

# **Analysis of Capital Assets Pricing Model of Listed Manufacturing Companies**

**Submitted By**

**Khagendra Kandangwa**

Central Department of Management

Roll No. : 215/065/67

T.U.Regd. No. : 7-1-2-928-2001

In Partial fulfillment of The Requirement for the Degree Master's of  
Business Studies (M.B.S.)

**Submitted to:**

Office of the Dean

Faculty of Management

Tribhuvan University

Kathmandu, Nepal

August. 2012

## **RECOMMENDATION**

This is to certify that the Thesis

**Submitted By**

**Khagendra Kandangwa**

**Entitled**

**Analysis of Capital Assets Pricing Model of Listed Manufacturing  
Companies**

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

-----  
AjayaPrasad Dhakal  
(Thesis Supervisor)

-----  
Prof. Dr. Bal Krishna Shrestha  
(Head, Research Department)

-----  
Prof. Dr. Dev Raj Adhikari  
(Head of the Department)

Date: -----

**VIVA –VOCE SHEET**

We have conducted the viva-voce examination of the thesis presented

**By**

**Khagendra Kandangwa**

Entitled

**Analysis of Capital Assets Pricing Model of Listed Manufacturing  
Companies**

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

**Master’s Degree in Business Studies (MBS)**

**Viva-Voce Committee**

Head, Research Department .....

Member (Thesis Supervisor) .....

Member (External) .....

Member (Central Department of Management) .....

Date:.....

## DECLARATION

I hereby declare that the work reported in this thesis entitled “**Analysis of Capital Assets Pricing Model of Listed Manufacturing Companies**” submitted to Central Department of Management, Faculty of Management, Tribhuvan University is my original work. It is done in the form of partial fulfillment of the requirement for the Master’s Degree in Business Studies (MBS) under the supervision of **Ajaya Prasad Dhakal**

.....

**Khagendra Kandangwa**

**Researcher**

Roll No. : 215/067

T.U.Regd. No. : 7-1-2-928-2001

Central Department of Management

Date:.....

## ACKNOWLEDGEMENT

This thesis "**Analysis of Capital Assets Pricing Model of Listed Manufacturing Companies**" is prepared in Partial Fulfillment of the Master's Degree in Business Studies. Many grateful hands were needed to complete this study. I express great thankful to all those who have helped me by sharing valuable time, efforts, views inspection etc in course of completing this work.

First of all, I would like to pay sincere thanks to my respected teacher **Ajaya Prasad Dhakal** who had supervisor my work.

I would also like to acknowledge the inspiration and support of respected Head of The Department **Prof. Dr. Dev Raj Adhikari** and offer him my special thanks. I am grateful to **Prof. Dr. Bal Krishna Shrestha**, Chairman of Research Committee and all the Professors and Lecturers of the Central Department of Management who helped me for making it possible to bring out this thesis at successful completion. Likewise, I would like to extend my thanks especially Central Department of Management who provide me idea about this research topic and also thanks to **Mr. Rishi Raj Dawadi** and **Mr. Mukunda Rimal**, who always encourage prepare this Thesis.

I am also grateful to my colleagues especially Indra Shrestha, Prakash Palungwa, Mohan Thapa and all friends for their great contribution and co- operation to provide all the required data and information to conduct this study. Finally, I am heartily indebted to the Central Library of Tribhuvan University Kirtipur, Library of Department for providing me the research materials during my study.

Khagendra Kandangwa

Date:.....

# TABLE OF CONTENT

Page No.

**Recommendation**

**Viva-Voce Sheet**

**Declaration**

**Acknowledgement**

**Table of contents**

**List of Table**

**List of Figures**

**List of Abbreviations**

**CHAPTER ONE : INTRODUCTION 1-10**

1.1 Background of The Study 1

1.1.1 Difference Between Manufacturing  
and Service Organization 6

1.2 Statement of the Problems 8

1.3 Objectives of the Study 8

1.4 Significance of the Study 9

1.5 Limitations of the Study 9

1.6 Organization of the Study 9

**CHAPTER TWO : REVIEW OF LITERATURE 11-27**

2.1 Introduction 11

2.1.1 Conceptual Framework 11

2.1.2 Relation between Manufacturing Companies  
and Securities Market 13

2.2	Reviews from Books	14
2.3	Reviews from Related Studying	17
	2.3.1 Review from Journals	17
	2.3.2 Review from Thesis	21
2.4	Reviews from Nepalese Studies	24
2.5	Research Gap	26
<b>CHAPTER THREE : RESEARCH METHALOGY</b>		<b>28-33</b>
3.1	Introduction	28
3.2	Research Design	28
3.3	Population and Sample	28
3.4	Sources of Data	29
3.5	Tools for Analysis	29
	3.5.1 Financial Tools	29
	3.5.2 Statistical Tools	29
<b>CHAPTER FOUR : DATA PRESENTATION AND ANALYSIS</b>		<b>34-63</b>
4.1	Analysis of Individual Company	34
	4.1.1 Nepal Lever Limited (NLL)	34
	4.1.1.1 Market Per Share (MPS) and Dividend Per Share (DPS)	34
	4.1.1.2 Realized Return (R), Expected Return, ( $\bar{R}$ ), and Standard Deviation ( $\sigma$ ) of NLL	36
	4.1.2 Bottlers Nepal Limited (BNL)	37

4.1.2.1 Market Per Share (MPS) and Dividend Per Share (DPS)	37
4.1.2.2 Realized Return I, Expected Return, ( $\bar{R}$ ), and Standard Deviation ( $\sigma$ ) of BNL	39
4.1.3 Arun Vanaspati Udyog Limited (AVUL)	40
4.1.3.1 Market Per Share (MPS) and Dividend Per Share (DPS)	40
4.2 Inter-Firm Comparison	43
4.3 Industry-Wise Comparison	46
4.4 Comparison With Market	52
4.4.1 Market Risk and Return	52
4.5 Measurement of Systematic Risk (Beta risk)	54
4.6 Capital Assets Pricing Model (CAPM) and Price Evaluation	56
4.7 Regression Analysis	58
4.7.1 Simple Regression Analysis	58
4.7.2 Multiple Regression Analysis	59
4.8 Portfolio Analysis	60
4.9 Major Findings	62
<b>CHAPTER FIVE : Summary, Conclusion and Recommendation</b>	<b>64-67</b>
5.1 Summary	64
5.2 Conclusion	65



**References**

**Appendix**

## LIST OF TABLE

	<b>Page No.</b>
Table No. 4.1 : MPS and DPS Data of NLL	35
Table No. 4.2 : Calculation of R, $\bar{R}$ and $\sigma$ of The Cs of NLL	36
Table No. 4.3 : MPS and DPS Data of BNL	38
Table No. 4.4 : Calculation of R, $\bar{R}$ and $\sigma$ of The Cs of BNL	39
Table No. 4.5 : MPS and DPS Data of AVUL	41
Table No. 4.6 : Calculation of R, $\bar{R}$ and $\sigma$ of The Cs of AVUL	42
Table No. 4.7 : Market Capitalization of Selected Manufacturing Companies	43
Table No. 4.8 : Expected Return, Standard Deviation and Coefficient of Variation of Each Sample	44
Table No. 4.9 : Industry-Wise Capitalization at 14 <sup>th</sup> July 2011	47
Table No. 4.10 : Year end (F.Y.) Market Capitalization of Different Industries.	49
Table No. 4.11 : Industries Wise NEPSE INDEX	49
Table No. 4.12 : Return of Each Industries	50
Table No. 4.13 : Expected Return, Standard Deviation and Coefficient of Variation of Mfg & Processing Company	51
Table No. 4.14 : Industries Wise Expected Return, Standard Deviation and Coefficient of Variation	51

Table No. 4.15 : Realization Rate of Return, Standard Deviation and The Coefficient of Variation of The Market	53
Table No. 4.16 : Beta Coefficient of Selected Mfg & Pro. Companies	56
Table No. 4.17 : RRR, ERR and Price Situation	57
Table No. 4.18 : Regression of Average Return on Beta Coefficient Regression Equation $AR = a + b\beta$	59
Table No. 4.19 : Regression of Average Return on Beta and Market Capital Regression Equation $AR = a + b_2\beta_1 + b_2mc$	60

## LIST OF FIGURES

	<b>Page No.</b>
Figure No. 4.1 : Closing Price Movement of CS of NLL	36
Figure No. 4.2 : Annual Rate of Return of the CS of NLL	37
Figure No. 4.3 : Closing Price Movement of CS of BNL	38
Figure No. 4.4 : Annual Rate of Return on the CS of BNL	40
Figure No. 4.5 : Closing Price Movement of CS of BNL	41
Figure No. 4.6 : Annual Rate of Return on the CS of AVUL	43
Figure No. 4.7 : Portion of Market Capitalization of Each Sample	44
Figure No. 4.8 : Expected Return, Standard Deviation and Coefficient of Variation of Each Sample	46
Figure No. 4.9 : Portion of Market Capitalization of Each Sector	48
Figure No. 4.10 : Market Index Movement	54
Figure No. 4.11 : Annual Rate of Return on Market	54

## **Abbreviations**

AVUL	Arun Vanaspati Udyog Limited
BNL	Bottlers Nepal Limited
BPM	Bottling Per Minute
CAPM	Capital Assets Pricing Model
CS	Common Stock
CV	Coefficient of Valuation
DPS	Dividend Per Share
EPS	Earning Per Share
ERR	Expected Rate of Return
MC	Market Capital
MPCs	Manufacturing and Processing Companies
NEPSE	Nepal Stock Exchange
NLL	Nepal Lever Limited
OLS	Ordinary Least Square
RRR	Required Rate of Return
SD	Standard Deviation
SLM	Security Market Line