

**COST-VOLUME-PROFIT ANALYSIS  
OF BOTTLERS NEPAL LIMITED**

**Submitted by:**

**Prakash Khanal**

**T.U Regd. No.: 7-2-52-103-2004**

**Roll No.: 1417/064-066**

**Shankar Dev Campus**

**Putalisadak, Kathmandu**

**Submitted to:**

**Faculty of Management**

**Shankar Dev Campus**

**In partial fulfillment of the Requirements for the Degree of**

**Master of Business Studies (MBS)**

**Putalisadak, Kathmandu**

**July, 2012**

## **RECOMMENDATION**

This is to certify that the thesis

*Submitted by:*

**Prakash Khanal**

Entitled:

### **COST-VOLUME-PROFIT ANALYSIS OF BOTTLERS NEPAL LIMITED**

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

-----  
Mr. Prakash Singh Pradhan    Prof. Bishehwor Man Shrestha    Mr. Prakash Singh Pradhan  
Supervisor                      Chairperson, Research Committee                      Campus Chief

Date: .....

# VIVA-VOCE SHEET

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

**Prakash Khanal**

Entitled:

## **COST-VOLUME-PROFIT ANALYSIS OF BOTTLERS NEPAL LIMITED**

and found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial

fulfillment for

**Master's Degree in Business Studies (M.B.S.)**

### **Viva-Voce Committee**

Head Research Department -----

Member (Thesis Supervisor) -----

Member (External Expert) -----

Date: -----

## **DECLARATION**

I hereby, declare that the work reported in this thesis entitled “**COST-VOLUME-PROFIT ANALYSIS OF BOTTLERS NEPAL LIMITED**” submitted to Shankar Dev Campus, Bagbazar, Kathmandu is my original piece of work done in the form of partial fulfillment of the requirement for the Master’s Degree in Business studies under the supervision and guidance of Mr. Prakash Singh Pradhan, Shankar Dev Campus.

.....

Prakash Khanal

Campus Roll No.: 1417/064-066

T.U. Registration No: 7-2-52-103-2004

Shankar Dev Campus

## ACKNOWLEDGEMENT

At the outset, I owe my sincere and utmost gratitude to my supervisor Mr. Prakash Singh Pradhan by Shankar Dev Campus for his valuable suggestions, proper guidance and unfathomable. Support in turning the proposal "**Cost-Volume-Profit Analysis of Bottlers Nepal Limited**" into a complete thesis.

I take this opportunity to thank especially to my life partner, my colleagues and friends for their encouragement, help and supportive role during this work. I deeply acknowledge my friend cum Brother Mr. Jay Paudel from Tyangla Cyber and Communication, Kirtipur, Kathmandu for his prompt and technical support in preparing this dissertation in the present elegant shape and size.

My gratitude goes to my better half Chitra Kala Sharma, who is a source of patience, and my curious offsprings Prachi and Prasant, for their valuable assistance in creating sound, peaceful, research friendly academic environment at home.

Finally but immensely, I acknowledge my parents, siblings and relatives from their blessings, whole hearted cooperation and enthusiastic encouragement to pursue my studies and complete the present work. My affective gratitude goes to them.

Thank You!

Prakash Khanal  
Shankar Dev Campus

## TABLE OF CONTENT

	Page No.
<i>RECOMMENDATION LETTER</i>	<i>I</i>
<i>VIVA VOCE SHEET</i>	<i>II</i>
<i>ACKNOWLEDGEMENT</i>	<i>III</i>
<i>DECLARATION</i>	<i>IV</i>
<i>TABLE OF CONTENT</i>	<i>V</i>
<i>LIST OF TABLE</i>	<i>VIII</i>
<i>LIST OF FIGURE</i>	<i>IX</i>
<i>ABBREVIATION</i>	<i>X</i>
<b>CHAPTER ONE : INTRODUCTION</b>	<b>01-09</b>
1.1 Background of the Study	1
1.2 Company Profile	4
1.2.1 An Over View of Bottlers Nepal Ltd.	4
1.2.2 Share Capital of BNL	5
1.2.3 Product Line	5
1.2.4 Profit Position	5
1.2.5 Distribution Policy	6
1.3 Statement of Problem	6
1.4 Objectives of the Study	7
1.5 Significance of the Study	7
1.6 Limitation of the Study	8
1.7 Organization of the Study	8
<b>CHAPTER TWO : REVIEW OF LITERATURE</b>	<b>10-43</b>
2.1 Fundamental Concept of Profit Planning and Control	10
2.2 Cost-Volume-Profit Analysis as Tools of Profit Planning and Budgeting	12 12
2.3 Concept of Cost-Volume-Profit Analysis	12
2.3.1 Purpose of Cost-Volume-Profit Analysis	14
2.3.2 Important of Cost-Volume-Profit Analysis	15
2.3.3 Assumption of Cost-Volume-Profit Analysis	15
2.4 Break-Even Analysis	16
2.4.1 Approaches to CVP and Break-Even Analysis	18
2.4.2 Application of Break-Even Analysis	21
2.4.3 Assumption of Break-Even Analysis	21
2.4.4 Limitation of Break-Even Analysis	22
2.4.5 Cash Break-Even Point	23
2.5 Margin of Safety	23

2.6 Formula of Cost Volume Profit Analysis	24
2.7 Cost Classification	27
2.7.1 Classification According to Element of Cost	27
2.7.2 Classification According to Function of Cost	28
2.7.3 Classification According to Behaviour of Cost	29
2.7.4 Classification According to Decision-Making	31
2.7.5 Classification According to Control	33
2.8 Segregation of Semi-Variable Cost	33
2.8.1 High - Low Method	33
2.8.2 Least-Square Regression Method	34
2.9 Cost-Volume-Profit Analysis for Multiple Product or Sales Mix	34
2.10 Sensitivity Analysis of CVP	36
2.11 CVP and Its Impact on Productivity	38
2.12 Limitation of Cost-Volume-Profit Analysis	39
2.13 Review of Previous Research Works	40
2.14 Research Gap	43
<b>CHAPTER – THREE : RESEARCH METHODOLOGY</b>	<b>44-48</b>
3.1 Introduction	44
3.2 Research Design	44
3.3 Population and Sample	44
3.4 Sources of Data	44
3.5 Process of Data Collection	44
3.6 Research Variables	45
3.7 Analysis Tools	45
3.7.1 Accounting Tools	45
3.7.2 Statistical Tools	46
3.7.3 Financial Tools	48
<b>CHAPTER FOUR : DATA PRESENTATION AND ANALYSIS</b>	<b>49-78</b>
4.1 Introduction	49
4.2 Revenue and Expenditure Summary	49
4.3 Relationship between Sales, Fixed Cost, and Variable Cost	51
4.4 Contribution Margin Analysis	53
4.5 Sales and Profit Relation of BNL	56
4.6 Break-Even Point Analysis	58
4.7 Proportion of BEP Sales on Actual Sales	60
4.8 Margin of Safety Analysis	62
4.9 Financial Analysis of BNL	64

4.9.1 Liquidity Ratio	64
4.9.1.1 Current Ratio of BNL	65
4.9.1.2 Quick Ratio of BNL	67
4.9.2 Leverage Ratio	68
4.9.2.1 Debt Ratio of BNL	69
4.9.2.2 Debt-Equity Ratio of BNL	71
4.9.3 Profitability Ratio	72
4.9.3.1 Gross Profit Margin of BNL	73
4.9.3.2 Net Profit Margin of BNL	74
4.10 Major Findings	76
<b>CHAPTER FIVE : SUMMARY, CONCLUSION AND RECOMMENDATION</b>	<b>79- 83</b>
5.1 Summary	79
5.2 Conclusion	81
5.3 Recommendation	82
<b>BIBLIOGRAPHY</b>	
<b>APPENDIX</b>	



## LIST OF TABLES

	<b>Page No.</b>	
Table 4.1	Sales, Expenses and Profit	40
Table 4.2	Sales, Fixed Cost and Variable Cost	51
Table 4.3	Contribution Margin	54
Table 4.4	Actual Sales and Actual Profit	57
Table 4.5	Summary of Statistical Calculation of Sales and Profit	58
Table 4.6	Break-Even Point	59
Table 4.7	Actual sales and Break-Even sales	60
Table 4.8	Summary of Statistical Calculation of Actual Sales and BEP Sales	61
Table 4.9	Margin of Safety	63
Table 4.10	Current Ratio	65
Table 4.11	Quick Ratio	67
Table 4.12	Debt Ratio	69
Table 4.13	Debt –Equity Ratio	71
Table 4.14	Gross Profit Margin	73
Table 4.15	Net Profit Margin	75

## LIST OF FIGURES

	<b>Page No.</b>
Figure 4.1 Sales, Expenses and Profit	50
Figure 4.2 Sales, Fixed cost and Variable Cost	53
Figure 4.3 Sales and Contribution Margin	55
Figure 4.4 Profit Volume Ratio	56
Figure 4.5 Actual Sales and Actual Profit	57
Figure 4.6 Break-Even Point	59
Figure 4.7 Actual Sales and BEP Sales	61
Figure 4.8 Margin of Safety	63
Figure 4.9 Current Ratio	66
Figure 4.10 Quick Ratio	68
Figure 4.11 Debt Ratio	70
Figure 4.12 Debt Equity Ratio	72
Figure 4.13 Gross Profit Margin	74
Figure 4.14 Net Profit Margin	76

## ABBREVIATION

BE	:	Break-Even
BEP	:	Break-Even Point
BNL	:	Bottlers Nepal Limited
CBEP	:	Cash Break-Even Point
CM	:	Contribution Margin
Co.	:	Company
CVP	:	Cost-Volume-Profit
FC	:	Fixed Cost
Ltd.	:	Limited
PV Ratio	:	Profit-Volume Ratio
PPC	:	Profit Planning and Control
Rs.	:	Rupees
SPPU	:	Selling Price Per Unit
SWOT	:	Strength, Weakness, Opportunities and Threat
TC	:	Total Cost
TCM	:	Total Contribution Margin
TS	:	Total Sales
VC	:	Variable Cost
VCPU	:	Variable Cost Per Unit