

PORTFOLIO ANALYSIS ON COMMON STOCK INVESTMENT OF JOINT VENTURE BANKS IN NEPAL



By:

Samir Kumar Paudel

TU Reg. No: 42942-94

Roll No: 1092/061

Shanker Dev Campus

A Thesis Submitted To:

Office of the Dean

Faculty of Management

Thibhuvan University

In Partial Fulfillment of the Requirements of the degree of
Master of Business Studies (M.B.S.)

Kathmandu, Nepal

2009

RECOMMENDATION

This is to certify that the Thesis

Submitted by

Samir Kumar Paudel

Entitled:

**PORTFOLIO ANALYSIS ON COMMON STOCK INVESTMENT OF JOINT
VENTURE BANKS IN NEPAL**

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

.....

Mrs. Amuda Shrestha

(Professor)

.....

Biseshwor Man Shrestha

(Head of Research Department)

.....

Prof. Dr. Kamal Deep Dhakal

(Campus Chief)

.....

Govinda Bahadur Thapa

(Lecturer)

Date:.....

VIVA VOCE SHEET

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

Samir Kumar Paudel

Entitled:

Portfolio Analysis On Common Stock Investment Of Joint Venture Banks In Nepal

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 (M.B.S)

Viva-Voce Committee

Head of Research Department :

Member (Thesis Supervisor) :.....

Member (Thesis Supervisor) :.....

Member (External Expert): :.....

Date:.....

DECLARATION

I hereby declare that the worked reported in this thesis entitled **Portfolio Analysis On Common Stock Investment Of Joint Venture Banks In Nepal** Submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment for the requirement of Master's Degree in Business Studies (MBS) under the supervision of **Mrs. Amuda Shrestha** and **Govinda Bahadur Thapa** of Shanker Dev Campus, Tribhuvan University.

Samir Kumar Paudel

(Researcher)

Shanker Dev Campus

T.U. Regd No: - 42942-94

Campus Roll No:- 1092/061

Date:

ACKNOWLEDGEMENT

This Thesis is for Master's Degree in Business Studies (MBS) undertaken at Tribhuvan University of Nepal. For this I gained lots of guidelines and suggestions from my teachers, friends, other company's officials and my relatives. Firstly, I wish to express my profound gratitude to my supervisor **Mrs. Amuda Shrestha** and **Govinda Bahadur Thapa** for their valuable guidance throughout the work and my teachers who inspired me to do this study.

I acknowledge staff of Securities Board of Nepal, Nepal Stock Exchange, Nepal Rastra Bank and selected Banks in this study. Who provided sources of data and other information for this study?

I would also like to thank Mr. Chuman Singh G.C. for Computer typing and setting. Similarly, I would like to thank my family member for their advice and inspiring matters.

Finally, I would like to express my sincere gratitude to the staffs of Shanker Dev Campus library for their cordial cooperation.

Samir Kumar Paudel

Shanker Dev Campus

TABLE OF CONTENTS

Recommendation

Viva Voce Sheet

Declaration

Acknowledgement

List of Tables

List of Figures

Abbreviations

CHAPTER I: INTRODUCTION	1 - 7
1.1 Background of the Study	1
1.2 Statement of the Problem	4
1.3 Objective of the study	5
1.4 Significance of the Study	6
1.5 Limitation of study	7
1.6 Organization of the study	7
CHAPTER II: REVIEW OF LITERATURE	9 - 41
2.1 Conceptual framework	9
2.1.1 Common stock	15
2.1.2 Investment	16
2.1.3. Return	17
2.1.3.1 Single Period Rate of Return	17
2.1.3.3 Required Rate of return	18
2.1.3.4 Expected Rate of Return	18
2.1.3.5 Expected Rate of Return Based on Historical Data	18
2.1.4. Risk	19
2.1.5 The Range	20
2.1.6 Standard Deviation (SD)	20

2.1.7	Coefficient of Variation (CV)	20
2.1.8.	Portfolio Analysis and Diversification	21
2.1.8.1	Portfolio Analysis	21
2.1.8.2	Expected Portfolio return	23
2.1.8.3	Portfolio Risk:	24
2.1.9	Correlation Coefficient and Portfolio Risk:	25
2.1.11	Capital Assets Pricing Model (CAPM):	27
2.1.12	Arbitrage Pricing Theory (APT)	31
2.1.13	Beta Coefficient	33
2.1.14	Portfolio Performance Evaluation	33
2.1.14.1	Sharpe's Performance Measure:	33
2.1.14.2	Treynor's Portfolio Performance Measure	34
2.1.14.3	Jensen performance measures	34
2.2	Review of Related Studies	35
2.2.1	Review of Journals and articles	35
2.2.2	Review of Dissertations	37
	Research Gap	41

CHAPTER III: RESEARCH METHODOLOGY 45-52

3.1	Research Design	45
3.2	Population and Sample	45
3.3	Nature and Source of Data	46
3.4	Data Analysis Tools	46
3.4.1	Return on Common Stock Investment (R_j)	46
3.4.2	Expected Return on Common Stock: $E(R_j)$	47
3.4.3	Standard Deviation (σ)	47
3.4.4	Co-efficient of Variation (CV)	48
3.4.5	Beta (β)	48
3.4.6	Correlation Co-efficient (ρ_{ij})	49
3.4.7	Portfolio Risk and Return	50
3.4.8	Risk minimizing Portfolio	50

3.4.9	Systematic Risk	51
3.4.10	Sharpe's Portfolio Performance Measure (S_p)	52
CHAPTER IV: DATA PRESENTATION AND ANALYSIS		53 - 90
4.1	Individual Assets Analysis	53
4.1.1	Nabil Bank Limited (NABIL)	54
4.1.1.1.	Analysis of MPS and DPS of NABIL Bank	54
4.1.1.2	Calculation of Expected Rate of Return, Standard Deviation and Coefficient of Variance of NABIL Bank.	56
4.1.1.3	Calculation of Co-variance, Correlation and Beta of NABIL Bank	57
4.1.2	Himalayan Bank Limited. (HBL)	58
4.1.2.1	Analysis of MPS and DPS of HBL	58
4.1.2.2	Calculation of Expected Rate of Return, Standard Deviation and Coefficient of Variance	60
4.1.3	Everest Bank Limited (EBL)	63
4.1.3.1	Analysis of MPS and DPS of EBL	63
4.1.3.2	Calculation of Expected Rate of Return, Standard Deviation and CV	64
4.1.4	Nepal Bangladesh Bank Limited (NBBL)	66
4.1.4.1	Analysis of MPS and DPS of NBBL	66
4.1.4.2	Expected Rate of Return, Standard Deviation and Variance	68
4.1.5	Standard Chartered Bank Nepal Limited. (SCBNL)	70
4.1.5.1	Analysis between MPS and DPS of SCBNL	70
4.1.5.2	Calculation of Expected Rate of Return, Standard Deviation and Variance	70
4.2	Inter Bank Comparison	75
4.2.1	On the Basis of Risk and Return	75
4.2.2	On The Basis Of Systematic and Unsystematic Risk	77
4.2.3	On the Basis of Movement of Market Capitalization	78
4.3	Comparison with Market	80
4.3.1	On the Basis of Market Risk and Return	80
4.3.2	Analysis of Market Sensitivity	82
4.3.3	On the Basis of Price Evaluation of Common Stock of Each Bank	83

4.4	Portfolio Analysis	85
4.5	Correlation between Banks	88
4.6	Measurement of Portfolio Performance	89
4.7	Major Findings of the Study	90

CHAPTERV: SUMMARY, CONCLUSION AND RECOMMENDATIONS 94 -100

5.1	Summary	94
5.2	Conclusion	97
5.3	Recommendations	100

Bibliography

Appendix

LISTS OF TABLES

Table No.	Title	Page No.
Table No-4.1	MPS and DPS of NABIL Bank Limited	54
Table No-4.2	Realized return(R), Standard Deviation () and expected return (\bar{R})	56
Table No-4.3	Calculation of Co-variance, Correlation and Beta of NABIL Bank	57
Table No-4.4	MPS and Dividend data of Himalayan Bank Limited	59
Table No-4.5	Calculation of expected rate of return, standard deviation and coefficient of variance	61
Table No-4.6	Calculation of Co-variance, Correlation and Beta of HBL	62
Table No-4.7	MPS and Dividend data of Everest Bank Limited	63
Table No-4.8	Calculation of Expected Rate of Return, Standard Deviation and CV	65
Table No-4.9	Calculation of Co-variance, Correlation and Beta of EBL	66
Table No-4.10	MPS and Dividend data of NBBL	67
Table No-4.11	Expected return(R), Standard Deviation () and expected return (\bar{R})	69
Table No-4.12	Calculation of Co-variance, Correlation and Beta of NBBL	70
Table No-4.13	MPS and Dividend data of SCBNL	71
Table No-4.14	Expected return(R), Standard Deviation () and expected return (\bar{R})	73

Table No-4.15	Calculation of Co-variance, Correlation and Beta of SCBNL:	74
Table No-4.16	Expected Return, Standard Deviation, Variance and Coefficient of Variation of individual Bank:	75
Table No-4.17	Comparison of risk of Different banks	77
Table No-4.18	Year-Wise Comparative Movement of Market Capitalization (Rs in millions)	79
Table No-4.19	Calculation of Market Returns, Expected Return, S.D. and C.V. of market	80
Table No-4.20	Beta Coefficient of Different Banks	83
Table No-4.21	Equilibrium Return, Expected return and Price Evaluation of Commercial banks	84
Table No-4.22	Portfolio Risk and returns and Co-variance between banks	86
Table No-4.23	Correlation Co-efficient between each Bank	88
Table No-4.24	Sharpe's Portfolio Performance Measurements (Sp)	89

LIST OF FIGURES

Figure No.	Title	Page No.
Figure No-4. 1	Year-end price movement of NABIL	55
Figure No-4.2	Year-end Price Movement on Common Stock of HBL	60
Figure No-4.3	Year-end price movement on common stock of EBL	64
Figure No-4.4	Year-end price movement on common stock of NBBL	68
Figure No-4.5	Year-end price movement of SCBNL	72
Figure No-4.6	Year-end Movement of Market Capitalization	79
Figure No-4.7	Market index Movement	81
Figure No-4.8	Market returns Movement	82

ABBREVIATIONS

BI	=	Hanking Index
C.V	=	Coefficient of variation
CAPM	=	Capital Assets Pricing Model
CS	=	Common Stock
DPS	=	Dividend per Share
FI	=	Finance and Insurance Index
Fin. & INS	=	Finance and Insurance
HBL	=	Himalayan Bank Ltd.
HMG	=	His Majesty's Government
HPR	=	Holding Period Return
HR	=	Hotel Index
Ltd	=	Limited
Mfg. & Proc	=	Manufacturing and Processing
MI	=	Manufacturing Index
MPS	=	Market Price of Stock
NABIL	=	Nabil Bank Ltd.
NBBL	=	Nepal Bangladesh Bank Ltd.
NEPSE	=	Nepal Stock Exchange
NI	=	Nepse Index
NRB	=	Nepal Rastra Bank
S.D.	=	Standard Deviation
SCBNL	=	Standard Chartered Bank Nepal Ltd.
SML	=	Security Market Line
T.U	=	Tribhuvan University
TI	=	Trading Index