

**UNIVERSITI TEKNOLOGI MARA**

**THE INFLUENCE OF  
LIBERALIZATION IN CONTAINER  
HAULAGE INDUSTRY TOWARDS  
ITS SAFETY PERFORMANCE**

**NADIA BINTI OTHMAN**

Thesis submitted in fulfilment  
of the requirement for the degree of  
**Master of Science**

**Malaysia Institute of Transport**

October 2015

## AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

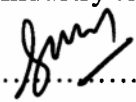
Name of Student : Nadia Binti Othman

Student I.D.No. : 2010805916

Programme : Master of Science (Logistics and Transport)

Faculty : Malaysia Institute of Transport (MITRANS)

Thesis Title : The Influence of Liberalization in Container Haulage  
Industry towards Its Safety Performance

Signature of Student :  .....

Date : October 2015

## **ABSTRACT**

This study was undertaken to identify the main cause of accidents involving container haulage and to determine the impacts of liberalization with regards to safety issues. After almost 10 years of liberalization, some operators think that authorities should consider stopping the issuance of new haulage licenses or giving new licenses only to existing companies to expand their fleet if the need arises. Many haulage operators hope to run their vehicle fleet profitably with a maximum return on the capital invested and at the same time prolonged the cycle of investment period. However, constraints such as budget limitations and increasing competition and challenges may possibly detract them from maintaining a safe fleet. In addition, reviews of well established literatures have been carried out as well as questionnaires have been distributed to assess the factors which contribute to accident – human factors and vehicle factors and how they are related to the impact of liberalization. Results of this survey were used to improve safety in container haulage industry by analyzing participants' response through provided questions. The target population of this study comprises low, middle and top management who works in haulage companies and the sample size in this study is 107. Two types of software have been used in this study, namely Statistical Package for Social Sciences (SPSS) version 2.0 to key in the data and Analysis of Moment Structures (AMOS) version 2.0 to test the Structural Equation Modeling (SEM). By having this study, it is strongly believed that the container haulage industry in our country would get the significant impacts where results from this study help all related stakeholders to take immediate action to improve the safety aspects in overall operations. Apart from that, the hauliers can look forward into factors which are considered as important to their customers as to boost efficiency and to ensure the continually success of operations and business. The final finding shows that human factors have significant relationship to the impact of liberalization; therefore, authorities should take action and plan for improvement of human development among who are involved in the haulage industry. Moreover, by establishing an institution to develop a career path for the drivers can educate them and create a Malaysian driver as a 5- star driver.

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>AUTHOR'S DECLARATION</b>	<b>ii</b>
<b>ABSTRACT</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS</b>	<b>iv</b>
<b>TABLE OF CONTENTS</b>	<b>v</b>
<b>LIST OF TABLES</b>	<b>x</b>
<b>LIST OF FIGURES</b>	<b>xii</b>
<b>LIST OF SYMBOLS</b>	<b>xiv</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xv</b>

### **CHAPTER ONE: INTRODUCTION**

1.1 Introduction	1
1.2 Research Background	1
1.3 Problem Statements	13
1.4 Objectives	19
1.5 Research Questions	19
1.6 Scope	20
1.7 Limitations	20
1.8 Significance of the Study	21
1.9 Outline of Thesis	22
1.10 Gaps in Research	22
1.11 Summary of the Chapter	23

## **CHAPTER TWO: LITERATURE REVIEW**

2.1	Introduction	24
2.2	Containerization	24
2.3	Liberalization	26
2.4	Licensing	30
2.5	Accident	34
2.6	Factors Contributing to an Accident	39
2.7	Summary of the Chapter	87

## **CHAPTER THREE: FRAMEWORK AND RESEARCH DESIGN**

3.1	Introduction	88
3.2	Theoretical/ Research Framework	88
3.3	Research Hypotheses	91
3.3.1	Human Factors and the Impact of Liberalization	91
3.3.2	Vehicle Factors and the Impact of Liberalization	92
3.4	Research Design	93
3.5	Operational Definition	94
3.6	Source of Data	95
3.6.1	Primary Data Collection	95
3.6.2	Secondary Data Collection	96
3.7	Justification for the Methodology	96
3.7.1	Sampling Design	96
3.7.1.1	Population	97
3.7.1.2	Sample Size	97
3.7.1.3	Sampling Technique	97
3.7.2	Data Measurement Scale	98