CHAPTER I
INTRODUCTION

1.1 General background

The choice of financing policy and its link with optimal risk exposure is central to the economic performance and value of corporations. Financing policy by firms requires managers to identify ways of funding new investments. Corporate financing decisions involve a wide range of policy issues. At the macro level, they have implications for capital market development, interest rate and security price determination, and regulation. At the micro level, they have implications for capital structure, corporate governance, and company development. In the past, there has been an upsurge in research on company finance, particularly aimed at understanding how companies finance their activities and why they finance their activities in these specific ways.

An important financial decision facing firms is the choice between debt and equity capital (Glen and Pinto, 1994). Capital structure decision is important because of the need to maximize returns to various organizational constituencies, and also because of the impact such a decision has on a firm's ability to deal with its competitive environment. The capital structure of a firm is actually a mix of different securities. Capital structure, which is defined as total debt to total assets at book value, influences both the profitability and riskiness of the firm (Bos and Fetherston, 1993). In general, a firm can choose among different alternative capital structures. It can issue a large amount of debt or very little debt. It can arrange lease financing, use warrants, issue convertible bonds, sign forward contracts or trade bond swaps. It can issue dozens of distinct securities in countless combinations; however, it attempts to find the particular combination that maximizes its overall market value (Abor, 2005).

The capital structure choice has long been an issue of great interest in the corporate finance literature. This interest is due to the fact that the mix of funds (leverage ratio) affects the cost and availability of capital and thus, firms' investment decisions. However, Modigliani and Miller (1958) have shown that in an idealized world without taxes, the value of a firm is independent of the debt-equity mix. In short, capital structure is irrelevant to the value of firm. MM's original insights (1958) and continued developments (1963, 1965) have laid the foundations of modern corporate

finance. The Modigliani and Miller perspective has been supported by other researchers such as Hamada (1969) and Stiglitz (1974). Researchers have judged the Modigliani and Miller article as having the greatest impact on the field of finance of any work published (Cooley and Heck, 1981). Numerous researchers have built careers on the foundation of their (MM) work. DeAngelo and Masulis (1980) have analyzed the effects of taxes on capital structure. Myers (1977) has investigated the optimal levels of debt while Warner (1977) has explored the relationship between bankruptcy costs and capital structure. Jensen and Meckling (1976) have analyzed how managers behave under varying levels of debt and equity. To date, much of the empirical research has been applied to companies listed on advanced stock markets. However, these conclusions are at variance with what one sees in the real world, where capital structure matters and banks will be extremely unwilling to finance a project entirely with debt capital. Additionally, firms may find it difficult to raise external fund, and the costs of alternative forms of external finance may differ. Under market imperfections, firms may attempt to select levels of debt and equity in order to reach an optional capital structure.

The greater the gearing a firm exhibits, the higher the potential for failure if cash flows fall short of those necessary to service the debts. Myers (1984) has pointed out that financial economists have not hesitated to give advice on capital structure, even though how firms actually chose their capital structures remains a puzzle as the theories developed did not seem to explain fully actual financing behavior. This view is supported by Harris and Raviv (1991) who point out that numerous attempts to explain capital structure have proved to be inconclusive. The capital structure decision is even more complicated when it is examined in a poor market context, particularly in developing countries where markets are characterized by controls and institutional constraints.

Since the influential work of MM (1958) on the irrelevance of capital structure in investment decision, a rich theoretical literature has emerged that models firms' capital structure choice under different assumptions. For example, the static trade-off relies on traditional factors such as tax advantage and potential bankruptcy cost of debt (Scott 1976, Modigliani and Miller 1963), while others use the asymmetric information in which debt or equity is used as a signaling mechanism or strategy tool

(Donaldson 1961, Myers and Majluf 1984, Myers 1984, Titman and Wessels 1988, Chung 1993, Wiwattanakatang 1999, Tong and Green 2004 and Chen 2004). Even though financing choices or issues in capital structure have been one of the most extensively researched areas in corporate finance, there is little consensus on how firms choose their capital structure and much remains to be understood about the link between theory and practice of capital structure.

The correlation of capital structure and industry membership receives empirical support in Schwartz and Aronson (1967), Scott and Martin (1975), Hamada (1972), using industry membership as proxy for risk class has found that levered beta values within different industries vary more than unlevered beta values. DeAngelo and Masulis (1980) and Masulis (1983) have used the documentation of this industry effect as argument for the presence of an industry-related optimal capital structure. Their implication is that it is the tax code and tax rate differences across industries that cause the intra-industry similarities in leverage ratios. Lev (1974) has compared operating leverage to industry membership and to systematic risk and has found a positive relationship. Building on Lev's study, Mandelker and Rhee (1984) empirically lend support to the conjecture that firms engage trade-off between operating leverage and financial leverage and argue that due to this trade-off a firm's industry may have some influence on capital structure decisions.

The validity of the modern theory of finance has been tested by researchers. Studies have also investigated the capital structure of firms in various sectors of the economy such as manufacturing firms (Long and Malitz, 1985; Titman and Wessels, 1988), electric-utility companies (Miller and Modigliani, 1966), non-profit hospitals (Wedig *et al*., 1988) and agricultural firms (Jensen and Langemeier, 1996). One of the main conclusions of empirical studies is that industrial classification is an important determinant of capital structure.

Bradely, Jarrell and Kim (1984) have found that the volatility of earnings is a strong inverse determinant of debt and that earnings volatility may be industry related. This may also affect the relationship between the industry membership and capital structure decisions. Further, following Jenson and Mecking (1976) about the free cash

flow argument, it seems that individual industries may be characterized by their growth rates which may influence debt levels in their capital structure.

Miller (1977) has introduced the effect of personal level taxes into the analysis. He argues that individual investors will demand a higher pretax return on debt to compensate for the higher personal tax on interest income. In equilibrium, the investor level tax disadvantage of debt may completely offset the corporate tax benefit, making capital structure irrelevant. However, Miller (1977) assumes that the firm will realize the full value of the debt tax shield. DeAngelo and Masulis (1980) show that in the presence of non-debt tax shields, the firm may not realize the full benefit of the interest expense deduction. In equilibrium, each firm will equate the expected tax benefit of an additional dollar of debt with the expected tax cost to investors. This implies an optimal capital structure for the firm. Numerous studies, including MacKie-Mason (1990), Dhaliwal *et al.* (1992), and Graham (1999), examine the effect of corporate and personal level taxes on firms' financial leverage and incremental financing decision. In general, their findings suggest that firms' capital structure choices correlate with corporate and investor level taxes in a predicted manner. These studies presume that economic considerations drive managers' capital structure decisions, but do not provide evidence that the tax implications of debt financing are reflected in firm value or the cost of capital.

Fama and French (1998) have also investigated whether the tax benefit of leverage increases firm value, but they have found the opposite effect and conclude that non-tax explanations dominate. They also argue that good estimates of how the tax treatment of dividends and debt affect the cost of capital and firm value are a high priority for research. Thus, in addition to determinants of capital structure, the financial planners may face the problem of knowing the impact of leverage on firm's profitability, cost of capital and eventually market value of firm. Thus, this study is mainly focused on these issues.

A better understanding of the issue at hand requires a look at the concept of capital structure and its effect on the firm profitability (Abor, 2005). According to the pecking order hypothesis, firms that are profitable and therefore generate high earnings are expected to use less debt capital than those do not generate high earnings.

Several researchers have tested the effects of profitability on firm leverage. Friend and Lang (1988) and Kester (1986) have found a significantly negative relation between profitability and debt/asset ratios. Rajan and Zingles (1995) and Wald (1999) also confirm a significantly negatively correlation between profitability and leverage. Besides, the high leverage degree generates agency problems among shareholders and creditors that predict negative relationships between leverage and profitability. Graham (2000) concludes that big and profitable companies present a low debt rate. Mesquita and Lara (2003) have found that the relationship between rates of return and debt indicates a negative relationship for long-term financing. However, they have found a positive relationship for short-term financing and equity.

Hadlock and James (2002) conclude that companies prefer loan (debt) financing because they anticipate a higher return. Taub (1975) has also found significant positive coefficients for four measures of profitability in a regression of these measures against debt ratio. Roden and Lewellen (1995) have found a positive association between profitability and total debt as a percentage of the total buyout-financing package in their study on leverage buyouts. Champion (1999) has suggested that the use of leverage was one way to improve the performance of an organization.

Although the effect of capital structure on profitability has been one of the extensively researched areas in corporate finance, there is little consensus about the effect of capital structure on firm's profitability. Studies, however, on the impact of capital structure on firm profitability have been few and have in most of the cases been carried out in developed economies on large and listed firms. It is this vacuum that among others is major issue in the present study which also investigates the effect of capital structure on profitability of listed non-financial firms on the NEPSE in Nepal. Thus, the effect of capital structure on the profitability of listed firms in Nepal has become a scientific area that has not yet been explored in Nepalese finance literature.

The effect of leverage on a firm’s cost of equity has been first examined by Modigliani and Miller (1958). They demonstrate that in the absence of taxes and transactions costs, firm value and the weighted average cost of capital are independent of capital structure. Holding the average cost of capital constant, they show that the cost of equity contains a financial risk premium that is positively related to the firm’s

debt-to-equity ratio. With corporate taxes, Modigliani and Miller (1963) establish that the value of the tax shield provided by the interest expense deduction increases firm value and show that this tax shield reduces the leverage-related premium in the cost of equity capital. This study is concerned with the validity of the proposition that the average cost of capital to a firm is independent of its capital structure.

Starting from the late 1940s, experts in finance have recognized that intelligent manipulation of debt and equity could enhance corporate value via producing an optimal (or near optimal) mix of capital (Tashfeen and Liton, 2010). However, the relationship between capital structure and firm value has been the subject of considerable debate. Throughout the literature, debate has centered on whether there is an optimal capital structure for an individual firm or whether the proportion of debt usage is irrelevant to the individual firm's value (Abor, 2005). On a similar issue, Modigliani and Miller (1958) report that in an idealized world without taxes, the value of a firm is independent of the debt-equity mix and concluded that capital structure is irrelevant to the value of firm. Hamada (1969) and Stiglitz (1974) also support MM's (1958) irrelevance theory. Theory in corporate finance points out that high leverage or low equity/asset ratio reduces agency cost of outside equity and thus increases firm value by compelling managers to act more in the interest of shareholders (Berger and Bonaccorsi di Patti, 2006). Therefore capital structure is deemed to have an impact on a firm value against the position held by Modogliani and Miller in their seminal work of 1958. According to Weston and Brigham (1992), the optimal capital structure is the one that maximizes the market value of the firm's outstanding shares. Fama and French (1998), analyzing the relationship among taxes, financing decisions and the firm's value, concluded that the debt does not concede tax benefits.

There is a growing literature linking managerial beliefs to financing choices. Jenter (2004) shows that CEOs are net sellers of stock when book-to-market ratios are low, suggesting a belief that their firms are overvalued. This evidence, combined with Baker and Wurgler (2002), connects CEO beliefs to financing choices and emphasizes the arbitrage role of rational managers in inefficient equity markets. Heaton (2002) models the financing choices of optimistic CEOs. Empirically, Bertrand and Schoar (2003) and Frank and Goyal (2007b) show that managerial traits matter for financial policy. Ben-David, Graham, and Harvey (2007) relate the mis-calibration of CFOs

revealed in such surveys to a wide range of corporate decisions, including corporate financing. Focusing on corporate financing, the wide range of practitioners' view about decision-making including preference for internal or external financing - which drives the effect of financing on firm value - is not directly tested in Nepalese setting. Thus, this study has analyzed the managers' views about the financing patterns and future performance (profitability) of company as perceived their firms. This study also analyzed the opinions of practitioners about access of the financial market and availability of external financing to be unduly costly or not. Eventually, financial executives' view on impact of capital structure on firm value has been examined.

Finally, the focus of this study is to explore how firms choose their capital structure and point out how the firm maximizes the value by the appropriate mix of various sources of finance including retained earnings, common shares, preference shares and debt. Debt financing may involve issuing of bonds, long term notes payable, leasing and loans from banks. Excessive debt financing makes the firm risky due to bankruptcy cost but it helps to avail tax shield. Different views have been put forward regarding the financing choice (debt-equity mix) in the developed capital market context; there applicability has not been tested in Nepalese reality. Even if there are few studies in the Nepalese contexts but as environment changes, methodology differs and new data are involved in the analysis because of which the results may differ. Thus, to redress and uncover the new evidence on this neglect of liability management, this study seeks to provide insight into financing policies as a whole and specifically the determinants of capital structure and its impact on profitability, cost of capital, and firm value of Nepalese listed enterprises.

1.2 Statement of the problem

The effective management of liabilities is every bit as vital to the financial well-being of the firm as is the management of assets. A misguided financing decision can drag a firm toward bankruptcy as certainty as a misguided investment decision (Scott and Johnson 1982). Financing or capital structure decision is one of the most important strategic decisions facing financial managers. Modigliani and Miller's (1958) classic paper provided the motivation for the huge literature concerning the behavior of corporations' capital structure. The main proposition of their work (Modigliani and Miller, 1958) is that, under a number of assumptions, the value of a company is

independent of its financial structure. Their work has led to the formulation of alternative theories such as the trade-off theory, the pecking order theory and the agency theory (Harris and Raviv, 1991). These theories point out a number of firm specific factors that may affect the capital structure choice of firms.

Moreover, theories in capital structure have been examined by many empirical studies. For example, the determinants of the capital structure choice of US companies has been examined by Taub (1975), Bradley, Jarrel and Kim (1984), Titman and Wessels (1988), Harris and Raviv (1991), Rajan and Zingales (1995), Demirguc-Kunt and Maksimovic (1996), Michaelas *et al.* (1999), Bevan and Danbolt (2000) and Booth *et al.* (2001). Similarly, firms operating in some European countries have been examined by Lasfer (1999), Mira (2001), and Antoniou, Guney and Paudel (2002). Most of financial theories have been developed to explain capital structure, with empirical evidence based upon large firms operating at developed capital market tending to support these theories. The applicability of these financial theories or their relative effects can be questioned when considering the influence of various institutional settings and scale effects upon the cost or even availability of financing alternatives. However, the question as to the whether these arguments are valid for a firm operating in under-developed market, particularly Nepalese firms, has received almost negligible attention.

Financing decisions have gained much attention in finance literature over the years since the seminal works of Modigliani and Miller (1958, 1963), already referred to as MM capital structure irrelevance propositions. Financing decisions vary from country to country, partly explained by institutional and legal environment as well as macroeconomic factors. Most of the studies on the capital structure have been conducted in the context of developed and industrialized nations (Kester, 1986; Harris & Raviv, 1991; Kostyuk, 2011; Sinha, 2011). Few of these studies, however, have also examined international comparison of capital structure determinants (Wald, 1999; Rajan & Zingales, 1995) as well as those in the context of developing countries (Demirguc-Kunt, 1992; Singh & Hamid, 1992; Booth *et al.*, 2001). Empirical works have identified firm characteristics, macroeconomic variables and country institutional factors as determinants of capital structure of firms (Booth *et al*., 2001).

Based on the review of the majority of past empirical results, it can be said that the major determinants of financing or capital structure decisions are firm specific.

The empirical work has so far more or less focused on the determinants of the optimal capital structure. Firms, in the underdeveloped market, are faced with financial distress; volatility in their interest rates, inflation, and tax rates play a significant role in taking decisions about the optimal capital structure decisions (Karadeniz *et al*., 2009). Previous studies on the determinants of capital structures have attempted to define the optimal capital structure for firms from various perspectives such as bankruptcy costs (Berger, Herring and Szego, 1995), agency theory (Jensen and Meckling, 1976; Smith and Warner, 1979) and asymmetric information (Myers and Majluf, 1984). Because of the factors affecting capital structures, no one has truly affirmed an optimal capital structure in practice. A broad range of issues have also been discussed in empirical studies that focus on the determinants of capital structures such as company cartelistic, company strategy, or managing decision. A review of previous studies reveals that the emanating factors from company characteristics but affecting capital structure are: firm size (Myers and Majluf, 1984), profitability (Myers and Majluf, 1984), non-debt tax shields (Modigliani and Miller, 1958; DeAngelo and Masulis, 1984), collateral value of assets (Myers, 1977), operating risks (Myers, 1977), dividend policy (Smith and Warner, 1979), and inflation (Homaifar *et al*., 1994). Among these factors, firm size, collateral value of assets, and inflation are positively correlated to capital structure whereas profitability and non-debt tax shields are negatively correlated but operating risk and dividend policy may have either positive or negative correlation. Therefore, what factors really affect capital structure still remains an unsolved issue in general as well as particularly neglected and untouched issue in Nepalese settings.

Although capital structure literature is replete with studies in the developed and selected developing countries, there is a dearth of similar studies on how the financing decisions of listed firms are made in Nepal. Firms in underdeveloped countries, especially in Nepal, are limited with regard to available financing which is mainly from the commercial banks. Few studies that have sought to explore this issue in selected developed and developing countries show inconclusive results (Demirguc-Kunt & Maksimovic, 1996; Agarwal & Mohtadi, 2004; Abor & Biekpe, 2006). Thus,

the goal for undertaking this study is to uncover the financing patterns, determinants of capital structure and its effect on profitability, cost of capital and firm value in Nepalese context.

The concept of optimal capital structure, based on the notion of asymmetric information, has also been expressed by Myers (1984) and Myers and Majluf (1984). The existence of information asymmetries between the firm and likely finance providers causes the relative costs of finance to vary between the different sources of finance. For instance, an internal source of finance where the funds provider is the firm will have more information about the firm than new equity holders; thus, these new equity holders will expect a higher rate of return on their investments. This means that it will cost the firm more to issue fresh equity shares than using internal funds. Similarly, this argument can be extended with regard to internal finance and new debt holders. The conclusion drawn from the asymmetric information theories is that there is a hierarchy of firm preferences with respect to the financing of their investments and the cost of capital depends on the sources financing.

One of the related issues of corporate financing policies is how the capital structure dynamics affect firm's profitability. According to any capital structure theories, a change in leverage ratio will either move the capital structure closure to or further away from the optimal capital structure that these models predict, which will then be reflected in the equity market. Therefore, profitability is expected to co-vary with the changes of leverage. Examining the relationship between leverage change and firm's profitability provides an alternate venue to test different capital structure theories. A change in capital structure may produce change a firm’s risk profile. For example, despite other things being equal, an increase in a firm’s leverage may increase the default risk, and, as residual claimers, equity holders may demand higher risk premium for holding the stock.

Fama and French (1998), analyzing the relationship among taxes, financing decisions, and the firm’s value, conclude that the debt does not allow for tax benefits. Besides, the high leverage degree generates agency problems among shareholders and creditors that predict negative relationships between leverage and profitability. Therefore, negative information relating debt and profitability obscures the tax benefit of the

debt. Booth *et al.* (2001) have come up with a study which attempts to relate the capital structure of several companies in countries with extremely different financial markets. They conclude that the variables that affect the choice of the capital structure of the companies are similar, in spite of the great differences presented by the financial markets. Besides, they assert that profitability has an inverse relationship with debt level and size of the firm. Graham (2000) concludes that big and profitable companies present a low debt rate.

Mesquite and Lara (2003) have found that the relationship between rates of return and debt indicates a negative relationship for long-term financing. However, they have found a positive relationship for short-term financing and equity. Hadlock and James (2002) concluded that companies prefer loan (debt) financing because they anticipate a higher return. Taub (1975) has also found significant positive coefficients for four measures of profitability in a regression of these measures against debt ratio.

The relationship of the capital structure decisions with the firm's profitability (performance) has been highlighted by a number of theories, mainly, the agency theory, information asymmetry theory, signaling theory and the trade off theory. The most important among them is the agency problem. According to Jensen and Meckling (1976), the influence of leverage on total agency cost is expected to be non-monotonic. Therefore, at low levels of leverage, increases will produce positive incentives for managers and reduce total agency costs by reducing agency costs of outside equity. However, Berger and Bonaccorsi di Patti (2006) show that at some point where bankruptcy and distress become more likely, the agency costs of outside debt overwhelm the agency cost of outside equity, and therefore further increases in leverage lead to higher total agency cost. In all this debate, one important conclusion that has emerged is the fact that, capital structure of a firm has implications for its operations, and, impacts on its profitability.

The pecking order hypothesis suggests that firms are willing to sell equity when the market overvalues it (Myers, 1984; Chittenden *et al*., 1996). Therefore, investors interpret the issuance of equity by a firm as signal of overpricing. If external financing is unavoidable, the firm will opt for secured debt as opposed to risky debt and firms will only issue common stocks as a last resort. Myers and Majluf (1984) maintain that

firms prefer internal sources to costly external finance. Thus, according to the pecking order hypothesis, firms that are profitable and, therefore, generate high earnings are expected to use less debt capital than those that do not generate high earnings.

There is at best mixed empirical evidence in the existing literature (Harris and Raviv 1991, and Myers 2001). Prior studies have emphasized that the measures of firm profitability are usually ratios fashioned from financial statements or stock market prices such as industry-adjusted operating margins or stock market returns. Studies however, on the impact of capital structure on firm profitability have been few and have in most of the cases been carried out in developed economies on large and listed firms. Abor (2005) looks at the effect of capital structure on profitability. Booth *et al*. (2001) have developed a study attempting to relate the capital structure of several companies in countries with extremely different financial markets. They conclude that the variables that affect the choice of the capital structure of the companies are similar, in spite of the great differences presented by the financial markets. Besides, they assert that profitability has an inverse relationship with debt level and size of the firm. Graham (2000) concludes that big and profitable companies present a low debt rate. Mesquita and Lara (2003) have found that the relationship between rates of return and debt indicates a negative relationship for long-term financing. However, they have found a positive relationship for short-term financing and equity. Hadlock and James (2002) conclude that companies prefer loan (debt) financing because they anticipate a higher return. Taub (1975) has also found significant positive coefficients for four measures of profitability in a regression of these measures against debt ratio. Roden and Lewellen (1995) have found a significant positive association between profitability and total debt as a percentage of the total buyout-financing package in their study on leveraged buyouts. Champion (1999) has suggested that the use of leverage is one way to improve the performance of an organization.

A review of past major empirical works reveals that capital structure may have some effect on firm's profitability but that the effect may be either positive or negative. These evidences are mainly from developed economies but the effect of capital structure on profitability is still to be tested in underdeveloped capital market context, especially in Nepalese setting. Thus, a better understanding of the issues at hand

requires a look at the concept of capital structure and its effect on firm profitability in Nepalese context.

Cost of capital has been a popular issue in corporate finance, yet little is known about the cost of capital on a broader menu of emerging markets (Barry *et.al.,* 1998). The cost of capital concept occupies a pivotal place in the theory of financial management as a criterion of allocation capital. A related issue of the financing policies is the determinants of cost of capital which has been an important focus in finance. The overall cost of capital may, of course, be affected by the capital structure of the firm. In spite of the voluminous literature on the cost of capital, the question of the effect of capital structure on the cost of capital still remains unresolved (Pandey 1991).

Although the cost of capital has been a popular issue in corporate finance for a long time, only insufficient attention has been paid to the factors that drive the cost of capital in the Nepalese context. Most of Nepalese companies have debt capital relatively very higher than equity capital. Further, most of the companies are operating at losses to the extent that payment of interest on loan has been serious issues. Without the proper combination of capital structure components in financing of the firm, it would be impossible to minimize the cost of capital. Specifically, this study also concentrates on the examination of relationship between the firm's overall cost of capital and its capital structure decisions.

The relationship between capital structure and firm value has been the subject of considerable debate. Throughout the literature, debate has centered on whether there is an optimal capital structure for an individual firm or whether the proportion of debt usage is irrelevant to the individual firm’s value. Leverage is a powerful tool for a company's management to potentially maximize firm value. Leland and Toft (1991) state that the value of a firm is the value of its assets plus the value of tax benefits enjoyed as a result of debt minus the value of bankruptcy cost associated with the debt. Modigliani (1980) points out that the value of a firm is the sum of its debt and equity and this depends only on the income stream generated by its assets. Pandey (2004) opines that the value of a firm is the sum of the values of all its securities that is, the sum of its equity and debt if it's a leverage firm and the value of only its equity if it is an unleveraged firm. The use of leverage in the capital structure also presents

some challenges for the business appraiser who may be attempting to determine the value of the company and if wealth has been created or destroyed as a result of management's decisions. Highly leveraged firms may have an artificially depressed weighted average cost of capital that boosts the value of the company but which may not adequately reflect the risk profile of the firm's leverage.

The relationship between capital structure and firm's value can best be explained by a brief review of the different theories on capital structure. Traditionalist theories believe that capital structure is relevant in determining a firm's value. But the irrelevance theory of Modigliani and Milller (1958) posit that there is no relationship between capital structure and firm's value. However, their position changes when they consider the effect of tax shield and other imperfection in the capital market. They revise their earlier statement and opine that capital structure is very much related to firm's value. That notwithstanding, Miller (1977) has come up with another argument that capital structure is unrelated to firm's value because the tax benefit which is adduced for the relevance of capital structure in relation to firm's value is offset by the fact that shareholders pay more tax than bondholders.

As long as the choice of capital structure matters for firm value, the innovation in capital structure should also be reflected in the equity market, as equity holders gets the residual claim of the firm. Finance theories suggest that a change in the capital structure indicates a change or review of the firm value which should, therefore, have an impact on stock prices. The presence of bankruptcy costs and favorable tax treatment of interest payments lead to the notion of an “optimal” capital structure which maximizes the value of the firm, or respectively, minimizes its total cost of capital.

Throughout the literature, debates have focused on whether there is an optimal capital structure for an individual firm or whether the proportion or level of debt usage is irrelevant or relevant to the firm's value (Hatfield, Chen and Davidson, 1994). Pandey (2004) opines that the capital structure decision of a firm should be examined from the point of its impact on the value of the firm. He further states that if capital structure decision can affect a firm's value, then firms will like to have a capital

structure which maximizes their value. The aim of a firm should centre, therefore, on the maximization of its value through capital structure decisions.

However, there exists conflicting theories on the relationship between capital structure and firm's value that it becomes necessary to capture them into some broad groups. In addition, McConnell and Servas (1995) posit that the seeds of under investment problem lie in the solution of over investment problem. They investigate the relationship between corporate values, leverage and equity ownership of U.S. firms. They discover that for firms with high P/E ratios or for high-growth firms' value are negatively related to leverage and that in firms with low P/E ratio or low-growth firms, value is positively related to leverage. Their evidence supports the contention that for low-growth firms, leverage acts as a monitoring mechanism to enhance firm value whereas for high-growth firms, leverage causes under investment and destroys the value of a firm.

In addition, the pecking order theory of Myers and Majluf (1984) state that there is a correlation between capital structure and firm's value. This is because a firm's value can increase if the right form of capital is used. This theory advocates that firm's value can be affected positively if a capital structure hierarchy is followed. That is, financing with internal fund when available instead of financing with external fund. And when internal fund is completely depleted, debt should be preferred to equity because of the low transaction cost, tax benefits and other advantages attached to it. The trade-off theory also states that there is a relationship between capital structure and firm's value. This is because a firm's value can increase if the proper debt equity mix is used in the firm.

Consistent with agency costs theory, prior literature indicate that the use of debt is value reducing for high growth firms and it is value enhancing for low-growth firms. Jensen (1986) posits that when firms have more internally generated funds than positive net present value projects; debt forces the managers to pay out funds that might otherwise have been invested in negative net present value projects. This over-investment problem can be lessened if managers are forced to pay out excess funds for serving debt, thereby enhancing the firm's value. Myers (1993) suggests that a firm with outstanding debt may have the incentive to reject projects that have positive

net present value if the benefits from accepting the project accrue to the bondholders without also increasing shareholders' wealth. This under-investment problem can harm the value of the firms, especially for the firms with high levels of future investment opportunities. However, Stulz (1988) argues that debt can have both positive and negative effect on firm value. Aggarwal and Kyaw (2006) also posit that debt can have both positive and negative effects on the value of the firm so that the optimal debt structure is determined by balancing the agency costs and other costs of debts as a means of alleviating the under and over-investment problems. Specially, when firms have surplus cash flows, debt will force managers to pay out funds that might otherwise have been invested in negative net present value projects. However, firms with outstanding debt may have incentives to reject projects that have positive net present value if the benefit from accepting the project accrues to the bondholders without also increasing shareholders' wealth. Therefore, the common message behind the arguments by Jensen (1986), Myers (1993) and Sultz (1988) is that debt can have positive or negative effect on the value of the firm depending on the firm's future investment opportunities.

In summary, there is no universal theory of the debt-equity choice. The study of financing policies seeks to address two-fold problem: the first is to provide an insight into the capital structure and financing policies; secondly to examine how capital structure impacts on profitability, cost of capital and firm's value. Although substantive researches have been conducted related to this subject in the past but most of them are in the developed economies and limited literature are available from the developing countries. So, none can generalize the results of the developed economies in relation to the developing economies without any research. Eldomiaty (2007) asserts that capital market in these emerging market countries is incomplete or not efficient compared to the developed market because of the information asymmetry problems. This creates an environment where financing decisions are attached with a significant level of irregularities for the firms. Nevertheless due to the fast changes in the socio-political and economic factors specific to the context of Nepal and the speed with which business are reshaping leading to both structural changes and policy changes demands new and updated information. Therefore, all these factors further strengthen the need for an updated research on the relevant issues in financing policies in Nepalese context. For this reasons, it is essential to evaluate the level of

financial leverage, sources of financing used as well as its determinants and its relationship with profitability, cost of capital and firm value of firms in Nepal--an underdeveloped market economy. It is noteworthy that the findings of the study help the ongoing debate on capital structure issues related to Nepalese non-financial firms, but it may also serve as a foundation for further studies in this sector. In view of the discussion just made, this study is directed at resolving the following issues:

1. What are the factors affecting the capital structure decisions in Nepalese firms?
2. Does leverage affect the firm's profitability?
3. Does leverage affect the cost of capital of the firm?
4. Does leverage affect the firm value?
5. How are the financing policies perceived by the Nepalese corporate executives?

Though there are considerable researches on these issues in developed economies, virtually no work has been done in the Nepalese context apart from a limited amount of empirical research. Thus, there is a conspicuous gap in the empirical research on financing policies and related prescribed issues in Nepal and this gap requires urgent attention, given that this study is likely to explore fresh and new evidences on the issues raised in the study.

1.3 Objectives of the study

The basic objective of this study is to analyze and examine corporate financing policy of Nepalese firms. The specific objectives are as follows:

1. To investigate the factors affecting capital structure decisions in Nepalese firms,
2. To assess the impact of capital structure on the firm's profitability,
3. To analyze the effect of leverage on the cost of capital,
4. To evaluate the effect of leverage on the firm value, and
5. To analyze the views of corporate executives on financing policies.

1.4 Statement of hypotheses

This study postulates the following testable hypotheses about financing policies in Nepalese listed non-financial companies:

H_1: There is a difference in the factors affecting decisions about the capital structure across manufacturing and non-manufacturing firms.

H_2: Capital structure is likely to affect on the firm's profitability.

H_3: Capital structure is likely to affect the cost of capital of the firm.
H_4: Capital structure is likely to affect on the firm value.

Till date, no significant empirical work has been done on the issues of financing policies in Nepal. Thus, this study has attempted to empirically test whether there are certain variables that affect capital structure and whether capital structure affects firm value in Nepalese companies.

1.5 Research methodology

1. Research design

Research is a fact-finding operation searching for adequate information. The research design adopted in this study consists of descriptive, correlational and casual comparative designs. It is a type of study which is generally conducted to assess the opinions, behaviours, or characteristics of a given population and to describe the situation and events occurring at present. It also includes the systematic collection and presentation of data to give a clear picture of a particular situation and obtain a complete and accurate description of situation. The descriptive research design has been adopted to undertake fact-finding operation searching for the opinions and views related to financing practices of different persons into different organizations for this study. This study has also used correlational research design to establish the directions, magnitudes and forms of the observed relationship between variables**.** Moreover, this study has also adopted casual comparative research design to assess the effect of financing policies on the firm value. This design has also been used to understand the fact that whether it is possible to predict the determinants capital structure and measure the impact of capital structure on profitability, cost of capital and firm value on the basis of different predictor (independent variables).

2. Nature and sources of data

Both secondary and primary data have been used in this study. The reason is simple - one cannot possibly collect all the data required for research oneself. Secondary data sources have been used in all major issues of this study. Primary data, in addition to secondary data, were collected with the intention of obtaining behavioral aspect of corporate financing policy and related issues considered relevant to this study that

were not possible to collect from secondary sources. Thus, data collected from primary sources is considered to complement the evidence from secondary sources.

The qualitative aspects of information relating to capital structure and other issues of corporate financial policies have been collected through primary source and the quantitative aspects of information have been collected from secondary sources. Required data from secondary sources were collected through financial statements of the selected enterprises. These data were collected from the office of the respective companies, Nepal Stock Exchange, and Security Board of Nepal.

The pre-tested questionnaires were used to collect primary data. The detailed of the pre-test questionnaire has been explained in the methodology section of the respective chapter. The survey questionnaires were delivered to the chief executive, general manager, financial managers or treasurers and chief accountant of business firms in different industries.

3. Population and sample size

The listed non-financial enterprises constitute the population of the study. Mainly 18 non- financial enterprises have been selected as sample for the study. However, Specific sample size has been mentioned in the methodology section of respective issue. Much like in other capital structure research, banks and financial companies have been excluded in the sample. These companies are generally guided by directives of central bank in designing their capital structure. The hydro sector and service sector companies are also excluded from the sample due not available of enough data required for analysis. Thus, listed non-financial enterprises should constitute the population of the study. The stratified random sampling technique has been adopted in selecting the enterprises as sample. In this study, the population has been classified into sub-populations (strata) based on industry types: manufacturing and non-manufacturing (hotel and trading). Then randomly chosen a sample from sub-populations provides data to represent subgroups. In this way, 12 enterprises have been selected from manufacturing (strata) sector and the remaining 6 enterprises have been chosen from non-manufacturing (strata) sector. The population and number of enterprises selected for the study have been depicted in Table 1.1.

Table 1.1
Number of enterprises selected for the study

Category (strata)	N	n	n/N (%)
Manufacturing	18	12	66.67
Non-manufacturing(Hotel & trading)	8	6	75.00
Total	26	18	69.23

In Table 1.1, N indicates the total number of listed manufacturing and non-manufacturing enterprises and n indicates the number of enterprises selected for the study. The enterprises sampled for the study represent 69.23% of the population.

However, the determination of an adequate sample size for secondary data analysis depends on the nature and techniques of analysis. An adequate sample size for the correlational study can be calculated based on variables. Although the minimum ratio is 5 to 1, the desired level is between 15 to 20 observations for each independent variable (Hair, Anderson, Tatham & Black 1998, p. 166). Another popular rule of thumb is that a sample must include at least 15 events per predictor variable (Stevens, 2002, p. 143).

Since multiple regression method has been used for this study, the sample size should be as large as possible based on independent variables used in the models. Using the approach suggested by Hair, Anderson, Tatham & Black (1998, p. 166) and Stevens, (2002, p. 143), the minimum sample size for the models used in "Capital Structure and Its Determinants in Nepalese Enterprises", "Effects of Leverage on Profitability in Nepalese Enterprises", and "Effects of Leverage on Firm Value in Nepalese Enterprises", is: $15 \times 7 = 105$, because there are 7 regressors used in each regression models. In the light of minimum requirements, this study has chosen the biggest sample size, as there are 251 observation for "Capital Structure and Its Determinants in Nepalese Enterprises", and "Effects of Leverage on Profitability in Nepalese Enterprises" models. However, there are 155 observations used for "Effects of Leverage on Firm Value in Nepalese Enterprises" models. In these regression analyses, adequate samples have been used compared to minimum sample size requirement as suggested by literature.

There are 5 regressors used in each regression models for measuring "Effects of Leverage on Cost of Capital in Nepalese Enterprises". In line of the approach suggested by Hair, Anderson, Tatham & Black (1998, p. 166) and Stevens (2002, p. 143), the minimum sample size is: 15×5=75 since there are 5 regressors used in each regression models. The 86 observations chosen for the analysis looks appropriate as it were more than required. Thus, as a whole, the sample chosen for secondary data analysis seems adequate for statistical power of the significance testing and the generalizability of the results.

The period covered for the study is 1998 to 2012. This study has chosen 251 observations for analyzing "Capital Structure and Its Determinants in Nepalese Enterprises", and "Effects of Leverage on Profitability in Nepalese Enterprises". However, the observations for measuring "Effects of Leverage on Cost of Capital in Nepalese Enterprises" and "Effects of Leverage on Firm Value in Nepalese Enterprises" have been reduced to 86 observations and 155 observations respectively.

Table 1.2
Enterprises selected, period covered and observations for the study

Ser. No	Name of the Company	Nature of Industry	Period Covered [Year in A.D.]	Observations
1	Bottlers Nepal Limited (Balaju)	Manufacturing	1998-2012	15
2	Nepal Lube Oil Limited	Manufacturing	1998-2011	14
3	Bottles Nepal (Tarai) Limited	Manufacturing	1998-2012	15
4	Unilever Limited	Manufacturing	1998-2012	15
5	Gorakhkali Rubber Udyog Ltd.	Manufacturing	2000-2011	12
6	Himalayan Distillery Limited	Manufacturing	2002-2012	11
7	Bishal Bazaar Co Ltd.	Trading	1998-2011	14
8	Khadya Udyog Ltd.	Manufacturing	1998-2011	14
9	Nepal Bitumen & Barrel Udyog Ltd.	Manufacturing	1998-2011	14
10	Nepal Banaspati Ghieu Udyog Ltd.	Manufacturing	1998-2011	14
11	Salt Trading Corporation	Trading	1998-2011	14
12	Fleur Himalayan Ltd.	Manufacturing	1998-2011	14
13	Shree Ram Sugar Mills	Manufacturing	1998-2011	14
14	Shree Raghupati Jute Mills Ltd.	Manufacturing	1998-2011	14
15	Soaltee Hotel Ltd.	Hotel	1998-2012	15
16	Yak and Yeti Hotel Ltd.	Hotel	1998-2011	14
17	Oriental Hotels Ltd.	Hotel	1999-2012	14
18	Taragaun Regency Hotel Ltd.	Hotel	1998-2011	14
	Total			251

The reasons of reducing observations and other details have been mentioned in the methodology section of the respective chapter. The details of enterprises selected for

study have been shown in Table 1.2. The 18 non-financial companies selected as sample have provided 251 observations for secondary data analysis.

In the case of primary data analysis, the stratified random sampling technique has also been adopted in selecting the sample. The details of the population, actual respondents and sample size adequacy test have been mentioned in the methodology aspect of respective chapter.

4. Method of analysis

A. Secondary data analysis

The nature of the study is descriptive-cum-analytical. The pooled data were analyzed. Selected financial ratios have been calculated. Data from balance sheet, profit and loss account, cash flow statement have been utilized. Several alternative measures of gearing, their pooled and cross-sectional regression analysis, correlation analysis have been made. Further descriptive statistics like: mean, median, standard deviation were calculated. The tables, diagrams, graphs have been used for analyzing the data.

The Model

In this section, ordinary least square regression analysis has been used to investigate the relationship between dependent and independent variables. The model related to the determinants of capital structure is the model that represents as a first step towards the analysis of a corporate financing policy. In this section of the study three measures of leverage like total debt, long-term debt and short-term debt have been used as dependent variables. The explanatory variables selected are measures of company size, liquidity, tangibility, tax, non-debt tax shields, uniqueness, and business risk.

To examine the determinants of capital structure, the following model has been proposed:

$LEV_{it} = \boldsymbol{\alpha} + \sum \beta X_{it} + e_{it}$

Where:

Leverage = f (size, liquidity, tangibility, tax, non-debt tax shield, uniqueness and business risk)

Similarly ordinary least square regression model has been used to estimate empirical evidence related to effect of leverage on profitability. Using the approach adopted by Mathur *et al.* (2001), Abor (2005), Onaolapo and Kajola (2010), Carvalho, Serrasqueiro and Nunes (2013) and as is mostly found in the other literature, the effect of corporate leverage on firm's profitability has been examined by:

$PROF_{it} = \alpha + \sum \beta X_{it} + e_{it}$

Where:

Profitability = f (leverage, assets turnover, size, age, tangibility, growth, and liquidity)

Further, the model for testing the impact of capital structure on cost of capital, the regression model has been developed. Using the approach adopted from Singh and Nejadmalayeri (2004), Omran and Pointon (2004) and Khadka (2006), impact of leverage on firm's cost of capital has been estimated. The OLS model used in the study is as follows:

$COC_{it} = \alpha + \sum \beta X_{it} + e_{it}$

Where:

Cost of capital = f (leverage, beta, assets turnover, liquidity, and age)

Finally, in order to examine the effect of leverage on firm value, using the approach adopted by Wippern (1966), Sarma and Rao (1969) and Adelegan (2007) and Chowdhury and Chowdhury (2010), following regression model has been proposed.

$LnTobin\text{-}q_{it} = \alpha + \sum \beta X_{it} + e_{it}$

Where:

Firm value = f (leverage, profitability, turnover, size, liquidity, asset growth, and business risk)

B. Primary data analysis

The primary data analysis is based on questionnaire survey. The first part of the questionnaire contains the respondents' profile. The second part of the questionnaire encompasses kinds of financing policy practiced by sample companies, factors governing firm's financing decisions, factors affecting firm's choice between short- and long-term debts, factors influencing capital structure, factors influencing firm's profitability, association between capital structure and profitability, methods in

estimating cost of capital, association between leverage and cost of capital, linkage between capital structure and firm value and finally, the focus of capital structure choice by Nepalese sample companies.

The questionnaires contain such questions as patterned simple ranking, Likert scale, multiple choice options, open-ended options and close-ended basis. Under Likert scale and the respondents have been were requested to rate how important the variables are in determining financing policies. The primary data collected from 251 respondents have been tabulated and analyzed, and significant tests have been performed using Chi-square and t-test where relevant. Interviews have also conducted with selected respondents to assess their opinion and views about financing policies and practice.

1.6 Significance of the study

Most of enterprises of non-financial sector in Nepal are either over leveraged or unable to raise needed capital to finance their capital need. These enterprises either report low profit or suffer from heavy losses. The financing cost of the enterprises fluctuates over time. The share price of these enterprises fluctuates over time more and comparatively lower as compared to enterprises of other sectors of the economy. In such a scenario, it is necessary to investigate reliable answer of such discrepancy found in non-financial sector enterprises in Nepal. Existing corporate financing policies have to be uncovered, remodeled and retouched to remove various hurdles faced by Nepalese enterprises. An in-depth study is, thus, essential to identify such obstacles so that they can be removed. This creates a background for smooth and optimal financing that helps to economic development of the enterprises and enhance share price. Thus, this study is considered to be one of the constructive steps as well as a very timely one.

This study offers empirical evidence based on pooled data of non-financial enterprises in Nepal on the issues of determinants of capital structure and its impact on profitability, cost of capital and eventually firm value. In particular, this study makes a significant contribution with practical implications for corporate policy makers, investors, lenders, the wider community and academicians.

This study has provided evidence-based information to develop better plan of how an organization will finance its activities, what amount of money it will need and where it will come from. Finance executives can take better course of action to address the issues, problems or interrelated set of problems for raising capital fund. This study has prescribed appropriate borrowing in relation to equity to improve investors' earnings. This study has prescribed a specific set of preferred financing option an entity should undertake that may provide the framework for all department budgets. Thus, the evidences provided by this study certainly help for a better financing decision making, the formulation of the policies and establish prudent financial goals and priorities for financial planning that could minimize financing costs over the long-term and can maximize firm value of the Nepalese enterprises. It is likely that Nepalese firms will make an effective strategy to design optimal capital structure and improve corporate financing policy. Moreover, financial executives will consider the factors that affect capital structure, profitability, cost of capital, firm value while raising capital fund for their enterprises.

An understanding of the debt and equity position of Nepalese enterprises may help investors make decisions about which stock to buy or sell and how much to spend on a particular stock. This study has provided evidences on preferred circumstances to issue debt and equity and thus investors can make right decisions about buying or selling particular stock.

Similarly, this study provides insight into the average financial risk position of Nepalese enterprises and how Nepalese enterprises manage their corporate debt-equity policy. This information is required to enable creditors and lenders to make better evaluations of the inherent risk of engagement and the related lending/ borrowing decisions. The findings of this study are not only significant to the above-mentioned market participants in Nepal, but also to prospective overseas investors looking for investment opportunities in the non-financial sector in Nepal.

This study has also important implications for academicians because the results of this study are considered to be the valuable teaching material to the teachers of corporate finance as well a basis for researchers and students for conducting further research.

1.7 Limitation of the study

This study has mainly emphasized on the secondary data analysis. However, as primary sources, an opinion of various executives has also been analyzed. The study has focused on the firms from non-financial industries and firms chosen for sample are among the listed firms with Nepal Stock Exchange Limited. Thus, data from Nepal Stock Exchange Ltd., Security Board Nepal, Nepal Rastra Bank, Internal Revenue Department and Annual Report of the sample companies have been utilized for secondary data analysis. Primary data have been used collected through structured questionnaire distributed among corporate executives using mail services as well as personal visit. The study has not considered the issues relating to corporate financing policies of international context. The environmental factors have been excluded in analyzing the issues concerning corporate financial policies. The study period is 1998 to 2012. Since data of the study are of non-experimental type, chance of observation errors may take place. Following are the basic limitations of the study:

1. The study has assumed linear relationship between the dependent and independent variables as used in past literature. Hence, this study has not considered nonlinear relationship between dependent and independent variables.
2. The study is based mainly on annual financial data (although in few cases monthly data has been used) of respective companies. However annual data have their own problems. Mainly, the balance sheet data are as of one particular date and need not represent the whole year. The semi-annually, quarterly, monthly or daily data on required financial variables are not available. Thus, this study is forced to confine to annual data.
3. This study has been completed with several omitted variables and these omitted variables include: different sources of short-term financing used by sample companies, debt maturity structure, lease financing and de-composition analysis of gearing measures. Though these variables are related to the issues of corporate financing policies, the same has not been included in the study due to the lack of reliable data.
4. The period chosen for the study is from 1998 to 2012. The data before 1998 have not been included in the study as very old data may distort recent financing policies and practices. The data of 2012 for some companies could not be included in study as they were not available at the time of collecting data for the purpose of this study in

2013. In general, data for 2012 were supposed to be available in 2013 but some of the selected companies could not complete their audit even.

5. The Maoist insurgency period 1995 - 2005 destabilized the whole economy leading to a decline in income, saving and investment in the economy as a whole. Consequently, during more than one-half of the sample period; sales, earnings and profits declined in the companies selected for this study. Hence, the results of this study may not be comparable to that of the results of the normal period.

6. Financing decisions may vary from country to country, partly explained by institutional and legal environment as well as macroeconomic factors but this study is mainly confined to firm specific factors for analyzing secondary data.

1.8 Organization of the study

This study is organized into seven chapters. Chapter one contains the introductory part of the study. This chapter describes the major issues to be investigated along with the general background, statement of the problem, objectives, statement of hypothesis, research methodology and limitations of the study. Chapter two deals with determinants of capital structure of Nepalese companies. The objective of this chapter is to provide empirical evidence on the determinants of capital structure of Nepalese firms. Capital structure and profitability has been presented in chapter three. The aim of this chapter is to test empirically the effect of capital structure on profitability. Chapter four throws light on the empirical evidence relating to the aspects of capital structure and cost of capital. The main purpose of this chapter is to examine empirically the effect of capital structure on the cost of capital. Chapter five is related to capital structure and firm value and seeks to investigate empirically the effect of capital structure on firm value. Chapter six highlights a survey of financing practices in Nepalese companies. Eventually, chapter seven attempts to present a summary of the key ideas, and makes conclusions and recommendations.