Impact of Capital Structure and Dividend Policy on Firm Value

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Abstract
The study aimed to investigate the impact of capital structure and dividend policy on firm value of KSE non financial listed firms using cross sectional time series regression analysis for the period 2006-2013 in Pakistan. The study uses fixed effect Model to measure the disparities of intercepts for each group considering fixed coefficient for independent variables and fixed variance among groups of the panel data. The results of the study reporting number of variables of capital structure and dividend policy has significant impact on dependent variable (tobin's Q). Three independent variables (TDTA as leverage ratio, SG as profit sustainability ratio and EQ as shareholders equity) of capital structure, while one independent variable (EPS as profitability ratio) of dividend policy has significant impact on dependent variable (tobin's Q). The left behind two variables (FATO as performance ratio of capital structure and DPO as cash flow indicator ratio of dividend policy) are not significant with depended variable (tobin's Q). Elaborately; EPS approve the prophecy of signaling theory while EQ, TDTA and SG statistically confirm assumptions of trade off theory and pecking order theory. Furthermore FATO fail to support the trade off hypothesis while DPO fail to favor the signaling theory postulations. Consequently our research analysis approves the hypothesis of pecking order theory and trade off theory in case of capital structure and signaling theory in case of dividend policy.
Keywords: Capital Structure, Dividend Policy, Firm Value

1. Introduction
1.1 Background
The capital structure of the company is the blend of current and long term debt, owner equity and other sources of endowments to funds its long term assets. Aligning the capital structure and dividend policy with the company's strategy is crucial task and need critical analysis. Shah and Khan (2010) contending that decision of capital structure is core of many other decision in corporate finance. Most of the theories emphasize on the balance between debt and equity which is then known optimized capital structure. Graham (2001) proposed that optimum capital structure is acquired by balancing its marginal cost and marginal benefits. If debt portion is increased, tax advantage can be achieved but it also can boost risk of financial distress and moving control to the investors. Therefore pronouncement making in the capital structure engineering and dividend policy conjointly called financial policy is extremely risky matter to all firms due to its direct effect on the firm value. Literature shows that firms uses practical approach in designing capital structure and try to align it with the strategy which is flexible and responding to the changing circumstances in the market.

Another factor which is the interesting area for the investors is the dividend payment behavior of the firm. Dividend payout ratio can affect firm value positively or adversely (Elfakhani, 1995). There are bunch of factors that can affect the company's dividend policy like constraints on dividend payment, investment opportunities, alternative sources of capital (Fida et al., 2012). Faulkender, et al., (2006) concluded that decision regarding financial policy is based conjointly upon capital structure designing and setting dividend policy. In one extreme, if firm uses high leverage and low equity, most of the control is in the hand of investors. On the other hand, if firm uses low leverage and high equity, less dividend should be paid and more control in the hands of managers. All over the discussion, the utmost aim of the firm should be to increase the shareholders capital or to extend the returns of the investors. So selection of optimal capital structure and dividend policy both or one by one can affect firm value positively or negatively.

The Modigliani and Miller provide base work for capital structure in 1958 and 1963. Their work postulates that in the symmetric world, firm leverage and no relation with its respective value but only in the case of tax consideration. However this theory is criticized by many because it work only in the idealistic world, but in reality firm value is manipulated by many factors like agency problem, information asymmetry, bankruptcy cost, tax considerations and further industry digressions. Optimal capital structure can only be achieved if the fore stated factors are taken in consideration for measuring the value of the firm.

Literature postulates that whenever any firms make financial decision, it has two major choices. First is the setting dividend policy and the second one is the capital structure engineering. Faulkender, et al., (2006) presents a theory in their research work which posits that capital structure and dividend policy mutually verify inherent governance mechanism to organize over project choice. Ronny Manos (2002) concluded that if more amounts is set back as retention, less external source of finance is needed and vice versa. So in the choice of financial policy, capital structure and dividend policy has vital role. Firm having more debt finance and less equity, tend to be more influenced by the investors in its corporate governance (Faulkender, et al., 2006). From such

various perspectives of the various researchers, the management of any firm or company should well understood their call concerning dividend payouts and capital structure, for the explanation that these policies together or one by one impact lots on the worth of a firm (Jensen and Meckling. 1976). By using more debt, firm will move average below from the industry and market will positively respond in that scenario (Masulis, 1983).

One rationale of the study is that prior literatures only consider capital structure design impact on firm value or dividend policy influence on firm value. It looks like that both (capital structure design and dividend policy) factor impact on measuring the firm value in Pakistan is not yet discussed. For example capital structure design like leverage ratio, performance ratio, profit sustainability ratio, shareholders equity and dividend policy like profitability and dividend payout ratio in determining the firm's worth.

Simultaneous equation is used to distinguish the positive or negative relation among dependent and independent variables. The major findings this paper support some of the empirical studies in literature like shah and khan (2007), C. Anup and P.C. Suman (2010), Samuel Antwi (2012) while contradicting with C. Anup and P.C. Suman (2010), Shah & Hijazi (2004). The study is beneficial for measuring the optimum value of the firm.

1.2 Problem Statement
The study investigates impact of capital structure design and dividend policy on firm value under the Pakistani setting. Their combined impact is not discussed before. Moreover the study takes recent and longer time period (8 years from 2006 to 2013) and more variable in order to extend the idea of how the design of capital structure and choice of dividend policy affect the firm's value individually and conjointly.

1.3 Research Question
The study attempt to identify that the capital structure design and dividend policy both or one by one has impact on firm value or not.

1.4 Objective of Research
The intent of the research work is to propose a new integrated theory of capital structure and dividend policy decision which empirically predict their affect on value of the firm. The analysis is based on the existing capital structure of the sample firm during 2006-2013. The sub objectives of the study consist of:
1. Identify the impact of capital structure design on firm value
2. To investigate the impact of dividend policy on firm value
The above phenomenon contended that firms take two key decisions during business course, which are design decision of capital structure and the policy regarding dividend. These two decisions conjointly or one by one have positive or inverse impact upon value of the firm. By efficiently designing the capital structure and establishing a well desired dividend policy in developing countries like Pakistan, a firm can avail opportunities coping the risk and mould with the divergent perspectives of the investors and ultimately create firm's worth.

1.5 Hypothesis
H_{0A} = Capital Structure has no significant effect on firm's value
H_{1A} = Capital Structure has significant effect on firm's value.
H_{0B} = Dividend Policy has no significant effect on firm's value
H_{1B} = Dividend Policy has significant effect on firm's value.

1.6 Significance of the study
The current research study will bring to light the diverse levels of debts uphold by the firm and how this dissimilar level has impact on firm value. In Pakistani market the firms typically employ more debts and this straight to boost in the success of the firm. This boosted profit also has impact on firm value and it will attract the investors to spend in the specific firm.

By employing capital structure and dividend policy ratios, the profit of the companies has been broadly exposed by the research works but still there is a need to present practical confirmations for the association of the capital structure and dividend policy on the firm value. The study weighs up the various schools of thoughts relevant to association and grant pragmatic proof from the Pakistani financial system.

This study will beneficial for academics that are interested in getting more knowledge about this topic and also provide opportunity to other researcher to conduct further studies in the mentioned area.

In developing countries like Pakistan, the study will enable the practitioners to better evaluate the designing of capital structure and setting the dividend policy for business growth and firm value.

2. Literature Review
2.1 Background
Capital structure and dividend policy are the most dominant decisions taken by the firm. It allows firms to minimize

the weighted average cost of capital and retain a specific sum of money for particular purposes. The connection between capital structure and value of the firm is a debatable matter both empirically and theoretically. Literature regarding capital structure engineering and dividend policy postulates that it has significant impact on firm's worth.

2.2 Theoretical Literature
2.2.1 Trade-off theory
Developed by Scott (1977) argue that firm optimal debt ratio can be figure out by comparing its associated cost (like insolvency cost) with its associated benefits (like tax benefit). The study focuses on debt structure by TDTA, FATO, SG and EQ ratio considering the trade off postulations and assuming the higher success of firm anticipated to depreciate its associated cost and permit the firm to enjoy the tax benefit by hoisting leverage ratio.

Cost and benefit analysis of debt financing to achieve optimal capital structure is the theory hypothesis (Gaud et al., 2005). The theory mainly counterbalances the cost of debt against the benefits of debt (Abdullah, A.K. 2005). The theory postulate that firm's are usually finance by both debt and equity. The firm can balance the marginal cost and benefit by trade off the equity and debt financing decision and to achieve so called optimum capital structure (Titman and Wessels. 1988).
2.2.2 Pecking order theory
Developed by Myers and Majluf (1984) assert that firm's financing needs decides the level of leverage. The theory postulates that typically companies used their retain earning at first in priority to sponsor their projects. Secondly company call for external debt and finally the alternative of issuing new share and generating equity is exercise to fuel their project engine. The retained earnings are prioritized at top because it relatively has almost no cost. Moreover financing from debts or issuing new equity broadcast signals towards the market. If manager issue more equity, a rational investor thinks that stock is overvalued and stock price will probable to plummet in the near future.

The on hand study assumes the pecking order hypothesis like Akhtar (2005), Friend and Lang (1988), Rajan and Zingales (1995), Shah & Khan (2007), Harris and Raviv (1991), and Akhtar and Oliver (2009) for capital structure impact on firm value. Drobetz and Fix, (2003) study investigates that ratio of leverage in the capital structure is the success story of company's management which broadcast information asymmetry to the rational investor. Furthermore our study assume that if the company retain earnings in the shape of internal funds are inadequate to avail any profitable project, firm prioritize to get finances from external sources but in such a way that it reduces the marginal cost of informational asymmetry (Akerlof, G.A. 1970).
2.2.3 Signaling Theory
Develop by Ross (1977) claim that company's dividend policy release signals towards investors. According to Bhattacharya (1979) in his signaling model claims that high quality firm pay more dividend compare to low quality firm. If signal increases with the information discrepancy between investor and manager, organization with higher information discrepancy should pay higher dividend. Ross (1977) argued that outside investors don't know the exact distribution of the inside company's income, but only inside management knows. If the internal management chooses to gives dividend, it transmits signals to more cash outflow and uses of more debt. Conversely if decision of retain earning is taking, less uses of debts decision is taken. So the issuing of dividend by the company has relation with the company's solvency ratio. Furthermore there is relation between EPS of a company and its dividend payout (Kuczynski. 2005).

2.2 Theoretical Literature
2.3.1 Capital Structure and firm value
The research work of how the design of capital structure has impact on firm value is done by many researchers across the world including developed and developing countries. The ground work for today's researchers provided by Modigliani and miller (1958) MM-I irrelevance theory, this theory basically based on some assumption like No Taxes, No Bankruptcy cost, market is efficient and asymmetric information, in such scenario there's absence of relation between capital structure and the firm's worth. Their research was further extended as Modigliani and miller (1963) MM -II contended that debt-equity ratio, required rate of return and cost of debt is the basis of value of the firm. MM -II exposes that value of the firm is basically relevant to the capital structure and make a conclusion that with 100 percent debt the capital structure of a firm have additionally benefit because of interest and tax shield. This (MM-I, 1958 and MM–II, 1963) was additionally supported by the Hamada (1969); Stilglitz (1972); Hatfield et al (1994) in their research work.
2.3.1.1 Studies conducted in the other countries
A number of researches shows that the more addition of debt financing in the firm capital structure might cause Agency cost, cost of insolvency and monitory suffering plus tax advantage (Jensen and Meckling, 1976; Tidman, 1984). Whilst it's not a smart decision to employee whole capital structure from debt finances. Brealey et al., (1977) conclude that managers consider it as a signal that high insolvency risk is associated with the high leverage ratio in the case of small firms. Because of having exact facts by the managers than of the outsiders, they may use debt

structure as a market indicator. Masulis (1983) postulates that if a firm is using more debt, it will move average below from the industry, in that scenario the market will optimistically respond when firm standard deviation value increases again industry mean.

Directly or indirectly, debt has relation with the value of firm. Upgrading the work of Masulis (1983), Stulz (1990) model eliminate both over and under investment problems by using debt financing and also presume that in the equity ownership, managers have no rights and he just enjoy the incentive by operating or managing large size of the organization. The relation between capital structure design and its impact on firm value is found by Garima Dalal (2013). The researcher makes two hypothesis and used correlation technique to check the relationship of capital structure, cost of capital and firm's worth. To know the correlation coefficient significance, t-test was applied and to know the difference of capital structure significance, F-test was applied. The researcher found negative correlation between capital structure and cost of capital.

Favoring with the Stulz (1990) work, Akintoye (2008) examine that if a company's debt portion increases, then the value of firm will also increase. However still there's a limit and which is the limit of insolvency variable, the bankruptcy danger if its debt portion is 100 percent, there's panic that the firm will go insolvent. Therefore, if debt portion will increase, the value of the firm will become increase, but still there's another risk, most advantageous debt formation per equity. Based on mentioned assumption, choose debt or equity for your capital construction. Now suppose if there is chance to absorb further debt, then priority should be given to use debt if the cost of debt was cheap, so in this case first preference will be given debt source of financing but up to a fix edge that it will proportionally minimize the WACC.

Contradicting with the studies of Stulz (1990) and Akintoye (2008), Eriotis et al., (2002) found the sturdily negative relation between high ratio of Debt and firm profitability after using the data of different firms from different fields. Chiang et al., (2002) elaborate the work of Eriotis et al., (2002) analyzes relation between "the construction and property sector firm's capital structure and financial performance in Hong Kong" and concluded a diverse linkage with gain boundary. Khalaf Al Taani (2013) uses multiple regression technique to test the firm's capital structure design impact on its financial performance. The results postulates that most of the leverage variables are negatively associated with the firm performance like there's negative association found between short term debt, long term debt with return on assets and profit margin. Their study concluded that the design of capital structure is not most important decision that has major impact on financial performance of the organization. Researchers suggest that before boosting the debt level, a warning should implement otherwise it will affect firm value adversely. Ramachandra et al., (2008) found firms having higher standard deviation from the industry mean if use high leverage can cause reduction in the sales which ultimately causes diminishing the profitability figure.

Ogbulu et al., (2012) uses OLS regression techniques and analyze NSE listed 124 firms for the period 2007. The researcher found that equity has no relation in fluctuated firm value. The main component of capital structure that has impact on firm's worth is found LTLTA. Researcher (in light of pecking order theory) propose to the corporate finance manager in Nigeria to uses more long term debt instead of issuing equity for creation of firm value. Contrasting with the study of Ogbulu et al., (2012), Antwi and Mill (2012) uses the same procedure of analyzing the data GSE listed firms for the period of 2010 and found that equity play an important role in creating the firm value. They also found the LTLTA has key importance in creation of the value of the firm. Their suggestions also direct the finance manager to use more long term liability instead of issuing equity for firm value creation.

Firm's worth and capital structure has a robust relation (Ai, 1997; Hung et al., 2002 and Chandara et al., 2008) determine in this studies that the firm with highly financed by debt as compared to the industry average must faces the problems of low growth in sale and low profits as compared to the firm which is accordingly of industry average. Under the general circumstances, if leverage of any company increases its earnings per share also likely to be increases. However on the other hand, high leverage or debt conjointly boosts the risk for such firm. Thus it'll be wrong that the worth of the firm increase as a firm will increase their leverage position (Ilyas. J, 2008). Chiang et al., (2002) found negative association between firm financial performance and leverage ratio. Researcher concluded that firm leverage ratio is negatively associated with its respective profitability margin ratio.

Myers and Majluf (1984) posit that optimal financing strategy of a firm will follow the pecking order. It is due to reason if the managers work on interest of the owner and are operating according to the well of shareholders, in such case securities will be issued at high price than they are the real its value. Cost of equity capital should be higher in relation to the sensitivity of the security. So the manager such sort of action explore market indicator about that security that it is overvalued. Jarrell and Kim (1984) found sturdy connection between leverage ratio and non debt tax shield. His work is mainly upon maintaining the optimal capital structure of the firm. Masidonda et al., (2013) find the link of capital structure and its impact on worth of the organization. LTDA and LTDE are the determinants of capital structure that explain the volatile value of firm. Value of the firm is measured by Tobin's Q which investigates that the larger long-term debt in capital structure can result the higher value of the firm and value of the firm will go up due to tax shield.

Optimum capital structure can be achieved by evacuating the unnecessary cost which ultimately trims down the weighted average cost of capital (Moyer et al., 2004). Their study postulate that if the blend of Debt, Common Equity and Preferred Stocks are rationally weighted, it represents in the firm optimal capital structure. By adopting such rationality, worth of the firm's augmented. Kyaw and Aggarwal (2006) exposes that leverage ratio has impact on firm value positively and adversely. Their finding concluded that optimal debt structure is maintained by finding the cost of debt and its associated benefits by trade off. Chu-Yang Chien, Yi-Pei Liu and Yu-Shu Cheng (2010) examine the most favorable leverage structure that has favorable impact on value of the firm. Advance threshold regression is applied to analyze the panel data of debt ratio of listed firms in China. Their study concluded U correlation between leverage structure and value of the firm.

The manager may motivate its self-interest being taking negative present value of project. For solving such problems shareholders can emphasize firm to move towards debt side. But if firm want to pay dividend then it may not want to take positive value projects. Amihum & Lev (1981) proposes that by raising the leverage level, more control will be given to the outside which ultimately contaminating the biases of corporate manager. Therefore if the agency cost and cost of debt is matched with the managerial direction, best debt structure can be adjudicated.

2.3.1.2 Studies conducted in Pakistan

Opposing with the previous work of Titman and Wessels (1988) Capital structure of Pakistani listed firm has no relation with their respective asset structure (Shah et al., 2004). Leverage is positively correlated with sales and negatively correlated with growth. They found strong relation between profitability and leverage but insignificant relation between debt and asset tangibility. The relation between capital structure and financial performance of KSE top 100 companies are analyzed by Umer M. et al., (2012) found that CLTA, LTLTA, leverage ratio has adverse impact upon firms profitability ratios.

Consistent with the study of Shah et al., (2004), Hijazi and Tariq (2006) investigate Pakistani listed Cement industry firm's respective capital structure and found that assets tangibility, growth, firm size and profitability as independent variable effect on leverage. Overall the results found to be highly significant excluding the firm size. KSE 100 index firms was analyzed by Raheel Mumtaz et al., (2013) and found negative association leverage ratio and firm's performance.

Umer M. et al., (2012) examines the connection between firms worth and capital structure by conducting exponential generalized least square regression. Researchers comes to the conclusion that most of the capital structure variables like current liability to total asset, long term liability to total asset or leverage ratio are significantly negatively associated with the firm's performance. Their general conclusion reach to the point that capital structure is among important and effective factors on corporate financial performance, and they are negatively associated due to which firm value is disturbed.

C. Anup and P.C. Suman (2010) concluded that maximizing the value of firm requires an optimal level debt and equity, whilst firm's worth has negative relation with WACC, therefore WACC should be minimum as possible. It has been also observed that firm's market worth can be boost up by achieving the optimal capital structure combination. Ali (2010) analyzes KSE non financial listed firms for the period of 2003-08 and exposes that tangibility, size, growth, profitability and dividend has significant impact on firm's leverage ratio. Researcher takes leverage ratio as dependent variable. Muhammad Umar (2012) include into the previous literature that all of the companies are basically finance by the mix of Debt and Equity. Firm's capital structure is mainly base on the dimensions of the debt and equity mixture that is utilized for operations by the organization. And firm's worth is dependent on real assets not on the Debt and Equity proportion.

Sheikh and Wang (2011) empirically analyze capital structure of Pakistani listed manufacturing firms for model which comes from western settings. The outcome recommend that tangibility (asset structure), liquidity, profitability and earnings volatility are negatively associated with the leverage ratio, which is contrasting with the work of Shah et al., (2004) and Hijazi and Tariq (2006) and is consistent with pecking order theory, agency theory and trade off theory under Pakistani setting, whereas firm size is positively linked to the debt ratio. The scenario screen out that financing behavior of firms in Pakistan can be well understood by taking help from capital structure models comes from western world.

Shah and Khan (2007) approve that leverage ratio key determinant is the Tangibility of asset, which is in consistent with the assumption of trade off theory. But on the other hand, their research work fails to confirm the trade off theory postulations in case of intangible asset in Pakistan. By strengthening the previous work, Shah and Khan (2007) claim that growth variable is confirmed by the agency theory and size variable is not confirmed by any variable.

Debt to equity ratio is analyzed by Butt and Hasan (2009) and concluded that managerial shareholding is significantly negatively correlated with it. It recommends that managerial shareholdings, ownership structure and size which are corporate governance variables participates key importance in determination of firm's financial engineering decisions.

Managers can increase the firm's worth by utilizing the best capital structure for the firm. Most high-

dynamic firms require giving quality signal toward the market, whilst managers of less-dynamic firms' will try to eliminate it at any cost. From this argument, it is exposed that firm's worth has positive relation with the debt level. Having Assumption that information are incomplete in market.

Shareholder of the firms expecting profit in the shape of dividend and mould their behavior according to the ratio fixed as dividend payout which ultimately affecting the worth of the respective firm. A huge number of papers have been studied concerning dividend payout ratio that has impact on firm value.

2.3.2 Dividend policy and firm value

2.3.2.1 Studies conducted in the other countries

Modigliani and Miller (1961) contended that under certain suppositions a firm, dividend policy doesn't affect the firm's worth. The main argument is about firm's worth that can be measured by using its optimal arrangement. The total payout is the discrepancy between returns and investments. Because the total payout is based on dividend and share repurchases, firm can conform its dividend at any level to a balancing change in offer exceptional. Dividend approach is unimportant from investor's perspectives, in light of the fact that any craved stream of installments can be repeated by proper buys and offers of value. In this manner, for any specific dividend policy, investors will not remunerate any premium. De-Angelo and Masulis (1980) extend the study of MM by indulging other variables like investment credit tax and charges of depreciation. Their study found that the internal capital structure make value of the firm if it is optimally balanced. They argued that decision of capital structure mostly influenced by taxes plus insolvency costs.

Linter (1962) and Gordon (1963) postulated that firm with all equity finance when make dividend payment have impact on firm value. Their assumption based on long run payout ratio. Cost of equity finance should include dividend payment under perpetuity, expected annual growth rate of dividend and stock prices. But earning solidity and profitability play a significant role in the dividend policy of the company (Gaver and Gaver. 1993 and Barclay et al., 1995)

Jagannathan et al., (2000) contended that DPO is disseminated in accordance with the long lasting distresses while the repurchase of shares are associated with the short run distress. The study of Brave et al., (2005) exposes that DPO is pre planned before accepting the investment project, be keeping other object constant and by keeping the decision of share repurchase later. Skinner (2008) prop up the work of Jagannathan et al., (2000) and contended that with earning volatility is due to adopting the policy of repurchase of shares dissemination method.

Walter (1963) indulge in the existing literature that firm value is determined by the dividend payment behavior of the firm. Johnson (1999) analyzed that firm value in the market can be build by its financial capital plus its intelligence capital. Where he claimed that intelligence capital can create more of firm value than the financial capital. The dividend payments align the interest of manager and shareholders which ultimately lessen the agency problems. This scenario diminishes the unrestricted finances accessible to managers (Rozeff, 1982). Some studies found negative relation between leverage and dividend payout (Al-Twajiry, 2007)

Mookerjee (1992) finds insignificant negative coefficient of the delayed earnings. Lee (1996) in contrast, discovers sturdy hold up for the sight that it is enduring earnings settle on dividend as conflict to recent income. La Porta et al., (2000) postulates that owners compel company to disseminate cash in the form of dividend. Researcher concluded that the cash ouflow in the form of dividend is indirectly related with the agency problem. By keeping other things constant, if rights of the shareholders are high, more dividend payout is expected in the company.

The High development firms which desires to reduce financial expenses has low dividend payout ratio for the reason that these firms want to take full advantage of the profitability of firm and they try to diminish the financial costs of the firm (Jensen et al., 1992). Hitt el al., (2001) investigate that investing in the human capital are valuable to the firm but if only when these workforce diversity can create competitive advantage to the firm. Their study advocate paying more to employee than of their marginal productivity can diminish market value of the firm. Elfakhani, (1995) investigate that if dividend payout increases the share prices of the firms are also increases for the reason that dividend payments and share prices have inverse relationship if the dividend payment is consistent the investors agree to pay high price for the company shares.

The dividend declaration creates an encouraging impression in the financial market for those, who are interested in investments, for the reason that it is the indication for superior return and the investors must interested in such kind of signal, for the reason that it mitigates the risk for the investors and compose their investment more safe and sound which in other words the assumption of Signaling theory. Below and Johnson (1996) point out that an investor should keep eye on dividend declaration for the reason that market gives irregular return with declaration of increase in dividend. Investors must keep eyes on the dividend payment behavior because firm paying high dividend has relatively low risk.

Baskin and Miranti (1997) contended that security provided to the shareholders in the form of cash flow is most of the time on the basis of market valuation. It is because of asymmetric information provided to the shareholders. Maquieira and Megginson (1998) investigate that manager's decision regarding dividend issuing will pending until they judge that those dividends can be persistent by future earnings. Grullon et al., (2000)

therefore argued that market price of stock increases just for the reason that to increase in dividend payment because it mitigates the systematic danger.

The eventual objective of the firm is to boost the wealth of shareholders and shareholder wealth can be measure by share price which can be increase by high dividend payments. Whenever a firm has bad financial position, its output prices tend to be diminishing and customer-driven financial distress are measured. Financial disturbance about Employee arises from misplacing the intangible properties when firm returns depreciating (Trigeorgis and Vafeas. 2001).

According to Anand (2004) dividend decisions p1ay very important function to anticipate the future expectation of a firm and also have huge affect the share market price. This indicates that the decisions connected with dividend are very important for shareholder wealth maximization.

DeAngelo et al., (2004) add to literature the positive and highly significant association of earned equity to total equity with dividend payment decision. In addition, extending the work of Walter (1963), agency problem can be controlled by initiating the dividend decisions, because the retention of profit means give more control in the hands of finance manager for some futuristic investment opportunities without any supervisory measures.

2.3.2.2 Studies conducted in Pakistan

Nishat and Irfan (2004) argued that share price instability is mainly affected by the decisions of payout ratio and dividend yield. This recommends that stock price instability in Pakistan is because of dividend policy and it provide confirmation behind the duration effect, information effect and arbitrage realization effect.

Some strands of literature focuses on current earning of the firm have impact on dividend payout ratio of that firm. Ahmed and Javid (2008) determine KSE listed firms follow stable dividend payout policies which contradicting with the Nishat and Irfan (2004) postulations. The results exposes Pakistan's listed firms fix their dividend amount based on current earning rather than ex post records. On this basis, KSE listed firms are more sensitive about current earnings and also on previous dividend experience.

Mirza and Azfa (2010) investigate the brunt of firm particular traits on corporate dividend conduct in rising economy of Pakistan. Researchers found that profitability and operating cash-flow are positively while leverage, size, cash flow sensitivity, managerial and individual ownership are negatively associated with the cash dividend. The most significant determinants with dividend behavior are operating cash flow size, individual ownership and managerial ownership while cash flow sensitivity and leverage are insignificant with the dividend payment behavior. Anticipated outcomes are robust to other proxy of dividend behavior i.e. dividend intensity.

Fida et al., (2012) randomly select 70 KSE listed firms and analyze the investor's sentiment by taking dividend policy as proxy. Their study contradicting with Mirza and Azfa (2010) work and uncover the adverse relation found between managerial ownership structure and dividend payout. Their study suggested that there are different means that are used to resolve the agency problem.

Intensifying the work of Nishat and Irfan (2004), Asghar et al., (2011) claims that there is risk of dividend policy on stock price in Pakistan. The study outcomes postulate the significant correlation between price fluctuation and dividend yield compare to all other variables. Furthermore price volatility negative correlation is found with asset growth. Besides from the study, all variables are linked with price volatility but second model justifies the relational impact of some variables on the price volatility.

2.4 Conclusion

From the literature, it has been observed that the capital structure and dividend policy has impact on the firm value. Managers realize the importance of decisions regarding capital structure design and policy concerning dividend payout as literature exposes its significant impact on market firm value. By reviewing the literature, it is concluded that to design an optimum capital structure and award a desired dividend policy, company's grasps the attentions of logical investors by making their worth in the market.

3. Research Methodology

This chapter of the study provides an overall synopsis of the methodological aspect of the research work. The section discusses the population of the study, sampling design, tools and techniques by the help of which the data were collected, the variable of the study, the theoretical framework and statistical methods that were employed for data analysis.

3.1 Universe of the study

The study is conducted for the rationale to provide a complete review about the relationship of the capital Structure and dividend policies with the firm value. For this purpose, the study uses all non financial listed companies domiciled at Karachi Stock Exchange as universe of the study for the period of 2006 to 2013. A total of 496 firms are analyzed at first stage which is slimed to 111 firms after meeting the sample selection criterion.

3.2 Sampling Design

At first stage, 496 non-financial firms were selected whose financial secondary data was available for the study period i.e. 2006-2013. Following firms are excluded from the sample:

1. Banks, investment companies, and insurance companies as their capital structure are different from the non financial sector firms, which possibly distort our analysis.
2. Incomplete data for study period
3. Firms those are suspended or delisted during the study period.
4. Firms having Negative Equity Share Capital and negative profitability.

       All those firms who pay NO dividend during study period are excluded from the study sample, but if a firm pay only one year dividend during the study period (2006-2013) are included in the sample.

       After meeting the above five basic study sample selection assumptions, our study sample slimed to the final population of 111 non-financial firms. The whole population has been taken as a census for the analysis. The sample selection process with respect to their selection criterion (sector-wise) is systematically revealed below:

S.No	Sector	Empty Year / Negative Equity / Negative EPS / Zero DPO	No Empty Year / Negative Equity / Negative EPS / Zero DPO	No Empty Year / No Negative Equity / Negative EPS / Zero DPO	No Empty Year / No Negative Equity / No Negative EPS / No Zero DPO
1	Automobile and Parts	19	14	13	8
2	Beverages	4	3	2	2
3	Chemicals	35	28	26	14
4	Construction and Materials	38	28	24	4
5	Electricity	16	12	10	6
6	Electronic and Electrical Equipment	3	1	1	1
7	Financial Services	1	1	1	0
8	Fixed Line Telecommunication	5	4	4	1
9	Food Producers	64	40	31	17
10	Forestry and Paper	4	3	3	2
11	Gas Water and Multiutilities	2	2	2	2
12	General Industrials	13	11	9	3
13	Health Care Equipment and Services	2	1	1	1
14	Household Goods	15	7	5	1
15	Industrial Engineering	11	9	7	3
16	Industrial metals and Mining	8	5	5	1
17	Industrial Transportation	4	2	2	1
18	Leisure Goods	1	0	0	0
19	Media	4	2	1	1
20	Oil and Gas	12	12	10	8
21	Personal Goods	213	111	84	27
22	Pharma and Bio Tech	9	9	9	6
23	Real Estate Investment and Services	2	1	1	0
24	Software and Computer Services	1	1	1	1
25	Support Services	1	1	1	0
26	Technology Hardware and Equipment	1	0	0	0
27	Tobacco	3	2	2	1
28	Travel and Leisure	5	4	3	0
	Total	496	314	258	111

3.3 Data Collection

Data is collected from the State Bank of Pakistan publications, Balance Sheet Analysis of Joint Stock Companies Listed on Karachi Stock Exchange, financial highlights and financial statements which exists in the annual reports downloaded from the company's respective websites of entire non-financial listed firms for the year 2006-2013 based on the subjective sampling.

3.4 Justification of variables

In this model firm's worth (Tobin's Q) is taken as dependent variable; whilst capital structure and dividend policy will be taken as independent variables.

3.5 Dependent Variable

Value of the firm is represented by Tobin's Q (Jaelani et al., 2013) as dependent variable which is measured as:

$$\text{Tobin Q}_{it} = \frac{\text{Market Value of Equity}_{it} + \text{Book Value of Debt}_{it}}{\text{Market Value of Assets}_{it}}$$

3.6 Independent Variable

3.6.1 Performance Ratio

Fixed Asset Turnover is taken as firm's performance ratio (C. Anup and P.C. Suman., 2010). This ratio postulate how effective a company's fixed assets are at generating sales revenue. A high number means the assets are generating sales for the company. A low number means that assets are inefficient or that more investment is needed to modernize the company.

$$\text{Fixed Assets Turnover}_{it} = \frac{\text{Net Revenue}_{it}}{\text{Net Fixed Asset}_{it}}$$

3.6.2 Leverage Ratio

This ratio gives an indication of the amount of leverage (money owed to others) used by a company (Umer M. et al., 2012). A low number means the company has a strong equity position. A higher number makes the company more risky to invest in because leverage magnifies gains and losses in the capital structure.

$$\text{Debt Ratio}_{it} = \frac{\text{Total Liability}_{it}}{\text{Total Asset}_{it}}$$

Total debt to total asset ratio shows the degree of financial risk or Solvency.

3.6.3 Profit Sustainability Ratio

Growth rate is noted through sales growth rate (Shah and Khan., 2007), calculated as percentage increase (decrease) in sales between two time periods by taking their natural log (Ln).

$$\text{Sales Growth}_{it} = \frac{\text{Ln(Current Year Sales)}_{it}}{\text{Ln(Previous Year Sales)}_{it}}$$

3.6.4 Shareholder Equity

It is the remaining claim amount of the shareholders (C. Anup and P.C. Suman., 2010). Log is taken of the variable for its normal distribution and is checked by conducting Jarque Bera test in EView (Umer M. et al., 2012)

Shareholder's Equity$_{it}$ = Log (Shareholders Equity)$_{it}$

3.6.5 Profitability

Earnings per share (EPS) are taken as a proxy for profitability of the company i at time t (C. Anup and P.C. Suman., 2010).

3.6.6 Cash Flow Indicator Ratio

This ratio shows what percentages of earnings are allocated to pay the shareholders dividend. The higher number indicates better for the shareholder. An unusually high number may not be sustainable. Also, it is important to note that dividends are not paid from earnings but from cash. If a large dividend is paid the company may experience cash flow problem later (C. Anup and P.C. Suman., 2010).

$$\text{Dividend Payout Ratio}_{it} = \frac{\text{Dividend per Share}_{it}}{\text{Earnings per Share}_{it}}$$

3.7 Econometric Model

The model uses the firm value (Tobin's Q) as dependent variable; while leverage ratio (TDTA), performance ratio (FATO), profit sustainability ratio (SG) and shareholder's equity (EQ) in capital structure and cash flow indicator ratio (DPO) and profitability (EPS) in dividend policy as independent variables (C. Anup and P.C. Suman., 2010). Panel data regression model is used for studying the relationship between the variable under consideration. The purpose of this is due to the availability of panel data and also an increased awareness of benefits of panel data over cross section or time series data (Lein, 2013). In such form of data, different entities are analyzed at different time period. Patric (2013) define that panel data are doubly index by individual and time in order to avoid bias from unobservable individual heterogeneity.

$$\text{Tobin's Q}_{it} = \beta_0 + \beta_1 FATO_{it} + \beta_2 TDTA_{it} + \beta_3 SG_{it} + \beta_5 EQ_{it} + \beta_6 EPS_{it} + \beta_7 DPO_{it} + \varepsilon_{it} \dots\dots\dots (3.1)$$

Where

$FATO_{it}$ = fixed assets turnover ratios for company i at time t

$TDTA_{it}$ = total debt to total assets for company i at time t

SG_{it} = sales growth for company i at time t

EQ_{it} = shareholders equity of company i at time t

EPS_{it} = earnings per share for company i at time t

DPO_{it} = dividend payments for company i at time t

β_0 = intercept of the regression line which is constant

β_1 to β_7 = coefficient of slop of independent variables and

ε_{it} = error term for company i at time t

3.8 Theoretical Framework

Theoretical framework of the study is given in Figure 3.1. It includes Tobin's Q as dependent variable and fixed assets turnover, debt ratio, sales growth, shareholder's equity, earning per share and dividend payout ratio as independent variables of the study. All these variables are described in the subsequent sections.
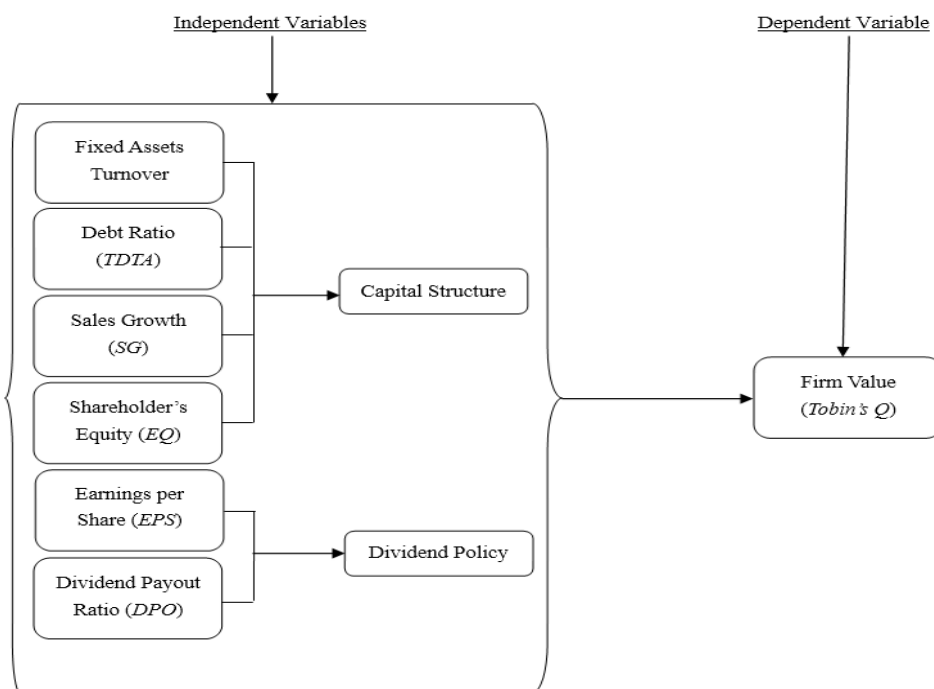

Figure 3.1: Theoretical framework of the study

3.9 Panel Data Analysis

Regression model on panel data is used on the study. There are three regression model fixed effect model and random effect model will be applied. Before applying panel data first the suitable model will be selected that either fixed effect or random effect model will be suit for the study for which Hausman test will be applied.

3.9.1 Fixed Effect Model

FEM is used for panel data analysis in which the intercept differ according to the cross sectional groups. Generally in FEM slope is kept constant and intercept varies. But sometimes the temporal effects are not assumed in the series, however cross sectional effects are assumed. In some FEM slope and intercept both may vary over time. (Gujarati, 2004).

3.9.2 Random Effect Model

REM is an alternative to FEM. REM is a random constant term of regression analysis. It depends on both a cross section and a time series within them. (Gujarati, 2004).

3.9.3 Hausman Test

To decide between fixed effect model and random effect model you can run a Hausman test is executed. if null hypothesis is accepted, it means random effect model is fit for your panel data analysis, while if alternative hypothesis is accepted, it means fixed effect test is best suit for your panel data analysis on hand(Green. 2008, chapter 9). It tests that whether the exceptional errors (ui) are correlated with regression. It tests the null hypothesis that random effect model is suitable. If the statistic is significantly large then the fixed effect model is used, if the statistic is significantly small then random effect model will be used.

3.9.4 Multicollinearity

Multicollinearity is the dependence of one independent variable on another independent variable or more than one variable. Due to the problem of multicollinearity in the data the relation of dependent and independent cannot be measured precisely. For multicollinearity VIF (variance inflation test) is used. If the value of VIF is less than 10 then it means that there is no multicollinearity (Gujarati, 2007).

$$VIF_J = \frac{1}{1 - R^2_J}$$

Rj   =   multicollinearity coefficient.

3.9.5 Heteroskedasticity

Heteroskedasticity is the difference of variance of error term across observations. If p value is significant and variance of the variable is constant, it means there is no heteroskedasticity problem exists in the data (Gujarati, 2007). White test is used for heteroskedasticity.

4. Analysis and Findings

4.1 Introduction

This section of the study enlightens the basic descriptive information about all the used variables (report the mean and standard deviation for each variable). Also the section test hypothesis of the research by using different statistical test and what the results indicated.

4.2 Descriptive Statistics of Data

To describe the fundamental characteristic of data like their means, standard deviation, minimum and maximum values etc, descriptive statistics tool is used.

Table 4.1: Descriptive Statistics

	N	Mean	S.D	Minimum	Maximum
Tobin's Q	888	1.0046	0.4934	0.288	9.507
FATO	888	0.7774	4.6841	-0.148	94.692
TDTA	888	0.5225	0.3490	0.008	6.115
SG	888	0.0017	0.8233	-5.4895	4.9611
EQ	888	9.3180	0.6911	6.9061	11.5100
EPS	888	22.4879	42.3182	0	460
DPO	888	0.37836	0.2895	0	2.304

The above Table 4.1 shows the data characteristics including total number of observations, means, Standard Deviation and their respective minimum and maximum values of all Karachi Stock Exchange non financial listed firms for the study period of 2006 to 2013.

There are total 111 firms having 8 years data constructing 888 observations. In the results, EPS standard deviation 42.318 signifies that profitability is very much volatile and unpredictable of the Pakistani non financial listed companies. It means EPS data of the organizations is very much unstable at different time periods and also between the various organizations listed at KSE 100 index. TDTA has a low SD which is 0.349 indicating that Pakistani firm's capital structure preferences are mostly common in figurative nature. By comparing Tobin's Q mean with its SD, it is concluded that most of Tobin's Q measurement fall above or below 0.493 of 1.005. FATO is having high inconsistency ranging from -0.148 to 94.692. The descriptive statistics regarding DPO exposing that Pakistani firm's dividend payment policy are not very much unpredictable.

4.3 Correlation Analysis of the data

Correlation analysis is a statistical tool that could be used in this study to describe the degree to which one variable is linearly related to another. Through conducting correlation analysis this study shall be capable to recognize the extent of connection among variables.

Table 4.2: Correlation Analysis (Total Observations = 888)

	TQ	FATO	TDTA	SG	EQ	EPS	DPO
TQ	1						
FATO	0.026	1					
TDTA	0.754	-0.069	1				
SG	0.006	-0.079	-0.001	1			
EQ	0.082	0.079	-0.088	-0.215	1		
EPS	0.102	0.031	-0.006	-0.145	0.182	1	
DPO	0.016	0.009	-0.052	-0.041	0.105	-0.007	1

The study found strong and positive correlation between Tobin's Q and TDTA (75.46%), Equity and EPS (18.23%), Equity and DPO (10.50%) and Tobin's Q and EPS (10.27%). While there is negative correlation found between Equity and Sales Growth (-21.56%) this means Equity is adversely related with Sales Growth which is controversial in the real world. Sales Growth will definitely increase the wealth of the shareholders. There is also negative relation found between Sales Growth and EPS (-14.46%) contending that Sales Growth has negatively correlated with EPS which is also not possible in the real world.

Tobin's Q is highly correlated with TDTA, from this point we got that firm value is mostly depends on

capital structure design of the company. The positive and strong correlation between Equity and EPS and DPO contending that shareholder wealth is boosting by rising in the value of EPS and DPO. The rest of variables exposing that none of them are perfectly correlated, just showing some relationship with each other.

4.4 Diagnostics Tests

4.4.1 Variance Inflation Factor for multicollinearity

It is a measure exposing the multicollinearity (correlation) problem in the independent variable of any pairs of variables, which can be identifiable in below column.

Table 4.3: Variance Inflation Factor

Variables	VIF	1/VIF
EQ	1.10	0.910897
SG	1.07	0.937358
EPS	1.05	0.954219
FATO	1.01	0.985441
TDTA	1.01	0.985734
DPO	1.01	0.985874
Mean VIF	1.04	

Table 4.3 reports that there is no multicollinearity problem exist in the data. It is because all the variables values are less than 10 and mean VIF value is 1.04 which is also less than 10. All results in Table 4.3 approve the prophecy of VIF test assumption (Gujarati, 2007).

4.4.2 Chow Test for structural break Fixed Effect

Chow test has been conducted to know the appropriate model between pooled regression and fixed effect model. Two hypotheses have been created in this regard:

H_0: Pooled OLS is appropriate and fixed effect model is not appropriate for the current study

H_1: Pooled OLS is not appropriate and fixed effect model is appropriate for the current study.

Table 4.4: Chow test for structural breakup

Variable name	P value
FATO	0
TDTA	0
SG	0
EQ	0
EPS	0
DPO	0
$F_{(6, 771)} = 509.14$, Prob > F = 0.0000	

The p value significance shows that Pooled OLS Model is rejected and Fixed Effect Model is accepting for data analysis.

4.4.3 Breusch and Pagan Lagrangian Multiplier Test for Random effect

Breusch Pagan test has been used to select the appropriate model between pooled regression and random effect model. Two hypotheses have been generated in this regard:

H_0: Pooled OLS is adequate and random effect model is inadequate for the current study

H_1: Pooled OLS is not adequate and random effect model is adequate for the current study.

Table 4.5: Breusch-Pagan LM Test

	Var	sd = √(Var)
Tobinq	0.2434	0.4934
E	0.0402	0.2007
U	0.0303	0.1743
$Chibar^2(01) = 529.86$, Prob > $chibar^2$ = 0.0000		

The p value significance postulates that Pooled OLS Model is rejected and Random Effect Model is accepting for data analysis.

4.4.4 Hausman Test for Fixed and Random Effects

Hausman test has been used to select the appropriate model between Random effect model and fixed effect model. Two hypotheses have been generated in this regard:

H_0: Random effect model is adequate and fixed effect model is inadequate for the current study

H_1: Fixed effect model is adequate and random effect model is inadequate for the current study.

Table 4.6: Hausman test for fixed and random effects

Independent Variables	Coefficients		(b – B) Difference	S.E.
	Fixed (b)	Random (B)		
FATO	0.0022	0.0033	-0.0010	.
TDTA	1.4559	1.3474	0.1084	.
SG	0.0286	0.0224	0.0061	.
EQ	0.4613	0.2334	0.2279	0.0218
EPS	0.0014	0.0015	-0.0001	0.0001
DPO	0.0383	0.0308	0.0074	.
chi^2(6) = 55.12, Prob>chi^2 = 0.0000				

Hausman test for fixed and random effects (Table 4.6) P value significance exposing that model is consistent in favor of the fixed effects model.

4.4.5 Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

White's test has been used to select the appropriate model between heteroskedasticity and homoskedasticity. Two hypotheses have been generated in this regard:

H0: There is no heteroskedasticity in the current data

H1: There is heteroskedasticity in the current data.

chi2(1) = 483.428,

Prob > chi2 = 0.0000

P value significance reporting that there is heteroskedasticity found in the data

4.5 Cross Sectional Time Series Fixed Effects (within) Regression Analysis

The research work uses fixed effect (within) model for data analysis. The fixed effect model considering Tobin's Q (for firm's value) as a dependent variable and Fixed Assets Turnover (FATO), Total Debt to Total Assets (TDTA), Shareholders Equity (EQ), Sales Growth (SG), Earning per Share (EPS) and Dividend Payout (DPO) as independent variables. This study uses last 8 years (2006 to 2013) financial data of 111 non financial listed companies on Karachi Stock Exchange (on every sector) fulfilling the sample selection criterion assumptions.

Table 4.7: Cross Sectional Time Series Fixed Effects (within) regression model

	Coefficient	std. error	t-ratio	p-value	
Const	-4.1047	0.2990	-13.73	0.0000	***
FATO	0.0022	0.0016	1.37	0.1697	
TDTA	1.4560	0.0266	54.53	0.0000	***
SG	0.0287	0.0088	3.23	0.0013	***
EQ	0.4613	0.0318	14.46	0.0000	***
EPS	0.0014	0.0002	5.07	0.0000	***
DPO	0.0383	0.0330	1.16	0.2462	
No. of Groups = 111, No. of Observations = 888, F(6,771) = 509.14, P-value(F) = 0.0000 and rho = 0.7732 R^2 = within = 0.7985, between = 0.3200, overall = 0.5121.					

No. of Groups = 111, No. of Observations = 888,

F(6,771) = 509.14, P-value(F) = 0.0000 and rho = 0.7732

R2 = within = 0.7985, between = 0.3200, overall = 0.5121.

In the study, the entire independent variable respective coefficients are positive and R2 value reporting that Tobin's Q (Firm's value) is 51.21% influenced by the independent variables (FATO, TDTA, SG EQ of capital structure and EPS, DPO of dividend policy).

TDTA coefficient 1.45 exposing that one unit increase in TDTA will make 1.45 unit firm value. Standard error is 0.026 exposing that data in the given table are satisfactory. t value of TDTA is 54.53 which is the uppermost t value in the regression table supported by its respective coefficient value. This signifies the most influential variable, which statistically satisfies that TDTA 1 change will change the firm value by 1.45 favoring the hypothesis of trade off theory and pecking order theory. The result support the work of Shah & Khan (2007), Lima (2009) and Sayilgan et al., (2006) So this study is in favor of trade off theory and pecking order theory concluded that under Pakistani setting, if firms increase their debt ratio, it is implicit that their inherent financial risk will increase but it also increase the firm value which is statistically proved in the results.

Shareholder equity has a coefficient of 0.46 which is second highest on Tobin's Q at the regression table. The t value is 14.46, standard error 0.031 which is higher than TDTA standard error posits the significant impact of shareholder equity on firm value, which supporting the trade off assumption while disfavoring the pecking order theory hypothesis. As the theory contends that financial manager should finance in order from low risky source to

high risky source in order to maintain shareholders wealth. Just like the results of the study contending that by increasing one unit in shareholders equity, firm value would significantly boost up by 0.46 respectively which is supporting the studies of Shah and Khan (2007), C. Anup and P.C. Suman (2010), Antwi S. et al., (2012) while contradicting with the work of Shah and Hijazi (2004).

Sales growth has positive impact on Tobin's Q. Its respective coefficient is 0.03 and standard error 0.008. The t value is 3.23 exposing that our statistical significance which favoring with the study of Shah and Hijazi (2004) while contradicting with the work of C. Anup and P.C. Suman (2010), Elli and Farouk (2011) and Suhaila, M.K. et al., (2008). From its coefficient value, the study concluded that sales growth has contribution in creating firm value in Pakistan are favoring the pecking order theory hypothesis in a sense that more gigantic the size of the firm, more easily they can generate and utilize the internal funds.

The coefficient of EPS is 0.001 which exposing impact of EPS on firm value. Its t value is 5.07 and standard error is 0.0002 postulating that EPS has significant impact on firm value in Pakistan. The positive association of EPS with Tobin's Q affirms the hypothesis of signaling theory that if high value of EPS transmits towards the market, more firm value will be created. It means if a firm increases 1 EPS, it'll boost up its firm value by 0.001 respectively. The results are favoring the study of C. Anup and P.C. Suman (2010) and Sayeed M.A. (2011) while disfavoring the work of Shah and Hijazi (2004) and Sheikh and Wang (2010).

FATO is the pledge against the default risk of borrower to its creditors. The trade off theory forecast the positive relation between FATO and firm value. FATO t value is 1.17 exposing disfavoring of trade off theory and also studies of Shah and Khan (2007), Rajan and Zingales (1995) and Harris and Raviv (1991).

DPO positive and insignificant association with the dependent variable which is not consistent with the signaling theory but conformity with the study of Lin C. et al., (2011) and C. Anup and P.C. Suman (2010) research work.

Throughout the analysis, capital structure has 3 out of 4 and dividend policy has 1 out of 2 proxies significant impact on firm value. Additionally it is also observed that by changing TDTA, Sales Growth, Shareholders Equity and Earning per Share, the value of the firm will increases accordingly to the foretasted variable respective coefficients which supporting the theories of capital structure (trade off theory and pecking order theory) and dividend policy theory (signaling theory). The R^2 value (51.21%) exposing that company financial information mentioned on its respective annual reports or financial highlights are not sufficient to determine its value, but also other factors like management decisions, level of top level supremacy, investor's psychology, market repute, business cycle and so forth.

5. Summary, Conclusion and Recommendations
5.1 Summary
All work of the study was to depict the capital structure design and dividend policy impact on firm value in the context of Pakistan's economy. This paper will help to understand the general practices of capital structure and dividend policy in Pakistan indulging the sensitivity of influence on every sector.

The ultimate objective of the research is to find out the relation between firm value and capital structure design and dividend policy. To achieve the objective, secondary data of all non financial listed firms (496) on KSE from 2006 to 2013 are considered as a population of the study, but only some of the organization financial data fulfilling the foretasted assumptions which slimed the whole population to 111 firms. STATA and Gretl were used for the analysis of the data. The study considers Tobin's Q as a proxy for firm value and Total Debt to Total Assets (TDTA), Fixed Assets Turnover (FATO), Shareholders Equity (EQ) and Sales Growth (SG) for capital structure and Dividend Payout (DPO) and Earning per Share (EPS) for dividend policy.

The study uses descriptive statistics to know the nature of data on hand (like No. of observations, their respective minimum, maximum, average and standard deviation values) of all the variables. Additionally the study employ correlation test to know the fair correlation among different dependent and independent variables. Furthermore under OLS regression, cross sectional time series fixed effect (within) model is selected for data analysis by using different diagnostics tests like Chow Test for structural break Fixed Effect, Breusch and Pagan Lagrangian Multiplier Test for Random effect and Hausman Test for Fixed and Random Effects. The effect of autocorrelation problem was ensured from Breusch-Pagan/Cook-Weisberg test for heteroskedasticity test and p value significance postulates that selected fixed effect test is free from heteroskedasticity hitch.

The results of the study support the perception of trade off theory, pecking order theory and signaling theory. The trade off and pecking order theory postulations are approved by the firm's TDTA ratio's that is very high significant impact on firm value in Pakistan (know from its coefficient value 1.455), which posits that by increasing the debt ratio, company's should boost up their values accordingly. TDTA, Sales Growth, Log Equity & EPS have positive and significant relation with Tobin's Q (supporting the trade off and pecking order theory assumptions), while FATO and DPO have positive insignificant relation with Tobin's Q. The study concluded that under Pakistani setting, firm's capital structure has significant impact on firm's value (consistent with prior researches like Friend and Lang (1988), Sheikh and Wang (2010), Smith (1990), Ellili and Farouk (2011) and

Abdullah (2005). Furthermore the firm's performance which is taken in the shape of EPS has also significant impact on firm value (supporting the prior work of Booth et al. (2001), Deesomsak et al. (2004), Ellili and Farouk (2011) and Sayeed M.A. (2011). It means investor's interest area under Pakistani setting is the firm's earning on each share.

The R2 value for the impact of capital structure design and dividend policy on firm value is 0.7546, it was establish to be statistically significant at 0.000 level. All the capital structure independent variables (TDTA, EQ and SG) were found to be the better predicators of firm value excluding FATO. In case of dividend policy, EPS is found better predictor of firm value while DPS is statistically not significant. This study shows that by changing capital structure composition, a firm market value will ebb and flow. All the findings are more or less consistent with prior studies.

5.2 Conclusion

By associating the empirical findings of the study with the theoretical framework, the study concluded some of the following assumptions:

Firms (especially under Pakistani setting) using more debt can create more worth (as its t-value is higher than every other independent variable of the study which is 54.53) but up to a fix limit which congruence with the TDTA coefficient value. It is also suggested that firm need to find the cheap sources of debt unlike fixed interest bearing debts.

It is obvious that sales growth and boosting shareholder's wealth can create firm value but the study exposes that fixed assets turnover has no impact on firm value under Pakistani setting. It means firms fluctuating fixed assets has no role in firm value disturbance.

Earning per share of any firm can create its respective firm value. If more earning per share is displayed in the annual reports, accordingly more firm value can be created.

5.3 Recommendations

The study suggest that firms should use more debt compare to equity in financing their profitable investment opportunities up to the extent that it improve firm's worth. Firms also need to find economical financing sources in place of debts having fixed interest rate which is comparatively higher. Firm value can also be created by recognizing flaws in investment because it shows how the firm takes its financial decisions.

The study also gives suggestions to the corporate manager to identify the influencing factors under capital structure and dividend policy that has significant impact on value of the firm.

The study would be more reliable by adding more variables like non debt tax shield, industry classification, uniqueness, volatility of earnings, CEO traits measured by stochastic frontier model etc as determinants.

KSE, LSE and ISE non financial listed firm can be taken into consideration categorically as dummy variable and find their impact on firm value.

Capital structure and dividend policy are introduced in the basic finance class at undergraduate level. The study will be helpful in giving the idea that shareholder wealth maximization can only be achieved by designing optimum capital structure and dividend policy. It is recommended that Indulgence of such idea in the curriculum will probably be helpful for futuristic business decision makers.

This study will beneficial for academics that are interested in getting more knowledge about this topic and also provide opportunity to other researcher to conduct further studies in the mentioned area. The study will enable the practitioners to better evaluate the designing of capital structure and setting the dividend policy for business growth and firm value.

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Appendix

Table A1: Pooled OLS Regression

Impact of Capital Structure and Dividend Policy on Firm Value

	Coefficient	std. error	t-ratio	p-value	
Const	-0.5322	0.1480	-3.594	0.0003	***
FATO	0.0074	0.0022	3.335	0.0009	***
TDTA	1.0950	0.0300	36.44	0.0000	***
SG	0.0340	0.0130	2.608	0.0093	***
EQ	0.0973	0.0157	6.165	0.0000	***
EPS	0.0010	0.0002	4.116	0.0000	***
DPO	0.0762	0.0362	2.106	0.0355	**
R-squared = 0.6077, F(6, 881) = 227.4757, P-value(F) = 0.0000					

Table A2: Random-effects (GLS) test

Impact of Capital Structure and Dividend Policy on Firm Value

	Coefficient	std. error	t-ratio	p-value	
Const	-1.9235	0.2186	-8.79	0.0000	***
FATO	0.0033	0.0017	1.89	0.0589	*
TDTA	1.3475	0.0275	48.99	0.0000	***
SG	0.0225	0.0096	2.33	0.0197	**
EQ	0.2334	0.0232	10.04	0.0000	***
EPS	0.0015	0.0002	5.53	0.0000	***
DPO	0.0308	0.0339	0.90	0.3634	
Wald chi2(6) = 2457.67, Prob > chi2 = 0.0000, R2 = 0.5881 and rho = 0.4298					