Managerial Entrenchment and Capital Structure Decision: A Case of Nepal

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Abstract

This paper tests the influence of managerial entrenchment and capital structure decisions using Nepalese firms' data and executives view. A majority of earlier studies show that firm leverage is negatively associated with the degree of entrenchment of managers. This study examines whether or not this is consistent in the context of Nepal. The data were taken from top listed companies on NEPSE, pharmaceuticals companies registered in Department of Drug Administration and other non-listed companies. To achieve the objective of the study, a descriptive and causal comparative research design has been administered. The managerial entrenchment index has been calculated using Principal Component Analysis. The major finding of the study shows that the managerial entrenchment increases as the percentage of CEO ownership rises. There exists positive association of managerial entrenchment and CEO percent ownership which suggests that increase in equity holding by CEO or top executives leads to lower shareholder rights or higher managerial entrenchment.

Key Words: Managerial Entrenchment, CEO Ownership, Capital Structure **JEL Classification:** G32, G34

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I. INTRODUCTION

Entrenchment is defined as the extent to which managers fail to experience discipline from the full range of corporate governance and control mechanisms, including monitoring by the board, the threat of dismissal or takeover, and stock- or compensationbased performance incentives. Entrenched managers by definition have discretion over their firms' leverage choices. Managers may prefer less leverage than optimal because of a desire to reduce firm risk to protect their under-diversified human capital (Fama (1980)). The research on managerial ownership and financial performance has attracted much academic interest for a long period of time. Adam Smith raised the question as early as 1776 when he argued that the separation of ownership and control in large publicly listed corporations created poor incentives for professional managers to operate the firms efficiently. However, since the early days of Adam Smith several other kinds of explanations have emerged to explain the relation between managerial ownership and financial performance. For instance, instead of predicting that financial performance increases by increasing managerial ownership, as implied by the Smith argument, it may also be that this relation is negative because of managerial entrenchment. In particular, it has been argued that high levels of managerial ownership entrench managers in the sense that the managers become powerful enough to pursue personal interests, such as growth maximization, at the expense of profit maximization. There are also several arguments that predict a positive relation from financial performance to ownership.

One stream of research suggests that leverage reduces managerial discretion over corporate resources because higher debt financing increases the commitment and pressure to distribute surplus cash as repayment of debt obligations (Jensen 1986). Entrenched managers prefer capital structures with low leverage. Another stream of research suggests that entrenched managers have greater incentives to increase leverage beyond the optimal level to reduce the probability of successful takeovers by increasing the concentration of their shareholdings, which enables them to have greater control of in their firms (Harris and Raviv (1988) and Stulz (1988)). Prior studies on US listed firms provide some evidence that entrenched managers prefer low corporate leverage. Lang and Friend finds that firms with high agency costs of managerial discretion have low leverage levels.

Corporate managers are subject to many pressures to act in the interest of shareholders. These pressures include monitoring by the board of directors and the threat of a takeover (Jensen and Ruback, 1983). These disciplinary forces do not appear to be totally effective. However, managers still consume expensive perquisites (Jensen and Meckling, 1976), diversify at a high cost to shareholders (Merck, Shleifer, and Vishny, 1990), and oppose hostile takeovers that raise shareholder wealth.

The main objective of the study is to analyze the managerial entrenchment and capital structure decisions of the Nepalese firms. The study evaluates the capital structure with managerial entrenchment by examining the influence of leverage.

This study also examined the association between CEO entrenchment and capital structure decisions of Nepalese firms. Specifically, the study focused the level of entrenchment on different level of CEO ownership.

Examination of factors which may affect the association between leverage and CEO entrenchment has been determined. In this study, an attempt has been made to establish an index of entrenchment that shows the level of entrenchment of top level executive in the Nepalese firms.

II. REVIEW OF EMPIRICAL WORKS

Gompers, Ishii, and Metrick (2003) put forward an entrenchment index based on six provisions: staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, and supermajority requirements for mergers and charter amendments that found the index levels are monotonically associated with economically significant reductions in firm valuation as well as large negative abnormal returns during the 1990–2003 periods. Harris and Raviv (1988) articulated that entrenched managers have greater incentives to increase the leverage level where as Morck and Vishny (1988) stated firm value decreases with the inside ownership. Despite of strong theoretical background, Shleifer and Vishny (1989) stated as corporate managers invest in business corresponding to their own experience and background. The study of Berger, Ofek and Yermack (1997) suggested that leverage has negative relationship with the degree of managerial entrenchment which is consistent with the earlier study of Lang and Friend (1988).

In the face of strong corporate governance study Gompers, Ishii and Metric (2003), Cremers and Nair (2005) and Muhammad and Rafiq (2012) supported that corporate governance variable are the main incentives to encourage and control managers to work inline with owner beside it has widespread role in organizational success whereas Muhammad, Ramiz and Raoof (2010) stated that there is no relationship between corporate governance and capital structure in the banking sector. To the contrary, Hanson and song (2000) showed that managerial stock ownership can serve as an important internal control mechanism, giving managers economic motivation to work in line with shareholders but later their Hanson and Song (2006) stated as companies that have lower management ownership tend to be more likely to undertake acquisitions and this suggests weaker internal control systems.

Murphy (1985) postulated as managers that have higher incentives tend their firms to grow beyond the optimal level. Yermack (1996) focused on board structure reflecting that smaller boards tend to have greater operating profitability and higher likelihood of CEO dismissal after poor firm performance. Just contrary to this finding, Core, Holthausen and Larcker (1999) stated as CEO compensation seems to have a negative relationship with CEO's ownership and CEO turnover is significantly less sensitive to firm performance when the positions are combined, Goyal and Park (2002).

Jensen (1986) postulated that the firm having large free cash flow creates conflict between shareholders interest and incentives of managers. Differently, Jung, King and

Stulz (1996) stated that agency cost of managerial discretion lead certain firms to issue equity when debt issuance would be the firm-value enhancing alternative where as Yoshikawa and Phan (2003) postulated that large boards which often created by CEOs makes the board members disperse the power in the boardroom and reduce the potential for coordinated action by directors. Study relating with the relationship between firm performance and managerial ownership, Chen, and Austin (2007) presented that managerial block shareholders could help firms to enhance efficiency. In the recent study, Nguyen and Xu (2010), stated that for dual-class firms, the managers do not need to worry about the dismissal.

III. SOURCES OF DATA AND NATURE OF STUDY

Population of this study includes all listed and non-listed companies of Nepal. Among them 68 listed and non-listed companies and 43 pharmaceuticals companies have been selected on the basis of convenience sampling methods as prior selected samples fail to avail the information as per the study. The data problem is more discriminating in private enterprises since most of the private enterprises specially non-listed companies deny availing printed form of financial information for their confidential and market competitiveness.

This study has employed descriptive and causal comparative research designs to deal with the fundamental issues associated with the managerial entrenchment, and capital structure in the context of Nepalese enterprises. The descriptive research design has been adopted for fact-finding and searching adequate information about top level executives and their discretionary level on capital structure. An attempt on identifying the capital structure position with its relevant variables like: sales, assets position, profitability also have been taken as important variables for the analysis. This study is also based on causal comparative research design. The relationship between managerial entrenchment and CEO ownership is primarily focused.

IV. SPECIFICATION OF THE MODEL

The model is derived on the basis of previous studies on Pecking Order Theory such as Ozkan (2001) and Titman and Wessels (1988). The chosen model is strongly believed to capture the essence of the subject under study.

Where,	
LTD	= Long term debt
Log TR	= Log of Total Revenue or Sales (in case of manufacturing companies)
MB	= Market value of equity divided by book value of equity.
Equity	= Book value of equity
Log TA	= Log of Total Assets
TENURE	= The number of years the CEO in office.
Profitability	= Total profit
DUM1	= 1 if chairman is a working director.
EDU	= Qualifications of the executives
Institution	= Type of institution
ROE	= Return on equity

The dependent variable, LTD, represents the long term debt and is used in this instance as a measure of capital structure.

The impact of log of total revenue, Market value of equity divided by book value of equity, Shareholders Equity, Log of Total Assets, Tenure, Profitability, If chairman is an executive director, Academic background, Type of Institution, Return on Equity have been taken as the most important independent variables and their impact on ratio to total debt to total assets have been tried to analyze.

First only one explanatory variable i.e. total revenue is included to test the explanatory power of the leverage. The empirical model of the regression can be depicted as follows:

Secondly, addition of the subsequently explanatory variables is included in the regression model and presented for explanatory power of each inclusion or removing of the variables. The distinctive empirical model of the regressions is presented as follows:

Since tenure has no significant effect on leverage then this variable is excluded on the next regression model

 $LTD = a + b_1 log TR + b_2 MB + b_3 Equity + b_4 log TA + b_6 Profitability + e \qquad (1.6a)$

V. EMPIRICAL ANALYSIS

Descriptive statistics

In this study, descriptive statistics primarily summarizes the data as per the purpose of the study with the facilitation of SPSS. The descriptive statistics used in this study consists of mean, median, standard deviation, and minimum and maximum values associated with variables under consideration. Table 1 summarizes the descriptive statistics of firm specific variables used in this study during the period 2004 through 2011 associated with 43 pharmaceuticals companies and 68 listed and others including financial institutions. Table 2 summarizes the Entrenchment Index as per the type of the institution.

Table 1: Descriptive Statistics of Firm Specific Variables associated with 111 Sample Firms during the Period 2004 through 2011

This table shows descriptive statistics- mean, standard deviation, minimum and maximum values- of firm specific variables associated with 111 sample firms with 43 pharmaceuticals companies and 68 listed companies in NEPSE and others including financial institutions for the period 2004 through 2011. Firm specific variables like profitability, return on assets, return on equity, total assets, long term debt, market value of equity divided book value of equity and shareholders equity are shown in the table.

Variables	Ν	Mean	Std. Dev.	Minimum	Maximum
Profitability (Rs in Million)	111	267.2561	515.6528	-1797.15	1392.314
Return on Assets	111	0.0081	0.033	-0.1463	0.0590
Return on Equity	93	0.3326	0.4092	0.0411	1.7583
Total Assets (Rs in Million)	111	19279.41	15350.11	501.78	59107.75
Long Term Debt	111	11971.41	9813.49	280.657	36854.1225
Market value of equity divided by book value of equity	109	5.9391	5.2306	-8.1313	20.5097
Shareholders Equity(Rs in Million)	111	861.8553	549.449	70	2409.1

Profitability of the sample firms shows the firm suffered losses in some period as maximum losses suffered to Rs. 1797.15 million whereas maximum profitability been Rs. 1392.31 million. Return on assets of the sample firms ranges from negative 15% to maximum positive 6%. The return on equity of the sample firm ranges from minimum 4% to maximum 176% with average 33.26%. The Table 1 also reveals that total assets ranges from minimum Rs. 501.78 million to maximum Rs. 59,107.75 million with average Rs. 19279.41 million and standard deviation of Rs. 15350.11 million. Long term debt ranges from minimum Rs 280.66 million to maximum Rs 36,854.12 million with a mean value and standard deviation of Rs 11971.41 million and Rs 9813.49 million respectively.

Similarly, market to book value of equity ratio has mean value of 5.9391 and standard deviation of 5.2306 with minimum to maximum range of negative -8.1313 to positive

20.5097. Table 1 also indicates shareholders equity ranges from minimum Rs. 70 million to maximum Rs. 2409.1 million with average and standard deviation of Rs. 861.8553 million and Rs. 549.449 million respectively.

Entrenchment Index Group: Using Principal Component Analysis								
	Type of Institution							
Entrenchment Index Group	Pharmaceuticals Companies	Development Banks	Commercial Banks	Finance Company	Others	Total		
.00 to .50	6	17	11	0	0	34		
.50 to 1.00	0	8	11	0	0	19		
1.00 to 1.500	22	0	0	9	6	37		
1.50 to 2.00	5	6	0	0	0	11		
2.00 to 2.50	5	0	0	0	0	5		
2.50 to 3.00	5	0	0	0	0	5		
Total	43	31	22	9	6	111		

 Table 2: Entrenchment Index as per type of institution

The table 2 is the descriptive figure of Entrenchment Index as per the type of institution. The entrenchment index is calculated using principal component analysis. The variables used for PCA under entrenchment index were ownership shares owned by the CEO/Director/Executive, tenure of the concerned director or executive and dummy variable of if chairman is an executive director. The principal factor was determined by the PCA method and each factor was multiplied by the square root of Eigen value (1.452) (Bebchuk et. al, 2004). The total variance explained by this factor was 48.41%. Most of the firms/companies lie under lower entrenchment index which shows their having low amount of discretion power on capital structure decision. Among all the institutions, development banks and commercial banks have almost lowest discretion power on capital structure. Comparatively, pharmaceuticals companies have significant amount of discretion power over capital structure decision as some of the companies even lie under upper index position.

Regression Analysis

The OLS estimates of capital structure determinants have been used to test the sensitivity of firm specific variables and managerial entrenchment variables on capital structure decision.

1. Determinants of Capital Structure

The study presents the regressions of LTD on log of total revenue, Market value of equity divided by book value of equity, Shareholders Equity, Log of Total Assets, Tenure, Profitability, If chairman is an executive director, Academic background, Type of Institution, Return on Equity. The sample contains top listed companies on NEPSE on the

basis of transactions, number of shares traded, shares traded amount, market capitalization whose financial statements are available on NEPSE website and registered pharmaceuticals companies and other non-listed companies during the FY 2004 to 2011

Table 3: OLS Estimates of Capital Structure determinants

$LTD = a + b_1 log TR + b_2 MB + b_3 Equity + b_4 log TA + b_5 Tenure + b_6 Profitability + b_7 DUM1 + b_8 EDU + b_9 Institution + b_{10} ROE + e$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	-35.847	-24.869	-36.132	-46.171	-46.929	-42.865	-44.703
Т	5.808	-4.529	-8.554	-8.981	-9.044	-8.621	-10.688
Sig.		0.000	0.000	0.000	0.000	0.000	0.000
Log of Total Revenue	0.650	0.437	0.721	0.303	0.314	0.229	-0.541
Т	8.942	5.998	11.714	2.095	2.170	1.652	-4.687
Sig.	0.000	0.000	0.000	0.039	0.032	0.102	0.000
Market value of equity divided by book		0.437	0.281	0.212	0.214	0.103	-0.066
value of equity		6.002	4.000	2 (52	2 (01	1 (22	1.665
1		6.003	4.992	3.653	3.691	1.632	-1.665
S1g.		0.000	0.000	0.000	0.000	0.106	0.100
Shareholders Equity			-0.518	-0.494	-0.495	-0.541	-0.668
T			-0.510	-0.333	-0.455	-10 307	-1/ 208
Sig			0.000	0.000	0.000	0.000	0.000
Log of Total Assets			0.000	0.469	0.457	0.508	1 175
T				3 174	3.085	3 604	10.887
Sig				0.002	0.003	0.000	0.000
Tenure				0.002	0.048	0.000	0.000
Т					1 047		
Sig.					0.297		
Profitability						0.207	0.465
Т						3.508	8.300
Sig.						0.001	0.000
If chairman is an executive director							-0.012
Т							-0.402
Sig.							0.689
Academic background							-0.025
Т							-0.853
Sig.							0.396
Type of Institution							-0.011
Т							-0.381
Sig.							0.705
Return on Equity							0.277
Т							7.275
Sig.							0.000
R Square	0.423	0.558	0.761	0.885	0.886	0.898	0.968
Adjusted R Square	0.418	0.550	0.755	0.783	0.785	0.806	0.938

The results from OLS denotes that the independent variables explain 93.8% (Adjusted R Square of Column (7)) variability in total Long Term Debt including all independent variables (i.e. long of Total Revenue, Market Value of Equity divided by Book Value of Equity, Shareholders equity, log of Total Assets, Tenure of executive, profitability, Dummy variable (i.e. if chairman is an executive director), academic background of the executive, type of institution and Return on Equity. Mostly all independent variables are positive influence on dependent variables except shareholders equity. The coefficient seemed quite changing while including additional variables in the model.

The study revealed that firm specific variables like: revenue, market value to book value to equity, shareholders equity and total assets have significant effect on leverage but the entrenchment variables like tenure, CEO as chairman and other personal characteristics of executives like: academic background and type of institutions have no significant on leverage. As the relationship between managerial entrenchment and capital structure decision Berger, Ofek, and Yermack (1997) is negative, but the findings is not found significant as the sign is negative in this study.

2. Comparative Analysis of Executive Ownership with Firm Value

Morck and Vishny (1988) stated firm value decreases with the inside ownership. Wenjuan and Shiguang (2011) showed managerial ownership that drives the capital structure into a nonlinear shape, but in an opposite direction to the effect of managerial ownership on firm value. In this study, the impact of executive ownership with firm value as denoted by Tobin's Q has been reflected.

		CEO Ownership Percentage							
	CEO%	CEO %	CEO %	CEO %	CEO %	Total			
Mean of Tobin's Q	0.907	0.844	0.921	1.003	0.735	0.891			
Count of Tobin's Q	68	25	5	6	5	109			
Std. Dev. Of Tobin's Q	0.296	0.185	0.106	0.072	0.330	0.263			
Max Tobin's Q	2.229	1.235	1.013	1.129	1.040	2.229			
Min Tobin's Q	0.174	0.436	0.772	0.929	0.174	0.174			

Table 4: CEO Ownership Percentage with Tobin's Q

The above table 4 Tobin's Q information by CEO ownership percentage shows that average firm value increases with CEO percentage ownership with the exception represented by the last category where CEO ownership exceeds 40 percent and initially CEO ownership between 10% to 20%. One, however, needs to realize that the number of firms in the last category is only 5 which constitute only 4.5 percent of that sample of firms. The result also shows that enhancement of the organizations performance depends on the CEO in relation to his/her share ownership. As high portion of share ownership owned by the CEO put high degree of effort so as to enhance the performance of company thereby increase the value of the company.

3. Comparative Analysis of Executive Ownership with Entrenchment

The analysis of executive ownership with respect to entrenchment variables is the principal focus of the study. In order to present the entrenchment position with different proportion of executive ownership, the following table clarifies the summary result.

	CEO Ownership Percentage							
	CEO% <10	CEO % 10 to 20	CEO % 20 to 30	CEO % 30 to 40	CEO % 40 to 50	Total		
Mean of E Index	0.815	0.791	1.306	2.119	2.733	0.988		
Count of E Index	69	26	5	6	5	111		
Std. Dev. Of E Index	0.535	0.451	-	0.244	-	0.683		
Max E Index	1.723	1.437	1.306	2.219	2.733	2.733		
Min E Index	0.021	0.079	1.306	1.621	2.733	0.021		

Table 5: CEO Ownership Percentage with Entrenchment Index

The E-index information by CEO ownership percentage, shows that managerial entrenchment increases as the percentage of CEO ownership rises except when CEO ownership between 10% to 20%. Specifically, the positive association of managerial entrenchment and CEO percentage ownership may suggest that increase in equity holding by CEO or top executives leads to lower shareholder rights, or higher managerial entrenchment. The percentage of CEO ownership has significant effect on managerial entrenchment of CEO. This seems that Nepalese organizations' entrenchment power over his/her discretion ability determines by his/her share ownership in the organization. Since CEO is the strategic level and he/she must be neutral without having prejudice for the strategic decision making, but his/her decision making power is influenced by the portion of his investment in the company.

VI. CONCLUSIONS

The major conclusion of this study is that there exists no relationship between the leverage and managerial entrenchment in the Nepalese enterprises. An examination of the relationship between leverage levels and entrenchment variables showed that higher leverage is found when the CEO has a long tenure in the organization, has strong stock, and does not face strong monitoring from the board of directors or major stockholders.

The study also concludes that as the managerial entrenchment increases, the percentage of CEO ownership rises. There exists positive association of managerial entrenchment and CEO percentage ownership which suggests that increase in equity holding by CEO or top executives leads to lower shareholder rights or higher managerial entrenchment.

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