high growth opportunities as they have to maintain their reputation and send positive signals to the market because the shareholders of these firms usually not willing to delay their share in the earnings as they not trust the management. Therefore the management pay high dividends under high growth opportunities and later on issue new stock in order to meet investment needs of the firm. Hence according to substitute model the countries where governance system is poor, firms pay more dividends under high growth opportunities as compared to low growth opportunities.

1.6 Problem Statement

Pakistan economy depends 80% on corporations they contribute significantly in GDP but unfortunately, Pakistan is a highly family concentrated ownership country. According to (Shleifer & Vishny, 1997) when large shareholders, especially family owners, hold maximum control, they tend to generate private benefits of control (such as expending the companies' cash flow, paying themselves extreme salaries, providing top managerial positions and board seats to their family members). In these cases, the prominent agency problem is therefore expropriation of the wealth of minority owners by the controlling Shareholders. The absence of better corporate governance mechanisms makes it easy for controlling shareholders to expropriate wealth from minority shareholders. They use the resources for their own benefits rather to share it with others in the form of dividends. According to Jensen and Meckling (1976) and (Easterbrook, 1984) dividend reduces the resources available to controlling parties for expropriation and also ensure the proportional distribution of cash among shareholders and shift the wealth from controlling shareholders. Therefore, it is important to study the different practices of corporate governance like board structure and ownership structure and their impact on dividend pay-out in order to identify which factor of governance has a significant role in increasing the dividend payout as increase in dividend leads towards minimizing the agency conflict in developing countries like Pakistan.

1.7 Research Objectives

- To determine the impact of board structure and ownership structure on dividend payout.
- To determine the impact of board structure and ownership structure on dividend payout under high growth opportunities.
- To determine the impact of board structure and ownership structure on dividend payout under low growth opportunities.

1.8 Research Questions

- What is the impact of foreign ownership on dividend payout?
- What is the impact of managerial ownership on dividend payout?
- What is the impact of institutional ownership on dividend payout?

- What is the impact of minority ownership on dividend payout?
- What is the impact of Board independence on dividend payout?
- What is the impact of CEO Duality on dividend payout?
- What is the impact of foreign ownership on dividend payout under high and low growth opportunities?
- What is the impact of managerial ownership on dividend payout under high and low growth opportunities?
- What is the impact of institutional ownership on dividend payout under high and low growth opportunities?
- What is the impact of minority ownership on dividend payout under high and low growth opportunities?
- What is the impact of Board independence on dividend payout under high and low growth opportunities?
- What is the impact of CEO Duality on dividend payout under high and low growth opportunities?

1.9 Significance of study

This study will enrich the literature on the role played by the different types of ownership structures and board structures in increasing or decreasing the dividend pay-outs of firms. As the dividend is the most concerned area for the investors, therefore it will help investors to understand any increase or decrease in dividend payouts caused by ownership structures and board structures. Furthermore this study will be helpful for investors in making investment decision after observing the shareholding patterns of firms. This study also draws its significance by providing a better understanding of ownership structure and board structure as a measure of corporate governance mechanism and how these protect the minorities, as the protection of minorities is one of the major issues faced by the investors of developing countries.

1.10 Contribution of the study

This study contributes to the existing literature by examining the impact of ownership and board structure on dividend pay-out of the firms listed at Pakistan stock exchange. As most of the studies regarding board structure, ownership structure and dividend pay-out conducted in

developed countries and limited research is carried out in emerging markets like Pakistan. Therefore this study filled the gap by examining the impact of board structure and ownership structure on dividend pay-out in one of the major developing country Pakistan. Additionally, this study differentiates from earlier ones by analyzing this relationship under high and low growth opportunities separately.

1.11 Organization of the study

This study organized as follow; Chapter one contains background of the study and detailed explanation of dependent and independent variables. Chapter two contains the review of previous literature. Chapter three includes the research design and statistical tools used in this study. Chapter four contains the results and discussion of data analysis. Chapter five contains the conclusion and recommendations.

CHAPTER NO. 2

LITERATURE REVIEW

2.1 Ownership structure and dividend pay-out

Huda and Abdullah (2013) analyzed the association among ownership structure and dividend payout using the data of companies listed on CSE-30 index over the time-period for 2006 to 2010. Leverage, ROA, and firm size are taken as controlled variables. A 'hierarchical multiple regression' and correlation model were used to reach at the results. Dividend per share is taken as a proxy for dependent variable. The results revealed that director's ownership has a significant positive impact on dividend per share, whereas the institutional ownership has a significant negative impact on dividend per share. Moreover, ROE displayed a significant positive effect and leverage showed a significant negative impact on the dividend payout of a firm.

Ullah, Fida, and Khan (2012) investigated the ownership structure against dividend payout of the firms listed at KSE-100 index from the period of 2003-2010. This study is conducted to investigate the determinants of corporate dividend policy in connection with the agency problem. Multiple regression has used to determine the relationship among dependent and independent variables. The results suggest that there is a negative relationship between managerial ownership and dividend-payout, whereas the institutional shareholding and foreign ownership has a positive impact on dividend payout. Additionally, the explanatory power of institutional shareholding was 23.3%, while the explanatory power of managerial ownership was 18%.

Farinha (2003) studied 'dividend policy, corporate governance, and managerial entrenchment hypotheses. The study provided alternative explanation of dividend payment. The empirical evidences suggest that dividend payment are used to decrease the agency problems either by decreasing the sources available to managers or by increasing the external monitoring of managers through equity financing. The sample of 600 firms was taken from the firms listed on S&P for the period of 1991_1996. The dependent variable dividend payout is measured by MNPAY which is the mean ratio of total dividends confirmed in five years. The independent

variables used in this study are following: insider ownership, past growth, future growth, debt, cash holding, shareholder dispersion, institutional ownership, percentage of non-executive directors, firm size, return on assets, and the dummy variable CADBURY which takes the value 1 if a firm show full compliance with Cadbury (1992) code of best practices. Ownership and board data was taken from the annual reports of the firms. The findings revealed a link among dividend- payout and insider-ownership which is consistent with the managerial entrenchment hypothesis.

Bokpin (2011) investigated the impact of "ownership structure and corporate governance" on dividend performance of the firms using panel data for the period of 4 years (2002 to 2007). For this purpose a sample of 23 firms that were listed on Ghana stock exchange was taken. Among common effects, random effects and fixed effects, the fixed effects method is used to analyze the panel data. The results suggest that foreign share ownership is considerably and directly linked with dividend payments of the firms of GSE. The results also shown that board size has a constructive effect on dividend payments. However the evidence of substantial connection between "inside ownership, board independence, board intensity, CEO duality and dividend payments" is not found. The results also state that high leverage results in low dividend payments. Furthermore age and income volatility were resulted in a major determinants of dividend payments.

Dandago, Farouk, and Muhibudeen (2015) studied the impact of corporate ownership structure on dividend payout ratio for chemical and paint companies listed on Nigerian stock exchange. They used the data covering the period of 2008-2013. The study used a sample of eight firms for the analysis. Corporate ownership structure included the following variables: "managerial ownership, institutional ownership, ownership concentration and foreign ownership". The dependent variable dividend- payout ratio was measured through dividend to net income. The data was collected from annual reports of the firms. Multiple regression technique was used in this study. The findings revealed that managerial share ownership has a substantial and adverse effect on dividend payout ratio, while institutional ownership and foreign ownership has a positive effect on dividend-payout ratio. The results also suggest that block shareholding has no significant impact on dividend payout ratio. The study made recommendation that these firms should increase the number of share issued to institutional shareholders and foreign shareholders

in order to insure the regular dividend payments to shareholders that are interested in dividend payments.

Sakinc and Gungor (2015) inspected the affiliation among ownership structure and dividend payout using the data of the firms listed at Istanbul stock exchange from 2004 to 2011. A sample of 271 companies from real and banking sectors was selected for analysis. Panel data analysis was used for obtaining the results. The results showed that the largest shareholders owns about 45% of the total shares, which suggest that the companies in turkey are mostly owned by single persons. Independent variables used in this study were following: ownership concentration, foreign ownership, and managerial ownership. The findings revealed that concentrated ownership is directly linked with dividend-payout and any increase in float rate bring a decrease in dividend payout. The results also showed a negative and significant relationship between foreign ownership and dividend-payout. Managerial share ownership was indirectly associated with dividend-payout but the relationship was not significant.

Mehrani, Moradi, and Eskandar (2011) examined the ownership structure and dividend payout of the firms registered at Tehran stock exchange using the data from 2000 to 2007. The sample consist of 427 per year firm observations. Regression model was used for analysis. Ownership structure was consist of three variables; ownership concentration, institutional ownership and managerial ownership. The findings revealed that institutional ownership brings down the dividend payments of firms which means that in presence of institutional ownership, shareholders do not need dividend induced monitoring device. The findings also suggest that an increase in concentrated ownership cause increase in dividends of the firm. However the relationship between managerial ownership and dividend payout was not significant. Along with these variables, three controlled variables were also used which are firm size, leverage and growth opportunities.

Al-Gharaibeh, Zurigat, and Al-Harahsheh (2013) investigated the effect of ownership structure on dividend policy for the firms registered at Jordan stock exchange. The data of the period 2005-2010 was used for this purpose. The sample consist of 35 firms. Two models namely full and partial adjustment models were used to examine the relationship between dependent and independent variables. The findings showed a positive association between institutional

shareholding and dividend which means that institutional shareholders use their influence and expertise to benefit all stakeholders and restrict the controlling bodies to invest in low returns projects or negative net present value projects. The results also showed a indirect association among managerial ownership and dividend payout which propose that Jordin investors do not need dividend as a mechanism of corporate governance to reduce agency conflicts. Among two adjustments models; full adjustment model was superior because it explained more variations in dependent variables as compared to partial adjustment model.

Imam and Malik (2007) investigated the influence of ownership structure on dividend- payout and firm performance. Ownership structure was considered as a tool of corporate governance in this study. The firms from non-financial sector registered at Dhaka stock exchange were taken for analysis. The data from 2000 and 2003 was used in this study. Firm performance was measured through holding period return and Tobin Q. Multiple regression technique was used for data analysis. The data was taken from balance sheet analysis, monthly review and annual reports of firms published by Dhaka stock exchange. The study used cross-sectional data instead of panel data. The final sample consist of 201 firms after excluding the outliers. The results showed a constructive and substantial relationship between foreign share ownership and performance represented by both holding period return and Tobin Q. The findings also revealed a positive association between institutional share ownership and dividend- payout and a negative association between ownership concentration and dividend payout.

Jiraporn, Kim, and Kim (2011) studied the impact of quality of corporate governance on dividend payout using the data for the period of 2001 to 2004. The sample contains 9893 firm-year observations after excluding the outliers. The dependent variable dividend is represented by two measures; “Ratio of dividend to net income and the ratio of dividend to total assets”. They control for firm size, firm profitability, and leverage and growth opportunities. Ordinary least square model was used for analysis. The results demonstrate a positive relationship between quality of corporate governance and dividend payout that is the better the corporate governance the higher the chances of firm to pay dividends. The findings concluded that shareholders of firm with great quality of corporate governance can put a pressure on management to distribute the earnings among them in the form of dividends and hence the management cannot able to use that resources for their own benefits and interests which leads towards resolving agency conflicts.

Short, Zhang, and Keasey (2002) investigated the link among institutional share ownership and dividend-policy. This is the first study in UK because the frame work of institutional shareholding and ownership structure are different in UK from USA. Four types of dividend models are used in this study which are;" Partial adjustment model, earning trend model, full adjustment model and wad model". In addition to institutional share ownership, managerial ownership also examined against dividend policy. The study used the data for the period of 1988 to 1992. The sample contain 211 firms listed at London stock exchange. Fixed effect panel data method is used to test the hypothesis. The findings revealed a constructive and substantial association between institutional ownership and dividend-policy. In addition the results of earning trend model showed a positive component of earning trend to the relationship between institutional share ownership and dividend-policy. The results also showed a negative association between managerial share ownership and dividend-policy.

Truong and Heaney (2007) examined the connection among dividend-policy and largest shareholder using the data for the period of 2003 and 2004. The study used a sample of 8279 firms from 37 countries around the world for examination. Three types of largest shareholders are discussed in this study. The first is inside largest shareholder, the second is institutional largest shareholder, and the third is state largest shareholder. The dependent variable dividend policy include two decision, the decision to pay or not pay dividend, and decision to how much pay dividend. The empirical evidence showed that dividend policy is positively related to the profitability and negatively related to the debt and growth opportunities. The findings also showed a adverse association between dividend and insider largest shareholder and financial largest shareholder. Legal system had no effect on dividend policy.

Setiawan et al. (2016) studied dividend-payout and ownership structure of Indonesian firms using the data from 2006 to 2012. The sample of this study include 710 firm observations per year. They divided the ownership in to "Family ownership, foreign ownership and government ownership". They argued that family owners are mostly involved in serving their own interests rather than shareholders benefits, and hence they utilized firm resources for their own satisfaction rather to distribute it among shareholders. They also said that government owned firms have more access to external funds and they do not need internal funds for investment purposes, so they mostly distribute them in the form of dividends. Their results revealed to

possibilities regarding the affiliation among foreign share-ownership and dividend-payout. The first one is that they require a strong mechanism of governance which leads towards more dividend payments. The second one is that they possess great capabilities of monitoring and expertise, so they do not depend on dividends to avoid management-expropriation which leads towards a low payments of dividends.

Mulyani, Singh, and Mishra (2016) explored the part of leverage and dividends in mitigating agency cost in the firms having higher family share-ownership of Indonesia. The sample of this study consisted of 410 firms after excluding the firms with net losses in order to avoid the negative values of dependent variable. The data of the period of 1990 to 2011 was used in this study. The data was taken from the financial statements of the firms and Indonesian market directory. Family firms are measured by two ways; a dummy variable which is known as family control that takes the value 1 when the family owns 20% or more shares in the firms, and otherwise zero. The second one is the percentage of shares held by family, which is known as family ownership." A simultaneous equations system and a fixed effects regression" techniques were used for model estimation. They concluded that family firms prefer to withhold high cash for their personal consumption rather than to consume it on the common goals that leads towards a low payments of dividends. Their empirical results also showed that family firms tend to keep high leverage.

Hamzah and Zulkafli (2014) examined the role played by the ownership-structure in effecting the financial-policies of corporations. The data used in this study cover the era of 2007 to 2013. The firms listed at busra stock exchange were the population of the study. They debated that the presence of large shareholder put a pressure on controlling bodies. If there were no large-shareholder, the controlling-shareholders will use the firm resources according to their will and wishes. Because of the expertise and interest in the firm, large-shareholder monitor the activities of the management and make sure that the firm resources is distributed among all on merit. So the association among controlling-shareholders and dividend is positive when there is a large-shareholder. They also concluded that firm with large-shareholder tend to invest the free-cash flows rather to consume it for the personnel benefits of controlling bodies.

Pindado et al. (2012) considered the family-ownership, dividend-payout and firm-performance of European firms. They used cross-country samples in this study. They said that due to the depreciation and appreciation in the prices of firm is associated with the announcement of dividends, the family-owned firms distribute more earnings than non-family owned firms. Because the wealth and the repute of the family is totally depending on the firm value, therefore they always tried to frame such a policies that maximize the firm value, and payments of dividend is among one of those policies. They also test the connection among family-owned firms and firm-performance. Their empirical evidences showed a direct link among these two variables. Which is in line with the most of the studies conducted on this regard.

González, Guzmán, Pombo, and Trujillo (2014) studied the family involvement and dividend-policy of the firms facing agency problems. The data of 458 firms was used in this study. They concluded different results depending upon the different scenarios. They showed that involvement of family in the management does not influence dividend- payout. Secondly they concluded that involvement of family in both the control and ownership moves dividend- payout of the firm downward. At last when the family members serve on the board disproportionately, it moves the dividend- payout of the firm upwards. So the use of family involvement against agency problems with the help of dividend- payout diverges depending upon how family is involved.

Jeon et al. (2011) investigated the possible results of foreign share ownership when tested against the decision of payout- policy of the firms. The study covers the era of 1994 to 2004. A total 5583 firm observations per year was used as a sample in this study. The dependent variable includes two proxies; payout- policy and share repurchase. They concluded that foreign share ownership with more than 5% shareholding moves the payout of the firm upward because they prefer for investment the firms that pay maximum portions of their earnings to the shareholders. They also showed that most of the foreign share- holders are institutions, therefore they possess expertise and experience regarding firm maters. The findings also demonstrate that foreign share ownership do not prefer the firms that repurchases shares, and increase in their shareholding do not brings up the share repurchase.

Kouki and Guizani (2009) observed ownership- structure and dividend policy of the firms listed at Tunisian stock exchange. They used the data of the period from 1995 to 2001. A total of 203 firm observations per year were used as a sample of the study. The findings suggest that ownership- structure is also among the other important elements of understanding the dividend-payout of the corporations. The empirical findings revealed that an increase in concentrated ownership- structure moves upward the dividend payments of the firm. They also concluded that institutional share ownership cause a decrease in the distribution of earnings. Finally they showed that state share ownership is also relevant with the earning distribution. Some controlled variables are also used in this study and their findings are the following: larger firms pay less dividends, and more levered firms also pay low dividends.

Lam, Sami, and Zhou (2012) explored the state share ownership and foreign share ownership against the payout decisions of the firms. The data from 2001 to 2006 is used in this study. The study taken 1712 firms as a sample across two markets. They showed that state share ownership enhance the earnings- distributions the firms as the firms with high state share ownership do not depend upon the internally generated firms and can manage the funds required for investments from outsiders easily. Their findings also demonstrated that owners that belongs to foreign countries do not require high dividend as they have the expertise and enough knowledge to monitor the management. Therefore they do not hang on the dividend to minimize the agency cost and protect themselves from the illegal activities carried out by the directors.

Faccio, Lang, and Young (2001) explored the diffusion of ownership- rights and control- rights and their influence on the dividend-payout of the firms. They chose western- Europe and Asia for this purpose because concentrated share ownership is the common form of ownership here. They said that the chances of expropriation are maximum in the firms where the dispersal among ownership- rights and control- rights is low. They showed a direct association among these variables in Thailand, Italy and Indonesia, as the firms with higher ratios among these represent a higher payments of dividends. Their conclusions can be explained with the simple words that the firms where the management possess maximum powers of expropriation pay low dividends because they prefer to retain the firm resources in the firm in order to use them for their personal consumptions rather to share it with the shareholders. The final conclusion from their study was

that the concentrated share ownership cause a decrease in the dividend- payments of the firms located in the above regions.

Berzins, Bøhren, and Stacescu (2011) explored the connection among the conflict of interest among minority and majority shareholders and dividend- payout. The selected the firms having controlled by block holders as a sample for the study. They concluded that higher conflicts of interests among shareholders leads towards higher payments of dividends. This association become stronger as the minority shareholders disperse more and they do not have any representative serving on the board to protect their comforts. The explanation of their findings is that dividend is a device which is used to control and minimize the agency- conflicts among majority and minority shareholders. As these conflicts rises, the need for dividend is also rises, and minorities only have that one tool for their wealth protection.

Maury and Pajuste (2005) explored the connection among the firm value and multiple-large shareholders. The data from 1993 to 2000 is used in this study. The sample of this study consisted of 612 yearly observations and 136 firms. They concluded that when the votes are distributed among block-holders equally, then it will enhance the governance mechanism of the firm, which in turn increases the value of the firm. These results are more substantial in the firms where the controlling functions are played by the families, as the families are more likely to generate private benefits from firm resources in the absence of other monitoring bodies. They also concluded that the nature of these block-holders do matter while influencing the value of the firm.

Harada and Nguyen (2011) inspected the affiliation among concentrated share ownership and dividend- payout. The data for the time-period of 1995 to 2007 is used in this study. The final sample of the study comprised of 11062 yearly observations. The findings of this study ate in line with the rent withdrawal by major shareholders hypothesis. They concluded that an increase in concentrated ownership cause a decrease in dividend payments of the firm. They also showed that the firms where ownership is concentrated among few hands do not enhance dividends even when they realize an increase in the firm earnings and decrease in the firm debts. This study also confirm the different arguments made on the agency cost by different authors that the unequal sharing of control rights creates agency conflicts. In order to avoid these problems, a strong

mechanism of governance is needed in which there will be appropriate independent monitoring bodies work for the sake of all stakeholders.

Florackis, Kanas, and Kostakis (2015) investigated managerial share ownership against the dividend pay-out in the presence of firm leverage. They used the data from 2001 to 2007 in this study. The sample of this study contain 7376 observations per year. “Thomson DataStream” was the source for the data of leverage and dividend. The data regarding governance variables was collected from Board analyst. Their findings revealed that low level of managerial share ownership in the firms leads towards the payments of low dividends which verifies the alignment hypothesis. They also find that high level of managerial share ownership cause the high payments of dividends. This can be explained that when the managers hold maximum shares in the firm, their wealth become undiversified and knotted to the firm. Therefore they gave out dividends in order to enhance the value of the share. The nature of the association among these variables becomes different due the difference in the leverage of firms.

Vo and Nguyen (2014) explored the managerial share ownership, dividend pay-out and leverage of the firms listed at HCM stock exchange. The study used the data that cover the period of 2007 to 2012. The sample size of the study was 81 firms. “Three stages least square” model was used for analysis. They said that firm with substantial managerial share ownership tend to maintain low debt level, as high leverage bring the bankruptcy threat to the firm and also high debt allow the creditors to intervene and monitor the activities of the management. They also find that firm with higher managerial share ownership tends to distribute high dividends which is against the managerial entrenchment hypothesis. Finally their results revealed a adverse influence of leverage on dividend which is in line with the assumptions provided by pecking order theory.

H. Li and Zhang (2007) explored firm profitability and managerial share ownership of the firms that were once owned by state and then privatized. They used the data for the period of 1992 to 2000. The study used 155 firms as a sample for analysis. The data was obtained from “China stock initial public offering database and china stock market and research database”. They find that after the performances of the companies decreases after their privatization, but the firms with managerial share ownership shows a small decrease in their performances as compared to other firms. The results also showed that higher level of CEO share ownership leads towards

more increase in the performances of the firms. However rather to allocate the shares to CEO only, the allocation of shares to the entire management is more beneficial for the performance of the firm.

2.2 Board structure and dividend pay-out

Van Pelt (2013) examined the impact of board characteristics on dividend payout of the firms listed on S&P 500 index. Five board characteristics are examined in this study: board size, number of insider directors, number of women directors, insider ownership and directors tenure. Cross sectional and fixed effects tests are applied in order to find the results. The findings publicized that there is a positive and significant association among board size and dividend-payout, suggesting that a larger board will have a negative influence on board performance. After application of cross sectional tests the other four characteristics also showed a significant impact on dividend payout. However they did not show any significance in robustness and firm fixed effects tests.

Abdelsalam et al. (2008) considered the board composition and ownership structure against dividend-payout using top 50 firms listed at Egyptian stock exchange. The data for the period of 2003-2005 is used in this study. These firms are nearly 80 per cent of the shares that are being traded at the Egyptian stock exchange in 2005. The number of observations are then increased through pooling of data for three years. Board- composition is represented by three variables: size of board, independence of board, and dual-role. Ownership structure is represented by the following variables: managerial share-ownership, block holder ownership, institutional share ownership, and the ratio of free floating stock. Dividend is measured by two proxies: dummy variable dividend decision and dividend payout ratio. Firm profitability is taken as control variable. The findings revealed a substantial and direct linked among institutional share ownership and both dividend decision and dividend- payout ratio. The findings also suggest that there is no major association among composition of board and both dividend decision and dividend-payout ratio.

Mansourinia et al. (2013) examined the impact of ‘board size, board independence and CEO duality’ on dividend-policy for the firms listed on Tehran stock exchange using the data from 2006 to 2010. A sample of 140 companies was selected for this purpose. F-Limer and Hausman

tests were applied and among common effects, fixed effects and random effect for hypothesis testing, the fixed effect model was chosen. Firm size, return on assets, financial leverage and growth are used as controlled variables. The findings have revealed that there is significant and direct link among board size and dividend policy, which means that higher number of board members leads towards more dividend payouts. The results also showed insignificant bonding concerning the variables of board independent and CEO duality with dividend policy of companies, which means the existence of executive and non-executive directors and also the existence of a person serving on both chairman and CEO post has no impact on dividend payout of the firm.

Shahid, Gul, Rizwan, and Bucha (2016) analyzed the influence of ownership structure, board size, board composition and CEO duality on dividend payments using the data of the firms listed on KSE and BSI for the period of 2010 to 2015. The study used a sample of 176 firms listed at KSE and 280 firms listed at BSI. Pooled OLS regression test is used to determine the relationship among dependent and independent variables. VIF and Hausman tests were applied to choose between random effects and fixed effects. Fixed effects model was chosen for testing the research hypothesis. The results suggest a significant and positive relationship between managerial ownership, board size, board independence and dividend payouts, and a negative relationship between ownership concentration and dividend policy. Finally the positive association between return on assets, firm size and dividend payouts is also found.

Roy (2015) investigated “ownership structure and corporate governance practices” against dividend policy for the firms listed at (BSE 100 and NIFTY 100) using the data of five years from 2007-2011. The study also explored the determinants of dividend, and the firm characteristics having impact on dividend policy like; profitability, age, size, growth, liquidity and income volatility are also studied. A sample of 51 top Indian firms in term of market value is used. The dependent variable dividend is measured through dividend payout ratio and dividend yield ratio. The results showed that corporate governance variables; board size and board independence are significantly associated with dividend payout, which suggest that when the protection mechanism of shareholders is working well, the capital will be allocated more effectively. The results also suggest that firm liquidity, growth opportunities and firm size positively influence dividend, while leverage negatively influence dividend payout.

Gill and Obradovich (2013) studied the impression of board size, CEO duality, internationalization of firms and institutional share ownership on the decision to pay or not pay dividends using the data for the era of 2009 to 2011. The study used 296 firms as a sample. These were listed at New York stock exchange.' Co-relational and non-experimental' research model were used in this study. The findings of the study revealed that there is a constructive influence of board size, CEO duality, and internationalization of firms on dividend decision and negative impact of institutional share ownership on decision regarding payments of dividends. The results also revealed that when the firm size is detained constant, the relationship between board size, CEO duality, internationalization of firms and decision of paying dividends is positive while the relationship between institutional-ownership and decision to pay dividends is negative. (!!) When firm performance is seized constant, the CEO duality is a positive function of decision to pay dividends and institutional- ownership is a negative function of decision to pay dividends. (!!!) When firm growth is held constant, the relationship between institutional ownership and decision to pay dividends is negative. When financial leverage is held constant the CEO duality, board size, and internationalization of firms are positively related with decision to pay dividends while institutional-ownership is adversely related with decision to pay dividends

Arshad, Akram, Amjad, and Usman (2013) studied the relationship between board structure and dividend payout of information, communication and transportation firms registered at Karachi stock exchange using the data from 2007 to 2011. Thirteen firms were registered from information and transportation and 12 were taken as a sample. One firm was removed because of the unavailability of the data. The data was derived from the income statements, balance sheet analysis and annual reports of the firms." Ordinary least square regression model" was used for analysis. The dependent variable dividend is presented by two variables; dividend decision a dummy variable and dividend payout. Board size was positively related with both dividend decision and dividend payout. The growth showed a negative and significant impact and leverage showed a positive but insignificant impact on dividend. Return on equity was also positively and significantly related with dividend.

Agyei and Owusu (2014) explored the ownership structure and corporate governance and their influence on capital structure of the firms listed on Ghana stock exchange. The data was used for

the period of 2007 to 2011. Eight manufacturing listed firms were randomly selected as a sample. After applying descriptive and correlation, multivariate regression analysis was used for data analysis. Corporate governance variables includes; size of board, CEO duality and board composition .Ownership structure include managerial share ownership and institutional share ownership. Some controlled variables like firm size and profitability on firm investments are also examined. The results showed that board size and board composition are significantly and positively related with leverage. Similarly institutional ownership and managerial ownership also had a positive and significant impact on leverage. However CEO duality had a significant negative impact on leverage. The findings also revealed that firm size had a positive and return on assets had a negative impact on leverage.

Kim and Lee (2008) analyzed the association among dividend-payout and corporate governance under agency cost and financial restrictions. The data from 1993, 1995, 1998, 2000, 2002 and 2004 is used in this study. The sample consist of 4399 per year firm observations. The corporate governance index was used in this study. The firms that have no data on corporate governance index are excluded in this study. Four alternative measures of dividend payout were used in this study which are; ratio of payout to sales, ratio of payout to the book value of shares, ratio of payout to net earnings and ratio of payout to market value of shares. Four control variables such as firm size, return on assets, leverage and firm profitability were taken in this study. Two measures of free cash flows was used as a proxy of agency cost. The results showed that corporate governance had an affirmative impact on firm payout. After considering the external constraints and agency cost, the results showed a decrease in dividend payout when their corporate governance become better. The findings suggest that the association among dividend-payout and corporate governance cannot be proclaimed without considering the agency cost and financial constraints.

Bolbol (2012) investigated the effect of board features on dividend- payout of Malaysian firms listed at bursa stock exchange. The study used the data of the financial year 2010. The sample consist of 50 companies after excluding the companies that did not paid dividend. Seven corporate governance variables were studied in this study which are; “board size, board composition, CEO duality, family linked companies, board of directors ethnicity, gender of board of directors and managerial ownership”. Growth opportunities, firm size, leverage and

firm performance were taken as controlled variables. Regression model was used to test the affiliation among dividend payout and corporate governance. The findings revealed a direct but immaterial connection between firm size, firm performance, growth opportunities and managerial share ownership. Board size, board composition, family linked, board ethnicity, leverage and gender of board of directors are adversely and immaterially associated with dividend- payout. Finally CEO duality is negatively and significantly associated with dividend.

Yarram and Dollery (2015) studied the impact of corporate governance ratings on dividend-payout decisions of Australian firms using the data for the period of 2004-2009. The study had two objectives, the first one is to check the role of corporate governance ratings in the decision of paying or not paying dividends, and the second one is to examine the impact of corporate governance ratings on the average dividend payout ratio of Australian firms. The sample comprise of 413 non-financial firms after meeting all the requirements. A logit model is employed for the first purpose and Tobit method is used for the second purpose of the study. This study employs random effects panel Tobit and panel logit models in order to minimize the chances of unobserved heterogeneity. The results showed that corporate governance ratings have a positive and significant impact on both the decision to pay or not pay the dividend and the average dividend ratio of Australian firms. The findings of this study also support the signaling hypothesis by demonstrating a positive relationship between profitability and dividend payout and also support the life cycle hypothesis by representing a negative relationship between dividend- payouts and growth opportunities.

O'Connor (2013) investigated the impact of individual corporate governance provisions on dividend- payout of emerging markets. The sample contain 220 firms from 21 emerging markets countries. Corporate governance provisions include;" independence, discipline, transparency, responsibility, Accountability, and fairness". The dependent variable dividend was measured by three proxies which are; dividend to earnings, dividend to cash flows and dividend to net sales. Firm profitability, Firm size, cash, total equity, firm growth and retained earnings were used as controlled variables. They concluded that dividends are outcomes of good governance. Better governance make shareholders to extract their dividends from the firm. The results showed that dividends are higher in the firms that have more quantity of independence and accountability.

The results also suggested that opaque firms pay more dividends than transparent firms because these firms substitute bad governance by more cash payments to shareholders.

Chen, Cheung, Stouraitis, and Wong (2005) inspected the influence of corporate governance on dividend and firm value. They also examined the effect of ownership share structure on dividend and firm performance. They used the data for the period of 1995 to1998. They selected 412 firms listed at Hong Kong stock exchange as a sample. The data is collected from company annual reports and firm analysis provided by the financial times. Return on assets, return on equity, and market to book ratio are used as measures for firm performance. Dividend payout ratio and dividend yield were the proxies for payout policy. The results showed a negative association between CEO duality and firm performance. A weak relationship is found between family ownership and dividend policy and for small firms, this relationship become negative up to 10% of firm shares, this relationship become positive within 10% to 35% of the company capital. Finally board independence, presence of audit committee and outsider dominated board have a small effect on dividend policy and firm value.

Adjaoud and Ben-Amar (2010) studied the impact of corporate governance quality on dividend payout of firms listed at Toronto stock exchange using the data of the period from 2002 to 2005. The sample size of the study was 714 firms. The Globe & Mail annual corporate governance index is used in this study. Additionally board composition, shareholdings issues, shareholders rights and corporate governance disclosure policy were used as a sub categories for scoring. Firm risk, free cash flows, firm size, growth opportunities and profitability were taken as a controlled variables. Tobit regression model was used to estimate the relationship between corporate governance quality and dividend policy. This method help us to remove prejudices that are associated with the use of ordinary least square method. Random effect Tobit model is used to eliminate errors while clustering at the firm level. The empirical results showed that strong corporate governance mechanism in firms leads towards higher payments of dividends. Board

composition and shareholder rights were positively related with dividend policy. Firm size and free cash flows are also positively linked with dividend policy. Finally firm risk and dividend policy were negatively associated with each other.

Alias, Yaacob, Rahim, and Nor (2017) considered the connection among the cash flows of the firm and dividend in the presence of different board characteristics. The data from 2002 to 2007 was used in this study. The final sample of the study consisted of 361 firms listed at Malaysian stock exchange. The analysis was done with the fixed effect regression model. They find out that duality has an adverse effect on the association among cash flows and dividends. On the other hand independence of board has a constructive impact on the direct relation among cash flows and dividend. Their findings suggest that the presence of sufficient number of independent directors on the board can make sure the use of cash flows appropriately such as distributing them in the form of dividends. While the duality can leads towards the use of these cash flows inappropriately and hence cause the agency problems. However the study could not find any significance of the size of the board regarding the cash flows and dividends.

2.3 Growth opportunities and dividend pay-out

R. K. Subramaniam, Shaiban, and Suppiah (2014) examined the affiliation among dividend-payout and growth opportunities, and the study also moderate the connection among dividend-payout and investment opportunities. The sample consisted of top 300 listed public companies on Malaysian stock exchange from the period of 2004 to 2011. The sample consist of 1330 firm-year observations. The variables used in this study are following: dividend payout ratio, growth opportunities, board size, board independence, CEO duality, ownership concentration, leverage and return on assets. The regression model is used to test the relationship. The findings revealed that association concerning growth opportunities and dividend- payout is negative. The findings also suggest that this relationship become weaker for Bumiputera ethnic controlled firms. Furthermore the results showed that the negative association occur only for non-government controlled firms.

R. Subramaniam, Devi, and Marimuthu (2011) explored the affiliation among investment opportunities and dividend policy using the data of three years (from 2004 to 2006). They also studied their relationship by moderating board size and board composition. The authors also tested the free cash flow theory with the help of firm size, return on assets, duality and debt. The study used the sample of three hundred companies listed on the Malaysian stock exchange. E-views software is used for the analysis of cross-sectional data. Ordinary least-squares regression is applied in order to obtain empirical evidences. After excluding the outliers, the sample size is

reduced. Data on CEO duality, board size and board composition is collected from the annual-reports of the companies. The findings revealed a significant and negative association between growth opportunities and dividend payouts. The results also showed that the negative relationship between growth opportunities and dividend payouts become weaker for the firms having large boards and more number of independent directors serving on the board.

Ghalandari (2013) studied that moderating effect of growth opportunities on the affiliation among dividend- payout and ownership structure, and also among capital structure and ownership structure for the firms listed at Tehran stock exchange. The study used the data for the period of 2007 to 2011. The sample consist of 120 firms. The data was collected from financial statements of the firms using Tadbir Pardaz software. Eviews software was used for the estimation of model. Variable reliability tests and Haussman test were applied before data analysis to determine whether the model is appropriate for estimation of parameters or not. Fixed effect model was used to test the hypothesis. The findings showed that growth opportunities had a substantial and adverse influence on the relationship between capital structure and firm value, and this relationship become positive in the absence of growth opportunities. The results also revealed that growth opportunities had a significant impact on the affiliation between ownership structure and firm value.

Benjamin et al. (2016) explored the family share ownership in the context of dividend payments in Malaysia. They utilized the data from (2005-2010). Their sample consisted of 160 firms after complying with the requirements. They concluded that firms with low family ownership (from zero to 5 %) pay low dividends because of the inability of these family owners to confiscate the firm wealth, and hence the shareholders do not demand and require the dividend-induced monitoring device. However firms with higher family share-ownership produced high dividends due to the capabilities of family owners to transfer firm wealth. In such cases shareholders demand high dividends in order to minimize the chances of management expropriation. Their results also demonstrated that firms with low investment opportunities and low debt-ratios are more likely to pay high dividends because of the shareholders concerns regarding management expropriation and hence they employ pressure on directors to distribute the resources.

CHAPTER NO. 3

RESEARCH METHODOLOGY

3 Research methodologies

This chapter depicts the way in which the research is conducted and completed. It contains the following steps in order to originate results from the available data in an organized way.

- population
- sampling size and technique
- data collection sources
- conceptual frame work
- Hypothesis of the study
- Identification of variables
- Types of analysis
- Models used for the estimation

The objective of this study is to determine the impact of board structure and ownership structure on the dividend pay-out of non-financial firms listed at Pakistan stock exchange. Furthermore this impact is also calculated under high and low growth opportunities. Board structure includes board independence and CEO duality, while ownership structure includes managerial ownership, institutional ownership, minority ownership and foreign ownership. Some control variables are also used in this study which are debt, firm size, return on assets and Tobin Q.

3.1 Population

Population is the thorough group from which the sample is derived. The researchers develop their hypothesis on the bases of those samples drawn from the population. It is difficult to study the whole population; therefore the samples are used for the gathering of information. The population is symbolized with N and sample is denoted with “n”. The reliability of the results obtained from the samples is depending upon the sampling technique. A proper sampling

technique leads towards the estimation of the entire population characteristics on the bases of that sample. There are almost 36 sectors of firms registered at Pakistan stock exchange which include both financial and non-financial firms. The present study proposed to conduct by using the data of textile sector, but as the objective of the study is to analyze the dividend payout and we have to take only the firms that give consistent dividend throughout the study period. So with the advice of research supervisor, the area of the current study is extended. The present study is conducted using the data of 396 non-financial firms listed at Pakistan stock exchange.

3.2 Sample size and technique

Purposive sampling technique is used in this study for drawing samples out of the population. In purposive sampling the observations with specific characteristics are taken from the population as a sample according to the objectives of the study. As the objective of this study is to determine the influence of board size and board structure on the dividend pay-out of manufacturing firms, therefore we taken only those firms that paid out dividends consistently from 2011 to 2016. After screening of data on the bases of above criteria, there were 92 firms that comply with that benchmark. After that 10 firms out of these 92 firms were excluded due to abnormality issues in the data and finally the data of 82 firms was used for the analysis.

3.3 Sources of data

This research is grounded on the secondary data. The panel data from 2011 to 2016 is collected from the balance sheet analysis by state bank of Pakistan and the annual reports of the firms. Additionally the website of Karachi stocks is also visited to collect market value of shares of some firms. A total 492 observations was used for the analysis purpose.

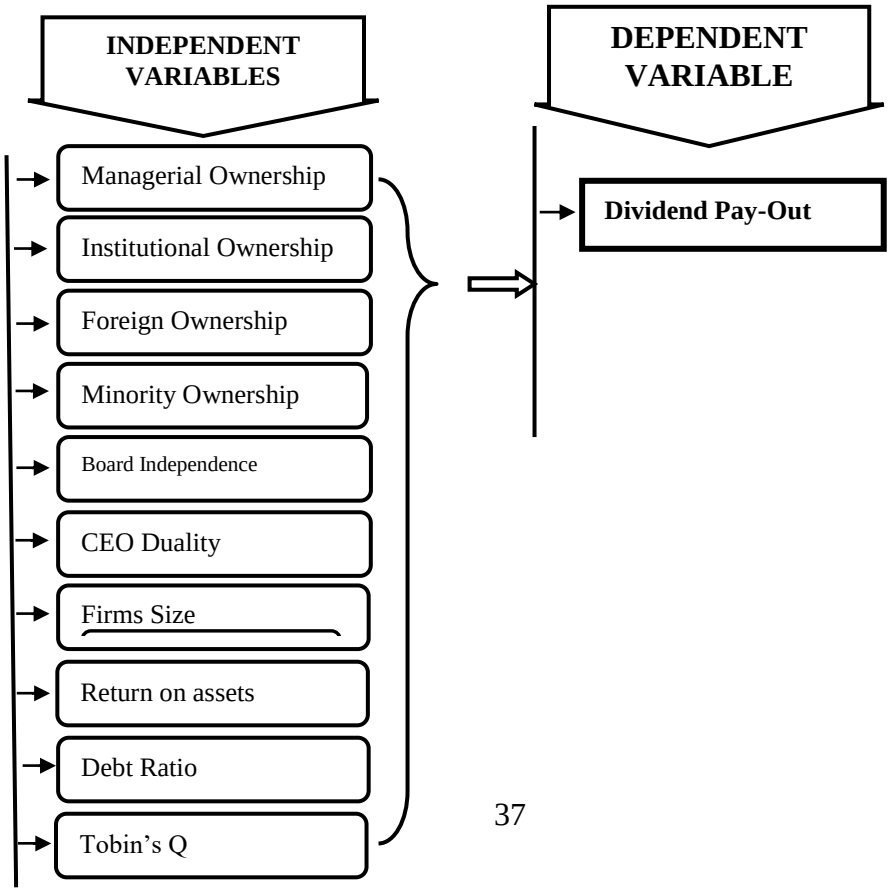
3.4 Conceptual frame work

The conceptual frame work is formed to explain the expectations of your findings through your study. It is a tool of analytical nature that have numerous perspectives. Conceptual discrepancies among various variables can be made by using this frame work. A good conceptual frame work is helpful in remembering and applying something in a easy way. It guide the reader regarding the work of researcher as well as it depicts the consideration of researcher regarding the

association among independent and dependent variables. The frame work of the present study is following.

Dividend remains a puzzle among researchers regarding its behavior and impact on financial worth of the firms. The two common behaviors of dividend that are mostly described by the researchers are signaling behavior and agency cost resolving behavior. The present study is conducted regarding the agency behavior of dividend. According to this explanation, dividend can be used as a tool to restrict the insiders to act in the best interests of the outsiders. There are several factors that influence the dividend payments of firms. The most important factor among all of these is a good practices of corporate governance mechanism. The present study is conducted to analyze the influence of corporate governance practices on dividend payments of the firms and measures corporate governance mechanisms in term of board structure and ownership structure. Board structure includes board independence and CEO duality while ownership structure includes managerial ownership, institutional ownership, foreign ownership and minority ownership. Tobin Q, firm size, debt and ROA are taken as control variables.

Figure 1: Conceptual Framework



3.5 Identification of variables

The variables used in this study are categorized in two types, dependent and independent variables. Dividend pay-out is used as dependent variable while board independence, CEO duality, managerial ownership, foreign ownership and minority ownership are used as independent variables. The proxies, measurement and brief explanation of these variables is following;

Table 3.1 Variables used in this study

Variable Name	Proxies
Dependent variable Dividend pay-out	Dividend pay-out ratio
Independent Variables (Corporate-governance practices)	Managerial Ownership Foreign Ownership Institutional Ownership Minority Ownership Board Independence CEO Duality
Control Variables	Firm Size Debt Ratio Return on Assets Tobin's Q

3.5.1 Dependent variable

The present study used dividend pay-out as dependent variable.

Dividend pay-out

Dividend can be defined as the amount of earnings paid out to shareholders by the management of the firms. The present study used dividend as dependent variable. Dividend pay-out ratio is used as a proxy for dependent variable. The calculation of dividend pay-out ratio is following

$$DPR = \frac{Cash\ Dividends}{Total\ Assets}$$

3.5.2 Independent variables

Following are the independent variables used in this study.

(1) Managerial ownership

Managerial ownership is very vital in influencing the dividend pay-out of the firms. The managers that are also shareholders of the firm behave differently about the dividend decisions of the firm. Managerial ownership is the total amount of shares held by the managers of the firm to the total shares outstanding. The calculation of managerial ownership is following;

$$MO = \frac{Shares\ held\ by\ managers}{Total\ shares\ outstanding}$$

(2) Institutional ownership

Institution here refers to the financial institutions like banks, insurance companies, investment companies, mutual funds etc. The shareholding of these firms in the joint stock companies enhance the transparency and information symmetry. As institutional investors possess great expertise and skills, there they can influence the dividend decisions of the firm more effectively as compared to the other outsiders. The calculation of institutional ownership is following;

$$IO = \frac{Shares\ held\ by\ financial\ institutions}{Total\ shares\ outstanding}$$

(3) Foreign ownership

The investors that belong to abroad are also very vital in influencing the dividend decisions of the firms. They also possess good skills and exposure like institutional owners therefore they can be an influential factor regarding the dividend decisions of the firms. The calculation of foreign ownership is following;

$$FRO = \frac{Shares\ held\ by\ foreign\ shareholders}{Total\ shares\ outstanding}$$

(4) Minority ownership

The dispersed and small owners that hold the shares which is less than 5% of the total shares outstanding. The failure of a better corporate governance practices results in the appropriation of minority's rights by the majority shareholders. Here dividend pay a vital role in giving out the rights and restricting the controlling bodies from appropriation of their wealth. The calculation of minority ownership is following;

$$MRO = \frac{Shares\ held\ by\ small\ shareholders < 5\%}{Total\ shares\ outstanding}$$

(5) Board independence

Board independence refers to the total number of independent directors in the board of directors. The BOD are the responsible for overall decision making and running the business affairs. They work on the behalf of shareholders. Therefore it is important that they will work for the best interest of shareholders and make sure that the rights of all stake holders are well protected. Only an independent board can do that task without doing favor to any party, they can make decisions on merit bases. The calculation of board independence is following;

$$BI = \frac{Number\ of\ independent\ directors}{Total\ number\ of\ directors}$$

(6) CEO Duality

There is two important designations in the corporate world, one is chairman and the other is chief executive officer. The chairman is the head of non-executive bodies and CEO is the head of the management of the firm. It is very important for the sake of better corporate governance that there should be two different persons serving on that position. If one person will perform both functions and play dual role then the accountability of that person will decrease and the efficient role of both these positions will also decrease. The calculation of CEO Duality is following;

If the one person will serve as a CEO and also as a chairman than it will take value 1 otherwise it will take value 0.

(7) Firm size

Firm size is used as a control variable in the present study. There are many studies that showed a significant impact of variations in the size of the firms on dividend pay-outs of the firms. The firm size can be captured by taking its total assets or total sales into account. The calculation of firm size in the present study is as follow;

$$SZ = Log\ of\ Total\ Assets$$

(8) Debt ratio

Debt is also used as a control variable in the present study. The firms with high debts have to pay out high interests and hence the level of earnings that is available shareholders is decreased. Additionally the creditors have a great influence on the management of high levered firms and they pressurize them to peruse policies which will benefit these creditors even on the expense of shareholders. Therefore high levered firms usually paid low dividends as compared to low levered firms. The calculation of debt is following;

$$DR = \frac{Total\ Long\ Term\ Debts}{Total\ assets}$$

(9) Return on assets

As we mention above that distribution of earnings among shareholders is known as dividends. Therefore the firms that generate high returns can be better in the position to pay high dividends. ROA is used as a control variable in this study as suggested by the literature. The calculation of return on assets is following;

Return on assets = Net income/total assets

(10) (10) Tobin Q

Brainard and Tobin (1968) indicated that how to check as the stock of a specific firm is fairly valued, undervalued or over-valued by taking the ratio of the market value of the firm to the book value of the firm. Therefore Tobin Q is the ration of the market value of a firm to its replacement cost. The market value of any firm can be easily calculated in Pakistan from the sources like business recorder and khi stock etc. The median value of Tobin Q is used in this study to classify firms in high and low growth categories. The calculation of Tobin Q is as follow;

$$TQ = \frac{Market\ value\ of\ firm}{Book\ value\ of\ assets}$$

3.6 Hypothesis of the study

Hypothesis is an anticipated justification that is prepared on the bases of limited proofs and it is used for further investigation. It is a proposition without any evidence of its truth. There are two types of hypothesis, one is null hypothesis and other is alternative hypothesis. The null hypothesis describes that there is no association among variables that are under the investigation. Contrary to this the alternative hypothesis suggest that there is an association among the variables under investigation. After reviewing the literature, the following hypothesis are developed to check the influence of corporate governance practices on the dividend pay-out under high and low growth opportunities.

Hypothesis for Overall Firms

H1a There is a significant impact of Managerial Ownership on dividend pay-out of textile firms listed at PSX.

H2a There is a significant impact of Institutional Ownership on dividend pay-out of textile firms listed at PSX.

H3a There is a significant impact of Foreign Ownership on dividend pay-out of textile firms listed at PSX.

H4a There is a significant impact of Minority Ownership on dividend pay-out of textile firms listed at PSX.

H5a There is a significant impact of Board Independence on dividend pay-out of textile firms listed at PSX.

H6a There is a significant impact of CEO Duality on dividend pay-out of textile firms listed at PSX.

Hypothesis for High Growth Firms

H1b There is a significant impact of Managerial Ownership on dividend pay-out of textile firms listed at PSX under high growth opportunities.

H2b There is a significant impact of Institutional Ownership on dividend pay-out of textile firms listed at PSX under high growth opportunities.

H3b There is a significant impact of Foreign Ownership on dividend pay-out of textile firms listed at PSX under high growth opportunities.

H4b There is a significant impact of Minority Ownership on dividend pay-out of textile firms listed at PSX under high growth opportunities.

H5b There is a significant impact of Board Independence on dividend pay-out of textile firms listed at PSX under high growth opportunities.

H6b There is a significant impact of CEO Duality on dividend pay-out of textile firms listed at PSX under high growth opportunities.

Hypothesis for Low Growth Firms

H1c There is a significant impact of Managerial Ownership on dividend pay-out of textile firms listed at PSX under low growth opportunities.

H2c There is a significant impact of Institutional Ownership on dividend pay-out of textile firms listed at PSX under low growth opportunities.

H3c There is a significant impact of Foreign Ownership on dividend pay-out of textile firms listed at PSX under low growth opportunities.

H4c There is a significant impact of Minority Ownership on dividend pay-out of textile firms listed at PSX under low growth opportunities.

H5c There is a significant impact of Board Independence on dividend pay-out of textile firms listed at PSX under low growth opportunities.

H6c There is a significant impact of CEO Duality on dividend pay-out of textile firms listed at PSX under low growth opportunities.

3.7 Types of analysis

The following statistical tools and analysis are employed in this study to calculate the influence of corporate governance practices on dividend pay-out of manufacturing firms.

3.7.1 Descriptive Statistics

The purpose of descriptive statistics is to show the basic features of the data. They perform graphic analysis to provide the summaries of the data. Descriptive statistics are used as a basis for other quantitative analysis. Descriptive statistics describes the minimum value, maximum value, standard deviation, range, mean and median values of the variables used in study.

3.7.2 Correlation analysis

Correlation analysis is used to determine the relationship among independent and dependent variables. It is also used to determine the strength and direction of the relationship among these variables.

3.7.3 Unit root analysis

It is compulsory to run the unit root test before running the regression analysis. The purpose of this test is to determine the stationarity of the data as the stationary data is one of the requirements for running the regression. This test is vital as it help us to figure out any trends in the data. Because the data containing trends provide false results. Hence to avoid this problem unit root test must be applied before running the regression.

3.7.4 Redundant Fixed effects test

Redundant Fixed effects test is used to decide among the common effects model and fixed effects model. If the p-value of the test is <.05 then fixed effects model will be selected.

3.7.5 Hausman test

Hausman test is used to select among the random effects model and fixed effects model. If the p-value of the test is < .05, then fixed effects model will be selected otherwise random effects model will be selected.

3.7.6 Regression analysis

Regression analysis is used to predict dependent variable with the help of one or more independent variables. It predict that how much change will be occur in dependent variable with one unit change in independent variable.

3.8 Models used for estimation

The following econometric models are used in this study to determine the impact of independent variables on dependent variable.

3.8.1 General research model

DP=$\beta o + \beta_1(MO)_{it} + \beta_2(IO)_{it} + \beta 3(FRO)_{it} + \beta 4(MRO)_{it} + \beta 5(BI)_{it} + + \beta 6(CD)_{it} + \beta 7(SIZ)_{it} + \beta 8(DEB)_{it} + \beta 9(TQ)_{it-1} + \beta 10(ROA)_{it} + \varepsilon it$

Where;

Constant

B_o = Constant coefficient (the intercept)

Coefficients

$\beta_1$to β_{10} =coefficients of the independent and control variables.

Dependent Variable

Dividend payout ratio (DP) =Cash dividend / Total asset

Independent Variables

$(MO)_{it}$ = managerial ownership of firm i at time t

$(IO)_{it}$ = institutional ownership of firm i at time t

$(FRO)_{it}$ = foreign ownership of firm i at time t

$(MRO)_{it}$ = minority ownership of firm i at time t

$(BI)_{it}$ = board independence of firm i at time t

$(CD)_{it}$ = duality of chief executive officer of firm i at time t

$(SIZ)_{it}$ = firm size of firm i at time t

$(DEB)_{it}$ = debt ratio of firm i at time t

$(TQ)_{it-1}$ = Tobin Q of firm i at time t-1

$(ROA)_{it}$ = return on assets of firm i at time t

3.8.2 Model for High Growth Opportunities Firms

$$\mathbf{DP} = \beta o + \beta_1(MO)_{it} * HQ + \beta_2(IO)_{it} * HQ + \beta 3(FRO)_{it} * HQ + \beta 4(MRO)_{it} * HQ + \beta 5(BI)_{it} * HQ + \beta 6(CD)_{it} * HQ + \beta 7(SIZ)_{it} + \beta 8(DEB)_{it} + \beta 9(ROA)_{it} + \varepsilon it$$

Where;

HQ is interaction term that is equal to 1 if Tobin Q is > than median value otherwise zero.

3.8.3 Model for low Growth Opportunities Firms

$$\mathbf{DP} = \beta o + \beta_1(MO)_{it} * LQ + \beta_2(IO)_{it} * LQ + \beta 3(FRO)_{it} * LQ + \beta 4(MRO)_{it} * LQ + \beta 5(BI)_{it} * LQ + \beta 6(CD)_{it} * LQ + \beta 7(SIZ)_{it} + \beta 8(DEB)_{it} + \beta 9(ROA)_{it}$$

Where;

LQ is interaction term that is equal to 1 if Tobin Q is < than median value otherwise zero.

CHAPTER NO. 4

DATA ANALYSIS AND RESULTS DISCUSSION

Introduction

The following variables are included in this research:

1. Dividend payout as a dependent variable
2. Board independence, CEO duality, managerial ownership, institutional ownership, minority ownership, and foreign ownership as independent variables.
3. Leverage, ROA, Tobin Q, and firm size as controlled variables.

The data of the time period of 2011 to 2016 of non-financial firms was evaluated by using the descriptive and inferential statistical practices. The statistical software E-view 9.1 has been used to test the panel data. The explanation of the results based on the hypothesis are given below:

4.1 Descriptive Analysis:

The purpose of descriptive statistics is to show the basic features of the data. They perform graphic analysis to provide the summaries of the data. Descriptive statistics are used as a basis for other quantitative analysis. It usually includes mean, minimum value, maximum value, standard deviation, etc. The difference between descriptive statistics and inferential statistics is that the former is used for only describing the data, and the latter is used to draw conclusions on the bases of the data.

In this study nine variables are used including dependent and independent variables. The number of observations of every variable are 492. In the below table firm size showed the higher value of standard deviation which is 1.5497. The minimum value of firm size is 10.0085 and the maximum value is 20.1949, and the range of firm size is 10.1864 which is highest in the group. This indicates that firm size has more diversity than the other variables.

Table 4.1 Descriptive statistics - Over All results

	Minimum	Maximum	Range	Mean	Median	Std. Dev.	N
DPR_TA	0.0000	0.2703	0.2703	0.0434	0.0256	0.0486	492
MAN_OWN	0.0000	0.9843	0.9843	0.2611	0.1989	0.2645	492
INST_OWN	0.0000	0.4818	0.4818	0.1207	0.1030	0.1045	492
FOR_OWN	0.0000	0.9400	0.9400	0.1012	0.0000	0.2164	492
MIN_OWN	0.0000	0.8113	0.8113	0.2083	0.1688	0.1560	492
BOARD_IND	0.0013	0.0100	0.0088	0.0070	0.0075	0.0018	492
CEO_D	0.0000	1.0000	1.0000	0.1280	0.0000	0.3345	492
F_SIZE	10.0085	20.1949	10.1864	15.8586	15.6412	1.5497	492
ROA	-0.0511	0.4149	0.4660	0.0942	0.0803	0.0648	492
D_RATIO	0.0000	0.5566	0.5566	0.1164	0.0972	0.0959	492
TOBINS_Q	0.1767	7.2617	7.0849	1.4686	1.0594	1.0968	492

The minimum value of DPR_TA is o and its maximum value is .2703. The difference between minimum and maximum value is .2703. Its mean value is .0434 and standard deviation is .0486. MAN_ OWN has 0 minimum value and .9843 maximum value. It has a mean value of .2611 and standard deviation is .2645. It has a range of .9843 and median value of .1989.

The minimum value of institutional share ownership is 0 and the maximum value is .4818. The difference among maximum and minimum value is .4818. it have the mean of value .1207 and standard deviation of .1045. Foreign share ownership has the minimum value of 0 and maximum value of .9400. The range is .9400. Its mean value is .1012 and standard deviation is .2164.

The minimum value of minority share ownership is 0 and the maximum value is .8113. The range is .8113. It has the mean of value .2083 and standard deviation of value .1560. Board independence has the maximum value of .0100 and minimum value of .0013. The range is .0088. Its mean value is .0070 and standard deviation is .0018.

The CEO duality has the minimum value of 0 and maximum value of 1. The range is 1 and the mean value and standard deviation are .1280 and .3345 respectively. The firm size has the minimum value of 10.0085 and maximum value of 20.1949. The range is 10.1864. It has the mean value and standard deviation of 15.8586 and 1.5497 respectively.

The ROA has the minimum value of -0.0511 and maximum value of .4149. The range is .4660. It has the mean value of .0942 and standard deviation of .0648. The D_RATIO has the minimum value of 0 and maximum value of .5566. The range is .5566. It has the mean value of .1164 and standard deviation is .0959.

TOBIN_Q has the minimum value of .1767 and maximum value of 7.2617. The range is 7.0849. It has the mean and standard deviation of value 1.4886 and 1.0968 respectively.

4.2 Correlation Analysis:

Correlation analysis is helpful in determining the following;

1. To find out the relationship among dependent and independent variables.
2. To find out the strength of relationship among these variables.
3. To find out the direction and nature of the relationship among these variables.

The value of the correlation coefficient lies between -1 and +1. The +1 shows a perfect positive correlation and -1 shows a perfect negative correlation while the 0 shows no correlation among study variables. Many researchers' underlines that there should be no multicollinearity among the independent variables.

Table 4.2 Correlation Matrix of overall firms

	DPR	MAN OWN	INST OWN	FOR OWN	MIN OWN	BOAR IND	CEO_D	F SIZE	ROA	D RATIO	TOBINS Q
DPR_TA	1										
MAN_OWN	0.3228	1									
INST_OWN	0.0818	-0.3110	1								
FOR_OWN	0.1641	-0.3543	-0.0451	1							
MIN_OWN	-0.1243	0.0592	-0.0120	-0.3063	1						
BOARD_IND	0.1623	-0.3251	0.1304	-0.0082	-0.1145	1					
CEO_D	0.0451	-0.1453	0.1525	0.0122	0.0066	-0.1330	1				
F_SIZE	0.1734	-0.3598	0.2107	0.1885	-0.3213	0.1267	0.1768	1			
ROA	0.6300	-0.2681	-0.0505	0.1334	-0.1674	0.1374	-0.0409	0.1389	1		
D_RATIO	-0.1837	0.1369	0.0104	-0.2134	0.1515	0.0861	-0.0213	0.1182	-0.213	1	
TOBINS_Q	0.4010	-0.1377	-0.0683	0.1169	-0.0433	0.1551	-0.0332	-0.0253	0.4402	-0.0878	1

In the above table the correlation among all the variables are displayed. All the variables are perfectly correlated with their selves as the value of each variable with itself is 1. The problem of multicollinearity does not exist as the value of correlation among independent variables is less than 0.8. The correlation among DPR_TA and MAN_OWN is moderate and positive with the value of 0.3228. It shows that the dividend payout of the firms and managerial share ownership moves in a same direction. The correlation among DPR_TA and INST_OWN is positive but weak with the value of 0.0818 which indicates that with the increase in the institutional share ownership there is also an increase in the dividend payout of the firms. The correlation among DPR_TA and FOR_OWN is also positive but weak with the value of 0.1641 which provide that the dividend payments of the firms increases with the increase in the foreign share ownership in the firms. DPR_TA showed a negative and weak correlation with MIN_OWN with the value of -

0.1243 which means that with the increase in minority share ownership there will be a decrease in the dividend payout of the firms. The correlation of DPR_TA with the BOARD_IND is positive but weak with the value of 0.1623 which means that the more independent board of a firm, the more dividend will be distributed by that firm. The correlation between DPR_TA and F_SIZE is positive and weak with the value of .1734 which provide that large firms pay more dividends than small firms. The DPR_TA exhibits a positive and strong correlation with ROA with the value of 0.6300 showing that increase in the returns on assets also increase the dividend payouts of the firms. The correlation of DPR_TA with CEO_D is positive and weak with the value of 0.0451 describing that the dual role of CEO and Chairman is positively correlated with the dividend payments of the firm. The DPR_TA showed a negative and weak correlation with D_RATIO with the value of -0.1837 which describe that as the debt of the firm increases, the dividend payout of that firm will decrease. The DPR_TA exhibits a positive and weak correlation with the TOBIN_Q with the value of 0.4010 meaning that the growth firms distribute more dividends as compared to non-growth firms.

4.3 Panel unit Root Test for Stationarity of Variables:

It is compulsory to run the unit root test before running the regression analysis. The purpose of this test is to determine the stationarity of the data as the stationary data is one of the requirements for running the regression. This test is vital as it helps us to figure out any trends in the data. Because the data containing trends provide false results. Hence to avoid this problem unit root test must be applied before running the regression.

The hypothesis of panel root test are following;

Ho: The data is non-stationary

H1: The data is stationary

Decision Criteria

Levin, Lin, and Chu (2002)

Null: Panel data has unit root (assume common unit root process)

Alternative: Panel data has not unit root

Fisher Type Test using ADF and PP test (Maddala & Wu, 1999) and (Choi, 2001)

(Assume individual unit root process)

Null: Panel data has unit root (assume common unit root process)

Alternative: Panel data has not unit root

Table 4.3

Panel Unit Root Test

Variable	Statistics values		Sig.	Stationary/ Non-Stationary	Decision
DPR_TA	Levin, Lin & Chu t PP - Fisher Chi-square	-9.18603 258.817	0.0000 0.0000	1(0) Stationary at level	DPR_TA is stationary at level i.e. Panel data has no unit root at level.
DIR_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-404.991 346.922	0.0000 0.0000	1(0) Stationary at level	DIR_OWN is stationary at level i.e. Panel data has no unit root at level.
INST_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-35.0463 342.305	0.0000 0.0000	1(0) Stationary at level	INST_OWN is stationary at level i.e. Panel data has no unit root at level.
FOR_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-19.1532 145.168	0.0000 0.000	1(0) Stationary at level	FOR_OWN is stationary at level i.e. Panel data has no unit root at level.
MIN_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-24.7105 318.508	0.0000 0.0000	1(0) Stationary at level	MIN_OWN is stationary at level i.e. Panel data has no unit root at level.
BOARD_IND	Levin, Lin & Chu t	-23.1580	0.0000	1(0) Stationary at level	BOARD_IND is stationary at

	PP - Fisher Chi-square	152.980	0.0029		level i.e. Panel data has no unit root at level.
CEO_D	Levin, Lin & Chu t PP - Fisher Chi-square	-12.5191 27.2984	0.0000 0.0736	1(0) Stationary at level	CEO_D is stationary at level i.e. Panel data has no unit root at level.
F_SIZE	Levin, Lin & Chu t PP - Fisher Chi-square	-19.4490 298.555	0.0000 0.0000	1(0) Stationary at level	F_SIZE is stationary at level i.e. Panel data has no unit root at level.
ROA	Levin, Lin & Chu t PP - Fisher Chi-square	-30.9599 364.462	0.0000 0.0000	1(0) Stationary at level	ROA is stationary at level i.e. Panel data has no unit root at level.
D_RATIO	Levin, Lin & Chu t PP - Fisher Chi-square	-26.4857 307.098	0.0000 0.0000	1(0) Stationary at level	D_RATIO is stationary at level i.e. Panel data has no unit root at level.
TOBIN_Q	Levin, Lin & Chu t PP - Fisher Chi-square	-21.1996 207.685	0.0000 0.0118	1(0) Stationary at level	TOBIN_Q is stationary at level i.e. Panel data has no unit root at level.

The results showed that the p value of each variable is significant therefore we can reject the null hypothesis and accept the alternative hypothesis. The p values also indicate that there is no trend in the data and the data is stationary.

4.4 Panel data regression Analysis

The combination of both time series and cross sectional data is known as panel data. The models that are used for the analysis of panel data are of three types; common effect model, fixed effect model, and random effect model.

4.4.1 Fixed effect model

Fixed effect model perceive each firm differs from other but constant in the time period. This model is used to predict the change in dependent variable caused by the independent variable. It

is the most commonly used model for panel data analysis. Under fixed effect model every firm shows different intercept from others, but it does not show variations across the time.

4.4.2 Random effects model

Under random effect model some variables may be invariant with respect to time but variant with respect to cases, and others may be fixed among cases but variant with respect to time.

4.4.3 Selection criteria between Common Effects, Fixed Effects and Random effects Models

To determine which model is more suitable, at first Redundant Fixed effects test is used to decide among the common effects model and fixed effects model. If the p-value of the test will <.05 then fixed effects model will be selected. After that Hausman test will be applied to select among the random effects model and fixed effects model. If the p-value of the test will < .05, then fixed effects model will be selected otherwise random effects model will be selected.

4.5 Regression Analysis

Regression analysis is used to predict dependent variable with the help of one or more independent variables. It predict that how much change will be occur in dependent variable with one unit change in independent variable

General research model

$$\mathbf{DP} = \beta o + \beta_1(MO)_{it} + \beta_2(IO)_{it} + \beta 3(FRO)_{it} + \beta 4(MRO)_{it} + \beta 5(BI)_{it} + + \beta 6(CD)_{it} + \beta 7(SIZ)_{it} + \beta 8(DEB)_{it} + \beta 9(TQ)_{it-1} + \beta 10(ROA)_{it} + \varepsilon it$$

Table 4.5.1

Redundant Fixed Effects Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	11.811953	(81,399)	0.0000
Cross-section Chi-square	601.795754	81	0.0000

Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	44.615351	11	0.0000

In the first table, we applied redundant fixed effects test to choose between the fixed effects model and common effects model. The results presented that the p- value is <.05, which means that we can reject null hypothesis and accept alternative hypothesis. So we selected fixed effects model.

In the second table, we run Hausman test to select among the fixed effects model and random effects model. The significant value of p allows us to reject null hypothesis and accept alternative hypothesis. Therefore we selected fixed effects model for the results.

Table 4.5.2

Regression Analysis of overall firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.164427	0.063807	2.576951	0.0103
MAN_OWN	0.016624	0.025450	0.653194	0.5140
INST_OWN	0.046350	0.040899	1.133293	0.2578
FOR_OWN	0.121749	0.042936	2.835608	0.0048
MIN_OWN	-0.050388	0.027622	-1.824179	0.0689
BOARD_IND	3.657621	1.186680	3.082230	0.0022
CEO_D	0.008707	0.005887	1.478939	0.1399
F_SIZE	0.009859	0.003961	2.489164	0.0132
ROA	0.191899	0.025000	7.676089	0.0000
D_RATIO	-0.066458	0.023304	-2.851840	0.0046
TOBINS_Q	0.004290	0.001419	3.023261	0.0027
R-squared	0.839245	F-statistic	22.94788	
Adjusted R-squared	0.802673	Prob(F-statistic)	0.000000	

The coefficient of the variable MAN_OWN is positive with the value of 0.0166224. Which means that there will be 0.0166224 units change in DPR_TA if one units changes in MAN_OWN. It also describes that an increase in MAN_OWN causes increase in the DPR_TA. T statistics is used to inspect hypothesis on the significance of the partial mode. It is projected to conclude the impact of each independent variable on dependent variable. In the above table the p- value of T statistics is 0.5140 which is greater than 0.05. It means that the impact of MAN_OWN on DPR_TA is not significant. The p- value 0.05 is used for the decision of significance. If the p- value is less than 0.05, it means that the relationship is significant. For the acceptance of alternative hypothesis and rejection of null hypothesis the p- value should be less than 0.05. The p- value in the above table shows that MAN_OWN is not significantly impacting

the dependent variable DPR_TA. Theoretically when the managers hold shares in the firm, they tend to distribute the earnings rather to expropriate it as their interests aligned with the interests of shareholders (Jensen & Meckling, 1976). But in developing countries like Pakistan, the majority of the management come from the holding families. Therefore the impact of managerial ownership on dividend pay-out is not significant.

The coefficient of INST_OWN is positive and insignificant with the value of 0.046350. It implies that one change in INST_OWN causes 0.046350 change in the DPR_TA. This result also indicates that an increase in INST_OWN result in the increase in DPR_TA. The p- value of T statistics is 0.2578 which is greater than 0.05, which means that INST_OWN is not significantly related with the dependent variable DPR_TA. Theoretically INST_OWN must be significantly related with the DPR_TA as they possess great abilities and expertise to monitor the management and restrict them from following their own interests on the expense of the other shareholders. But this alternative results is due to the fact that in Pakistan the institutions make investments in the firms for short terms, and they only care about the appreciation in their shares prices, that is why they do not monitor management activities and also not influence them in their decision making. Therefore the presence of INST_OWN does not influence the dividend policies of the firms significantly.

The coefficient for the variable of FOR_OWN is positive and significant with the value of 0.121749. Which implies that on unit change in FOR_OWN will cause 0.121749 units change in the value of dependent variable DPR_TA. This result can also be interpreted that an increase in the FOR_OWN is result in the increase in DPR_TA of the firm. The P- value of the FOR_OWN in the above table describes that FOR_OWN is significantly related with DPR_TA as its P- value is 0.0048 which is less than 0.05. Theoretically foreign ownership is positively related with the dividend payout. According to Manos (2002) it is a matter of fact that foreign shareholders possess a great experience of worldwide investments and they know well how to evaluate firm financial performance, despite of holding these skills they often find the monitoring of management actions costly and difficult because the differences in the political environment and cultural environment. Therefore they depend upon the dividend as a tool for the monitoring purposes, which suggest a positive connection among foreign shareholding and dividend. Our results are also consistent with the results obtained by the (Jeon et al., 2011).

The coefficient of the variable MIN_OWN is negative and significant with the value of -0.050388. It means that one unit change in the value of MIN_OWN will cause -0.050388 units change in DPR_TA. The finding shows that an increase in MIN_OWN will decrease DPR_TA. . The P- value of the MIN_OWN in the above table describes that MIN_OWN is significantly related with DPR_TA as its P- value is 0.0689 which is significant at the level of 10%. Theoretically MIN_OWN is negatively related with the DPR_TA. According to Wang et al. (2011) in the states where capital gains are exempt and dividends are taxed the small investors there desire for capital gains rather for dividends. As the Pakistan is also one of these states that is why the association among MIN_OWN and DPR_TA is negative. Our results are also with in line of the results obtained by (Gang Wei et al., 2004).

The coefficient of BOARD_IND is positive and significant with the value of 3.657621. It describes that 3.657621 units change will occur in DPR_TA if there will be one unit change in the value of BOARD_IND. In other words an increase in BOARD_IND will also cause in DPR_TA. The P_ value of its T statistics is 0.0022 which is significant at the level of 5%. Which means that BOARD_IND is significantly related with the DPR_TA. Theoretically there is a positive association among BOARD_IND and DPR_TA as Independence is another important characteristic of the board as only an neutral and independent board can make it sure that the stake of all shareholders is being served equally. According to Farinha (2003) when the independent non-executive directors feel their monitoring inefficient, they can put a pressure on the management to pay out high dividends so that their monitoring can be done by the external equity markets. Our results are in line with the results obtained by (O'Connor, 2013) and support the view that dividend and independence are compliment to each other rather substitutes. Therefore these results are against the (Shehu, 2015) who's results support the substitution theory.

The coefficient of variable CEO_D is positive with the value of 0.008707 but insignificant. The P_ value of its T statistics is 0.1399 which is greater than 5%. It means that CEO_D is not significantly related with the DPR_TA of Pakistani firms. The finding is consistent with the study of (Shahid et al., 2016)

The coefficient of variable F_SIZE is positive and significant with the value of 0.009859. It means that one change in the F_SIZE will bring about 0.009859 change in the value of DPR_TA. In simple words an increase in F_SIZE is associated with the increase in DPR_TA of the firm. The P_ value of F_SIZE is 0.0132 which is less than 5%, and it shows that F_SIZE is significantly related with the DPR_TA of the firms. This result is in line with the (Shahid et al., 2016).

The coefficient of the variable ROA is positive and significant with the value of 0.191899 which means that one unit change in ROA will cause about 0.191899 units change in the value of DPR_TA of the firm. We can say that an increase in ROA will also increase the DPR_TA. The P_ value of ROA is 0.000 which is significant at the level of 1% and shows that ROA is significantly influencing DPR_TA of Pakistani firms. Theoretically the more returns a firm will get on its existing assets the more dividend the firm will announced. Our results are also consistent with the results obtained by (Shahid et al., 2016).

The coefficient of the variable D_RATIO is negative and significant with the value of -0.066458 which means that one unit change in D_RATIO will cause about -0.066458 units change in the value of DPR_TA of the firm. We can say that an increase in D_RATIO will decrease the DPR_TA. . The P_ value of D_RATIO is 0.0046 which is significant at the level of 1% and shows that D_RATIO is significantly influencing DPR_TA of Pakistani firms. Our results are in line with the study of (Huda & Abdullah, 2013). Theoretically when a firm has more debts, it also has to pay more money to debtholders in the form of interests, so the funds available to distribute among shareholders will decrease.

The coefficient of the variable TOBIN_Q is positive and significant with the value of 0.004290 which means that one unit change in TOBIN_Q will cause about 0.004290 units change in the value of DPR_TA of the firm. We can say that an increase in TOBIN_Q will also increase the DPR_TA. . The P_ value of TOBIN_Q is 0.004290 which is significant at the level of 5% and shows that TOBIN_Q is significantly influencing DPR_TA of Pakistani firms. This result is consistent with the results of (K. L. Lin & Shen, 2012)

The value of ‘R’ shows that how independent variables are connected to the dependent variables. The rate of change in dependent variable that can be predicted with the help of independent

variables is shown as R^2. It is basically the overall prediction of variance in the dependent variable by the independent variables. Moreover, it does not reflect how many independent variables are associated with the dependent variable. Simply, adjusted R square refers the compatibility of independent variables with dependent ones in order to validate the decisions based on regression model. In the above table R^2 value is 0.839245 which mean 83.92% change in DPR_TA is caused by the independent variables and remaining variance is due to the other factors. Adjusted R^2 value is 0.802673 that it is the total exact variation in DPR_TA by joint variations in the independent variables.

F-Statistic (Fisher statistics) is technique that uses to find out the overall significance of regression. The F-Statistic used to identify that the estimated model is the goodness of fit. The significant value of F-statistic is 5% level. If the F-value is less than 0.05 it means there is linear relationship between dependent variables and independent variables and overall model is significant.

F-value as showed in the above table is below 5% ($F<0.05$) which means overall model is significant.

4.6 Analysis of High Growth Firms

4.6.1 Descriptive statistics of high growth firms

Table 4.6.1

	Min	Max	Range	Mean	Median	S.D	N
DPR_TA	0.0000	0.2703	0.2703	0.0591	0.0438	0.0556	282
MAN_OWN_H	0.0000	0.9843	0.9843	0.1815	0.0111	0.2663	282
INST_OWN_H	0.0000	0.4818	0.4818	0.0959	0.0641	0.1046	282
FOR_OWN_H	0.0000	0.9319	0.9319	0.1178	0.0000	0.2342	282
MIN_OWN_H	0.0000	0.8112	0.8112	0.1556	0.1244	0.1449	282
BOARD_IND_H	0.0000	0.0100	0.0100	0.0062	0.0071	0.0031	282
CEO_D_H	0.0000	1.0000	1.0000	0.0851	0.0000	0.2795	282
F_SIZE_H	0.0000	20.1949	20.1949	13.6475	15.7325	6.0639	282
ROA_H	-0.0086	0.4149	0.4234	0.1018	0.0911	0.0772	282
D_RATIO_H	0.0000	0.5231	0.5231	0.0999	0.0652	0.1054	282

The minimum value of DPR_TA is 0 and its maximum value is .2703. The difference between minimum and maximum value is .2703. Its mean value is .0591 and standard deviation is .0556. MAN_ OWN has 0 minimum value and .9843 maximum value. It has a mean value of .1815 and standard deviation is .2663. It has a range of .9843 and median value of .0111. The minimum value of institutional share ownership is 0 and the maximum value is .4818. The difference among maximum and minimum value is .4818. it have the mean of value .0959 and standard deviation of .1046.

Foreign share ownership has the minimum value of 0 and maximum value of .9319. The range is .9319. Its mean value is .1178 and standard deviation is .2342. The minimum value of minority share ownership is 0 and the maximum value is .8113. The range is .8113. It has the mean of value .1556 and standard deviation of value .1449. Board independence has the maximum value of .0100 and minimum value of .000. The range is .0100. Its mean value is .0062 and standard deviation is .0031.

The CEO duality has the minimum value of 0 and maximum value of 1. The range is 1 and the mean value and standard deviation are .0851 and .2795 respectively. The firm size has the minimum value of 0 and maximum value of 20.1949. The range is 20.1949. It has the mean value and standard deviation of 13.6475 and 6.0639 respectively.

The ROA has the minimum value of -0.0086 and maximum value of .4149. The range is .4234. It has the mean value of .1018 and standard deviation of .0772. The D_RATIO has the minimum value of 0 and maximum value of .5231. The range is .5231. It has the mean value of .0999 and standard deviation is .1054.

4.6.2 Correlation Analysis of high growth firms

Table 4.6.2

	DPR_TA	MAN_OWN_H	INST_OWN_H	FOR_OWN_H	MIN_OWN_H	BOARD_IND_H	CEO_D_H	F_SIZE_H	ROA_H	D_R_H
DPR_TA	1									
MAN_OWN_H	0.2158	1								
INST_OWN_H	0.2366	-0.1501	1							
FOR_OWN_H	0.0754	-0.2405	0.0525	1						
MIN_OWN_H	0.0826	0.2720	0.2073	-0.2105	1					
BOARD_IND_H	0.2679	0.0876	0.4366	0.1735	0.3970	1				
CEO_D_H	0.2670	-0.0724	0.2138	0.0332	0.0410	0.0719	1			
F_SIZE_H	0.2997	0.1883	0.4300	0.2329	0.3741	0.8725	0.1385	1		
ROA_H	0.6428	-0.1264	0.2093	0.1810	0.1743	0.5519	0.1206	0.5869	1	
D_RATIO_H	-0.0604	0.2539	0.3284	-0.1129	0.3036	0.4511	0.0400	0.4313	-0.0111	1

In the above table the correlation among all the variables are displayed. All the variables are perfectly correlated with their selves as the value of each variable with itself is 1. The problem of multicollinearity does not exist as the value of correlation among independent variables is less than 0.8. The correlation among DPR_TA and MAN_OWN is moderate and positive with the value of 0.2158. It shows that the dividend payout of the firms and managerial share ownership moves in the same direction. The correlation among DPR_TA and INST_OWN is positive but

moderate with the value of 0.2366 which indicates that with the increase in the institutional share ownership there is also an increase in the dividend payout of the firms. The correlation among DPR_TA and FOR_OWN is also positive but weak with the value of 0.0754 which provide that the dividend payments of the firms increases with the increase in the foreign share ownership in the firms. DPR_TA showed a positive and weak correlation with MIN_OWN with the value of 0.0826 which means that with the increase in minority share ownership there will be a decrease in the dividend payout of the firms. The correlation of DPR_TA with the BOARD_IND is positive and moderate with the value of 0.2679 which means that the more independent board of a firm, the more dividend will be distributed by that firm. The correlation between DPR_TA and F_SIZE is positive and moderate with the value of .2997 which provide that large firms pay more dividends than small firms. The DPR_TA exhibits a positive and strong correlation with ROA with the value of 0.6428 showing that increase in the returns on assets also increase the dividend payouts of the firms. The correlation of DPR_TA with CEO_D is positive and moderate with the value of 0.2670 describing that the dual role of CEO and Chairman is positively correlated with the dividend payments of the firm. The DPR_TA showed a negative and weak correlation with D_RATIO with the value of -0.0604 which describe that as the debt of the firm increases, the dividend payout of that firm will decrease.

4.6.3 Regression Model for High Growth Opportunities Firms

$$\mathbf{DP} = \beta o + \beta_1(MO)_{it} * HQ + \beta_2(IO)_{it} * HQ + \beta 3(FRO)_{it} * HQ + \beta 4(MRO)_{it} * HQ + \beta 5(BI)_{it} * HQ + \beta 6(CD)_{it} * HQ + \beta 7(SIZ)_{it} + \beta 8(DEB)_{it} + \beta 9(ROA)_{it} + \varepsilon it$$

Table 4.6.3

Redundant Fixed Effects Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.349328	(65,207)	0.0000
Cross-section Chi-square	337.348493	65	0.0000

Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	29.905954	9	0.0005

In the first table, we applied redundant fixed effects test to choose between the fixed effects model and common effects model. The results presented that the p- value is <.05, which means that we can reject null hypothesis and accept alternative hypothesis. So we selected fixed effects model.

In the second table, we run Hausman test to select among the fixed effects model and random effects model. The significant value of p allows us to reject null hypothesis and accept alternative hypothesis. Therefore we selected fixed effects model for the results.

Table 4.6.4

Regression Analysis of high growth firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021686	0.015299	1.417422	0.1579
MAN_OWN_H	0.113844	0.063331	1.797605	0.0737
INST_OWN_H	0.157062	0.069115	2.272469	0.0241
FOR_OWN_H	0.259285	0.090104	2.877601	0.0044
MIN_OWN_H	0.054459	0.053552	1.016926	0.3104
BOARD_IND_H	6.811981	2.484509	2.741781	0.0066
CEO_D_H	0.031338	0.013777	2.274694	0.0239
F_SIZE_H	0.007568	0.002239	3.380631	0.0009
ROA_H	0.296338	0.043235	6.854174	0.0000
D_RATIO_H	-0.090349	0.043653	-2.069690	0.0397

R-squared	0.844522	F-statistic	15.19432
Adjusted R-squared	0.788941	Prob(F-statistic)	0.000000

The coefficient of the variable MAN_OWN is positive with the value of 0.113844. Which means that there will be 0.113844 units change in DPR_TA if one units changes in MAN_OWN. It also describes that an increase in MAN_OWN cause an increase in the value of DPR_TA. T statistics is used to inspect hypothesis on the significance of the partial mode. It is projected to conclude the impact of each independent variable on dependent variable. In the above table the p- value of T statistics is 0.0737 which is significant alt the level of 10%. it means that the impact of MAN_OWN on DPR_TA is significant. The p- value is used for the decision of significance. If the p- value is less than 0.05 0r 0.1, it means that the relationship is significant. For the acceptance of alternative hypothesis and rejection of null hypothesis the p- value should be less than 0.05 or 0.1. The p- value in the above table shows that MAN_OWN is significantly impacting the dependent variable DPR_TA. This result is in line with the results obtained by the (Shahid et al., 2016). Jensen and Meckling (1976) provided alignment effect of managerial ownership. They argued that the managerial share ownership with low level in the firms can be used as a mechanism to line up the interests of managers with the shareholders. This is because when the managers hold shares of the firm, their own wealth is associated with the value of the firm, and they tried to follow the policies which results in the appreciation of the value of the firm.

The coefficient of INST_OWN is positive and significant with the value of 0.157062. It implies that one change in INST_OWN cause 0.157062 change in the value of DPR_TA. This result also indicates that an increase in INST_OWN result in the increase in DPR_TA. The p- value of T statistics is 0.0241 which is less than 0.05, which means that INST_OWN is significantly related with the dependent variable DPR_TA. Theoretically INST_OWN must be significantly related with the DPR_TA as they possess great abilities and expertise to monitor the management and restrict them from following their own interests on the expense of the other shareholders. Zeckhauser and Pound (1990) claimed that rather to monitor the management activities directly by participating in the board of directors, the institutional shareholders force the management to pay maximum dividends in order to get them monitored by the external markets. Farinha (2003) provided that when the institutions perceive their monitoring insufficient and expensive, they tend to put pressure on the management to pay great amount of dividends in order to enhance their monitoring by the capital markets. According to the above two studies, a direct link among

dividend pay-out and institutional share ownership is anticipated which is consistent with our study.

The coefficient for the variable of FOR_OWN is positive and significant with the value of 0.259285. Which implies that on unit change in FOR_OWN will cause 0.259285 units change in the value of dependent variable DPR_TA. This result can also be interpreted that an increase in the FOR_OWN is result in the increase in DPR_TA of the firm. The P- value of the FOR_OWN in the above table describes that FOR_OWN is significantly related with DPR_TA as its P- value is 0.0044 which is less than 0.05. Theoretically foreign ownership is positively related with the dividend payout. According to Manos (2002) it is a matter of fact that foreign shareholders possess a great experience of worldwide investments and they know well how to evaluate firm financial performance, despite of holding these skills they often find the monitoring of management actions costly and difficult because the differences in the political environment and cultural environment. Therefore they depend upon the dividend as a tool for the monitoring purposes, which suggest a positive connection among foreign shareholding and dividend. Our results are also consistent with the results obtained by the (Jeon et al., 2011).

The coefficient of the variable MIN_OWN is positive and insignificant with the value of -0.054459. It means that one unit change in the value of MIN_OWN will cause 0.054459 units change in DPR_TA. The finding shows that an increase in MIN_OWN will increase DPR_TA. . The P- value of the MIN_OWN in the above table describes that MIN_OWN is insignificantly related with DPR_TA as its P- value is 0.3104 which is greater than 0.05. Theoretically MIN_OWN is negatively related with the DPR_TA. According to Wang et al. (2011) in the states where capital gains are exempt and dividends are taxed the small investors there desire for capital gains rather for dividends. As the Pakistan is also one of these states that is why the association among MIN_OWN and DPR_TA is not significant.

The coefficient of BOARD_IND is positive and significant with the value of 6.811981. It describes that 6.811981 units change will occur in DPR_TA if there will be one unit change in the value of BOARD_IND. In other words an increase in BOARD_IND will also cause increase in DPR_TA. The P_ value of its T statistics is 0.0066 which is significant at the level of 5%. Which means that BOARD_IND is significantly related with the DPR_TA. Theoretically there is

a positive association among BOARD_IND and DPR_TA as Independence is another important characteristic of the board as only an neutral and independent board can make it sure that the stake of all shareholders is being served equally. According to Farinha (2003) when the independent non-executive directors feel their monitoring inefficient, they can put a pressure on the management to pay out high dividends so that their monitoring can be done by the external equity markets. Our results are in line with the results obtained by (O'Connor, 2013) and support the view that dividend and independence are compliment to each other rather subtitutes. Therefore these results are against the (Shehu, 2015) who's results support the substitution theory.

The coefficient of variable CEO_D is positive with the value of 0.031338 and significant. The P_ value of its T statistics is 0.0239 which is less than 5%. It means that CEO_D is significantly related with the DPR_TA of Pakistani firms. In other words an increase in BOARD_IND will also cause increase in DPR_TA. Theoretically CEO is the head of management and chairman is the head of non-executive directors. There should be separate persons who performs these two responsibilities in order to maintain the balance and independence of the board. If one person hold both the offices of CEO and chairman, then the responsibilities of that person will be increased as he has to deal with the duties associated with both the positions, and as a result it can reduce the supervisory role played by the board which in turn leads towards an increase in the agency cost. Our results are in line with the study of (Gill & Obradovich, 2013) and against the study of (Shahid et al., 2016)

The coefficient of variable F_SIZE is positive and significant with the value of 0.007568. It means that one change in the F_SIZE will bring about 0.007568 change in the value of DPR_TA. In simple words an increase in F_SIZE is associated with the increase in DPR_TA of the firm. The P_ value of F_SIZE is 0.0009 which is less than 5%, and it shows that F_SIZE is significantly related with the DPR_TA of the firms.

The coefficient of the variable ROA is positive and significant with the value of 0.296338 which means that one unit change in ROA will cause about 0.296338 units change in the value of DPR_TA of the firm. We can say that an increase in ROA will also increase the DPR_TA. The P_ value of ROA is 0.000 which is significant at the level of 1% and shows that ROA is

significantly influencing DPR_TA of Pakistani firms. Theoretically the more returns a firm will get on its existing assets the more dividend the firm will announced. Our results are also consistent with the results obtained by (Shahid et al., 2016).

The coefficient of the variable D_RATIO is negative and significant with the value of -0.090349 which means that one unit change in D_RATIO will cause about -0.090349 units change in the value of DPR_TA of the firm. We can say that an increase in D_RATIO will decrease the DPR_TA. . The P_ value of D_RATIO is 0.0397 which is significant at the level of 5% and shows that D_RATIO is significantly influencing DPR_TA of Pakistani firms. Our results are in line with the study of (Huda & Abdullah, 2013). Theoretically when a firm holds more debts, it also has to pay more money to debtholders in the form of interests, therefore the funds available to distribute among shareholders will decrease.

The value of 'R' shows that how independent variables are connected to the dependent variables. The rate of change in dependent variable that can be predicted with the help of independent variables is shown as R^2. It is basically the overall prediction of variance in the dependent variable by the independent variables. Moreover, it does not reflect how many independent variables are associated with the dependent variable. Simply, adjusted R square refers the compatibility of independent variables with dependent ones in order to validate the decisions based on regression model.

In the above table R^2 value is 0.844522 which mean 84.45% change in DPR_TA is caused by the independent variables and remaining variance is due to the other factors. Adjusted R^2 value is 0.788941 that it is the total exact variation in DPR_TA by joint variations in the independent variables.

F-Statistic (Fisher statistics) is technique that uses to find out the overall significance of regression. The F-Statistic used to identify that the estimated model is the goodness of fit. The significant value of F-statistic is 5% level. If the F-value is less than 0.05 it means there is linear relationship between dependent variables and independent variables and overall model is significant.

F-value as showed in the above table is below 5% (F<0.05) which means overall model is significant.

4.7 Analysis of Low Growth Firms

4.7.1 Descriptive statistics of low growth firms

Table 4.7.1

	Min	Max	Range	Mean	Median	Std. Dev.	N
DPR_TA	0.0000	0.2500	0.2500	0.0228	0.0160	0.0247	254
MAN_OWN_L	0.0000	0.8641	0.8641	0.3043	0.3116	0.2448	254
INST_OWN_L	0.0000	0.4491	0.4491	0.1274	0.1180	0.1042	254
FOR_OWN_L	0.0000	0.9400	0.9400	0.0652	0.0000	0.1736	254
MIN_OWN_L	0.0000	0.8113	0.8113	0.2307	0.1999	0.1669	254
BOARD_IND_L	0.0013	0.0100	0.0088	0.0067	0.0071	0.0020	254
CEO_D_L	0.0000	1.0000	1.0000	0.1535	0.0000	0.3612	254
F_SIZE_L	12.4068	19.7348	7.3280	15.5663	15.3744	1.4222	254
ROA_L	-0.0511	0.2457	0.2968	0.0694	0.0633	0.0490	254
D_RATIO_L	0.0000	0.5566	0.5566	0.1146	0.0983	0.0871	254

The minimum value of DPR_TA is 0 and its maximum value is .2500. The difference between minimum and maximum value is .2500. Its mean value is .0228 and standard deviation is .0247. MAN_ OWN has 0 minimum value and .8641 maximum value. It has a mean value of .3043 and standard deviation is .2448. It has a range of .8641 and median value of .3116.

The minimum value of institutional share ownership is 0 and the maximum value is .4491. The difference among maximum and minimum value is .4491. It have the mean of value .1274 and standard deviation of .1042. Foreign share ownership has the minimum value of 0 and maximum value of .9400. The range is .9400. Its mean value is .0652 and standard deviation is .1736.

The minimum value of minority share ownership is 0 and the maximum value is .8113. The range is .8113. It has the mean of value .2307 and standard deviation of value .1669. Board

independence has the maximum value of .0100 and minimum value of .0013. The range is .0088. Its mean value is .0062 and standard deviation is .0020.

The CEO duality has the minimum value of 0 and maximum value of 1. The range is 1 and the mean value and standard deviation are .1535 and .3612 respectively. The firm size has the minimum value of 12.4068 and maximum value of 19.7348. The range is 7.3280. It has the mean value and standard deviation of 15.5663 and 1.4222 respectively.

The ROA has the minimum value of -0.0511 and maximum value of .2457. The range is .2968. It has the mean value of .0694 and standard deviation of .0490. The D_RATIO has the minimum value of 0 and maximum value of .5566. The range is .5566. It has the mean value of .1146 and standard deviation is .0871.

4.7.2 Correlation Analysis of low growth firms

Table 4.7.2

	DPR_ TA	MAN_ OWN_L	INST_ OWN_L	FOR_ OWN_L	MIN_ OWN_L	BOARD_ IND_L	CEO_ D_L	F_ SIZE_L	ROA _L	D_R _L
DPR_TA	1									
MAN_OWN_L	0.2328	1								
INST_OWN_L	0.0884	-0.3550	1							
FOR_OWN_L	0.3594	-0.3545	-0.0323	1						
MIN_OWN_L	-0.1300	-0.0759	-0.0636	-0.2307	1					
BOARD_IND_L	0.1609	-0.2695	0.0950	-0.0487	-0.1467	1				
CEO_D_L	-0.1691	-0.2043	0.1257	0.0521	0.0060	-0.1464	1			
F_SIZE_L	0.1363	-0.2509	0.2498	0.2621	-0.2727	-0.0392	0.3345	1		
ROA_L	0.3623	-0.0005	-0.0365	0.0726	-0.1265	0.0144	-0.0855	-0.0955	1	
D_RATIO_L	-0.3048	0.1279	-0.2004	-0.2126	0.1746	-0.0361	-0.0250	0.0641	-0.1115	1

In the above table the correlation among all the variables are displayed. All the variables are perfectly correlated with their selves as the value of each variable with itself is 1. The problem of multicollinearity does not exist as the value of correlation among independent variables is less than 0.8. The correlation among DPR_TA and MAN_OWN is moderate and positive with the value of 0.2328. It shows that the dividend payout of the firms will increase with the increase in the managerial share ownership. The correlation among DPR_TA and INST_OWN is positive

but weak with the value of 0.0884 which indicates that with the increase in the institutional share ownership there is also an increase in the dividend payout of the firms. The correlation among DPR_TA and FOR_OWN is also positive and moderate with the value of 0.3594 which provide that the dividend payments of the firms increases with the increase in the foreign share ownership in the firms. DPR_TA showed a negative and weak correlation with MIN_OWN with the value of -0.1300 which means that with the increase in minority share ownership there will be a decrease in the dividend payout of the firms. The correlation of DPR_TA with the BOARD_IND is positive and weak with the value of 0.1609 which means that the more independent board of a firm, the more dividend will be distributed by that firm. The correlation between DPR_TA and F_SIZE is positive and weak with the value of 0.1363 which provide that large firms pay more dividends than small firms. The DPR_TA exhibits a positive and moderate correlation with ROA with the value of 0.3623 showing that increase in the returns on assets also increase the dividend payouts of the firms. The correlation of DPR_TA with CEO_D is negative and weak with the value of -0.1691 describing that the dual role of CEO and Chairman is negatively correlated with the dividend payments of the firm. The DPR_TA showed a negative and moderate correlation with D_RATIO with the value of -0.3048 which describe that as the debt of the firm increases, the dividend payout of that firm will decrease.

4.7.3 Regression model for low growth firms

$$\mathbf{DP} = \beta o + \beta_1(MO)_{it} *LQ + \beta_2(IO)_{it} *LQ + \beta 3(FRO)_{it}*LQ + \beta 4(MRO)_{it} *LQ + \beta 5(BI)_{it}*LQ + \beta 6(CD)_{it} *LQ + \beta 7(SIZ)_{it} + \beta 8(DEB)_{it} + \beta 9(ROA)_{it}$$

Table 4.7.3

Redundant Fixed Effects Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.898300	(64,180)	0.0000
Cross-section Chi-square	256.171224	64	0.0000

Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	21.302921	9	0.0114

In the first table, we applied redundant fixed effects test to choose between the fixed effects model and common effects model. The results presented that the p- value is <.05, which means that we can reject null hypothesis and accept alternative hypothesis. So we selected fixed effects model.

In the second table, we run Hausman test to select among the fixed effects model and random effects model. The significant value of p allows us to reject null hypothesis and accept alternative hypothesis. Therefore we selected fixed effects model for the results.

Table 4.7.4

Regression Analysis of low growth firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.088893	0.073715	1.205901	0.2294
MAN_OWN_L	0.020971	0.024211	0.866175	0.3875
INST_OWN_L	0.019877	0.036332	0.547090	0.5850
FOR_OWN_L	0.199744	0.050775	3.933921	0.0001
MIN_OWN_L	-0.055819	0.025850	-2.159396	0.0321
BOARD_IND_L	2.380264	1.188169	2.003304	0.0466
CEO_D_L	-0.000862	0.005252	-0.164095	0.8698
F_SIZE_L	0.005250	0.004748	1.105715	0.2703
ROA_L	0.132039	0.024980	5.285851	0.0000
D_RATIO_L	-0.005417	0.024173	-0.224088	0.8229
R-squared	0.770352	F-statistic		8.271363
Adjusted R-squared	0.677218	Prob(F-statistic)		0.000000

The coefficient of the variable MAN_OWN is positive with the value of 0.020971 which means that there will be 0.020971 units change in DPR_TA if one units changes in MAN_OWN. It also describes that an increase in MAN_OWN causes increase in the DPR_TA. T statistics is used to inspect hypothesis on the significance of the partial mode. It is projected to conclude the impact of each independent variable on dependent variable. In the above table the p- value of T statistics is 0.3875 which is greater than 0.05. It means that the impact of MAN_OWN on DPR_TA is not significant. The p- value 0.05 is used for the decision of significance. If the p- value is less than 0.05, it means that the relationship is significant. For the acceptance of alternative hypothesis and rejection of null hypothesis the p- value should be less than 0.05. The p- value in the above table shows that MAN_OWN is not significantly impacting the dependent variable DPR_TA.

The coefficient of INST_OWN is positive and insignificant with the value of 0.019877. It implies that one change in INST_OWN causes 0.019877 change in the DPR_TA. This result also indicates that an increase in INST_OWN result an increase in DPR_TA. The p- value of T statistics is 0.5850 which is greater than 0.05, which means that INST_OWN is not significantly related with the dependent variable DPR_TA. Theoretically INST_OWN must be significantly related with the DPR_TA as they possess great abilities and expertise to monitor the management and restrict them from following their own interests on the expense of the other shareholders. But this alternative results is due to the fact that in Pakistan the institutions make investments in the firms for short terms, and they only care about the appreciation in their shares prices, that is why they do not monitor management activities and also not influence them in their decision making. Therefore the presence of INST_OWN does not influence the dividend policies of the firms significantly.

The coefficient for the variable of FOR_OWN is positive and significant with the value of 0.199744. Which implies that on unit change in FOR_OWN will cause 0.199744 units change in the value of dependent variable DPR_TA. This result can also be interpreted that an increase in the FOR_OWN is result in the increase in DPR_TA of the firm. The P- value of the FOR_OWN in the above table describes that FOR_OWN is significantly related with DPR_TA as its P- value is 0.0001 which is less than 0.05. Theoretically foreign ownership is positively related with the dividend payout. According to Manos (2002) it is a matter of fact that foreign shareholders possess a great experience of worldwide investments and they know well how to evaluate firm

financial performance, despite of holding these skills they often find the monitoring of management actions costly and difficult because the differences in the political environment and cultural environment. Therefore they depend upon the dividend as a tool for the monitoring purposes, which suggest a positive connection among foreign shareholding and dividend. Our results are also consistent with the results obtained by the (Jeon et al., 2011).

The coefficient of the variable MIN_OWN is negative and significant with the value of -0.055819. It means that one unit change in the value of MIN_OWN will cause -0.055819 units change in DPR_TA. The finding shows that an increase in MIN_OWN will decrease DPR_TA. . The P- value of the MIN_OWN in the above table describes that MIN_OWN is significantly related with DPR_TA as its P- value is 0.0321 which is significant at the level of 5%. Theoretically MIN_OWN is negatively related with the DPR_TA. According to Wang et al. (2011) in the states where capital gains are exempt and dividends are taxed the small investors there desire for capital gains rather for dividends. As the Pakistan is also one of these states that is why the association among MIN_OWN and DPR_TA is negative. Our results are also with in line of the results obtained by (Gang Wei et al., 2004).

The coefficient of BOARD_IND is positive and significant with the value of 2.380264. It describes that 2.380264 units change will occur in DPR_TA if there will be one unit change in the value of BOARD_IND. In other words an increase in BOARD_IND will also cause in DPR_TA. The P_ value of its T statistics is 0.0466 which is significant at the level of 5%. Which means that BOARD_IND is significantly related with the DPR_TA. Theoretically there is a positive association among BOARD_IND and DPR_TA as Independence is another important characteristic of the board as only an neutral and independent board can make it sure that the stake of all shareholders is being served equally. According to Farinha (2003) when the independent non-executive directors feel their monitoring inefficient, they can put a pressure on the management to pay out high dividends so that their monitoring can be done by the external equity markets. Our results are in line with the results obtained by (O'Connor, 2013) and support the view that dividend and independence are compliment to each other rather subtitutes. Therefore these results are against the (Shehu, 2015) who's results support the substitution theory.

The coefficient of variable CEO_D is negative with the value of -0.000862 but insignificant. The P_ value of its T statistics is 0.8698 which is greater than 5%. It means that CEO_D is not significantly related with the DPR_TA of Pakistani firms. The finding is consistent with the study of (Shahid et al., 2016)

The coefficient of variable F_SIZE is positive and insignificant with the value of 0.005250. It means that one change in the F_SIZE will bring about 0.005250 change in the value of DPR_TA. In simple words an increase in F_SIZE is associated with the increase in DPR_TA of the firm. The P_ value of F_SIZE is 0.2703 which is greater than 5%, and it shows that F_SIZE is not significantly related with the DPR_TA of the firms

The coefficient of the variable ROA is positive and significant with the value of 0.132039 which means that one unit change in ROA will cause about 0.132039 units change in the value of DPR_TA of the firm. We can say that an increase in ROA will also increase the DPR_TA. The P_ value of ROA is 0.000 which is significant at the level of 1% and shows that ROA is significantly influencing DPR_TA of Pakistani firms. Theoretically the more returns a firm will get on its existing assets the more dividend the firm will announced. Our results are also consistent with the results obtained by (Shahid et al., 2016).

The coefficient of the variable D_RATIO is negative and significant with the value of -0.005417 which means that one unit change in D_RATIO will cause about -0.005417 units change in the value of DPR_TA of the firm. We can say that an increase in D_RATIO will decrease the DPR_TA. The P_ value of D_RATIO is 0.8229 which is insignificant and shows that D_RATIO is not significantly influencing DPR_TA of Pakistani firms.

The value of 'R' shows that how independent variables are connected to the dependent variables. The rate of change in dependent variable that can be predicted with the help of independent variables is shown as R^2. It is basically the overall prediction of variance in the dependent variable by the independent variables. Moreover, it does not reflect how many independent variables are associated with the dependent variable. Simply, adjusted R square refers the compatibility of independent variables with dependent ones in order to validate the decisions based on regression model.

In the above table R^2 value is 0.770352 which mean 77.03% change in DPR_TA is caused by the independent variables and remaining variance is due to the other factors. Adjusted R^2 value is 0.677218 that it is the total exact variation in DPR_TA by joint variations in the independent variables.

F-Statistic (Fisher statistics) is technique that uses to find out the overall significance of regression. The F-Statistic used to identify that the estimated model is the goodness of fit. The significant value of F-statistic is 5% level. If the F-value is less than 0.05 it means there is linear relationship between dependent variables and independent variables and overall model is significant.

F-value as showed in the above table is below 5% ($F<0.05$) which means overall model is significant.

4.8 T-Test

The t test is a statistical test which is used to find out difference between the means of two groups. In a t test, we have two variables. One is dependent variable and other is independent variable. The independent variable consists of two levels or groups. If it is consist of more than two levels, then ANOVA analysis will be used instead of t test.

Table 4.8.1 Group Statistics

Variable	Groups	N	Mean	Std. Deviation	Std. Error Mean
DPR_TA	1	268	.06	.056	.003
	0	224	.02	.025	.002

The above table 4.8.1 is group statistic table. The data is divided into two groups, high growth firms and low growth firms. The high growth firms have been given the value of 1 and the low growth firms have been given the value of 0. The sample size of high growth firms 268 and low growth firms is 224. We can also see the mean and standard deviations of both groups in the above table.

Table 4.8.2 Independent sample test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
DPR_TA	Equal variances assumed	92.241	.679	9.354	490	.000	.038	.004	.030	.046
	Equal variances not assumed			9.925	385.631	.000	.038	.004	.030	.045

The above table 4.8.2 is independent sample test table which is used to determine the difference in means. The p value of F test is .679 which is more than .05. It means that null hypothesis is accepted. According to null hypothesis both groups are from same population and the insignificant p value of F test in the above table confirmed that statement.

The p value of t-test is .000 which is less than .05. It means that null hypothesis is rejected and alternative hypothesis is accepted. According to alternative hypothesis, there is a difference between the means of two groups, high growth and low growth firms.

So the results of t test verified that dividend payments of high growth firms and low growth firms are different.

Table 4.9 Acceptance / Rejection of Hypothesis table

Hypothesis	Overall firms	High Growth firms	Low Growth firms
H1	Rejected	Accepted	Rejected
H2	Rejected	Accepted	Rejected
H3	Accepted	Accepted	Accepted
H4	Accepted	Rejected	Accepted
H5	Accepted	Accepted	Accepted
H6	Rejected	Accepted	Rejected

CHAPTER NO. 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter displays the complete report and summary of the study. This chapter also provides results and conclusion of the present study, as well as it convey managerial implications and recommendations for future researches.

5.2 Summary

The objective of the study was to examine the impact of board structure and ownership structure on dividend pay-out of manufacturing firms listed at Pakistan stock exchange. Additionally to examine this relationship under high and low growth opportunities separately. This study used board independence and CEO Duality as proxies of board structure, and managerial ownership, foreign ownership, institutional ownership, and minority ownership as proxies of ownership structure. This study used panel data of 82 manufacturing firms that covers the period of 2011 to 2016. Purposive sampling technique was applied to select firms as a sample for analysis. The firms that paid consistent dividends from 2011 to 2016 were selected from the population. Initially the sample contains 92 manufacturing firms. But due to abnormality issues in the data, 10 firms out of these were excluded and the final sample consisted of 82 firms. The study applied descriptive statistics, correlation and panel regression on panel data. Among random effects, fixed effects, and common effects model, fixed effects model is used to run the regression analysis. The study also applied panel root test to find whether the data is stationary or not. The findings of this test suggest that there is no trends in the data and the data is stationary. Furthermore to examine the impact of board structure and ownership structure on dividend pay-out of listed manufacturing firms under high and low growth opportunities, the data is divided into high and low growth categories. The median value of Tobin Q is used for classification of

data. Firm size, debt ratio, return on asset, and Tobin Q were used as control variables in this study.

The results of regression analysis show that the impact of managerial ownership, institutional ownership and CEO Duality on dividend pay-out is not significant. On the other hand. Foreign ownership has a positive and significant impact on the dividend pay-out. The minority ownership also has a significant but negative impact on dividend pay-out. In relation to the control variables, return on asset and Tobin Q have a positive and significant impact on dividend pay-out, while debt ratio has a negative impact on dividend pay-out. The impact of firm size on dividend pay-out was not statistically significant.

After classifying the data into high and low growth opportunities groups, the regression results of high growth opportunities firms show that managerial ownership, foreign ownership, institutional ownership, board independence and CEO Duality have positive and significant impact on dividend pay-out, while the impact of minority ownership on dividend pay-out was not statistically significant. In relation to the control variables, firm size and return on asset are positively related with dividend pay-out while debt ratio was negatively related with dividend pay-out.

The regression results of low growth opportunities firms show that foreign ownership and board independence have positive and significant impact on dividend pay-out, while minority ownership has negative and significant impact on dividend pay-out. However we could not find any evidence regarding the significant impact of managerial ownership, institutional ownership, and CEO Duality on dividend pay-out. Among the control variables, only return on asset show a significant association with dividend pay-out while the debt ratio and firm size was not significantly associated with dividend pay-out.

5.3 Conclusion

The results of this study follow the substitution model of dividends presented by (La Porta et al., 2000) and explained in detail by (K. L. Lin & Shen, 2012) latter on. According to this model, poor governance structure of firms result in high dividends under high growth opportunities as compared to low growth opportunities. As the shareholders of these firms do not trust the

management and they are not willing to leave the cash flows in the hand of management. On the other hand these firms with better growth opportunities need finance to fulfill their investment needs, therefore they have to pay high dividends in order to maintain a good repute of firm in the market and issue additional capital on a better market price.

The countries like Pakistan, where the information asymmetry is more than the developed countries, the confidence level of investors on management of firm is low as compared to developed economies. The main reason behind this is the absence of transparency and the attitude of management to pay low or no dividends to shareholders. The current study suggested variables like foreign ownership, board independence, institutional ownership, and managerial ownership are important in enhancing the payout ratios of firms and eliminate that low paying attitude of Pakistani firms.

The findings of this study revealed that under high growth opportunities, all the variables of board structure and ownership structure except minority ownership were positively and significantly related with the dividend pay-out. While under low growth opportunities only foreign ownership and board independence are positively and significantly related with dividend pay-out and the impact of minority ownership was significant but negative. These results suggest that the impact of corporate governance practices like board structure and ownership structure on dividend pay-out is more significant and positive under high growth opportunities as compared to under low growth opportunities.

The findings of this study also confirmed that there is difference in payment of dividends by high growth firms in developing countries as compared to developed countries. The firms in developed economies usually pay low dividends while facing high growth opportunities, but the same is opposite in developing countries like Pakistan, where firms usually pay high dividend while facing high growth opportunities.

5.4 Theoretical and Managerial implications

This study has provided a useful insights and enrich the existing literature. The present study explored the relationship among dividend pay-out and corporate governance practices (board structure and ownership structure). This setup of variables is first time tested in the Pakistani

context. Additionally this study observed the influence of corporate governance practices on dividend pay-out under high and low growth opportunities separately. Therefore, the present study draw its significance by observing the behavior of governance characteristics towards the dividend pay-out under two different circumstances. This study confirms the results of studies conducted earlier e.g. (Farinha, 2003; Gang Wei et al., 2004; Jensen, 1986; Jeon et al., 2011; K. L. Lin & Shen, 2012; O'Connor, 2013; Shahid et al., 2016) etc.

For managerial point of view this study emphasized different matters that can be useful for corporate policy makers. This study provided that the governance practices are more relevant to the dividend decisions for growth firms as compared to the non-growth firms. Growth firms have more cash flows and returns from their projects as they have more profitable and feasible projects then non-growth firms. The more relevance of governance practices with dividend pay-out for growth firms' show that there is a large information gap and asymmetry between insiders and outsiders. The outsiders do not believe the controlling authorities to leave their cash flows in their hands and hence they demand high dividends to restrict the controlling bodies from appropriation of their wealth. So this study suggest that the management of growth firms should not use internal funds for investment purposes but distribute them among shareholders in order to maintain the repute and good will of the firm. It will increase firm market value. Despite using internal funds they should issue new capital at overvalued prices and use these remittances for their investment projects. This study also provided a better understanding of ownership structure and board structure as a measure of corporate governance mechanism and how these protect the minorities. As well as this study is helpful for investors in making investment decision after observing the shareholding patterns of firms.

5.5 Recommendations

The present study recommended that all the listed firms should improve their governance structures and enhance the independence of governance mechanisms. The poor governance mechanisms is the basic cause of information asymmetry in Pakistani markets which restrict the management from using internal funds and obtaining costly financing for their investment projects. There are many causes of poor governance mechanisms in Pakistan, some important one of these are following;

The board of directors usually consisted of a very few independent directors. Therefore their decisions are not based on merit and they failed to protect the stake of all shareholders.

The Pakistani firms should focus on the factors that are contributing significantly in increasing payouts of firms in order to restore the confidence level of investors.

The absence of developed capital markets is one of the main reason of costly financing. The firms needs to enhance their distribution of profits in order to attract the investors to increase their activities in capital markets, which will in turn make these markets more developed and less costly.

The institutional investors in Pakistan usually do investments in the companies on short term bases. Therefore they do not really bother about the commencement and affairs of the firms, despite that they have the capabilities to pressurize the management to make their decisions in the favor of all stake holders.

Therefore it is recommended that the corporations should ensure that their board of directors consisted of a sufficient number of independent directors and the financial institutions should play a role in improving the governance structures of listed firms.

5.6 Limitations of the study

There are some limitations of the present study which are following;

- The findings of this study are based on Pakistani firms which can limit the generalizability of the findings to other jurisdictions.
- The data of some firms are not calculated due to limited resources.
- The present study just used data of dividend paying firms and excluded the non-dividend paying firms.
- The present study excluded the data of financial firms due to limited access and resources.

5.7 Recommendations for future research

- More research can be conducted on the influence of corporate governance characteristics on dividend pay-out by including some more governance dimensions like external auditor, remuneration committee, audit committee, and ownership concentration.
- Control variables other than size, ROA and Tobin Q can also be used in future research.
- Comparative study of financial and non-financial firms can be conducted in future.

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APPENDIX

Table 3.1 Variables used in this study

Variable Name	Proxies
Dependent variable Dividend pay-out	Dividend pay-out ratio
Independent Variables (Corporate-governance practices)	Managerial Ownership Foreign Ownership Institutional Ownership Minority Ownership Board Independence CEO Duality
Control Variables	Firm Size Debt Ratio Return on Assets Tobin's Q

Table 4.1 Descriptive statistics - Over All results

	Minimum	Maximum	Range	Mean	Median	Std. Dev.	N
DPR_TA	0.0000	0.2703	0.2703	0.0434	0.0256	0.0486	492
MAN_OWN	0.0000	0.9843	0.9843	0.2611	0.1989	0.2645	492
INST_OWN	0.0000	0.4818	0.4818	0.1207	0.1030	0.1045	492
FOR_OWN	0.0000	0.9400	0.9400	0.1012	0.0000	0.2164	492
MIN_OWN	0.0000	0.8113	0.8113	0.2083	0.1688	0.1560	492

BOARD_IND	0.0013	0.0100	0.0088	0.0070	0.0075	0.0018	492
CEO_D	0.0000	1.0000	1.0000	0.1280	0.0000	0.3345	492
F_SIZE	10.0085	20.1949	10.1864	15.8586	15.6412	1.5497	492
ROA	-0.0511	0.4149	0.4660	0.0942	0.0803	0.0648	492
D_RATIO	0.0000	0.5566	0.5566	0.1164	0.0972	0.0959	492
TOBINS_Q	0.1767	7.2617	7.0849	1.4686	1.0594	1.0968	492

Table 4.2 Correlation Matrix of overall firms

	DPR	MAN OWN	INST OWN	FOR OWN	MIN OWN	BOAR IND	CEO_D	F SIZE	ROA	D RATIO	TOBINS Q
DPR_TA	1										
MAN_OWN	0.3228	1									
INST_OWN	0.0818	-0.3110	1								
FOR_OWN	0.1641	-0.3543	-0.0451	1							
MIN_OWN	-0.1243	0.0592	-0.0120	-0.3063	1						
BOARD_IND	0.1623	-0.3251	0.1304	-0.0082	-0.1145	1					
CEO_D	0.0451	-0.1453	0.1525	0.0122	0.0066	-0.1330	1				
F_SIZE	0.1734	-0.3598	0.2107	0.1885	-0.3213	0.1267	0.1768	1			
ROA	0.6300	-0.2681	-0.0505	0.1334	-0.1674	0.1374	-0.0409	0.1389	1		
D_RATIO	-0.1837	0.1369	0.0104	-0.2134	0.1515	0.0861	-0.0213	0.1182	-0.213	1	
TOBINS_Q	0.4010	-0.1377	-0.0683	0.1169	-0.0433	0.1551	-0.0332	-0.0253	0.4402	-0.0878	1

Table 4.3

Panel Unit Root Test

Variable	Statistics values		Sig.	Stationary/ Non-Stationary	Decision
DPR_TA	Levin, Lin & Chu t PP - Fisher Chi-square	-9.18603 258.817	0.0000 0.0000	1(0) Stationary at level	DPR_TA is stationary at level i.e. Panel data has no unit root at level.
DIR_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-404.991 346.922	0.0000 0.0000	1(0) Stationary at level	DIR_OWN is stationary at level i.e. Panel data has no unit root at level.
INST_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-35.0463 342.305	0.0000 0.0000	1(0) Stationary at level	INST_OWN is stationary at level i.e. Panel data has no unit root at level.
FOR_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-19.1532 145.168	0.0000 0.000	1(0) Stationary at level	FOR_OWN is stationary at level i.e. Panel data has no unit root at level.
MIN_OWN	Levin, Lin & Chu t PP - Fisher Chi-square	-24.7105 318.508	0.0000 0.0000	1(0) Stationary at level	MIN_OWN is stationary at level i.e. Panel data has no unit root at level.
BOARD_IND	Levin, Lin & Chu t PP - Fisher Chi-square	-23.1580 152.980	0.0000 0.0029	1(0) Stationary at level	BOARD_IND is stationary at level i.e. Panel data has no unit root at level.
CEO_D	Levin, Lin & Chu t PP - Fisher Chi-square	-12.5191 27.2984	0.0000 0.0736	1(0) Stationary at level	CEO_D is stationary at level i.e. Panel data has no unit root at level.
F_SIZE	Levin, Lin & Chu t	-19.4490	0.0000	1(0) Stationary at level	F_SIZE is stationary at

	PP - Fisher Chi-square	298.555	0.0000		level i.e. Panel data has no unit root at level.
ROA	Levin, Lin & Chu t	-30.9599	0.0000	1(0) Stationary at level	ROA is stationary at level i.e. Panel data has no unit root at level.
	PP - Fisher Chi-square	364.462	0.0000		
D_RATIO	Levin, Lin & Chu t	-26.4857	0.0000	1(0) Stationary at level	D_RATIO is stationary at level i.e. Panel data has no unit root at level.
	PP - Fisher Chi-square	307.098	0.0000		
TOBIN_Q	Levin, Lin & Chu t	-21.1996	0.0000	1(0) Stationary at level	TOBIN_Q is stationary at level i.e. Panel data has no unit root at level.
	PP - Fisher Chi-square	207.685	0.0118		

Table 4.5.1

Redundant Fixed Effects Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	11.811953	(81,399)	0.0000
Cross-section Chi-square	601.795754	81	0.0000

Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	44.615351	11	0.0000

Table 4.5.2

Regression Analysis of overall firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.164427	0.063807	2.576951	0.0103
MAN_OWN	0.016624	0.025450	0.653194	0.5140
INST_OWN	0.046350	0.040899	1.133293	0.2578
FOR_OWN	0.121749	0.042936	2.835608	0.0048
MIN_OWN	-0.050388	0.027622	-1.824179	0.0689
BOARD_IND	3.657621	1.186680	3.082230	0.0022
CEO_D	0.008707	0.005887	1.478939	0.1399
F_SIZE	0.009859	0.003961	2.489164	0.0132
ROA	0.191899	0.025000	7.676089	0.0000
D_RATIO	-0.066458	0.023304	-2.851840	0.0046
TOBINS_Q	0.004290	0.001419	3.023261	0.0027
R-squared	0.839245	F-statistic	22.94788	
Adjusted R-squared	0.802673	Prob(F-statistic)	0.000000	

Table 4.6.1

Descriptive statistics of high growth firms

	Min	Max	Range	Mean	Median	S.D	N
DPR_TA	0.0000	0.2703	0.2703	0.0591	0.0438	0.0556	282
MAN_OWN_H	0.0000	0.9843	0.9843	0.1815	0.0111	0.2663	282
INST_OWN_H	0.0000	0.4818	0.4818	0.0959	0.0641	0.1046	282
FOR_OWN_H	0.0000	0.9319	0.9319	0.1178	0.0000	0.2342	282
MIN_OWN_H	0.0000	0.8112	0.8112	0.1556	0.1244	0.1449	282
BOARD_IND_H	0.0000	0.0100	0.0100	0.0062	0.0071	0.0031	282
CEO_D_H	0.0000	1.0000	1.0000	0.0851	0.0000	0.2795	282
F_SIZE_H	0.0000	20.1949	20.1949	13.6475	15.7325	6.0639	282
ROA_H	-0.0086	0.4149	0.4234	0.1018	0.0911	0.0772	282
D_RATIO_H	0.0000	0.5231	0.5231	0.0999	0.0652	0.1054	282

Table 4.6.2

Correlation Matrix of high growth firms

	DPR_ TA	MAN_ OWN_H	INST_ OWN_H	FOR_ OWN_H	MIN_ OWN_H	BOARD_ IND_H	CEO_ D_H	F_ SIZE_H	ROA_ H	D_R _H
DPR_TA	1									
MAN_OWN_H	0.2158	1								
INST_OWN_H	0.2366	-0.1501	1							
FOR_OWN_H	0.0754	-0.2405	0.0525	1						
MIN_OWN_H	0.0826	0.2720	0.2073	-0.2105	1					
BOARD_IND_H	0.2679	0.0876	0.4366	0.1735	0.3970	1				
CEO_D_H	0.2670	-0.0724	0.2138	0.0332	0.0410	0.0719	1			
F_SIZE_H	0.2997	0.1883	0.4300	0.2329	0.3741	0.8725	0.1385	1		

ROA_H	0.6428	-0.1264	0.2093	0.1810	0.1743	0.5519	0.1206	0.5869	1	
D_RATIO_H	-0.0604	0.2539	0.3284	-0.1129	0.3036	0.4511	0.0400	0.4313	-0.0111	1

Table 4.6.3

Redundant Fixed Effects Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.349328	(65,207)	0.0000
Cross-section Chi-square	337.348493	65	0.0000

Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	29.905954	9	0.0005

Table 4.6.4

Regression Analysis of high growth firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021686	0.015299	1.417422	0.1579
MAN_OWN_H	0.113844	0.063331	1.797605	0.0737
INST_OWN_H	0.157062	0.069115	2.272469	0.0241
FOR_OWN_H	0.259285	0.090104	2.877601	0.0044
MIN_OWN_H	0.054459	0.053552	1.016926	0.3104
BOARD_IND_H	6.811981	2.484509	2.741781	0.0066
CEO_D_H	0.031338	0.013777	2.274694	0.0239
F_SIZE_H	0.007568	0.002239	3.380631	0.0009
ROA_H	0.296338	0.043235	6.854174	0.0000

4.7.1 Descriptive statistics of low growth firms

Table 4.7.1

	Min	Max	Range	Mean	Median	Std. Dev.	N
DPR_TA	0.0000	0.2500	0.2500	0.0228	0.0160	0.0247	254
MAN_OWN_L	0.0000	0.8641	0.8641	0.3043	0.3116	0.2448	254
INST_OWN_L	0.0000	0.4491	0.4491	0.1274	0.1180	0.1042	254
FOR_OWN_L	0.0000	0.9400	0.9400	0.0652	0.0000	0.1736	254
MIN_OWN_L	0.0000	0.8113	0.8113	0.2307	0.1999	0.1669	254
BOARD_IND_L	0.0013	0.0100	0.0088	0.0067	0.0071	0.0020	254
CEO_D_L	0.0000	1.0000	1.0000	0.1535	0.0000	0.3612	254
F_SIZE_L	12.4068	19.7348	7.3280	15.5663	15.3744	1.4222	254
ROA_L	-0.0511	0.2457	0.2968	0.0694	0.0633	0.0490	254
D_RATIO_L	0.0000	0.5566	0.5566	0.1146	0.0983	0.0871	254

4.7.2 Correlation Analysis of low growth firms

Table 4.7.2

	DPR_ TA	**MAN_ OWN_L**	**INST_ OWN_L**	**FOR_ OWN_L**	**MIN_ OWN_L**	**BOARD_ IND_L**	**CEO_ D_L**	**F_ SIZE_L**	**ROA _L**	**D_R _L**
DPR_TA	1									
MAN_OWN_L	0.2328	1								
INST_OWN_L	0.0884	-0.3550	1							
FOR_OWN_L	0.3594	-0.3545	-0.0323	1						
MIN_OWN_L	-0.1300	-0.0759	-0.0636	-0.2307	1					
BOARD_IND_L	0.1609	-0.2695	0.0950	-0.0487	-0.1467	1				
CEO_D_L	-0.1691	-0.2043	0.1257	0.0521	0.0060	-0.1464	1			
F_SIZE_L	0.1363	-0.2509	0.2498	0.2621	-0.2727	-0.0392	0.3345	1		
ROA_L	0.3623	-0.0005	-0.0365	0.0726	-0.1265	0.0144	-0.0855	-0.0955	1	

Table 4.7.3

Redundant Fixed Effects Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.898300	(64,180)	0.0000
Cross-section Chi-square	256.171224	64	0.0000

Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	21.302921	9	0.0114

Table 4.7.4

Regression Analysis of low growth firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.088893	0.073715	1.205901	0.2294
MAN_OWN_L	0.020971	0.024211	0.866175	0.3875
INST_OWN_L	0.019877	0.036332	0.547090	0.5850
FOR_OWN_L	0.199744	0.050775	3.933921	0.0001
MIN_OWN_L	-0.055819	0.025850	-2.159396	0.0321
BOARD_IND_L	2.380264	1.188169	2.003304	0.0466
CEO_D_L	-0.000862	0.005252	-0.164095	0.8698
F_SIZE_L	0.005250	0.004748	1.105715	0.2703
ROA_L	0.132039	0.024980	5.285851	0.0000
D_RATIO_L	-0.005417	0.024173	-0.224088	0.8229

R-squared	0.770352	F-statistic	8.271363
Adjusted R-squared	0.677218	Prob(F-statistic)	0.000000

Table 4.8.1 Group Statistics

Variable	Groups	N	Mean	Std. Deviation	Std. Error Mean
DPR_TA	1	268	.06	.056	.003
	0	224	.02	.025	.002

Table 4.8.2 Independent sample test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
DPR_TA	Equal variances assumed	92.241	.679	9.354	490	.000	.038	.004	.030	.046
	Equal variances not assumed			9.925	385.631	.000	.038	.004	.030	.045

Table 4.9 Acceptance / Rejection of Hypothesis table

Hypothesis	Overall firms	High Growth firms	Low Growth firms
H1	Rejected	Accepted	Rejected
H2	Rejected	Accepted	Rejected
H3	Accepted	Accepted	Accepted
H4	Accepted	Rejected	Accepted
H5	Accepted	Accepted	Accepted
H6	Rejected	Accepted	Rejected