Effect of family control on strategic financial decisions of the firms: Evidence from Pakistan

By

Mr. Imran Yousaf

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Supervisor

Dr. Arshad Hassan

Dean, Faculty of Management and social Sciences,
MAJU, Islamabad

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DEDICATED TO

MY PRAISEWORTHY MOTHER
DEARLY LOVED FATHER

FOR THEIR ENDLESS LOVE, SUPPORT & ENCOURAGEMENT

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List of Abbreviations

Lev1……...Leverage1
Lev2……...Leverage2
Lev3……...Leverage3
Div……Dividends
Inv……Investments
Tang……...Tangibility
Prof……Profitability
M/B……Market to Book ratio
NDTS……Non debt tax shield
Liq……..Liquidity
FO……..Family Ownership
FF……...Family firm
NFF……Non FF

Abstract

This study investigates the effect of family ownership on strategic financial policies of the firms in Pakistan. These strategic financial decisions consist of capital structure, dividend policy and investment decision. The univariate analysis of study shows that a significant difference exists between family and non family firms in terms of firm's characteristics such as total debt ratio, long term debt ratio, dividend per share, tangibility, profitability, size, Tobin's Q, liquidity, business risk, cash flows and investments. The multivariate analysis of study consists of three parts. In first part, this study examines the effect of family ownership on debt ratios and in second part investigates the effect of family ownership on dividends and in third part explores the investment cash flow sensitivity of family and non family firms. This study results reveal that family firms maintain significantly high "total debt ratio" and "short term debt ratio" as compare to non family firms; and family firms maintain lower dividends ratio as compare to non family firms; and fixed investment of family firms is lower than non family firms in Pakistan. These findings demonstrate that family firms behave differently than non family firms in Pakistan.

Chapter 1: Introduction

Family businesses are dominant in developed as well as developing countries all over the world. Family businesses generate an estimated 70 to 90 percent of global GDP annually and family firms employ major proportion of workforce in all over the world (family firm Institute). Social and economic importance of family owned firms is widely recognized by the research scholars of finance and economics (La Porta et al. 1999; Sharma, 2004; Holderness, 2009). Family businesses are also dominated in Pakistan and approximately more than 59 percent of listed firms can be categorized as family firms (Shahab and Attiya, 2012) and family firms employ approximately 80 percent of workforce in Pakistan (Nasir and Tayyaba, 2007). So, family firm's growth is important for the development of economy.

Family firms have some distinctive characteristics and some of them describes one by one. First, family firms objective is to continue business successfully up to next generations and families never consume all during life time but transfer business to next generation (Anderson and Reeb, 2003). Second, family firms are least likely to focus upon short term profits by sacrificing performance in long run; and family firms focus on long run when making corporate decisions to achieve goal of successful survival up to next generations (McVey and Draho, 2005). Third, family owners directly or indirectly involve in managerial activities of the firm (Anderson and Reeb, 2003) and family owners serve as efficient monitoring mechanisms and ensure that managers don't waste the firms' cash flows on unprofitable projects. These characteristics can be competitive advantage of family firms over non fa mily firms but there can be potential disadvantages of family firms such as agency conflict between family shareholders and minority shareholders due to different preferences of both parties. Minority shareholders may prefer to take dividends from firms in short run

and family firms at the same time may be focus on long term investment rather than distributing profits to minority shareholders (Villalonga and Amit, 2006).

Family control may effects the strategic corporate decisions of the firms, namely the financing, investment and dividends decision of firm. So, this study analyzes that whether family firms are different from non family firms and "what are distinctive characteristics of family firms on which basis family firms differ from non family firms" and then analyze the "effect of family control on financial policies (financing, investing and dividends) of firms".

1.1: Theoretical background

Jensen and Meckling (1976) argue for the foreseeable importance of agency cost within corporate finance. This theory is based upon the idea of diverging interest when principal (e.g. the shareholders) and agent (e.g. the management) are separated. When ownership and management are separated then different conflicting interests emerge and this phenomenon creates high agency cost. It is believed that all stakeholders work for maximization of their personal utility, even at the others' expense. The principal may not be able to monitor the behaviors of agent and this in turn will cause the agent to participate in such type of actions that are unknown and may be against the rights of principal. Agency conflicts emerge due to this asymmetric information dilemma, in which all parties involve don't share similar information with each other.

Corporate managers sometime prefer their own interest over shareholder interests and involve in activities related to job security or even direct capture of assets and cash flows. Other theory on the basis of agency cost approach is "Free cash flow theory". In this theory cash flows refer to the amount that is available to distribute among shareholders of a firm. Jensen (1986) argue that unless the free cash flow is given back to shareholders, management

decide to invest this amount in such type of projects whose cost of capital is more than rate of return or negative NPV projects and wasting these resources on organization inefficiencies. To tackle this problem, debt uses an instrument to increase pressure on management. High debt would force the company's management to minimize its investment in loss bearing projects in order to avoid the risk of default.

To deal with agency conflicts, family ownership and dividends can be use as controlling mechanism. When dividends are paid then it shows that family owners serve as efficient monitoring mechanisms and ensure that managers don't waste the free cash flow on unprofitable projects. So dividends distribution reduces free cash flow agency conflicts between controlling and minority shareholders (Jensen, 1986). So dividend can help out in creating better corporate governance systems. According to outcome model of dividend, higher dividend should be associated with better corporate governance practices. Michaely and Roberts (2006) argue that companies, in which shareholders and managers interests are same such as in family firms, should pay higher dividend as compare to firms with higher ownership dispersion. And dividend should use to protect the rights of minority shareholders in family firms or group affiliated firms (Faccio et al. 2001). But in contrast to above higher dividend point of view, family firms have low dividend payout ratio as compare to state controlled firms in Australia (Gugler et al. 2003).

However opponents argue that capital structure desired by family firms depend upon level of agency conflicts. Family firms use more debt as compare to non family firms to limit the negative consequences of altruism within the firm and in order to control the self interest of family agents. And resources of the family use to fulfill the self interests of the family through employment, incentives and privileges that they otherwise would not receive (Schulze et al. 2001). Gomez-Mejia et al. (2001) argues that family firms have higher agency

cost due to retaining of incompetent family members in management. Family firms are found to be hesitant to fire incompetent family members due to personal relationship. This will in return increase the agency costs and decrease the efficiency of firm.

Schulze et al. (2003) conclude that long term investment behavior is normally based upon the expectation of controlling owner and not on minority shareholders or other stakeholders. The main concern of controlling owner should be to choose the most appropriate investment alternatives on the basis of future projections. Due to agency conflicts, controlling owner may confuse about either to choose the project which increase the family utility or which increase the value of firm by sacrificing the family utility. And family matters force the controlling owner to change the investment plans sometimes. Fama and Jensen (1985) find that undiversified shareholders may prefer investment on the basis of their own risk preferences rather than as nonfamily shareholders preferred market base rule for investment.

1.1.1: Family ownership and capital structure

Modigliani and Miller (1958) developed Capital structure theory first time and argue that value of the firm effected by investment decision and not affected by the financing policy of the firm. Theory was built upon many constraints and ceteris paribus due to which in real world difficult to applicable. After this base theory, many relevant theories have been developed such as Trade off theory (Jensen and Meckling, 1976; Myers, 2001). According to this theory, optimal targeted level of leverage is the point where marginal benefit of debt is equal to marginal cost of debt. Tradeoff theory is based upon cost of financial distress, agency cost and effects of tax (Romano and Tanewski, 2000). And underlying assumption of this theory is that there is a tradeoff occurs between high risk of financial distress and tax benefit due to high debt proportion. As leverage will be high then firm can gain tax benefit of

high debt and agency cost also decrease due to high proportion of debt. On the other hand firm face cost in form of higher probability of financial distress of firm by maintaining high leverage. This tradeoff increases the value of firm but also weaken the financial position of the firm.

Family block holders maintain high debt ratio to take some benefit from firm such as to pay themselves higher dividend or use these cash flows for family private benefits. In both these cases, when cash flows used by family to pay higher dividend to themselves and used for privates benefits, family firm need more external finance in form of debt due to less internal funds to fulfill the financing needs of firm (Rubecca Duggal, 2010).

Capital structure decision is most important strategic decision taken by the top level management of the organization. Every country law defines the ownership cut off point up to which control becomes contestable. Nenova (2006) argue that family firms use high debt ratio to maintain their control over the firm. Maintaining high debt to control organization is the expensive and more risky way because high debt increases the risk of bankruptcy. To maximize the firm survival, this high firm specific risk is very important for the family firms with undiversified portfolio. Mc conaughy (2001) argue that capital structure use as proxy for control risk and firms maintain high leverage to reduce control risk.

Firm could continue to borrow up to the point where marginal cost of financial distress becomes equal to marginal benefit of the interest tax shield (Kraus and Litzenberger, 1973). In contrast to above findings, family firms maintain lower leverage below the optimal level. Gallo, Tapies and Cappuyuns (2004) argue that family firms maintain lower debt ratio as compare to non family firms. Financial risk aversion behavior of family firms is one of the main reasons behind maintaining low debt ratio. So there are different results of studies about capital structure behavior in family firms of different countries. Myers and Majluf (1984) test

pecking order hypothesis and explain that family firms maintain low debt ratio, because hypothesis suggest that managers will finance assets with lower cost financing option available and issue less risky security available to reduce cost. Family firms in UK follow pecking order principle of financing (Poutziouris, 2001). Monetary cost of financing is not the only cost but other costs also effect financing decision. If firm focus on external sources than family firm's goals like maintains control, independence and transfer business to next generation successfully are sacrificed. And external finance is much expensive option due to goals scarification cost and this non monetary cost also explain family firms financing behavior by following pecking order principle.

Family firms have low portfolio diversification as compare to non family ownership such as institutional block holders have high portfolio diversification (Andreson and Reeb, 2003). Due to low portfolio diversification, family firms face high risk, so family firms compensate this high risk by reducing leverage. Because when leverage is lower, then risk reduce and High risk of portfolio compensate by low risk of leverage. In some countries, family firms maintain high debt ratio and some countries maintain low debt ratio as compare to non family firms. So this study focuses to examine the capital structure behavior of family and non firms in Pakistan.

1.1.2: Family ownership and dividend policy

According to Theory of irrelevance, dividends don't have any effect on the value of the firm and dividend does not matter for shareholders in perfect market structure. And shareholder ultimate get benefit either take dividend yield in form of cash or capital yield in form of increase in share price so dividend does not matter for shareholders (Miller and Modigliani, 1961). In contrast Gordon (1963) support the 'Bird in hand theory' and show that there is Imperfect information available to different stakeholders and uncertainty in world, so

dividend payments affect the firm value. To minimize future risk, investors prefer cash in form of dividends today rather than capital gain yield in future.

Many studies show that family firms pay fewer dividends than non family firms. Family firms use these funds for their personal benefits and this shows that families expropriate the wealth of shareholders through paying lower dividends and ultimate loss face by minority shareholders. Villalongs and Amit (2006) argue that conflicts arise between large controlling shareholder and minority shareholder, when large controlling shareholders use firms' resources for private purposes and pay less dividends to minority shareholders by firms. And this conflict is termed as Agency Problem (Villalongs and Amit, 2006).

In contrast some studies show that family firms pay more dividend as compare to non family firms due to different reasons. Fama and Jensen (1983) argue that family firms pay more dividend as compare to non family firms to overcome agency problems and to reduce agency cost. Bozec and Laurin (2008) argue that Dividend use as a one of the governance controlling mechanism to reduce agency cost. Anderson and Reeb (2003) argue that families may be better monitor of the manager as compare to other shareholders.

In different countries proportion of family members in boards is different and minority shareholders rights can protect where independent board members have majority in board of directors. Laporta (2000) argue that countries where legal protection of minority shareholders is strong, firms pay higher dividend ratio as compare to countries where legal protection of minority shareholders is weak. Setia Atmaja (2010) argue that family firms have higher dividend payout ratio than non family firms in Australia and families do not expropriate the wealth of shareholders by lower dividend and lower debt. And family firms pay more dividends because of higher proportion of independent directors in family firm's board of directors played very important role in providing dividend to all shareholders

including minority shareholders. Anderson and Reeb (2004) shows that board of independence used as a signaling mechanism by firms to protect their legitimacy and family members have higher proportion in board of directors of family firms.

In Pakistan, dividends are used by companies as signal of firm's future earnings and cash flow generated by insiders. Hu (2007) argue that family firms without active management pay more dividend than family firms with active management. This study examines the behavior of family and non family in paying dividend to shareholders.

1.1.3: Family ownership and investment

In perfect capital markets, Investment decisions are independent of financing and dividend decisions. Internal and external financing are perfect substitutes in perfect capital markets (Modigliani and Miller, 1958). But markets are not perfect so there may be relationship between investment and financing decision. Gugler (2003) argue that there is a positive relationship between investment and cash flows in family firms.

In non family firms CEO and managers are hired on the basis of short term contracts (e.g. 5 year) and focus on short term view, because of more incentive in short term value maximization. On the other hand family owner focus on long term view of success and invest more in long run horizon projects such as more investment in fixed assets as compare to non family firms (James et al. 1999).

Families concerns a lot for reputation of both firm and family; and families focus on a long term survival of their firms (Anderson et al. 2003). Family firms in Europe invest more in fixed assets as compare to non family firms (Doukas et al. 2009). And family business model of longer investment horizon may become an advantage in tough economic times or in recession such as in 2008 world economic downfall (Stern et al. 2009). But if firms invest

more in fixed assets which result in idle capacity or overinvestment than this advantage may convert into disadvantage for family firms. Pindado and de la Torre (2009) argue that over and underinvestment problems arise when large shareholder have the ability to expropriate minority investor's wealth.

But other view about investment behavior also prevail, Family firms are more risk averse in investment policies (Naldi et al. 2007), less growth oriented (Pountziouris, 2001) and conservative in financing or funding behavior as compare to non family firms. Doukas and Gonens (2009) find that family firms confirms their risk averse behavior by invest more in low risk fixed asset capital expenditure than high risk research and development expenditures. Jensen (1986) argue that manager sometime prefer to investment in negative net present value project due to agency conflict between managers and shareholders and this in turn leads to overinvestment or inefficient investment . And sometime controlling family with more control rights and less cash flow rights do the same and invest in negative NPV projects instead of distributing these free cash flows as dividend to outside shareholders.

Investment policy depends upon investment opportunities and project is required to be finance either by internal or external funds if there have positive net present value (Myers and Majluf, 1984). By using two period model, family firms invest according to market rule of positive NPV and family firm makes more efficient investment as compare to nonon family firms due to intention of transferring business to succeeding generation (James, 1999). Family firms invest for long term horizon and founding family member actively monitor the investment projects and then efficiency of such investments may also increases in long run horizon.

Firm's availability of cash flows significantly affects the corporate investment (Meyer and Kuh, 1957). Corporate investment is also effected by ownership structure and liquidity

position also (Fazzari, hubbard and Peterson et al. 1988). Pindado and Requejo (2011) argue that investment -cash flow sensitivity is lower in family firms in Euro zone. This shows lower dependence of family firm on internal cash flows for investments as compared to non family firm. And this lower dependence is the positive aspect of family firms because efficiency of investment increases in Euro zone due to lower dependence on internal cash flows. And financing by external sources especially through debt and high leverage may force the management to use cash flows for investment properly to avoid from financial distress. And this lower dependence is explained by the benefits of (Anderson et al. 2003; Maury et al. 2008) family firms as it alleviate the agency conflicts between manager, creditor and shareholder and due to access to external finance. In contrast, (Elisabete et al. 2012) find that family firms have higher investment to cash flow sensitivity in Portugal as compare to non family controlled firms. The present study investigates the behavior of family and non family firms towards corporate investments.

1.2: Research Questions

Family firms are different from non family firms with respect to terms of goals, size, ethics, financial structure, corporate governance, international structure and strategies (Chrisman et al. 2005). There are many scholars that provided insights, theoretical as well as empirical that family firms behave differently in financing, investing and dividend decision as compare to non family firms. Findings of these studies are contrasting due to different reasons such as Villalongs and Amit (2006) argue that family firms pay less dividend as compare to non family firms; Fama and Jensen (1983) argue that family firms pay high dividend than non family firms; Nenova (2006) find that family firms maintain high debt ratio as compare to non family firms; Gallo, Tapies and Cappuyuns (2004) argue that family

firms maintain low debt ratio as compare to non family firms. Therefore various research questions can be arise which includes

- Do family firms behave differently from non family firms with respect financial characteristics of firms?
- Does family control affects the corporate financing decision of firms in Pakistan?
- Does family control affects the corporate dividends decision of firms in Pakistan?
- Does family control play any role in investment-cash flows sensitivity of firms in Pakistan?

1.3: Objective of study

The study is aimed with following objectives

- To provide insight about the role of family control in financing decisions.
- To explain the difference between dividend policy of family and non family firms.
- To study the impact of presence of family control on the investment cash flow sensitivity dynamics.

1.4: Significance of study

Firm and family are two different social systems and this study investigates both social systems in family firms at same time. It requires understanding of management sciences and economics (Thomas Markus Zellweger, 2006) because family business research borrows from different fields such as psychology, sociology, law, corporate finance and economics (Bird et al, 2002; Wortman, 1994; Sharma, 2004; D .Ignacio Requejo Puerto, 2010). Family firms consist of 59 percent of listed firms in Asia (claessens., 200) and 44 percent in Europe (Faccio and Lang, 2002). In Pakistan, family firms are in higher proportion

as compare to non family owned firms. Family firms play very important role for GDP growth and employment generation in Pakistan and all over the world.

In Pakistan, many studies are carried out to investigate the effects of ownership structure (like managerial ownership, foreign ownership, government ownership, family ownership etc.) on the performance of the firm. In all over the world, especially in developed countries , lot of research carried out on family firm behavior towards financial polices of firm but in context of developing country Pakistan, specifically family ownership dynamics has yet never been investigated with respect to financing, investment and dividend decision in firms. This study examines that "how financing, investment and dividend decisions are affected by family and non family ownership in Pakistan. This study will be very helpful for financial managers, family business owners, researchers, policy makers, investors and educators because this study will improve their decision making and enhance their knowledge about financial policies of family and non family firms in Pakistan.

1.5: Scheme of study

To fulfill the objective of the study, the rest of the dissertation is divided into Chapters. In chapter 2, this study provides the comprehensive review of literature and this section is divided into further three sub sections. In 2.1 section, this study provide the literature review on capital structure and its determinants including family ownership and section 2.2 provides literature review of dividend policy and its determinants including family ownership and section 2.3 provides literature review on investment cash flow sensitivity and family ownership effects on investment cash flow sensitivity of firm. In chapter 3, this study presents the methodology of the study and this section has further two subsections. Data description is presented in subsection 3.1 and model of study is presented in subsection 3.2. In chapter 4, this study provides the empirical results of the study and this

section further divided into two subsections. Descriptive statistics and analysis is presented in subsection 4.1 and Multivariate variate regression analysis is demonstrated into subsection 4.2. In chapter 5, this study provides the conclusions and policy implications of the study. This study presents the references and indices at the end.

Chapter 2: Literature review

2.1: Capital structure

Corporate financing decision is the one of the key strategic decision of the firm and previous studies explains that many characteristics of the firms affect the capital structure decision such as tangibility, ownership, size, profitability, growth, non debt tax shield, business risk, dividends and liquidity. This section explains about the theoretical and empirical relationship between capital structures its determinants (including family ownership).

Family Ownership:

According to agency conflicts theory, agency conflicts may arise between firm's shareholders and managers when interests of both stakeholders are different from each other and agency cost is high in presence of agency conflicts. But in view of agency theory, family owned firms are believed to be more beneficial than non family owned firms because in family owned firms, owner and management are same. Ang et al. (2000) argue that family firms are used as solid proposition to represent non conflicting firms with zero agency costs. McCounaughy (2000) and Anderson and Reeb (2003) suggest that incentive structure in family firms creates fewer conflicts between different stakeholders of firms then non family firms counterparts.

Andereson and Reeb (2003) argue that two main characteristics of family firms may affect capital structure decision of family firms. First, family firms' shareholders do not hold well diversified portfolio due to financial constraints and non family firms' shareholders usually hold well diversified portfolio. Family firms' shareholders demonstrate risk averse behavior and debt uses as a tool to reduce risk because when firms maintain less debt then

cost of financial distress is low and vice versa. Family maintains low level of leverage because large proportion of wealth of family firms is at high risk due to undiversified portfolio of family firms. This characteristic explains that family firms maintain lower leverage as compare to non family firms. Gallo, Tappies and Cappuyns (2004) confirms that family firms maintain lowers leverage as compare to non family firms because family firms are risk averse. According to trade off theory, there is a tradeoff between cost of financial distress and tax benefits; and these risk averse family firms reduces leverage and in results cost of financial distress also decreases, so these firms may behave according to trade off theory but very scarce empirical evidences find in literature about this assumption (Romano Tanewski and smyrnios, 2000).

Second, family firms focus on long term survival because family firms want to transfer the business to next generation. For long term survival and to avert from takeover attempt, family firms tend to be retaining control and concentrate voting power by maintaining high debt ratio in firm; instead of issuing new equity which in results dilute ownership. So, desire to 'retain control' and effects the leverage decision (Anderson, 2003). Family firms follow pecking order theory in financing preferences , at first family firms use retained earning then debt and as a last resort , new issue of ordinary shares because family firms want to maintain control (Chen and Ye, 2007). Romano et al. (2001); Poutzioris, (2001) find that when internal funds are inefficient than debt prefer to equity to fulfill financing need in family firm in order to retain control. On one hand 'risk reduction' desire motivates family towards maintaining low leverage and 'retain control' objective motivates towards maintaining high leverage. Ultimately, actual leverage level depends upon which factor is more dominant (Anderson and Reeb, 2003). On the basis of family vs non family ownership, it is hypothesized that

Hypothesis No. 1: Family firms maintain high leverage as compare to non family firms.

Tangibility of Assets:

Cost of borrowing can be low for those firms which having more physical or tangible assets as compare to firm with less physical assets because tangible assets can be utilized as collateral, so high tangibility of assets lowers the creditor's risk. According to agency costs theory of Jensen and Meckling (1976), conflicts between lender and shareholder exists and lender face agency cost, because firm may invest in riskier projects by borrowing from lender and may transfer the wealth from lender to shareholder. And this lender's risk of suffering agency cost of debt can be mitigated by firm's pledging fixed assets as collaterals against borrowing, so companies having more physical or fixed assets can borrow more from lenders (Ross et al. 2008). Hence, agency theory explains about positive association between assets' tangibility and debt.

Booth et al. (2001) argue that ability of a firm to issue secured debt is high if it owns more tangible assets. Titman and wessels (1988) conclude that there is a positive association between tangible assets and leverage. Rajan and Zingales (1995) find that assets tangibility positively affects the leverage of the firm. De jong (2008) suggests a positive correlation between fixed assets and leverage. Shah and Khan (2007) find positive relationship between tangibility of assets and leverage in firms of Pakistan.

Many other empirical research studies in developed countries such as UK based (Bennet and Donnelly, 1993) , G7 countries based (Rajan and Zingales , 1995) and USA based (Baker and Wurgler, 2002 ; Kayhan and Titman, 2007 ; Frank and Goyal, 2009) also confirms about positive association between tangibility and leverage. In contrast to above findings of developed countries, developing countries shows mix type of results. Booth (2001) conducted study in ten emerging countries including Pakistan and find that there is a

negative association between the assets tangibility and leverage. Chen (2004) finds that there is a positive association between the tangibility of assets and leverage in emerging economy of China. These research findings are different due to difference between institutional and country level factors of developed and emerging economies such corporate governance structure of firms, banking system , legal system ,GDP growth rate, inflation and development of markets. On the basis of tangibility, it is hypothesized that

Hypothesis No. 2: There is a significant positive association between tangibility of assets and leverage of firms.

Profitability:

According to pecking order theory, firms use internal financing option of using retained earnings at first then external financing option of debt at second and then external financing option of issuing shares at third priority to fulfill their financing needs (Myer et al. 1984). This show that firm with insufficient profit prefer to borrow debt then issue equity securities if financing need is not fulfilled by debt borrowings. Pecking order theory explains a negative association between profitability and leverage of firm because more profitable firms will need less debt to finance investments. Rajan and Zingales (1995) observe a negative association between firm's profitability and leverage.

In contrast, trade off theory explains positive association between firm's profitability and leverage. According to trade off theory, firms identify target debt ratio by comparing costs and benefits of leverage. Leverage's cost is cost of financial distress and benefit of leverage is tax shield. Frank and Goyal (2009) argues that cost of financial distress becomes low and tax shield becomes more valuable for those firms which are more profitable. More benefit of tax shield can attain by maintaining high debt. This shows that positive relationship between profitability and firm's leverage. Agency cost theory by (Jensen et al.

1986) predicts that high debt can be used to restrain management discretion for those firms having high profits or cash flows. So, trade off theory and agency cost predicts positive association of profitability and leverage.

Many empirical research studies in developed countries such as UK based (Ozkan, 2001) ,G7 countries based (Mahajan and Tarturoglu, 2008) and USA based (Kayhan and Titman, 2007 ; Frank and Goyal, 2009) confirms about negative association between profitability and leverage. Wiwattanakantang et al. (1999) and Booth et al. (2001) find negative association between profitability and leverage in emerging economies. Dejong (2008) confirms negative relationship between profitability and leverage by conducting research study at world level including developed and emerging economies. On the basis of profitability of firm, it is hypothesized that

Hypothesis No. 3: There is a significant negative relationship between profitability and leverage of firms.

Size:

Large size firms are more diversified and having lower bankruptcy risk as compare to small size firms (Titman and Wessels, 1988). Hence, borrowing cost can be low for large size firms because of having low risk of default and high bargaining power over creditors. According to trade off theory, any decrease in cost of leverage allows the firms to increase leverage. So this theory explains positive association between leverage and size of firms because large size firms having lower cost of borrowing as compare to small size firms. Many empirical studies such as Marsh (1982) and De Jong (2008) find positive relationship between leverage and size.

On the other hand, Frank and Goyal (2009) argue that larger firms are well known and having older history of adding retained earnings in their capital structure. According to pecking order theory, firm fulfill their financing need at first priority from retained earnings and if retained earnings of large firms are high then there is no need to use second option of borrowing, so this explains a negative relationship between leverage and size of firm . Rajan and Zingales (1995) argue that more information have to be provided by large firm to outside investors than small firms ,so large firms having less asymmetric information problem should prefer more equity as compare to debt. This study explains about negative relationship between leverage and size of firm. This study explains about negative association between leverage and size of firm. Many empirical studies such as Kale (1991) and Jung (1996) finds also negative relationship between leverage and size of firm.

In developed and emerging economies, studies find mix type results about relationship of leverage and size. Booth (2001), I.M.Pandey (2002) and Megumi Suto (2003) find positive relationship between leverage and size of firm in study of developing countries. Chen (2004) finds negative association between leverage and size of firm in emerging economy of China. In studies on developed countries such as USA based (Baker and wurglur et al. 2002 ; Mackay and Phillips et al . 2005) and UK based Ozkan (2001) predicts positive association between leverage and size. A study based upon USA and Japan data by Kester (1986) find negative relationship between leverage and size. These different results may be explain by the institutional and country factors differences such as corporate governance structure of firms, legal system, banking system , GDP growth , Inflation, taxation policy and securities markets development level between emerging and developed economies. On the basis of size of firm, it is hypothesized that

Hypothesis No. 4: There is a significant negative relationship between leverage and size of the firm.

Growth:

According to pecking order theory by Myers and Majluf (1984), internal funds may be insufficient to finance positive investment opportunities in high growth period of firms, then firm use external source of funds to fulfill the financing needs of growth opportunities. From external sources of finance debt and equity, firms prefer debt because of lower information cost associated with debt issues as compare to equity financing. Hence, this theory explains positive relationship between growth and leverage of the firm. Chen (2004) finds positive association between growth opportunities and leverage of firms. Tong and Green (2005) also predict positive association between growth opportunities and leverage of firms.

On the other hand, agency cost theory by Jensen and Meckling (1976) explains that leverage increases with lack of growth opportunities. Jensen (1986) suggests that debt serves to limit agency cost of managerial discretion for firms having lack of investment opportunities. Hence, this theory explains negative relationship between growth opportunities and firm's leverage. Slutz (1990) predicts negative relationship between leverage and growth opportunities of firms. Berger Ofek Yermack (1997) explains negative association between growth opportunities and firm's leverage.

There is a mix type results find by different studies in developing and emerging economies. Empirical studies of developed countries such as USA based (Smith and watts, 1992; Frank and Goyal, 2009) and UK based Bennet and Donnelly (1993) finds negative relationship between leverage and growth opportunities of firms. Booth (2001) finds negative relationship between leverage and growth opportunities in ten developing countries including

Pakistan. Chen (2004) finds a positive association between leverage and growth opportunities of firm in emerging economy of China. And these differences of results may be due to difference in macroeconomic indicators, institutional factors, legal framework and governance mechanism differences between these developed and emerging economies. It is hypothesized that

Hypothesis No.5: There is a significant positive relationship between leverage and growth opportunities of firms.

Non debt tax shield:

Trade off theory predicts a negative relationship between non debt tax shield and debt of the firm (Titman and Wessels et al. 1988). Firms having large amount of non debt tax shields are expected to use less debt because non debt tax shields are substitute for tax shields or tax benefits from debt financing. Marginal tax saving from an additional unit of debt decreases with the increase in non debt tax shields because with increase in leverage, cost of financial distress increases and marginal benefit becomes low (DeAngelo and Masulis et at. 1980). Hence, this shows an inverse association between debt and non debt tax shields.

On the other hand , some studies explains positive association between non debt tax shield and leverage of firm. Bradley (1984) argue that non debt tax shield can be used as measure of firm's assets securatibilty in terms of debt collateral , so firms with more securable assets can done debt financing at lower cost as having less risk as compare to firm with less securable assets. Non debt tax shield is highly correlated with tangibility and they do not include proxy of tangibility in their study, which also affects the leverage of firm. Wald (1999) and Delcoure (2007) also confirm the positive relationship between non debt tax shield of firm.

There is a similar type results find by different studies in developing and developed countries. Empirical studies of developed countries such as USA based (Titman and Wessels, 1988; DeAngelo and Masulis, 1980) and UK based Bennet and Donnelly (1993) finds negative relationship between leverage and non debt tax shields of the firms. Deesomsak, Paudyal, and Pescetto (2004) finds negative relationship between non debt tax shield and leverage in emerging economies of Malaysia and Thailand and developed economies of Australia and Singapore. On the basis of non debt tax shield, the hypothesis is

Hypothesis No.6: There is a significant negative relationship between non debt tax shield and leverage of firms.

Business risk:

According to trade off theory, higher volatility of earning increases the likelihood of financial distress. When costs of financial distress are larger, an increase in earnings volatility decreases leverage of firm. Bradely (1984) predicts negative association between earning volatility and leverage of firm and shows consistent results with trade off theory findings. DeAngelo and Masulis (1980) argue that an additional unit of debt increases the chances of firm's bankruptcy. Based on publicly available information, investors face difficulty in forecasting of future earnings due to high volatility of earnings; and high volatility is an indication of high risk. Hence, investor demands a high premium against high risk in order to lend fund to company. In result, this drives up the cost of debt. So this shows a negative relationship earning volatility and leverage of firm because high earning volatility increases the cost of debt and decreases the leverage level. Marsh (1982) and De Miguel and Pindado (2001) finds negative association between leverage and earning volatility.

Jaffe and Westerfield (1987) finds that relationship between leverage and earning volatatlity may not be monotonic and under certain conditions this relation can be positive.

Jarrell and kim (1984) explains 'U' shaped dependence between two variables. Thies and Klock (1992) find a positive relationship between short term debt and earnings volatility of firms. Due to credit rationing, firms are restricted in their extent to borrow large long term loans in presence of high earning volatility, therefore firms cover these deficiencies of financing by using short term debt .So this shows positive association between short term debt and earning volatilities. Shenoy and Kock (1996) explains another reason of positive association between earning volatility and demand for debt. As high leverage firms having significantly greater amount risk associated with them i.e. there may be bidirectional relationship between earning volatility and leverage instead of unidirectional relationship from risk to leverage.

Many other empirical research studies in developed countries such as Spain based (De Miguel and Pindando, 2001) and USA based (Marsh, 1982; Bradley, 1984) also confirms about negative association between business risk and leverage. Huang and Song (2002) find that there is a positive association between the business risk and leverage of the firms in emerging economy of China. These different results may be explain by the institutional and country specific differences such as corporate governance structure of firms, legal system, banking system ,GDP growth , Inflation, taxation policy and securities markets development level between emerging and developed economies. On the basis of business risk, it is hypothesized that

Hypothesis No.7: There is a significant negative association between business risk and leverage of firm.

Dividends:

Dividend decision of the firm affects the capital structure. According to pecking order theory, firms with higher dividends payout ratio are experiencing the higher debt in their

capital structure. Dividend payments to the shareholders reduce the amount of internal funds. When internal funds are insufficient to fulfill their financing needs then at second priority firms borrow funds to meet up their financing needs and this theory predicts positive relationship between the dividends and leverage of firms. Tong and Green (2005) and Baskins (1989) confirm the positive association between dividends and leverage of the firms.

Debt financing and dividend payments can be used as two alternative approaches to tackle the agency cost of free cash flows problem. According to agency theory , agency costs of free cash flow problems decreases with the increases of borrowing of firms. Hence, when firm borrow more to reduce agency costs then firms leaves fewer amount to pay dividend because large amount of interest pays against large amount of borrowings. And large dividends payout can also reduce the security of bondholders or creditors. So, this shows a negative relationship between dividends and leverage of firms. Trade off theory also proposed negative association between dividend and leverage of firms due to higher costs of bankruptcy. Allen and Mizuno (1989) find when firm faces high fixed charges of financing then firm might not pay dividends to shareholders of the firm. Frank and Goyal (2009) explains that 'dividend paying firms' have lower leverage level as compare to firms that don't pay dividends. Fama and French (2002) also finds negative association between the dividend payments and leverage of firms. It is hypothesized that

Hypothesis No.8: There is a significant positive association between dividends and leverage of firm.

Liquidity:

Pecking order theory explains that firms that have more liquid assets maintain lowers amount of leverage. Liquid assets such as cash and cash equivalents are the part of internal funds, when sufficient internal funds are available to fulfill financing needs of investment

then there is no need of external finance through debt or equity. Hence, this theory predicts an inverse relationship between leverage and liquidity of the firms (Myers, 1984). Myers and Rajan (1998) also find negative association between liquidity and leverage of the firms.

According to agency cost theory, when large amount of free cash flows available to firms then managers can invest these large amount of cash flows in wasteful investments or negative net present value projects rather than utilizing these cash flows efficiently to increase the value of firm. So, debt financing is used to mitigate these uneconomical actions by binding managers to use extra cash flows to pay interest payments against debt. This theory shows a positive association between liquidity and leverage of the firm (Jensen and Meckling ,1976; Jensen , 1986).

According to trade off theory, there is a positive association between liquidity and leverage of the firm. High liquidity firms have greater ability to fulfill their short term obligations on time and as a result cost of financial distress also decreases. Shleifer and Vishny (1992) argue that debt capacity of firm having more liquid assets increases because liquid assets use as better collateral against short term borrowings and high liquid asset holding firms can done their repayments of borrowings easily as they come due. This shows a positive relationship between liquidity and leverage of the firms.

Limited empirical studies are found on the relationship between liquidity and leverage of the firms. Sibikov (2009) finds positive association of liquidity and leverage of the firm in developed economy of USA and Ozkan (2001) finds a significant inverse association between liquidity and leverage in developed economy of UK. Deesomsak, Paudyal, and Pescetto, (2004) finds that there is a negative relationship between leverage and liquidity of the firm in developed countries of Australia and Singapore and in emerging economies including Malaysia and Thailand. Previous studies explains mix up results and these mix

results may be explain by the differences of institutional , legal and macroeconomic indicators in different countries of the world. On the basis of liquidity, it is hypothesized that

Hypothesis No. 9: There is a significant negative relationship between liquidity and leverage of the firm.

2.2: Dividend Policy

Corporate dividends decision is also one of the main strategic decisions of the firms and empirical studies give explanation that many firms' characteristics affect the dividends decision such as ownership, Tangibility, free cash flows, size, growth, leverage, and investments. This section explains below about the theoretical and empirical relationship between dividend policy and its determinants (including family ownership).

Family Ownership:

According to agency cost theory, agency conflicts can exists between managers and shareholders of the firms (Jensen and Meckling, 1976) and in family ownership , interests of shareholders and managers might become aligned and agency conflict decreases (La Porta et al. 1999) because family owners might monitors properly the managers (Anderson and Reeb,2003). Dividends and debt are used as the two important alternate for governance control mechanisms to mitigate agency costs (Fama and Jensen, 1983; Setia-Atmaja et al. 2009).

After alignment of interests between shareholders and managers of the firms, conflicts may arise between family owners and non family owners regarding dividends. DeAngelo and DeAngelo (2000) argue that income and wealth preservation may be the preferences of family owned firms instead of maximization of outside shareholders wealth by paying dividends. Hence, family interests may dominate over the interests of non family firm

shareholders. Faccio et al. (2001) argue that when family control is greater than its cash flows rights then controlling family may have a tendency to expropriate the wealth of minority shareholders. Gugler and Yurtoglu (2003) argue that if family firms pay higher dividends then free cash flows reduces and high dividends may decrease the tendency of family firms to expropriate the wealth from minority shareholders and La Porta et al. (2000) in turn higher dividends reduces agency costs. De Cesari (2009) argues that family firms pay less dividends and preserve these cash flows for expropriation purpose. Hu et al. (2007) empirically find that family firms pay fewer dividends as compare to non family firms.

Li, Moshirian et al. (2006) find that family firms don't pay dividends smoothly and family firms' dividends are more volatile. And family firms pay fewer dividends as compare to their counterparts. Jensen et al. (1992) ; Moh'd et al. (1995) ; Noronha et al. (1996) find negative association between insider ownership and dividend payouts of the firms. In studies of developed countries such as Austria (Gugler, 2003) and German (Gugler and Yurtoglu, 2003) are reported that family firms pay fewer dividend as compare to non family firms. On the other hand, Setia-Atmaja et al. (2009) shows that family firms pay high dividend as compare to non family firms in developed country like Australia. These differences of relationship between developed countries may be due to institutional and country specific factors such as firm's governance systems, legal system, inflation, and development of markets. On the basis of family ownership, it is hypothesized that

Hypothesis No. 10: Family controlled firms pay lower dividends as compare to non family firms.

Size:

Jensen and Meckling (1976) argue that dividend policy may help to reduce agency costs in large size firms. When large amount of free or excess cash flows available to large

firms then managers may invest these cash flows in negative NPV for their personal interests and these personal benefits may be mergers and acquisition to gain prestige from growth of firm or luxury consumptions and excessive salaries. Agency costs arise between shareholders and managers because managers can use free cash flows for their personal benefits. Dividend may be use as tool to deal with this problem of agency conflicts in large firms because of monitoring hypothesis. Easterbrook (1984) explains that when firms pay large excess cash flows as dividends to shareholders then firm have to take external finance and need for external finance leads to an increase in monitoring of large firms by creditors. This monitoring mechanism reduces the probability of non profitable investments by managers in large firms. Jensen (1986) argues that shareholders can minimize these cash flows problems by forcing managers to pay higher dividends in large firms. Hence, agency theory explains about positive association between size of firm and dividend payout. Chang and Rhee (1990) point out that larger firm have easier access to capital markets at lower cost when financing need arises, so larger firms can afford higher dividend payments as compare to smaller firms. Gayer et al. (1993), Holders et al. (1998), Fama et al. (2001) and Jones et al. (2001) finds empirically positive relationship between size and dividend payout of the firms.

On the other hand , Signaling hypothesis explains that there may be inverse relationship between firm size and dividend payout ratio of the firm. According to signaling hypothesis, firms having more publicly available information tend to be less motivated to release a signal to investors in term of dividends changes. Hence larger firms pay less dividend as compare to small firms when more information available to investors in large firms as compare to small firms (Bajaj and Vijah, 1990; Mozes and Rapaccioli, 1995) find that large firms pay lower dividend to shareholders.

Many empirical research studies in developed countries such as USA based (Lloyd et al.1985; DeAngelo , DeAngelo and Slutz, 2006; Fama and French, 2001; Lloyd et al. 1985; Holder et al. 1998) , UK based (Al Shabibi & Ramesh, 2011; Renneboog and trojanowski, 2010), EU based (Eije and Megginson, 2008), many developed countries based (Denis and Osobov, 2008) confirms positive relationship between firm size and dividend payouts of the firms. Al-Kuwari (2009) finds positive association between size and dividend payments of the firms in GCC emerging stock exchanges. In contrast, (Ahmed and Attiya, 2009) find negative association between size and dividend payments in emerging economy of Pakistan. There is a direct relationship between firm size and dividend payout ratio of the firms in emerging market of china (Huang et al. 2010). These research findings are different in developed and developing countries of the world due to difference between country level and institutional factors such as GDP growth rate, inflation, corporate governance structure of the firms, banking system, legal system and development of markets. On the basis of firm size, the hypothesis is that

Hypothesis No. 11: There is a significant positive relationship between firm size and dividend payouts of the firms.

Profitability:

It is generally believed that more profitable firms have greater likelihood to pay dividend in order to reduce agency costs of free cash flows in firms (Easterbrook, 1984; Jensen, 1986). Hence, agency cost theory explains about positive relationship between profitability and firm's dividend payouts. One of the important indicator of firm' financial heath is profitability of the firm, higher the profitability of the firm lead to better access to external financing at lower cost. This positive indication of profitable firms' financial health decrease their dependency of internal funds because profitable firm can take benefits of lower

cost external finance to fulfill their financing needs after paying dividends and this shows positive association between profitability and dividend payout of the firms (Brockman et al. 2009). According to residual cash flows theory, firms pay more dividends when residual cash flows are high and vice versa. Hence residual cash flows theory explains positive association profitability and dividends of the firms. Amidu and Abor (2006) and Naceur et al. (2006) empirically confirm positive association between profitability and dividend payouts of the firms.

In empirical studies of developed countries such as USA based (Gill et al, 2006; Deangelo, Deangelo and Slutz , 2006; Fama and French, 2001) , UK based (Renneboog and Trojanwski , 2010; Al Shabibi & Ramesh, 2011), different developed countries based (Denis and Osobov , 2008) find positive relationship between profitability and dividend payouts of the firms. Al-Kuwari (2009) empirically finds positive association between profitability and dividend payouts of the firms in GCC (Gulf Co-operation Council) emerging stock exchanges. In empirical studies of emerging economies such as India based (Kumar, 2003 ; Anil & Kapoor, 2008), Pakistan based (Ahmed and Attiya, 2009), China based (Huang et al. 2010) find positive association profitability and dividend payouts of the firms in emerging economy of India. Aivazian and Booth (2003) find positive relationship between profitability and dividends of the firms in Developed country USA and in eight emerging economies. Brockman and Unlu (2009) find positive relationship between profitability and dividend payouts of the firms in world level study focus on 52 developed as well as developing countries. On the basis of profitability of firm, it is hypothesized that

Hypothesis No. 12: There is a significant positive association between profitability and dividend payouts of the firm.

Business risk:

Business risk can be major factor that may effects the dividend policy of the firm. (Michel et al. 1986; Glen et al. 1995) explains that higher business risk firms pay fewer dividends as compare to low business risk firms because higher business risk firms have higher volatility in their returns and in result uncertainty increases in forecasting future earnings and risk of default increases due to high volatility. When risk of default becomes high then cost of external financing also becomes high and firms declare lowers dividend when volatility of earnings is high. This shows that business risk is negatively associated with dividend payout of the firms. Aivazian et al. (2003) argue that if signaling model holds then highly earning volatile firms face higher cost to external financing and high earning volatile firms pay fewer dividends in developing countries.

In empirical studies of developed economies such as USA based (Rozeff, 1982; Holder et al. 1998) find that there is negative association between business risk and dividend payouts of the firms. In empirical studies of developing countries such as Saudi Arab based (Turki and Ahmed, 2013; Amidu and Abor, 2006) find negative association between business risk and dividend payouts of the firms. On the basis of business risk, it is hypothesized that

Hypothesis No. 13: There is a significant negative association between business risk and dividend payouts of the firm.

Growth:

Higher growth firms require more capital as compare to low growth firms because of higher investment expenditures of high growth firms. High growth firms are expected to follow low dividend payouts policy as compare to low growth firms because firms retain their profits to finance investments and to avoid the high cost of external finance (Rozeff, 1982).

According to agency theory, low growth firms should pay higher dividends in order to reduce agency costs between shareholders and managers because low growth firms have lower expenditures of investment and this in turn results with higher retained earnings. Otherwise, managers may use these retained earnings or cash flows to invest in unprofitable projects if firm contain low growth opportunities, so best option in this situation is to distribute dividends among shareholders to reduce agency costs instead of wasting these funds in unprofitable projects (Jensen, 1986). Hence, agency theory predicts negative relationship between growth and dividend payouts of the firms. Lang et al. (1989) and Denis et al. (1994) confirm the negative relationship between growth and firm's dividend payouts.

According to pecking order theory, higher growth firms should pay lower dividend and maintain more retained earnings, so that firm can minimize the need to raise high cost funds from external source of finance especially new equity capital to fulfill the financing needs of investments. Hence, pecking order theory also explains negative association between growth and dividend payouts of the firms. Barclay, Smith and Watts (1995), Gaver and Gaver (1993) and Glen et al. (1995) empirically find negative relationship between growth and dividend payouts of the firms.

In studies of developed countries such as USA based (Fuller and Blau, 2010; Deangelo , Deangelo and slutz , 2006; Fama and French , 2001; Rozeff ,1982; Lloyd et al. 1985; Holder et al. 1998; Gill et al. 2006), UK based (Renneboog and Trojanwski, 2010) , EU based (Eije and Megginson, 2008), many developed countries based (Denis and Osobov, 2008) find negative association between growth and dividends of the firms. In empirical studies of developing countries such as Ghana based (Amidu and Abor, 2006), India based (Anil & Kapoor, 2008) find negative association between growth and dividend payouts of the firms Aivazian and Booth (2003) find that growth (M/B) and dividend payouts of the

firms are positively associated with each others in developed country USA and eight emerging economies. On the basis of growth, it is hypothesized that

Hypothesis No. 14: There is a significant negative association between growth and dividend payouts of the firm.

Leverage:

According to agency theory, Jensen (1986) argues that debt can use as alternate for dividends in reducing agency conflicts because when firms take high debt then debt repayments reduces the cash flows available to firm and chances of investment of free cash flows in unprofitable projects by managers also decreases and monitoring from capital market also increases. This agency theory also explains negative association between debt and dividend payout of the firms. Kalay (1982) argues that debt covenants can force the firms to limit dividend payouts. Jensen et al. (1992) and Faccio et al. (2001) find empirically negative association between leverage and dividend payouts of the firms.

Gugler et al. (2003) and Al-Malkwai (2005) find negative relationship between leverage and dividend payout of the firms and argue that high leverage firms pay less dividends to shareholders, as high amount of interest plus principal payments reduce the firm's capacity to pay dividend to shareholders. Highly levered firms pay fewer dividends to maintain their liquidity position in order to fulfill the current and future debt obligation otherwise if firms unable to debt repayments then risk of bankruptcy or liquidation arises.

In studies of developed economies such as US based (Smith and Warner, 1979; Malitz, 1986), Germany based (Leuz et al. 1998), UK based (Citron, 1992; Day and Taylor, 1996), Australia based (Mather and Peirson, 2006), Canada based (Thoroton, 1992) and Finland based (Niskanen and Niskanen, 2004) suggest that debt covenants restrict dividend

policy, so there is negative relationship between leverage and dividend payouts of the firms. Al-Kuwari (2009) finds a negative association between leverage and dividends of the firms in the emerging stock exchanges of GCC countries. Kumar (2003) finds negative association between leverage and dividend payouts of the firms in emerging economy of India. On the basis of leverage, our hypothesis is that

Hypothesis No. 15: There is a significant negative relationship between leverage and dividend payouts of the firm.

Investments:

Expenditures on investments and cash dividends are two main alternative ways of utilizing firm's profits. According to pecking order theory by (Myers, 1984), firms that have high investment expenditures pay fewer dividends as compare to firms that have low investment expenditures because firms with high investment expenditures need more funds to finance investments then firms pay less dividend and save these internal funds to finance investments at first priority and to avoid from using high cost external financing sources to finance investments. Hence this theory explains negative relationship between investments and dividend payouts of the firms. Haan (1997) finds consistent results with the prediction of pecking order theory about negative relationship between investment and dividends payouts of the firms. Jensen et al. (1992) find that higher investments reduce dividend payments. On the basis of investments, it is hypothesized that

Hypothesis No. 16: There is a significant negative relationship between investments and dividends payments of the firms.

Free Cash flows:

Jensen (1986) argues that an agency conflict arises between managers and shareholders of firms when large free cash flows available. Managers may use free cash flows for investing in unprofitable projects or maximize their own wealth instead of using these funds to increase the value of shareholders. Dividend is the mechanism through which these agency problems can be tackle down, so firms with large free cash flows have to pay dividends in order to reduce agency conflicts between shareholders and firm's managers. Excessive cash flows reduces after paying large amount of dividends and firm borrows funds if firm faces shortage of finance for investments and in turn borrower increases their monitoring over firm and managers utilize funds in efficient manners in order to full the payment obligations of the borrowers . Hence, agency theory explains about the positive association between free cash flows and dividend payouts of the firms. Smith and Watts (1992; Jensen et al. 1992; La Porta, 2000; Mollah et al. 2002) confirms the theory of free cash flows hypothesis.

Holder et al. (1998) find that free cash flows are positively associated with dividend payouts of the firms in developed economy of US. In studies of emerging economies such as Ghana based (Amid and Abor, 2006) and India based (Anil & Kapoor, 2008) empirically find positive association between free cash flows and dividend payouts of the firms. On the basis of free cash flows, it is hypothesized that

Hypothesis No. 17: There is a significant positive relationship between free cash flows and dividend payouts of the firm.

Tangibility:

Assets tangibility may affect the dividends policy of the firm because tangible assets can be used as collateral against debt (Booth et al. 2001; Bevan and Danbolt, 2004). Bradley et al. (1984) argue that firms with higher proportionate of tangible assets can fulfill their need of financing much easily and with cheap cost through debt as compare to firm with lower proportionate of tangible assets because higher tangibility firms can use more tangible assets as backup or collateral against large debts as compare to their counterparts. When firm can fulfill their financing needs through debt then pressure on internal funds to fulfill financing needs decreases and then firm can easily declare dividends from internal funds. Hence, these tangible assets as collateral positively affect the dividend policy. Titman and Wessels (1988) argue that there should be less agency conflicts between bondholders and shareholders of higher tangibility level firms. As protection level of debtor or bondholder increases with higher tangible assets as collateral, the debtor may impose fewer restrictions on firms' dividend policy.

Aivazian et al. (2003) finds empirically negative association between assets tangibility and dividend payouts of the firms in emerging markets. Because firms in emerging markets fulfill their higher proportion of financing needs through short term debts from banks. When tangible or long term assets are much higher in proportion then short term assets will be in lower proportion and firms' capacity to take short term debt decreases because of small proportions of short term assets. In turn, firms face financial constraints and firms may use their internal funds to fulfill their financing needs rather than distributing these internal funds as dividends. Hence, higher tangible assets firms pay lower dividends in emerging markets. On the basis of tangibility of assets, it is hypothesized that

Hypothesis No. 18: There is a significant negative relationship between assets tangibility and dividend payouts of the firm.

2.3: Investment-Cash Flows sensitivity

Investment decision is one of the important strategic decisions of firms. Investment decisions are affected by the availability of firms' cash flows (Meyer and Koh, 1957). Firms can get maximum benefit from investment opportunities and in turn firms can allocate capital properly when firms have an easier access to external finance. Bernanke and Gertler (1990) argue that better capital allocation at individual firm level can foster economic development at country level. Investment cash flow sensitivity analysis explains about dependence of firms either more on internal or external funds to finance investments at individual firm level.

Investment decision is independent from its financing policies in perfect capital markets (Modigliani and Miller, 1958). Myers et al. (1984) argue that external finance and internal finance are perfect substitute for financing and firm's investments spending are not affected by availability of internal cash flows in presence of perfect markets because external investors have all information regarding investments of the firms and there is a presence of symmetry of information in perfect markets. But actually markets are imperfect and incomplete in this world; and firms face limited access to external financing sources. Markets are inefficient and imperfect due to asymmetric information (Myers et al. 1984), agency costs (Bernanke et al. 1989) and transaction costs. In presence of these frictions, debt and equity financing are no longer perfect substitute for financing and investment decisions are not independent of financing decisions; and investment decision effects by internal cash flows and firms follow pecking order hierarchy for financing of investments (Myers et al. 1984). Fazzari et al. (1988) argue that internal funds may effects the investments because of

"financial hierarchy" in which internal finance have a cost advantage over new external finance.

Many studies examine the association between investment and cash flows of the firms. Fazzari, Hubbard and Petersen (1988) shows that investment to cash flow sensitivity is positive and more constrained firms (based on predisposed classification/low dividend payout firms) show higher investment to cash flows sensitivity as compare to less constrained firms (High dividend payout firms). Firms with highest sensitivity of investment to cash flow are considers as financially constrained firms in this study. Hence, firms face greater level of financial constraints shows higher sensitivity of investment to internal funds availability. In perfect world, only investment opportunities' variable is significant and cash flows variable is insignificant. In imperfect world, significant internal cash flows coefficient can be interpreted as an indication of external financing constraints. In this study (Fazzari), firms considered to be constrained when external financing is much expensive. In this situation, firms use their internal cash flows to fulfill the financing needs of investments rather than paying these cash flows as dividends. In Fazzari's study, firms classify into groups on the basis of their earnings retention and argue that firms that retain major portion of their income or pay fewer dividends face higher level of financial restrictions. Firms' paying low dividends considers as "Most Constrained" and firms paying high dividends consider as "Least constrained". Many other studies such as Allayannis and Mozumdar (2001), Fazzari, Hubbard and Petersen (2000), Gilchrist and Himmelberg (1995), Hoshi, Kashyap and Schafstein (1991), Oliner and Rudebusch (1992), Schaller (1993) confirms the findings of Fazzari, Hurbard and Petersen (1988).

On the other hand, Kaplan and Zingales (1997) classify the firms in two categories "Likely constrained" and "Never constrained" on the basis of more detailed quantitative as

well as qualitative information from various financial reports of the firms. Firms having no access to more funds to full the financing need of investments consider as a "Likely constrained" and firms having easy access to more funds to full their financing needs of investment consider as a "Never constrained". Kaplan and Zingales disagree with the Fazzari use of low dividend to identify firms with financial constraints. Kaplan and Zingales (1997) find that financially "Never constrained" firms show high sensitivity of investment to availability of cash flows as compare to "Likely constrained" firms. Hence, this shows that less constrained firms show high sensitivity and these findings are opposite to study of (Fazzari et al. 1988). Kadapakkam et al. (1998), Cleary (1999), Kumar and Riddick (1998), Kaplan and Zingales (2000) empirically confirms these findings of Kaplan and Zingales (1988).

Even though the presence of conflict upon financial constraints groups and investment cash flow sensitivities, generally empirical studies confirm the presence of positive relationship between the investment and internal cash flows. This positive sensitivity may not be only explained by the arguments based upon information asymmetries and transaction costs. This positive sensitivity may be due to conflicts between the shareholders and managers of the firm because particularly managers in widely held corporations may use the free cash flows for their personal benefits (Jensen, 1986). Pawlina and Renneboog (2005) empirically confirms the presence of high sensitivity between investment and internal cash flows in UK and find an evidence for agency conflicts as a key source of high sensitivity between investment outlays and internal cash flows. Many of the other studies such as Australia based (Gugler, 2003), US based (kathuria and Mueller, 1995) empirically verify that controlling shareholders effects the investment policy of the firms.

After this study, many other studies use “age” and “size” for the purpose of classification into groups. Small firms should depend more upon internal source of finance and face more financial restrictions as compare to large size firms because potential debt and equity financers have fewer amount of information about these small firms. Rauh (2006) finds that medium and small firms are highly financially constrained as compare to large size firms. But in contrast, Kadapakkaam et al. (1988) find that investments of large firms are more sensitive to cash flows as compare to small firms. Lyandres (2007) find that investment-cash flow sensitivity is lower in mature firms as compare to young firms. Mature firms bear less cost of external finance and more access to external market because these firm less suffer from asymmetric information.

Firm characteristics like tangibility of assets may also affect the investment-cash flow sensitivity because tangible assets use as collateral against debt financing. Almeida and Campello (2007) find that investment in highly tangible assets holding firms is not affected by changes in internal cash flows; and tangibility of assets affects the investment-cash flow sensitivity in financially constrained firms but tangibility of assets does not affect the investment cash flow sensitivity in unconstrained firms because highly tangible assets firms can use more tangible assets as collateral against debt than low tangible assets firms.

Firms’ financial position such as financially distresses position of firms may be also an important way to analyze investment cash flow sensitivity. Bhagat et al. (2005) examine the investment cash flow sensitivity of financially distressed firms and find that financially distressed firms with profit show positive investment to cash flow sensitivity and financially distressed firms with operating losses show negative investment to cash flow sensitivity. Distressed firms show negative relationship due to dependence of firms fully upon external finance in presence of operating losses.

Firm's ownership may affect the investment-cash flow sensitivity. Goergen and Renneboog (2001) find that investment-cash flow sensitivity is lower in presence of ownership concentration or large block shareholders in firms because asymmetric information problem is reduced in presence of large block shareholders. Handlock (1998) explain that investment to cash flow sensitivity can be reduced by insider ownership when investors and managers' interests converge. Andres (2011) find that investments of family controlled firms are less sensitive to internal cash flow and more sensitive to firms' investment opportunities. This shows that family firms invest regardless of internal cash flow availability. Theoretically, external financing may be risky for family firms because as debt increases then default probability increases and as share capital increases then family control reduces. Pindado et al. (2011) empirically find that family firms have lower investment to cash flow sensitivity as compare to non family firms.

Financial system of country also affects the investment cash flow sensitivity of firms. Bank based system and market based system are two major financial systems. Financial constraints should reduce in bank based system because asymmetric information problem reduce in bank based system due to close relationship between firm and banks. Badhuri (2005) find that investment cash flow sensitivity decreases and access to external finance increases when financial system improves. Brown and Petersen (2009) provide evidence of improvement in equity market decreases the financial constraints on US firms. Baum et al. (2011) shows that financial development reduces financial constraints on firms investment because when financial institutions becomes strengthen then funds available at lower costs. On the basis of ownership of firm, it is hypothesized that

Hypothesis 19: The investment-cash flow sensitivity is lower in family controlled firms as compare to non family controlled firms.

Critical review:

Literature review provides the insight about the work which has already been done on family firms. There is found a mix type of results about relationship between two variables i.e. somewhere positive relationship and somewhere negative relationship are found between two same variables. These mix type of results may be due to different reasons and most of research work on family firms is found in developed countries and very little work has been done in emerging markets. This study is based upon the firms of Pakistan and Pakistan categorizes as developing country. A little work is found on "family ownership and performance of the firms" in Pakistan but no study is found in literature which investigate the effect of family firms on financial policies of the firms in Pakistan and this study examines the effect of family firms on financial policies of firms in Pakistan.

Chapter 3: Research Methodology

3.1: Data description

This study analyses the effect of family ownership on strategic financial decisions of the firms in emerging economy of Pakistan. This study's population consists of all non financial listed firms on Karachi Stock exchange and sample consists of 100 non financial public limited companies that are listed on Karachi Stock Exchange (KSE). These sample firms are chosen from 19 non financial sectors of Pakistan and distribution of full sample by industry exhibits in Table 3.1. Financial firms are not selected because of data inconsistency and major acquisitions and mergers in financial sectors of Pakistan. The annual based data is used for analysis and sample period of study is from 2005 to 2012. The accounting data is taken from "Balance sheet analysis of stock exchange listed firms" published by State bank of Pakistan and family ownership related data are taken from annual financial reports of selected companies.

3.2: Model

This study uses the panel data framework to analyze the effect of family ownership on corporate strategic financial policies of the firms. This study is using the balanced panel data of 100 cross sectional firms over the 8 year period of time and this study sample consist of 800 observations. The Panel data analysis assists to investigate time series as well as cross sectional data simultaneously. When causality runs from X to Y and from Y to X; then simultaneous causality bias is arise and two stage least square method is used to deal with this simultaneous causality. In this study, causality runs from dividends to capital structure in first model; while causality runs from capital structure to dividends in second model and this creates endogenity problem. To deal with simultaneity between dividends and capital

structure of the firm, this study uses the 2SLS approach in first two models. The lags of endogenous variables are used as instruments in first and second models. Lags of endogenous variables are using as instrument, because limited financial data is available. Lags of leverage and dividends per share are used in this study as instruments while using 2SLS approach for estimations. And, these 1st and 2nd equations are estimated simultaneously in system by using 2SLS approach in this study.

In third model, this study uses the fixed effect vs random effect model to find the investment cash flow sensitivity of family and non family firms. And in third model, interaction term of cash flows and family ownership is use to compare investment cash flow sensitivity of family and non family firms. Different methods of estimation are used for the panel data models such as common constant method, fixed effect method, random effect method and every method has its own assumptions and this study is using the results of one method from all these methods which is to be compatible with the data of study.

It is appropriate to use Hausman test for the selection of better method of estimation from both fixed effect method and random effect method. Hausman test is applied on random effect method. Random effects model has an assumption that composite error term is uncorrelated with all the explanatory variables. And Hausman test is use to check this assumption and if composite error term (or unobserved omitted variables) is uncorrelated with explanatory variables then random effect model is appropriate for panel estimation; otherwise fixed effect model is appropriate for panel estimations.

Table 3.1: Distribution of the full sample by industry

Industry description	Family firms	Non family firms	Percentage family firms in industry
Personal Goods (Textile)	16	02	88.8
Construction and Materials (Cement)	04	05	44.4
Electricity	01	04	20.0
Travel and Leisure	02	01	66.6
General Industrials	03	01	75.0
Automobile and Parts	*05*	01	83.3
Food Producers	07	03	70.0
Engineering	01	01	50.0
Forestry (Paper and Board)	02	01	66.6
Chemicals	04	05	44.4
Pharma and Bio Tech	02	04	33.3
Household Goods	02	01	66.6
Fixed Line Telecommunication	01	03	25.0
Tobacco	00	02	0.00
Industrial Transportation	00	01	0.00
Oil and Gas	00	11	0.00
Multiutilities (Gas and water)	00	02	0.00
Electronic and Electrical Goods	00	01	0.00
Software and Computer Services	00	01	0.00
Total	**50**	**50**	

The functional forms of our models are as follows;

Model 1:

$$Lev_{it} = \alpha_0 + \alpha_1(FO)_{it} + \alpha_2(Tang)_{it} + \alpha_4(Size)_{it} + \alpha_3(\mathrm{Prof})_{it} + \alpha_5(Growth)_{it} + \alpha_6(NDTS)_{it} + \alpha_7(Business\ Risk)_{it} + \alpha_8(Div)_{it} + \alpha_9\,(Liquidity)_{\mathrm{it}} + \alpha(Industry\ dummy)_i + u_{it}$$

Model 2:

$$\mathrm{D}iv_{it} = \alpha_0 + \alpha_1(Family\ Ownership)_{it} + \alpha_2(Tangibility)_{it} + \alpha_3(Size)_{it} + \alpha_4(Free\ cash\ flows)_{it} + \alpha_5(Growth)_{it} + \alpha_6(Leverage)_{it} + \alpha_7(Business\ Risk)_{it} + \alpha_8(Investments)_{\mathrm{it}} + \alpha(Industry\ dummy)_i + u_{it}$$

Model 3:

$$\left(\frac{I}{K}\right)_{it} = \alpha_0 + \alpha_1\left(\frac{CF}{K}\right)_{it} + \alpha_2\left(\frac{M}{B}\right)_{it} + \alpha_3(FO)_i + \alpha_4\left(\frac{CF}{K}_{it} * FO_i\right) + \alpha\,(X)_{it} + U_{it}$$

Many definitions of family firms are reported in the literature but there is not found any generally accepted definition of family firms in literature (Littunen et al. 2000). Villalonga and Amit (2006) describe that firm is said to be family firm when the founder or a member of family is officer, director or owns at least 5 percent of firm's equity. This study defines family firm if firm exhibit the following two conditions; (a) At least two individual related by blood or marriage are directors (or CEO) of the firm; (b) Individuals from family owns at least 20 percent of shareholdings. And if any firm from the sample does not fulfill the any one condition from two, then this firm is categorize as non family firm. Family business dummy variable is equal to 1 if firm is family firm, and 0 otherwise. In this study, family firm defines on the basis of three dimensions such as governance, management and ownership.

Family can influence the firm through extent of governance, ownership and management involvement (Astrachan, Klein and Smyrnios, 2002). In this definition, extent of governance is measured by directorship, management involvement by the CEO and ownership by at least 20 percent shareholdings.

Three ratios such as "total debt to total assets", "long term debt to total assets" and "short term debt to total assets" are used as proxy of capital structure of the firm. Amount of dividends scaled by number of outstanding shares use as proxy for dividends. Net fixed assets of current year minus net fixed assets of previous year, plus book value of depreciation expense of corresponding year use as proxy of investment. In this study, fixed assets scaled by total assets use as proxy of tangibility. Return on assets is to be used as a proxy of profitability of firm and return on assets defines as the ratio of earnings before interest and taxes divided by total assets of the firm. Natural logarithm of sales is to be used as a measure of size of firm. Market value of assets (book value of firm assets plus market value of equity less book value of equity divided by book value of the assets) is used as a proxy of growth of the firm. Depreciation expense scaled by the total assets of the firm is used as proxy of non debt tax shields. The ratio of current assets to current liabilities is used to measure the liquidity of firm. Standard deviation of the percentage changes in operating income of firm is used as a proxy for business risk or earning volatility. Earnings before interest and taxes (EBIT) plus book value of depreciation allowances and amortization is used as a proxy of cash flows. I/K calculated by dividing change in fixed assets by beginning of the year value of property plant and equipment. Tobin's Q is denoted by M/B and is used as a proxy for the availability of investment opportunities. CF/K is calculated as dividing cash flows by the beginning of the year value of property, plant and equipment. X_{it} represents control variables of the model and there are four control variables in this model such as debt, dividends, tangibility and sales. FD denotes family dummy that equal 1 for family firm and 0 otherwise.

Chapter 4: Empirical Results

4.1: Descriptive statistics and analysis

This section exhibits the descriptive statistics of study's sample. Section 4.1.1 reveals the summary statistics of full, family and non family firm's sample. Table 4.1 exhibits the means, medians, standard deviations, maximum and minimum values of our key variables of combined sample of study (100 firms) and Table 4.2 shows the summary statistics of family firm's sample and Table 4.3 shows the summary statistics of non family firms. Table 4.4 exhibits the correlation matrix for the key variables in the sample. Table 4.5 exhibits the results of these univariates (difference of means tests) tests and shows, family controlled firms differ from non family firm on the basis of different firm level characteristics.

4.1.1: Summary statistics

Table 4.1 exhibits that average total debt ratio in Pakistani listed firms are 0.592 with highest 3.107 and lowest 0.076. This shows that debt is major source of financing in non financial listed firms of Pakistan as compare to equity. Highest total debt ratio is more than 1 because of negative equity of some firms in the sample. Breaking total debt ratio into two parts indicates that average long term debt ratio is 0.140 and average short term debt ratio is 0.453.This shows that listed non financial firms in Pakistan are fulfilling their financing needs more from short term debts as compare to long term debts. Tangibility has a mean value of 0.478 with a lowest value of 0.001 and highest value of 0.973.

Table 4.2 and Table 4.3 shows family and non family descriptive summary, respectively. Table 4.2 shows that average total debt ratio is 0.611 with minimum 0.097 and maximum value 3.107. In Table 4.3 exhibits that average total debt ratio is 0.574 with minimum value of 0.076 and maximum value of 1.415. This reveals that leverage of family

firms is higher than non family firm. Table 4.2 exhibits that average profitability ratio is 0.086 with standard deviation 0.106 of family firms. And Table 4.3 shows that average profitability ratio is 0.145 with standard deviation of 0.145 of non family firms. This reveals that rate of return on assets in family firms are low and less volatile as compare to non family firms. For family owned firms, average I/K ratio is 0.388 with minimum value of -0.775 and Maximum value of 16.023 and on the other hand for non family owned firms, average I/K ratio is 0.470 with minimum value of -0.922 and maximum value of 23.146. This shows that family firms invest less than non family firms.

Table 4.1: Summary statistics for the full sample

Variables	Mean	Std Dev.	Minimum	Median	Maximum
Total debt ratio	0.593	0.289	0.076	0.609	3.107
Long term debt	0.140	0.168	0.000	0.082	1.073
Short term debt	0.453	0.249	0.017	0.439	2.119
DPS	6.510	19.009	0.000	1.000	249.999
Tangibility	0.478	0.226	0.001	0.481	0.973
Profitability	0.115	0.130	-0.445	0.098	0.604
Size	6.764	0.789	3.484	6.696	9.010
M/B	1.385	1.375	0.251	0.999	13.908
NDTS	0.033	0.032	0.000	0.028	0.458
Liquidity	1.515	1.246	0.139	1.107	14.516
Inv (Millions)	2.386	7.378	-21.399	0.310	95.511
CF (Millions)	3.585	11.183	-23.621	0.640	139.578
I/K	0.430	1.375	-0.922	0.164	23.146
CF/K	0.391	0.916	-5.512	0.195	9.665
Tobin Q	1.385	1.375	0.251	0.999	13.908
Sales/K	6.589	13.939	0.002	2.496	137.898
Dividends/K	0.138	0.502	0.000	0.012	11.661

Table 4.2: Summary statistics for the family firm's sample

Variables	Mean	Std Dev.	Minimum	Median	Maximum
Total debt ratio	0.611	0.249	0.097	0.626	3.107
Long term debt	0.162	0.147	0.000	0.123	0.988
Short term debt	0.450	0.265	0.017	0.434	2.119
DPS	1.862	6.010	0.000	0.000	110.000
Tangibility	0.531	0.191	0.007	0.529	0.965
Profitability	0.086	0.106	-0.445	0.082	0.497
Size	6.447	0.589	3.484	6.479	7.686
M/B	0.977	0.426	0.251	0.866	3.133
NDTS	0.032	0.022	0.001	0.028	0.305
Liquidity	1.405	1.262	0.211	1.050	14.516
Inv (Millions)	0.908	2.368	-8.690	0.178	22.374
CF (Millions)	0.925	1.603	-3.812	0.344	12.003
I/K	0.388	1.167	-0.775	0.139	16.023
CF/K	0.261	0.867	-2.223	0.135	9.665
Tobin Q	0.977	0.426	0.251	0.866	3.133
Sales/K	3.279	4.543	0.002	2.048	38.498
Dividends/K	0.046	0.153	0.000	0.000	1.602

Table 4.3: Summary statistics for the non family firm's sample

Variables	Mean	Std Dev.	Minimum	Median	Maximum
Total debt ratio	0.574	0.265	0.076	0.594	1.415
Long term debt	0.117	0.183	0.000	0.035	1.073
Short term debt	0.456	0.232	0.055	0.452	1.212
DPS	11.157	25.380	0.000	2.500	249.999
Tangibility	0.426	0.245	0.001	0.408	0.973
Profitability	0.145	0.145	-0.267	0.116	0.604
Size	7.081	0.836	4.909	7.152	9.010
M/B	1.792	1.809	0.316	1.180	13.908
NDTS	0.034	0.039	0.000	0.029	0.458
Liquidity	1.626	1.221	0.139	1.227	8.737
Inv (Millions)	3.864	9.951	-21.399	0.593	95.511
CF (Millions)	6.246	15.287	-23.621	1.700	139.578
I/K	0.470	1.556	-0.922	0.186	23.146
CF/K	0.521	0.946	-5.512	0.346	9.363
Tobin Q	1.792	1.809	0.316	1.180	13.908
Sales/K	9.886	18.602	0.137	3.445	137.898
Dividends/K	0.230	0.681	0.000	0.061	11.661

4.1.2: Correlation Matrix

Table 4.4 reveals the correlation matrix of different key variables of the study. Leverage is negatively correlated with dividends of the firms which is consistent with agency theory that "when firm borrow more to reduce agency costs then firms leaves fewer amount to pay dividend because large amount of interest pays against large amount of borrowings". Leverage (lev1 and lev2) is positively correlated with tangibility of the firms because as fixed assets use as collateral against borrowing so as more the tangible assets firms have then more the firms can get financing through borrowing. There is a positive correlation between leverage (lev1 &2) and market to book ratio is consistent with agency cost theory which explains that leverage increases with lack of growth opportunities.

The negative relationship between dividends and investments is to be consistent with the prediction of pecking order theory about negative relationship investment and dividends payouts of the firms. There is a positive association between dividends and profitability of the firms which is consistent with the residual cash flows theory and this explains positive association profitability and dividends of the firms.

The dividends is found positively correlated with size of the firms because larger firm have easier access to capital markets at lower cost when financing need arises, so larger firms can afford to pay higher dividends as compare to smaller firms (Chang and Rhee, 1990). I/K is found positively correlated with CF/K and this positive sensitivity may be explained by the arguments based upon information asymmetries and transaction costs.

Table 4.4a: Correlation Matrix A

	Lev1	Lev2	Lev3	Div	Inv	Tang	Prof	Size	M/B	NDTS	Liq	Risk	CF
Lev1	1.000												
Lev2	0.511	1.000											
Lev3	0.815	-0.080	1.000										
Div	-0.112	-0.151	-0.028	1.000									
Inv	-0.003	0.154	-0.108	-0.029	1.000								
Tang	0.057	0.569	-0.317	-0.185	0.212	1.000							
Prof	-0.519	-0.326	-0.379	0.308	0.008	-0.237	1.000						
Size	-0.082	-0.066	-0.055	0.147	0.350	-0.078	0.236	1.000					
M/B	-0.046	-0.144	0.045	0.322	0.010	-0.214	0.393	0.051	1.000				
NDTS	0.025	0.098	-0.036	-0.065	0.090	0.197	-0.032	-0.022	-0.025	1.000			
Liq	-0.610	-0.256	-0.532	0.098	-0.019	-0.261	0.358	-0.058	0.085	-0.057	1.000		
Risk	-0.012	0.041	-0.043	0.011	0.523	0.019	0.169	0.484	0.094	0.031	0.087	1.000	
CF	-0.176	-0.050	-0.169	0.051	0.384	-0.034	0.408	0.404	0.135	0.019	0.251	0.666	1.000

Lev1 denotes to Total Debt Ratio, Lev2 denotes to Long Term Debt Ratio and lev3 denotes the Short Term Debt Ratio of the firm. Div denotes Dividends Per Share, Inv denotes the Investment, NDTS denotes the Non Debt Tax Shield, Liq denotes the Liquidity and CF denotes the Cash Flow.

Table 4.4b: Correlation Matrix B

	Inv/K	CF/K	Tobin Q	Debt	Sales/K	Div/K
Inv/K	1.000					
CF/K	0.246	1.000				
Tobin Q	-0.001	0.151	1.000			
Debt	-0.029	-0.237	-0.144	1.000		
Sales/K	0.090	0.363	0.064	-0.266	1.000	
Div/K	0.052	0.258	0.187	-0.137	0.205	1.000

4.1.3: Mean difference univariate analysis

Table 4.5 presents the mean differences in leverage, dividends, investment as well as other variables for family firms and non family firms. The univariate analysis shows that family firms behave differently than non family firms in several aspects. Family firms employ significantly higher total debt and long term debt level in their capital structure as compare to non family firms, which is consistent with results of (Nenova, 2006). According to this study, family firms use high debt ratio to maintain their control over the firm. The difference between the short term debt ratio of family and non family firms is not statistically significant at 10% level.

Family firms pay around Rs. 1.86 dividend per share whereas non family firms pay Rs. 11.15 dividend per share and this difference is statistically significant at 1% level. This shows that family firms pay significantly fewer amount of dividend per share than non family firms and these results are consistent with the results of (De Cesari, 2009) which argue that family firms pay fewer dividends than non family firms and preserve these cash flows for expropriation purpose. Family firms use these cash flows to expropriate the wealth of minority shareholders and use firms' resources for private purposes and pay less dividend to minority shareholders as compare to non family firms (Villalongs and Amit , 2006) .

Profitably, size, M/B ratio, liquidity and business risk of family firms is significantly lower as compare to non family firms and difference is statistically significant at 1% in all these firm's characteristics. Investment (I/K) of family is significantly lower than non family firms which may be due to family preferences or may be due to the fact that in this study sample, non family firms having much larger amount of total assets as compare to family firms in Pakistan. Sales/K, Dividends/K and CF/K ratios of family firms are significantly lower than non family firms and difference is significant at 1%.

Table 4.5: Difference of mean test for family and non-family firms

	All	**Family**	**Non Family**	**t-statistic (2)-(3)**
	(1)	**(2)**	**(3)**	**(4)**
Total Debt Ratio	0.593	0.610	0.573	1.822*
Long Term Debt	0.140	0.161	0.117	3.805***
Short Term Debt	0.453	0.449	0.456	-0.378
DPS	6.510	1.861	11.157	-7.127***
Investments (000)	2385.798	907.674	3863.922	-5.780***
Tangibility	0.478	0.530	0.426	6.741***
Profitability	0.115	0.085	0.145	-6.608***
Liquidity	1.515	1.404	1.625	-2.514**
Size	6.764	6.447	7.081	-12.393***
M/B	1.385	0.977	1.792	-8.767***
NDTS	0.033	0.032	0.033	-0.706
CF (000)	3585.375	924.932	6245.817	-6.923***
I/K	0.430	0.387	0.470	-0.852
CF/K	0.391	0.260	0.520	-4.046***
Tobin Q	1.385	0.977	1.792	-8.768***
Sales/K	6.589	3.278	9.886	-6.901***
Dividends/K	0.138	0.045	0.230	-5.277***

This table provides the results of difference of means tests for key variables between family and non family firms.. The sample comprises the 50 family and 50 non family firms and covers 2005 through 2012.
* Significance at 10% level.
** Significance at 5% level.
*** Significance at 1% level.

4.2: Multivariate Regression Analysis

4.2.1: Results of Model 1 and Model 2

A regression result in Table 4.6 suggests that family ownership has a positive impact on total debt ratio of the firms, as the coefficient of the family ownership binary variable is 0.095.This coefficient shows that family firms maintain significantly higher total debt ratio as compare to non family firms in Pakistan. An explanation of this result is that family firms may keep high debt ratio to maintain control over the firm or to avoid dilution of ownership of the firm (Nenova, 2006) or to avert from takeover attempt for long term survival up to next generations. Another explanation is that when cash flows use by family for private benefits then family firm need more external finance in form of debt to fulfill the financing needs of the firm, due to this reason there is positive association between family ownership and leverage of the firms (Rubecca Duggal , 2010).

Total debt ratio is significantly affected by the tangibility of the firms and 1% increase in tangibility leads to 0.22% of increase in total debt ratio of the firms. And this relationship is in accordance with agency theory prediction, (Jensen and Meckling, 1976) explain that conflicts between lender and shareholder exists and lender face agency cost because firm may invest in riskier projects by borrowing from lender and may transfer the wealth from lender to shareholder. And this lender's risk of suffering agency cost of debt can be mitigated by using fixed assets as collateral against borrowing, so companies having more fixed assets can borrow more from lenders (Ross et al. 2008).

This study provides evidence about the existence of significant negative association between size and total debt ratio of the firms and this result is consistent with pecking order theory, which argues that firm fulfill their financing need at first priority from retained

earnings and if retained earnings of large firms are high then there is no need to use second option of the

Table 4.6: Effect of family ownership on total debt ratio and dividends per share

	Total debt/Total assets (A)		**Dividends per share (B)**	
	Coefficients	t statistics	Coefficients	t statistics
Constant	1.206	6.001***	-19.850	-1.260
Family Ownership	0.095	2.650***	-12.514	4.265***
Tangibility	0.221	3.022**	-3.030	-0.490
Size	-0.136	-5.893***	3.328	1.752*
Profitability	-0.363	-3.522***	0.000	0.184
M/B	0.085	8.141***	2.358	2.743***
Business Risk	0.000	2.802***	0.000	-1.055
NDTS	0.089	0.213		
Liquidity	-0.090	-10.41***		
DPS	0.000	-0.834		
Lev1			-5.224	-1.234
Investments			0.000	-0.516
Industry Dummy		Yes		Yes
R-squared	0.409		0.132	

This table reports IV-2SLS multivariate regression results of family ownership on dividends per share and total debt ratio of the firms. The sample comprises the 100 family and non family firms and covers 2005 through 2012.
* Significance at 10% level.
** Significance at 5% level.
*** Significance at 1% level.

borrowing, so this explains a negative association between leverage and size of firm and Frank and Goyal (2009) argues that large size firms are well known and having older history of adding retained earnings in their capital structure.

It is found that there is a significant negative association between profitability and total debt ratio of the firms and this relationship is consistent with pecking order theory which explains that firm with loss or insufficient profit prefer to borrow debt at second priority. And results shows that 1% increase in profitability leads to 0.36% decrease in total debt ratio.

Regression results show that there is a significant positive association between growth and total debt ratio of the firms and this relationship is in line with pecking order theory proposed by Myers and Maljuf (1984), which argue that internal funds may not be sufficient to finance positive investment opportunities in high growth period of firms, then firm use external source of funds such as debt at second priority to fulfill the financing needs of growth opportunities.

There is a significant positive association between the business risk and total debt ratio of the firms and these results are in line with the study of (Huang and Suang, 2002). Liquidity shows a significant negative association with total debt ratio and these results are consistent with the pecking order theory which exhibits that when sufficient internal funds are available to fulfill financing needs of investment then there is no need of external finance through debt or equity. Electricity sector, Engineering sector, fixed line telecom sector, oil and gas sector, Gas and water and electrical goods sector's dummies positively and significantly affect the total debt ratio of the firms.

Regression results in Table 4.7 shows that effect of family ownership on long term debt ratio is insignificant. Results in Table 4.8 exhibits that there is a positive and significant relationship between family ownership and short term debt of the firms and coefficient of

family firm is 0.108. This shows that family firms maintain higher short term debt ratio as compare to non family firms in Pakistan. In Pakistan, mostly firms fulfill their short as well as long term need of finance from short term debt, that why family ownership affect upon short term debt is significant and family ownership affect upon long term debt ratio is insignificant.

The regression results for effect of family ownership on dividends per share are exhibited in column B of Table 4.6-4.8 and results are almost similar in column B of table 4.6-4.8, so this study just interprets the results of table 4.6. It is found that Family ownership negatively affects the dividend policy of the firms and coefficient of the family ownership binary variable is -12.5. This coefficient shows that family firms pay lower dividends to the shareholders as compare to non family firms in Pakistan which is consistent with the findings of Villalongs and Amit (2006), Hu et al. (2007) and De Cesari (2009) .In these studies explain that family firms use these funds for their personal benefits and families expropriate the wealth of shareholders through paying lower dividends and ultimate loss face by minority shareholders.

There is a positive relationship found between size and dividends of the firms and this relationship is found to be significant at 10% level. Results shows that 1% increase in size of firm leads to 3.32% increase in dividends of the firms in listed firms in Pakistan, which is in accordance with agency theory. Easterbrook (1984) explains that when firms pay large excess cash flows as dividends to shareholders then firm have to take external finance and need for external finance leads to an increase in monitoring of large firms by creditors. This monitoring mechanism reduces the probability of non profitable investments by managers in large firms and by this way, conflicts between shareholders and managers reduced. This agency theory explains a positive relationship between size and dividends of the firms.

Table 4.7: Effect of family ownership on long term debt ratio and dividends per share

	Long term debt/Total assets		Dividends per share	
	Coefficients	t statistics	Coefficients	t statistics
Constant	-0.140	-1.960**	-23.923	-1.527
Family Ownership	-0.013	-1.030	-13.239	-4.574***
Tangibility	0.405	15.585***	-1.010	-0.148
Size	0.001	0.141	3.812	2.059**
Profitability	-0.195	-5.319***	0.000	0.505
M/B	0.001	0.180	1.906	2.381**
Business Risk	0.000	2.923***	0.000	-1.227
NDTS	0.087	0.585		
Liquidity	-0.001	-0.453		
DPS	0.000	-0.715		
Lev1			-9.995	-1.262
Investments			0.000	-0.480
Industry Dummy	Yes		Yes	
R-squared	0.418		0.132	

This table reports IV-2SLS multivariate regression results of family ownership on dividends per share and long term debt ratio of the firms. The sample comprises the 100 family and non family firms and covers 2005 through 2012.
* Significance at 10% level.
** Significance at 5% level.
*** Significance at 1% level

This study provide evidence about the existence of significant positive relationship between growth and dividends of the firm in listed firms of Pakistan and this result is in line with (Aivazian and Booth, 2003). This relationship between growth and dividends of the firms is significant at 1% level. There is found to be insignificant effect of tangibility, cash flows, business risk and investment on dividends per share of the firms. General industrials sector, Food sector's dummies show positive and significant affect upon dividends of the firms in Pakistan.

Table 4.8: Effect of family ownership on short term debt ratio and dividends per share

	Short term debt/Total assets		Dividends per share	
	coefficients	t statistics	coefficients	t statistics
Constant	1.346	6.959	-20.796	-1.322
Family Ownership	0.108	3.144***	-12.802	-4.389***
Tangibility	-0.187	-2.657***	-5.235	-0.883
Size	-0.138	-6.172***	3.611	1.929*
Profitability	-0.164	-1.653*	0.000	0.438
M/B	0.084	8.375***	2.168	2.607***
Business Risk	0.000	1.839*	0.000	-1.265
NDTS	0.003	0.008		
Liquidity	-0.089	-10.65***		
DPS	0.000	-0.600		
Lev1			-2.475	-0.876
Investments			0.000	-0.508
Industry Dummy	Yes		Yes	
R-squared	0.405		0.131	

This table reports IV-2SLS multivariate regression results of family ownership on dividends per share and short term debt ratio of the firms. The sample comprises the 100 family and non family firms and covers 2005 through 2012.
* Significance at 10% level.
** Significance at 5% level.
*** Significance at 1% level

4.2.2: Family ownership and investment to cash flow sensitivity

This study uses the hausman test for selection of appropriate method from fixed and random effects model for panel estimation. Null hypothesis of hausman test is that random effects are consistent and efficient; while alternate hypothesis is that random effects are not consistent and efficient. Parameters estimates will be inconsistent and biased when composite error term and explanatory variable are correlated in random effects estimation method. The p-value for hausman test is 0.0003 which is less than 1% and this indicates that random effects are not consistent and efficient, so random effects model isn't appropriate for panel estimations and fixed effects specification is to be preferred. This study prefers the parameters estimates of fixed effect model for investment cash flow sensitivity model and explained in below paragraphs. The results of random effects model are inconsistent and biased and that's why many of important variables are not significantly effects the I/K of the firms.

A regression result of fixed effects method (Table 4.9) shows that family ownership has a negative impact on investments of the firms, as the coefficient of family ownership binary variable is -8.08 and result is consistent with the findings of (Anderson et al. 2012). This coefficient shows that family firm's investments are lower as compare to non family firms in Pakistan and this negative relationship indicates that family firms are more risk averse as compare to non family firms. So, family firms are adopting more conservative approach in investment decisions.

There is a positive relationship between cash flows and investments of the firms and this relationship is found to be significant at 10% level. Results exhibits that 1% increase in internal cash flows of firm leads to 0.04% increase in investments of the firms. These results are in line with the findings of (Fazzari, Hubbard and Petersen, 1988) which shows that

investment to cash flow sensitivity is positive because of "financial hierarchy" in which internal finance have a cost advantage over new external finance and this financial hierarchy explained by pecking order theory. And in imperfect world, significant internal cash flows coefficient can be interpreted as an indication of external financing constraints.

The effect of cash flow on investments is stronger for family owned firms (0.048+0.035=0.083) as compare non family owned firms (0.048) and this reveals that investment cash flow sensitivity of family firms is high as compare to non family firms and this result is consistent with the findings of (Elisabete et al. 2012). This shows that family firms depend more upon internal cash flows to finance investments as compare non family firm. The effect of internal cash flows on investment is found significantly positive in both family and non family firms but family firm depend more upon internal cash flows as compare to non family firms for investment. As explained by Pecking order theory, firms use internal cash flows at first because internal cash flow is cheap financing source as compare to external financing sources such as debt and equity.

Regression result shows that leverage is negatively associated investments and this relationship is found to be significant at 1% level and 1% increase in leverage leads to decrease in 0.50% investment of the firms in Pakistan. This negative relationship may exist be due to the fact that majority portion of debt is used for the purpose of financing short term needs by the firms in Pakistan. Sales affect the investment positively and relationship is significant at 1% level. This shows that when sales increases by 1% then investment increases 0.008% in firms. There is a significant positive association between tangibility and investments of the firms and 1% increase in tangibility leads to 2.63% increase in investments of the firms in Pakistan.

Table 4.9: Family ownership and investment to cash flow sensitivity

	I/K (Fixed Effect Method)		I/K (Random Effect Method)	
	Coefficients	t statistics	coefficients	t statistics
Constant	10.303	1.901	-0.164	-0.325
CF/K	0.048	1.795*	0.033	1.365
M/B	0.001	0.468	0.001	0.498
Family Ownership	-8.082	-1.755*	-0.001	-0.008
FO*CF	0.035	1.840*	0.168	2.376**
Debt ratio	-0.501	-2.998***	-0.396	-3.302***
Sales/K	0.008	6.477***	0.006	6.930***
Tangibility	2.635	6.145***	1.493	5.225***
Dividends/K	0.114	1.034	0.064	0.623
R-squared	0.249		0.124	
Hausman test(P-value)				0.0003

* Significance at 10% level.
** Significance at 5% level.
*** Significance at 1% level

Discussion:

There are three types of systems in financial markets and first is capital market based system, second is financial intermediary based system and third is industrial group based system. Every system has its own characteristics and now discusses some main characteristics of these three types of systems.

In capital market based system, ownership of firms is dispersed; and mostly financing of companies from capital markets such as stock and bonds markets; institutional ownership is dominant form of ownership; organization serve the objective of all shareholders; large size private organizations in this system (as compare to other systems); high dividend payment by dispersed ownership based firms; efficient management due to institutional ownership dominancy; and high agency costs in this prevail. This system is dominant in USA and UK.

In financial intermediary based system, ownership of firms is concentrated; and mostly financing of companies from banks; family ownership is dominant form of ownership; organization serve the objective of the family; firm's size is small than firms in capital market based system; low dividend payment by family firms due to concentration of ownership; cross shareholdings exist between family firms; and low agency costs prevail in this system. This system is dominant in many Asian countries including Pakistan.

In industrial group based system, ownership of firms is concentrated; some large group exists and these groups invest in different companies; every group is supported by at least one political party; every large group is owned a bank and these groups fulfill their financing needs from their own banks; cross ownership and cross directorship exist between group companies; whole economic system is run dominantly by some groups; less growth in

this system; low agency costs prevail in this system. This system is dominant in Japan and Korea.

In Pakistan, financial intermediary based system is dominant currently; but Pakistan is now rapidly moving from financial intermediary based system to industrial group based system. It could be expected that industrial group based system will be the dominant form of system in coming years.

Chapter 5: Conclusions and Policy Implications

5.1: Conclusions

This study empirically examines the family firm's behavior toward strategic financial policies of the Pakistani non financial listed firms for the period of 2005-2012. In univariate analysis, this study find that there is a significant difference between family and non family firms in terms of firms characteristics such as total debt ratio, long term debt ratio, dividend per share , tangibility ,profitability, size, Tobin's Q, liquidity, business risk, cash flows, I/K, CF/K and sales ratio. Hence, family firms behave differently from non family firms in Pakistan.

Total debt ratio and short term debt ratios are significantly affect by family ownership but long term debt ratio is not significantly affect by family ownership, this shows that family firms prefer to fulfill their financing needs majority from short term debt. Instead of financing long term projects from long term debts, generally firms in Pakistan full their most of their long and short term financing needs from short term debts.

Family firms maintain significantly high "total debt ratio" and "short term debt ratio" as compare to non family firms. Family firms don't want to dilute their ownership and want to transfer ownership to next generation successfully and that's why family firms fulfill their major financing need from debt instead of issuing new share to extract financing from market.

Family firms pay lower dividends as compare to non family firms and firms use extra cash flows for expropriation purpose. Many sectors like Pakistan's largest sector textile pay much lower dividends to shareholders and minority shareholders suffer a lot. Family firms can easily use these extra cash flows for expropriation purpose rather than increasing the

value of shareholders wealth; because in family firms, majority of the board members consist on family members and family directors take decisions to increase the wealth of family rather than focus on maximizing wealth of all shareholders including family and minority shareholders. The security and exchange commission of Pakistan should make a policy to restrict all companies to pay some threshold level of dividends to all shareholders. By this way, right of minority shareholders on dividends can be protected.

Fixed investment of family firms is lower than non family firms in Pakistan, because large assets holding or highly capital intensive companies lies in non family firm's category, such as firms of oil and gas, gas and water sectors and many of large government owned firms are belong to non family firms. This shows that typical family firms grow with less speed as compare to non family firms in Pakistan. This lower investment of family firms also shows risk averse behavior of family firms while taking investment decisions. The investment cash flows sensitivity of family firms is higher than non family firms and this indicate that family firms depend more upon internal cash flows for financing of investments as compare to non family firms in Pakistan.

5.2: Policy Implications

Family firms maintains high debt ratio to avoid dilution of ownership and takeover attempts. Majority of firms in Pakistan are family owned and very few of them are listed and if policy makers make such type of policies that discourage takeover attempts and encourage equity financing by issuing shares than family firms may use stock markets more to fulfill their investment needs and this step may be boost up the economic growth.

The difference of dividends per share between family and non family firms is so much high and family firms pay fewer dividends as compare to non family firms. This disparity of dividends paying behavior between family and non family firms should be reduced and minority shareholder's rights should be protected. Majority of board of directors are family members in family firms and these family members prefer their family's wealth maximization rather than focusing on maximization of shareholders wealth. The Security and Exchange Commission of Pakistan should make a policy to restrict all listed companies to pay at least some threshold level of dividends to all shareholders. By this way, minority shareholders rights could be protected and dividend's disparity could also be reduced between family and non family firms.

Investment cash flow sensitivity is significantly positive for both family and non family firms. This positive cash flow coefficient shows that firms depend upon the internal cash flow of firms and facing external financing constraints. External financing sources are bank borrowing, bonds and issuing shares; external financing constraints can be minimized by lending more money to firms and this can only be happened when government borrowing to finance fiscal deficit will be decrease. So, government of Pakistan should focus more to increase their tax revenue; and government should decrease borrowing from state bank and commercial banks, because when government decrease domestic borrowing than more funds

will be available for lending to corporate sector firms and ultimately investment increases and economy will grow fast. And development of bonds and stock markets can also decrease these external financing constraints; policy makers should also focus on development of policies that encourage the firms to fulfill their financing needs from issuing corporate bonds.

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Appendices:

Appendix 1:

Correlated Random Effects - Hausman Test
Equation: EQ03
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	60.168769	27	0.0003