

CAPITAL STRUCTURE AND COST OF CAPITAL

(AN EVIDENCE FROM JOINT VENTURE BANKS IN NEPAL)

A THESIS

Submitted by:

Sunaina Shakya

Patan Multiple Campus

Faculty of Management

Roll Number: 134/060

T.U. Registration Number: 7-1-039-0330-96

Submitted to:

Office of the Dean

Faculty of Management

Tribhuvan University

In partial fulfillment of the requirements of the
Degree of Master of Business Studies (M.B.S.)

Patan Dhoka, Lalitpur

2009

RECOMMENDATION

This is to certify that the thesis

Submitted by:

SUNAINA SHAKYA

Entitled:

Capital Structure and Cost of Capital

(An Evidence from Joint Venture Banks in Nepal)

has been prepared as approved by this Department in the prescribed format of the faculty of management. This thesis is forwarded for examination.

Mr. Yuga Raj Bhattarai

(Thesis Supervisor)

Mr. Shiva Prasad Pokharel

(M.B.S Coordinator).

Mrs. Krishna Badan Nakarmi

(Campus Chief)

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis

Submitted by:
Sunaina Shakya

Entitled:

Capital Structure and Cost of Capital

(An Evidence from Joint Venture Banks in Nepal)

and found the thesis to be the original work of the student and written according to the prescribed format of Faculty of Management Tribhuvan University. We recommend the thesis to be accepted as partial fulfillment of the requirement for Degree of Master of Business Studies (M.B.S.)

Viva-Voce Committee

Head (Research Department):

Member (Thesis Supervisor):

Member (External Expert):

Date:

DECLARATION

I hereby declare that this thesis entitled "Capital Structure and Cost of Capital" (An Evidence from Joint Venture Banks in Nepal) submitted to the Research Department of Patan Multiple Campus, Patan Dhoka, Faculty of Management, Tribhuvan University is my original done in the form of partial fulfillment of the requirement for the Masters of Business Studies (MBS), under the supervision of Mr. Yuga Raj Bhattarai.

Sunaina Shakya

Roll no: 134/060

TU Registration no: 7-1-039-0330-96

ACKNOWLEDGEMENTS

The study of Capital Structure and Cost of Capital (An evidence from Joint Venture Banks in Nepal) has been carried out in partial fulfillment of the Master's Degree in Business Studies (MBS).

This study could not have been completed without the help of many people. Firstly, I would like to thank Mr. Yuga Raj Bhattarai (Thesis Supervisor) for proper advice, guidance and supervision without which this study could not be completed. I am equally grateful to all my respected teachers for their kind support and valuable suggestions.

I would like to extend my appreciation to the College Library and Librarians, Patan Multiple Campus, Central Library of Tribhuvan University, Security Board, NEPSE for providing several valuable secondary data, articles of Nepalese and foreign writers while preparing this thesis.

Lastly, I would like to thank my family, friends, especially to Sunil dai and all of those who helped me directly and indirectly by sharing ideas, giving suggestion and encouraging me in writing this thesis and making it possible.

Sunaina Shakya

Patan Multiple Campus

Date:

TABLE OF CONTENTS

Recommendation	
Viva-Voce Sheet	
Deceleration	
Acknowledgment	
List of Table	
List of Figure	
List of Abbreviations	
	Page No.
CHAPTER- 1: INTRODUCTION	1- 8
1.1 General Background	1
1.2 Overview of Sample Banks	4
1.3 Statement of Problems	6
1.4 Objective of the Study	7
1.5 Limitation of the Study	8
1.6 Organization of the Study	8
CHAPTER- 2: RIVIEW OF LITERATURE	9- 39
2.1 The Conceptual Framework	9
2.1.1 Concept of Cost Capital	9
2.1.1.1 Cost of Debt Capital	12
2.1.1.2 Cost of Perpetual Debt	12
2.1.1.3 Cost of Redeemable Debt	13
2.1.1.4 Cost of Preference Share Capital	13
2.1.1.4.1 Cost of Irredeemable Preference Share	14
2.1.1.4.2 Cost of Redeemable Preference Share	14

2.1.1.5 Cost of Equity Capital	15
2.1.1.5.1 Cost of Retained Earning	15
2.1.1.5.2 Common Stock	16
2.1.1.5.3 Approaches to Calculate the Cost of Equity	16
2.1.1.6 Weighted Average Cost of Capital	18
2.1.2 Financial Leverage	19
2.2 Theories of Capital Structures	20
2.2.1 Net Income Approach	21
2.2.2 Net Operating Income Approach	23
2.2.3 Traditional Approach	25
2.2.4 M-M Approach	27
2.3 Review of Related Empirical Studies	31
2.3.1 The M-M first Study	31
2.3.2 Davenport Study	32
2.3.3 The Weston Study	32
2.3.4 The Wippern Study	33
2.3.5 Sharma and Hanumanta Rao Study	34
2.4 Review of Related Nepalese Studies	35
2.4.1 Adhikari Study	35
2.4.2 The Khanal Study	36
2.4.3 The Khatri Study	37
2.4.4 The Shrestha Study	37
2.4.5 The Rima Devi Shrestha Study	38
2.5. Concluding Remarks	38
CHAPTERS - 3: RESEARCH METHODOLOGY	40-51
3.1 Introduction	40
3.2 Research Design	40
3.3 Population and Sample	40
3.4 Techniques used in Data Collection	41
3.5 Tools and Techniques for Analysis	41

3.5.1 Financial Analysis	41
3.5.1.1 Ratio Analysis	41
3.5.1.1.1 Long Term Debt to Total Debt Ratio	41
3.5.1.1.2 Debt to Total Assets Ratio	41
3.5.1.1.3 Debt to equity	42
3.5.1.1.4 Interest Coverage Ratio	42
3.5.1.1.5 Return on Total Assets	43
3.5.1.1.6 Return on Shareholders Equity	43
3.5.1.1.7 Earning Per Share Analysis	44
3.5.1.1.8 Dividend per Share (DPS) Analysis	44
3.6 Models	44
3.6.1 Models I	44
3.6.2 Models II	45
3.6.3 Models III	46
3.6.4 Models IV	47
3.7 The Specification of the Variables	47
3.7.1 The average cost of capital (K_o)	47
3.7.2 Size (Logs)	48
3.7.3 Growth (G)	48
3.7.4 Dividend payout Ratio (D/P)	49
3.7.5 Earning volatility (E.V)	49
3.7.6 Liquidity Ratio (Liq.)	49
3.7.7 Cost of Equity (k_e)	49
CHAPTER - 4: Presentation and Analysis of Data	50-70
4.1 General Background	50

4.2 Results of Financial Tools	50
4.2.1 Ratio Analysis	50
4.2.1.1 Long Term Debt to Total Debt Ratio	50
4.2.1.2 Debt to Total Assets Ratio	51
4.2.1.3 Debt to Equity	52
4.2.1.4 Interest Coverage Ratio	53
4.2.1.5 Return on Total Assets	54
4.2.1.6 Return on Shareholders' Equity	55
4.2.1.7 Earning Per Share	57
4.2.1.8 Dividend per Share (DPS) Analysis	58
4.3 Results of Statistical Analysis	58
4.3.1 Descriptive Statistical of Variables	58
4.3.2 Cost of Capital and Leverage	60
4.3.2.1 Correlation Coefficient between Variables	61
4.3.2.2 Simple Regression Analysis of the Variables	62
4.3.2.3 Multiple Regression Analysis	64
4.3.3 Cost of Equity and Leverage	65
4.3.3.1 Correlation Analysis	66
4.3.3.2 Simple Regression Analysis	67
4.3.3.3 Multiple Regression Analysis	69
4.4 Major Findings of the Study	70

CHAPTER- 5: SUMMARY, CONCLUSION AND RECOMMENDATION 73-76

5.1 Summary	73
5.2 Conclusion	74
5.3 Recommendations	76

BIBLOGRAPHY

APPENDEX

Lists of Tables

		Page no.
Table: 1	Long-Term Debt to Total Debt Position	51
Table: 2	Comparative Debt – Assets Ratio	52
Table: 3	Comparative Debt –Equity Ratio	53
Table: 4	Comparative Interest Coverage Ratio	54
Table: 5	Position of Comparative Return on Total Assets	55
Table: 6	Return on Shareholders' Equity	56
Table: 7	Position of Comparative EPS	57
Table: 8	Position of Comparative DPS	58
Table: 9	Mean and Standard deviation of the variables	59
Table: 10	Individual variables	59
Table: 11	Correlation Matrix of the variables	61
Table: 12	Simple regressions Result with average cost of capital as dependent variable (Model I)	63
Table: 13	Multiple Regression Result (Model II)	64
Table: 14	Correlation Matrix of the variables	66
Table: 15	Simple Regression Result with Cost of Equity as dependent variable (Model IV)	68
Table: 16	Multiple Regression Result (Model V)	69

List of figures

	Page No.
Figure: 1 The Effect of Leverage on the Capital Structure	22
Figure: 2 The Effect of Leverage on the Total Market Value of the Firm	22
Figure: 3 The Effect of Leverage on Cost of Capital	24
Figure: 4 The Effect of Leverage on the Total Market Value of the Firm	24
Figure: 5 The Effect of Leverage on Cost of Capital under traditional theory	26
Figure: 6 The Cost of Capital under the M-M hypothesis	29
Figure: 7 Behaviors of k_0 , k_i and k_e under M-M hypothesis	31

ABBREVIATIONS

NABIL	Nepal Arab Bank Limited
HBL	Himalayan Bank Limited
NIBL	Nepal Investment Bank Limited
SCB	Standard Chartered Bank Limited
NEPSE	Nepal Stock Exchange
JVBs	Joint Venture Banks
ATM	Automatic Teller Machine
Ltd.	Limited
EBIT	Earning before interest and tax
EBT	Earning before tax
DPR	Dividend Payout Ratio
EPS	Earning Price per Share
DPS	Dividend per Share
E.V.	Earning Variability
G	Growth
K_e	Cost of Equity
K_o	Cost of Capital
L_1	Leverage 1
L_2	Leverage 2
Liq.	Liquidity
Logs	Size of firm
LTD	Long Term Debt
STD	Short Term Debt
E.C.	Equity Capital
P.C.	Preference Share Capital
WACC	Weighted Average Cost of Capital
i.e.	That is
St. dev.	Standard deviation