

CAPITAL STRUCTURE OF LISTED HYDROPOWER COMPANY

**(With Special Reference to Butwal Power Company Limited, Chilime
Hydropower Company Ltd. & National Hydropower Company Ltd.)**

By

SIDDHARTHA KHANAL

Shanker Dev Campus

T.U. Regd.: - 7-1-25-377-97

Campus Roll No.: - 591/060

Second Year Symbol No.: -3702

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)***

Kathmandu, Nepal

March, 2010

RECOMMENDATION

This is to certify that the Thesis

Submitted by:

SIDDHARTHA KHANAL

Entitled:

CAPITAL STRUCTURE OF LISTED HYDROPOWER COMPANY

**(With Special Reference to Butwal Power Company Limited, Chilime
Hydropower Company Ltd. & National Hydropower Company Ltd.)**

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

.....
Shree Bhadra Neupane
(Thesis Supervisor)

.....
Prof. Bishweshor Man Shrestha
(Head of Research Department)

.....
Prof. Dr. Kamal Deep Dhakal
(Campus Chief)

.....
Arun Neupane
(Thesis Supervisor)

VIVA-VOCE SHEET

We have conducted the viva –voce of the thesis presented

By

SIDDHARTHA KHANAL

Entitled:

CAPITAL STRUCTURE OF LISTED HYDROPOWER COMPANY

**(With Special Reference to Butwal Power Company Limited, Chilime
Hydropower Company Ltd. & National Hydropower Company Ltd.)**

*And found the thesis to be the original work of the student and written
according to the prescribed format. We recommend the thesis to
be accepted as partial fulfillment of the requirement for the
Degree of Master's in Business Studies (M.B.S.)*

Viva-Voce Committee

Head, Research Department

Member (Thesis Supervisor)

Member (Thesis Supervisor)

Member (External Expert)

DECLARATION

I hereby declare that the work reported in this thesis entitled “**CAPITAL STRUCTURE OF LISTED HYDROPOWER COMPANY (With Special Reference to Butwal Power Company Limited, Chilime Hydropower Company Ltd. & National Hydropower Company Ltd.)**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master’s Degree in Business Study (M.B.S.) under the supervision of **Shree Bhadra Neupane** and **Arun Neupane** of Shanker Dev Campus.

.....
SIDDHARTHA KHANAL

Researcher

T.U. Regd.: 7-1-25-377-97

Campus Roll No.:- 591/060

Second Year Symbol No.:-3702

ACKNOWLEDGEMENT

At first, I would like to express my deep gratitude to my respected teacher and thesis supervisors **Shree Bhadra Neupane** and **Arun Neupane** for their incisive and constant guidance. It would not have been possible for me to complete this thesis without their guidance and kind cooperation. So, I owe a great debt of gratitude to them.

I also express my sincere thanks to staff of library of Shanker Dev Campus, Tribhuvan University and Security Board Nepal whose cooperation have made it possible to complete the work.

I also owe an indebtedness to all authors whose writings have provided me the necessary guidance and invaluable materials for enriching my thesis in all possible ways. Similarly my special thanks goes to my colleagues Mr. Sachet Shrestha, Sanjeev, Singh and Bishal Shrestha for their cooperation

Last but not least, let me offer my profound gratitude to my parents and family members who inspired and helped me to uplift every step of my life. This study is an outcome of their heartily blessings.

Siddhartha Khanal

Bishal Nagar, Kathmandu.

March 21, 2010

ABBREVIATIONS

BPC	-	Butwal Power Company Limited
CHPCL	-	Chilime Hydropower Company Limited
CL	-	Current Liabilities
CV	-	Coefficient of Variation
D/E	-	Debt to Shareholders Equity
DTAR	-	Debt to Total Assets Ratio
DTR	-	Debtors Turnover Ratio
EPS	-	Earning Per Share
IPP	-	Independent Power Producer
KWh	-	Kilowatt
Ltd.	-	Limited
MW	-	Megawatt
NEA	-	Nepal Electricity Authority
NEPSE	-	Nepal Stock Exchange
NHPCL	-	National Hydro Power Company LTD.
No.	-	Number
NRs.	-	Nepali Rupees
PPA	-	Power Purchase Agreement
ROE	-	Return on Shareholders Equity
ROTA	-	Return on Total Assets
T.U	-	Tribhuvan University
TD	-	Total Debt
S.D.	-	Standard Deviation.
SEBO	-	Security Board Nepal.

Table of Contents

Recommendation
Viva-voce Sheet
Declaration
Acknowledgement
Table of Content
List of Tables
List of figures
List of Abbreviation

Chapter I : Introduction 1-11

1.1	General Background	1
1.2	Focus of Study	5
1.2.1	Butwal Power Company Limited	6
1.2.2	Chilime Hydropower Company Limited	6
1.2.3	National Hydropower Company Limited	7
1.3	Statement of the Problems	7
1.4	Objectives of the Study	8
1.5	Significant of Study	8
1.6	Limitation of Study	9
1.7	Organization of Study	10

Chapter II : Review of Literature 12-44

2.1	Conceptual Framework	12
2.1.1	Concept of capital Structure	12
2.1.2	Optimumal Capital Structure	13
2.1.3	Capital Structure Theory	14
2.1.4	Appropriate Capital Structure and its Feather	19
2.1.5	Approaches to Establish Appropriate Capital Structure	20
2.1.6	Factors Affecting Capital Structure	22
2.1.7	Theory of Cost of Capital	24
2.1.8	Ratio Analysis	25

2.1.9	Conceptual Framework of Leverage	26
2.1.10	Types of Leverage	27
2.2	Legal and contractual Review	29
2.2.1	Electricity ACT-2049	29
2.2.2	The Hydro power Development Policy, 2001:	32
2.3	Review of Related Journals and Articles:	35
2.4	Review of Thesis:	37
	Chapter III : Research Methodology	45-52
3.1	Research Design	45
3.2	Selection of Firms	46
3.3	Data Collection Procedure	46
3.4	Method of data analysis	46
3.4.1	Financial tools	46
3.4.2	Statistical Tools	50
3.5	Graphical Approach	52
	Chapter IV : Data Presentation And Analysis	53-77
4.1	Financial Analysis	53
4.1.1	Leverage Ratio	53
4.1.2	Profitability Ratio	64
4.2	Statistical Tools	68
4.3	Graphical Analysis	71
	Chapter V : Summary, Conclusion And Recommendation	78-83
5.1	Summary	78
5.2	Conclusion	80
5.3	Recommendations	83

Bibliography

Annexes

List of Tables

Table		Page no.
1.1	Estimate Hydro Power Potentialities in Nepal	2
2.1	Royalty for Internal consumption project	33
2.2	Royalty for Export-oriented hydropower project	33
4.1	Total debt ratio of BPCL, CHPCL and NHPCL	54
4.2	D/E ratio of BPCL, CHPCL and NHPCL	55
4.3	Equity ratio of BPCL, CHPCL and NHPCL	57
4.4	Total liabilities ratio of BPCL, CHPCL and NHPCL	59
4.5	Interest Coverage ratio of BPCL, CHPCL and NHPCL	62
4.6	Degree of financial leverage of BPCL, CHPCL and NHPCL	63
4.7	Return of equity of BPCL, CHPCL and NHPCL	65
4.8	Return on investment of BPCL, CHPCL and NHPCL	67
4.9	Standard deviation mean of BPCL, CHPCL and NHPCL	68
4.10	Standard deviation, mean and CV of BPCL, CHPCL and NHPCL	69
4.11	Correlation of coefficient	70

List of Figures

Figures	Page no.
4.1 Debt-equity ratio of BPCL, BHPCL & NHPCL	56
4.2 Capital employed to net worth (Equity Ratio)	58
4.3 Total Liabilities Ratio of BPCL, CHPCL and NHPCL	59
4.4 Total liabilities and Total assets of Butwal power company:	60
4.5 Total liabilities and Total assets of Chilime Hydropower Company.	60
4.6 Total liabilities and total assets of National Hydropower Company.	61
4.7 Interest coverage ratios of BPCL, CHPCL and NHPCL	62
4.8 Degree of Financial Leverage of BPCL, CHPCL and NHPCL	64
4.9 Return on equity of BPCL, CHPCL and NHPCL.	66
4.10 Return of Investment of BPCL, CHPCL and NHPCL	67
4.11 Capital structure of BPCL	71
4.12 Share holder funds and interest bearing debt (BPCL):	71
4.13 Capital structure of CHPCL	72
4.14 Share holder funds and interest bearing debt (CHPCL):	72
4.15 Capital structure of NHPCL	73
4.16 Share holder funds and interest bearing debt (NHPCL):	73