

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

**INFLATION EFFECTS ON RISK MINIMISING PORTFOLIO OF
FOOD AND BEVERAGES ASSETS IN MALAYSIA BY USING
MEAN-CVAR MODEL**

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TABLE OF CONTENTS

AKNOWLEDGEMENTS	i
TABLE OF CONTENTS	ii
LIST OF TABLES	iii
LIST OF FIGURES	iii
ABSTRACT	iv
CHAPTER 1: INTRODUCTION.....	1
1.1 Motivation.....	1
1.2 Problem Statement	3
1.3 Objectives	4
1.4 Significant and Benefit of Study.....	4
1.5 Scope and Limitation of Study.....	4
1.6 Definition of Terms.....	5
CHAPTER 2: BACKGROUND THEORY AND LITERATURE REVIEW	7
2.1 Background Theory	7
2.2 Literature Review/Related Research.....	8
2.2.1 Inflation rate.....	8
2.2.2 An overview of CVaR	9
2.2.3 An overview of mean-risk and Mean-CVaR model	10
CHAPTER 3: METHODOLOGY.....	11
3.1 Introduction.....	11
3.2 Data Collection from Datastream and the Calculation of Daily Returns.....	12
3.3 Portfolio Optimisation	13
3.4 Constructing In-sample and Out-of-sample Portfolio.....	14
3.5 Constructing Portfolio Selection and Mean-CVaR Model	14
3.6 Result Analysis	17
CHAPTER 4: RESULTS AND DISCUSSIONS	18
4.1 Introduction.....	18
4.2 Collection of Data	18
4.3 Observation of In-sample Portfolio	19
4.4 Observation of Out-sample Portfolio.....	23
CHAPTER 5: CONCLUSION & RECOMMENDATIONS	25
REFERENCES.....	27
APPENDIX OF IN-SAMPLE ANALYSIS.....	30
APPENDIX OF OUT-OF-SAMPLE ANALYSIS.....	32

LIST OF TABLES

Table 1.1: Definition of term use in this study	5
Table 4.1: Number of assets selected in in-sample portfolios for each target returns d	19
Table 4.2: Realised return for one of the portfolios with different levels of d	24

LIST OF FIGURES

Figure 1. 1: Flowchart of Methodology	11
Figure 4.1: CVaR 5% of In-Sample and Equally Weighted for Mean-CVaR Model	20
Figure 4.2: CVaR 5% of In-Sample Portfolios for Mean-CVaR Model with Inflation Rate	21
Figure 4.3: CVaR 5% of Out-of-Sample and Equally Weighted for Mean-CVaR Model.	23

ABSTRACT

This study aims to see the effect of inflation rate on the food and beverage industry by applying the Mean-CVaR model. This industry was chosen for the study since it is one of the prosperous businesses which offer human necessities, which makes it a major contributor to the country's economy. Thus, we want to find out whether there is a significant impact on losses in this industry for ten years, from January 2013 to December 2022, when inflation occurs. Daily closing prices dataset of food and beverage assets from Datastream is used to generate the scenario returns for each portfolio. This dataset is simulated from the year 2013 to 2022 and implemented in Microsoft Excel Version 16.0. The CVaR calculation is used as a risk measure to obtain the optimal portfolio of the assets. The optimal portfolios are observed and assessed over three different target returns, which are low risk-low returns, medium risk-medium returns, and high risk-high returns portfolios. A variety of expected return and risk levels are observed for a period of ten years. The formulation and detailed explanations of this calculation have been explained in Chapter 3. The 35 risky assets in the in-sample portfolio are validated using an out-of-sample portfolio which in total has 250 scenarios. The result shows that low target return will give a low risk while high target return will also come with high risk during investment. Low target return will also minimised the risk of investment in the in-sample. This study also proves that high inflation causes low risk while still obtaining expected return at the same time.