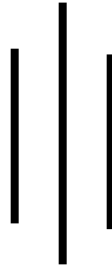
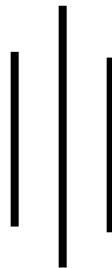


**A STUDY OF CASH MANAGEMENT IN PUBLIC  
MANUFACTURING COMPANY  
(A Case Study of Bottlers Nepal Limited)**



**By:**  
**Khagendra Dulal**  
**Post Graduate Campus**  
**Biratnagar**  
**T.U. Reg.: 7-2-3-1731-2002**



***A Thesis Submitted to;***

**Office of the Dean**  
**Faculty of Management**  
**Tribhuvan University**

***In partial fulfillment of the requirements of the degree in***  
**Master's of Business Studies (M.B.S.)**  
**Biratnagar, Nepal**

**March, 2010**



**TRIBHUVAN UNIVERSITY**

**POST GRADUATE CAMPUS**

**Biratnagar**

**Morang, Nepal**

Tel.No: 021-526327

021-522204

Ref.No.:-

---

---

***RECOMMENDATION***

**This is to certify that the thesis:**

*Submitted by:*

**KHAGENDRA DULAL**

*Entitled*

**A STUDY OF CASH MANAGEMENT IN PUBLIC  
MANUFACTURING COMPANY  
(A Case Study of Bottlers Nepal Limited)**

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

**Supervisor**

**Head of Department**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

**(Mr. Ram Prakash Upadhyaya)**

**Prof. Dr. Khagendra Acharya )**

**Campus Chief**

Signature: \_\_\_\_\_

**(Mr. Harihar Bhandari)**

**Date: - .....**



**TRIBHUVAN UNIVERSITY**

**POST GRADUATE CAMPUS**

**Biratnagar**

**Morang, Nepal**

Tel.No: 021-526327

021-522204

Ref.No.:-

---

---

**VIVA-VOCE SHEET**

*We have conducted the Viva-Voce Examination of the thesis presented by*

**KHAGENDRA DULAL**

*entitled*

**A STUDY OF CASH MANAGEMENT IN PUBLIC**

**MANUFACTURING COMPANY**

**(A Case Study of Bottlers Nepal Limited)**

*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**

Chairperson, Research Committee:

\_\_\_\_\_

Member (Thesis Supervisor):

**(Mr. Ram Prakash Upadhyaya)**

\_\_\_\_\_

Member (External Expert):

\_\_\_\_\_

**Date: .....**

# **Tribhuvan University**

## **Post Graduate Campus**

Biratnagar, Nepal

### **DECLARATION**

I heartily declare that the work reported this thesis entitled " cash management in public manufacturing company of Bottler Nepal limited".Submitted to the Faculty of Management, T.U. is my original work for the partial fulfillment of the Requirements for the Degree of Master of Business Studies(MBS). Under the supervision of Ram Prakash Upadhayaya of Post Graduate Campus Biratnagar.

.....  
Khagendra Dulal  
Researcher

Date: 2066/

## ACKNOWLEDGEMENT

At first, I would like to thank department of management for its greatest support to complete my MBS degree thesis and also helping me throughout my research work. The infrastructures of the campus have played an eminent role to complete this thesis in time. My supervisor Mr. Ram Prakash Uadhyaya had assisted me throughout the completion of this thesis assistance for this research work has been preferred to be very prudent and I would like to thank from the core of my heart. There have been considerable helping hands from many other personalities of the campus. In this regard, I would like to thank to all of them. I would like to thank also to the Campus chief Prof. Harihar Bhandari providing necessary suggestions during my research work.

I am thankful to Department Head Prof. Dr. Khagendra Acharya ,other teachers, Campus staff Mr. Gopal Prasad Ghimire and other staff and their contributions. The librarians of campus library will always be remembered for their assistance to provide me necessary documents related to my thesis. The Annual Report relating to Bottlers Nepal Limited has also been very fruitful to complete my study. So, I am also thankful to BNL and Mr. Narayan Adhikari. My Parents, family members Nawaraj Dulal, and my friend Mr. Dilli Dahal have always been kind to all my inquiries to complete my works in time. Similarly, I am indebted to all my brother and sister for his support and motivation to complete this thesis in time.

I am thankful to Mr. Ghanashyam, Binod, Radha Krishna for helping to the typing and formatting this thesis to make this more productive and comprehensive. Finally, I am indebted to all the associates who had contributed to make this thesis completed.

Khagendra Dulal

## TABLE OF CONTENTS

<b>Title</b>	<b>Page No.</b>
<b>Recommendation</b>	
<b>Viva-Voce Sheet</b>	
<b>Declaration</b>	
<b>Acknowledgement</b>	
<b>Table of Contents</b>	
<b>List of Tables</b>	
<b>List of Figures</b>	
<b>List of the Abbreviations</b>	
<b>CHAPTER ONE</b>	<b>1- 8</b>
<b>INTRODUCTION</b>	
1.1 Background of the Study	1
1.2 Introduction of Bottlers Nepal Limited	2
1.3 Focus of the Study	5
1.4 Statement of Research Problem	5
1.5 Objectives of the Study	6
1.6 Significance and Importance of the Study	6
1.7 Research Methodology	7
1.8 Limitation of the Study	7
1.9 Organization of the Study	8
<b>CHAPTER TWO</b>	<b>9- 34</b>
<b>REVIEW OF LITERATURE</b>	
2.1 Introduction	9
2.1.1 Meaning of Cash Management	9
2.1.2 Efficiency of Cash Management	11

2.1.3	Different Techniques of Cash Management	13
2.1.4	Determining the Optimum Cash Balance	15
2.1.5	Cash Management Models	17
2.1.6	Cash Cycle	22
2.1.7	Motives of Holding Cash	24
2.1.7.1	Transaction Motives	25
2.1.7.2	Precautionary Motives	25
2.1.7.3	Speculative Motives	25
2.1.7.4	Compensating Motives	26
2.1.8	Definitions of Key Terms	26
2.2	Introduction and Purpose of Cash Management	27
2.2.1	Review of Books	28
2.2.2	Review of Responsible Related Study	34

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

		<b>39-43</b>
3.1	Introduction	39
3.2	Research Design	39
3.3	Population and Sample	40
3.4	Source of Data	40
3.5	Data Collection Instrument	40
3.6	Data Collection Procedure	41
3.7	Data Processing Procedure	41
3.8	Method of Data Analysis	41
3.8.1	Financial Analysis	42
3.8.1.1	Ratio Analysis	43
3.8.2	Statistical Analysis	43

## **CHAPTER FOUR**

### **ANALYSIS AND PRESENTATION OF DATA**

**46-77**

4.1	Analysis of the Data by Financial Tools	46
4.1.1	Analysis of Cash Balance	46
4.1.2	Analysis of Cash Turnover	47
4.1.3	Analysis of Cash Conversion Cycle	48
4.1.4	Analysis of Cash Account Receivable of BNL	55
4.1.5	Analysis of Account Receivable to Cash and Bank Balance	56
4.1.6	Analysis of Cash and Bank Balance to Current Assets	57
4.1.7	Analysis of Cash and Bank Balance to Total Assets	59
4.1.8	Analysis of Cash and Bank Balance to Current Liabilities	60
4.2	Analysis of the Data by Statistical Tools	62
4.2.1	Fitting the Straight Line Trend by Least Square	62
4.2.2	Correlation Coefficient between Cash/Bank Balance and Actual Sales	64
4.2.3	Fitting the Straight Line Trend by Least Square for Sales and Receivables	66
4.2.4	Analysis of Correlation Coefficient between Sales and Account Receivables	69
4.2.5	Analysis of Correlation Coefficient between Account Receivables and Cash and Bank Balance	71
4.3	Analysis of Cash Flow Statement of BNL	72
4.4	Major Findings	77



## **CHAPTER FIVE**

### **SUMMARY, FINDINGS AND RECOMMENDATION**

	<b>77-80</b>
5.1 Summary	78
5.1.1 Issue and Constraints	78
5.2 Conclusion	79
5.3 Recommendation	80

### **BIBLIOGRAPHY**

### **APPENDICES**

#### **Appendix – I**

#### **Appendix - II**

#### **Appendix – III**

## **LIST OF TABLES**

<b>Table No.</b>	<b>Title of the Table</b>	<b>Page No.</b>
4.1	Analysis of Cash Balance	46
4.2	Analysis of Cash Turnover	47
4.3	Analysis of Inventory Conversion Period	49
4.4	Analysis of Receivable Conversion Period	51
4.5	Analysis of Payable Conversion Period	52
4.6	Analysis of Cash Conversion Cycle	54
4.7	Analysis of Account Receivable Turnover of BNL	55
4.8	Analysis of Account Receivable to Cash/ Bank Balance	56
4.9	Analysis of Cash/ Bank Balance to Current Assets	58
4.10	Analysis of Cash/ Bank Balance to Total Assets	59
4.11	Analysis of Cash/ Bank Balance to Current Liabilities	61
4.12	Least Square Spreadsheet between Fiscal Years and	62

	Cash/Bank Balance	
4.13	Future Trend Line of Cash Balance	63
4.14	Correlation 'r' between Actual Sales and Cash Balance	64
4.15	Fitting the Straight Line Trend by Least Square for Sales and Receivables	67
4.16	Future Trend Line for Sales and Receivable	68
4.17	Correlation 'r' between Receivables and Sales	69
4.18	Correlation between Account Receivable and Cash & Bank Balance	71
4.19	Calculation of Cash Flow Statement	73
4.20	balance sheet	74

## **LIST OF THE FIGURES**

<b>Figure No.</b>	<b>Title of the Figure</b>	<b>Page No.</b>
2.1	Determination of Optimum Cash Balance	16
2.2	EOQ Model of Cash Balancing	17
2.3	Relationship between Average Cash balance and Cost of Cash Maintains	18
2.4	Graphical Presentation of Miller Orr Model of Cash Balance	20
2.5	Cash Cycle	23
2.6	Cash Management Cycle	29
4.1	Graphical Presentation between Cash and Bank balance and Sales	48
4.2	Graphical Presentation between Sales and Inventory	50
4.3	Graphical Presentations between Sales and Receivable	52
4.4	Graphical Presentations between Purchase and Creditors	53
4.5	Graphical Presentation Among ICP, RCP, PDP and CCC	54
4.6	Graphical Presentations between account Receivable and Cash and Bank Balance	75
4.7	Analysis of Cash and Bank Balance to Current Assets	58
4.8	Graphical Presentation between Cash and Bank Balance and Total Assets	60
4.9	Graphical Presentations between cash & Bank Balance and Current Liabilities	61
4.10	Future Trend of Cash Balance	64
4.11	Future Trend Line of A/R and Sales by A/R Turnover Ratio	68

## **LIST OF ABBREVIATION**

%	:	Percent
$\sigma^2$	:	Variation
ACP	:	Average Collection Period
AM ( $\bar{x}$ )	:	Arithmetic Mean
AR	:	Account Receivables
B.S	:	Bikram Sambat
BEP	:	Break Even Point
BNL	:	Bottlers Nepal Limited
C.V.	:	Coefficient of Variation
CA	:	Charter Account
CA	:	Current Assets
CAPM	:	Capital Assets Pricing Model
CCC	:	Cash Conversion Cycle
CDM	:	Central Department of Management
CL	:	Current Liabilities
CVP	:	Cost Volume Profit Analysis
DTC	:	Depository Transfer Cheques
EDTC	:	Electronic Depository Transfer Cheques
EOQ	:	Economic Order Quantity
FC	:	Fixed Cost
FY	:	Fiscal Year
g.	:	Gram

ICP	:	Inventory Conversion Period
Kcal.	:	Calcium
Ltd.	:	Limited
MBA	:	Master of Business Administration
MBS	:	Master of Business Studies
ml.	:	Milliliter
No.	:	Number
P.E.	:	Probable Error
PDP	:	Payable Conversion Period
PEs	:	Public Enterprises
r	:	Correlation Coefficient
RCP	:	Receivable Conversion Period
Reg.	:	Registration
S.D. ( )	:	Standard Deviation
T.U.	:	Tribhuvan University
TA	:	Total Assets
VC	:	Variable Cost
VC	:	Variable Cost