A STUDY ON CAPITAL STRUCTURE AND COST OF CAPITAL

(AN EVIDENCE FROM JOINT VENTURE BANKS IN NEPAL)

Submitted By:
SAMBIR NARAYAN SHRESTHA
Makawanpur Multiple Campus
TU Reg. No. : 7-2-242-167-2003

A Thesis Submitted to:
Office of the Dean
Faculty of Management
Tribhuvan University

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

Hetauda, Makawanpur March, 2012

RECOMMENDATION

This is to certify that the thesis

Submitted by: SAMBIR NARAYAN SHRESTHA

Entitled:

A Study on 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. Bin Bahadur Raut	Mr. Bachchu Ram Adhikari
(Thesis Supervisor)	(Campus Chief)

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis

Submitted by:

SAMBIR NARAYAN SHRESTHA

Entitled:

A Study on 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 Master Degree 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 "A Study on Capital Structure and

Cost of Capital" (An Evidence from Joint Venture Banks in Nepal) submitted to the

Research Department of central department of management, Kritipur, Kathmandu,

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. Bin Bahadur Raut.

SAMBIR NARAYAN SHRESTHA

TU Registration no: 7-2-242-167-2003

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. Bin Bahadur Raut (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, Makawanpur 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 Suman Acharya 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.

Sambir Narayan Shrestha Researcher Makawanpur Multiple Campus Hetauda

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	7
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	12
2.1.1.4 Cost of Preference Share Capital	13
2.1.1.4.1 Cost of Irredeemable Preference Share	13
2.1.1.4.2 Cost of Redeemable Preference Capital	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	15
2.1.1.5.3 Approaches to Calculate the Cost of Equity	16

18

2.1.1.6 Weighted Average Cost of Capital

2.1.2 Financial Leverage	18
2.2 Theories of Capital Structures	20
2.2.1 Net Income Approach	21
2.2.2 Net Operating Income Approach	22
2.2.3 Traditional Approach	24
2.2.4 M-M Approach	27
2.3 Review of Related Empirical Studies	30
2.3.1 The M-M first Study	31
2.3.2 The Davenport Study	31
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	36
2.4.4 The Shrestha Study	37
2.4.5 The Rima Devi Shrestha Study	37
2.5. Concluding Remarks	38
CHAPTERS - 3: RESEARCH METHODOLOGY	39-48
3.1 Introduction	39
3.2 Research Design	39
3.3 Population and Sample	39
3.4 Techniques used in Data Collection	39
3.5 Tools and Techniques for Analysis	40
3.5.1 Financial Analysis	40
3.5.1.1 Ratio Analysis	40
3.5.1.1.1 Long Term Debt to Total Debt Ratio	40
3.5.1.1.2 Debt to Total Assets Ratio	40
3.5.1.1.3 Debt to equity	41
3.5.1.1.4 Interest Coverage Ratio	41
3.5.1.1.5 Return on Total Assets	42

3.5.1.1.6 Return on Shareholders Equity	42
3.5.1.1.7 Earning Per Share Analysis	42
3.5.1.1.8 Dividend per Share (DPS) Analysis	43
3.6 Models	43
3.6.1 Models I	43
3.6.2 Models II	44
3.6.3 Models III	44
3.6.4 Models IV	45
3.7 The Specification of the Variables	45
3.7.1 The average cost of capital (Ko)	46
3.7.2 Size (Logs)	46
3.7.3 Growth (G)	47
3.7.4 Dividend payout Ratio (D/P)	47
3.7.5 Earning volatility (E.V)	47
3.7.6 Liquidity Ratio (Liq.)	47
3.7.7 Cost of Equity (ke)	48
CAHPTER - 4: Presentation and Analysis of Data	49-69
4.1 General Background	49
4.2 Results of Financial Tools	49
4.2.1 Ratio Analysis	49
4.2.1.1 Long Term Debt to Total Debt Ratio	49
4.2.1.2 Debt to Total Assets Ratio	50
4.2.1.3 Debt to Equity	51
4.2.1.4 Interest Coverage Ratio	52
4.2.1.5 Return on Total Assets	
	53
4.2.1.6 Return on Shareholders' Equity	53 54
4.2.1.6 Return on Shareholders' Equity4.2.1.7 Earning Per Share	
• •	54
4.2.1.7 Earning Per Share	54 55
4.2.1.7 Earning Per Share4.2.1.8 Dividend per Share (DPS) Analysis	54 55 56

4.3.2.1 Correlation Coefficient between Variables	60
4.3.2.2 Simple Regression Analysis of the Variables	61
4.3.2.3 Multiple Regression Analysis	63
4.3.3 Cost of Equity and Leverage	64
4.3.3.1 Correlation Analysis	65
4.3.3.2 Simple Regression Analysis	66
4.3.3.3 Multiple Regression Analysis	68
4.4 Major Findings of the Study	69
CHAPTER- 5: SUMMARY, CONCLUSION AND RECOMMENDATION 72-76	
5.1 Summary	72
5.2 Conclusion	73
5.3 Recommendations	74
BIBLOGRAPHY	

APPENDEX

LISTS OF TABLES

		Page no.
Table: 1	Long-Term Debt to Total Debt Position	50
Table: 2	Comparative Debt – Assets Ratio	51
Table: 3	Comparative Debt –Equity Ratio	52
Table: 4	Comparative Interest Coverage Ratio	53
Table: 5	Position of Comparative Return on Total Assets	54
Table: 6	Return on Shareholders' Equity	55
Table: 7	Position of Comparative EPS	56
Table: 8	Position of Comparative DPS	57
Table: 9	Mean and Standard deviation of the variables	58
Table: 10	Individual variables	58
Table: 11	Correlation Matrix of the variables	60
Table: 12	Simple regressions Result with average cost of capital as	
	dependent variable (Model I)	62
Table: 13	Multiple Regression Result (Model II)	63
Table: 14	Correlation Matrix of the variables	65
Table: 15	Simple Regression Result with Cost of Equity as dependent	
	variable (Model IV)	67
Table: 16	Multiple Regression Result (Model V)	68

LIST OF FIGURES

	rage 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 ko, ki and ke under M-M hypothesis	30

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 Leverage 1

L₂ Leverage 2Liq. LiquidityLogs 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