

**DEBT SERVICES, CAPITAL INFLOWS AND  
ECONOMIC GROWTH IN NORTH AFRICAN  
COUNTRIES**

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**DEBT SERVICES, CAPITAL INFLOWS AND ECONOMIC GROWTH IN  
NORTH AFRICAN COUNTRIES**

**By**

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**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
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## **ABSTRACT**

The North African countries namely Algeria, Egypt, Mauritania, Morocco and Tunisia rely heavily on external funds for financing its development. Such external funding usually takes the form of external loans. This study advances the argument that the real problem that impedes the process of economic growth is the challenge of inadequate real resources for capital formation, due to high external debt servicing. The mounting debt stocks have discouraged the inflow of foreign capital in the form of Foreign Direct Investment (FDI) for fear of macroeconomic distortions. It is scarcely surprising that high debt-service obligation has not only made North African economies to perform poorly but also to rely heavily on foreign sources of budgetary support, thereby creating an unending cycle of economic crisis. In a nutshell, this study used a simultaneous equations model to test the process of interaction between FDI inflows, external debt service and economic growth. The analysis uses the Three Stage Least Square and panel cointegration test to investigate the relationship between debt service, FDI inflow and other determinants and economic growth. The results showed a negative sign and significant relation between debt service and economic growth. The results also show that FDI inflows play an important role and increased the economic growth. The interaction variables between debt crisis with FDI inflows, debt crisis and domestic saving show a negative effect on economic growth in some countries and a positive effect on economic growth in others. In terms of policy, the governments should promote rational and proper utilization of resources, while trying to get more concession on newly acquired debt inflows. It also indicates that policymakers should act early when choosing to lean against credit booms, before the debt service reaches critical levels.

**Keywords:** debt service, capital inflows, multi-simultaneous equation, panel cointegration, economic growth

## ABSTRAK

Negara-negara Afrika Utara seperti Algeria, Mesir, Mauritania, Maghribi dan Tunisia amat bergantung kepada dana luar untuk membiayai pembangunannya. Pembiayaan luar seperti ini biasanya dalam bentuk pinjaman luar negara. Kajian ini mengutarakan hujah bahawa masalah sebenar yang menghalang proses pertumbuhan ekonomi adalah cabaran dari segi sumber sebenar yang tidak mencukupi untuk pembentukan modal, kerana khidmat hutang luar negara yang tinggi. Peningkatan dalam stok hutang tidak menggalakkan aliran masuk modal dalam bentuk pelaburan langsung asing (PLA) kerana bimbang akan keherotan ekonomi makro. Adalah tidak menghairankan bahawa obligasi terhadap khidmat hutang yang tinggi bukan sahaja telah membuatkan ekonomi Afrika Utara berprestasi lemah tetapi juga terpaksa bergantung sepenuhnya kepada sokongan belanjawan sumber asing, dan keadaan ini mewujudkan kitaran krisis ekonomi yang tidak berkesudahan. Secara ringkasnya, kajian ini menggunakan model persamaan serentak untuk menguji proses interaksi antara aliran masuk PLA, khidmat hutang luar dan pertumbuhan ekonomi. Data kajian akan dianalisis menggunakan ujian Kuasa Dua Terkecil Tiga Peringkat dan ujian kointegrasi panel untuk menyiasat hubungan antara khidmat hutang, aliran masuk PLA serta penentu lain dan pertumbuhan ekonomi. Keputusan menunjukkan tanda negatif dan hubungan yang signifikan antara khidmat hutang dan pertumbuhan ekonomi. Dapatan kajian juga menunjukkan bahawa aliran masuk PLA memainkan peranan yang penting dan telah meningkatkan pertumbuhan ekonomi. Pembolehubah interaksi antara krisis hutang dengan aliran masuk PLA, krisis hutang dan tabungan domestik menunjukkan kesan negatif ke atas pertumbuhan ekonomi di beberapa buah negara dan kesan positif kepada pertumbuhan ekonomi di negara-negara yang lain. Dari segi dasar, kerajaan harus menggalakkan penggunaan sumber secara rasional dan sebaik-baiknya, disamping cuba mendapat lebih konsesi untuk aliran masuk perolehan hutang yang baharu. Hal ini juga menunjukkan bahawa pembuat dasar perlu bertindak awal apabila memilih untuk bersandar kepada hutang yang banyak, sebelum khidmat hutang sampai ke tahap kritikal.

**Kata kunci:** khidmat hutang, aliran masuk modal, persamaan serentak berbilang, kointegrasi panel, pertumbuhan ekonomi

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## **TABLE OF CONTENT**

<b>TITLE PAGE</b>		<b>i</b>
<b>CERTIFICATION OF THESIS WORK</b>		<b>ii</b>
<b>PERMISSION TO USE</b>		<b>iii</b>
<b>ABSTRACT</b>		<b>iv</b>
<b>ABSTRAK</b>		<b>v</b>
<b>ACKNOWLEDGMENT</b>		<b>vi</b>
<b>TABLE OF CONTENTS</b>		<b>ix</b>
<b>LIST OF TABLES</b>		<b>xiii</b>
<b>LIST OF FIGURES</b>		<b>xiv</b>
<b>LIST OF ABBREVIATION</b>		<b>xv</b>
<b>CHAPTER ONE</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Background of the Study	1
1.2	Statement of the Problem	13
1.3	Research Questions	18
1.4	Objectives of the study	19
1.5	Significance of the Study	20
1.6	Scope of the Study	22
1.7	Organization of the Study	22



CHAPTER TWO	AN OVERVIEW OF EXTERNAL DEBT AND ECONOMIC GROWTH IN SELECTED NORTH AFRICAN COUNTRIES	24
2.1	General Situation of the Linkages between External Debt and Economic Performance of North African Economies	24
2.2	Algeria	28
2.3	Egypt	32
2.4	Morocco	37
2.5	Tunisia	38
2.6	Mauritania	40
2.7	Conclusion	43
CHAPTER THREE	LITERATURE REVIEW	45
3.1	Theoretical Framework	45
	3.1.1 Economic Growth	45
	3.1.2 Relationship between External Debt and Economic Growth	49
	3.1.3 External Debt, Foreign Investment and Economic Growth	53
3.2	Empirical Framework	57
	3.2.1 Relationship between External Debt and Economic Growth	57
	3.2.2 External Debt, Foreign Investment and Economic Growth	61
	3.2.3 Selected Empirical Studies on the Simultaneous Equation Model	66
	3.2.4 Issues related to Model Estimation	75

3.3	Conclusion	78
CHAPTER FOUR	METHODOLOGY AND DATA	79
4.1	Specification of the Model	79
4.2	Theoretical Growth Model Uses Production Function	80
4.3	Estimation Procedure	89
	4.3.1 Time Series Unit Root Test	89
	4.3.2 Simultaneous Equations Model	90
	4.3.3 The Assumptions are articulated as Follows	96
4.4	Extension of the Model	98
	4.4.1 Panel Unit Root Tests	100
	4.4.1.1 Levin, Lin and Chu	101
	4.4.1.2 Im, Pesaran and Shin	105
	4.4.2 Cointegration Tests	108
	4.4.2.1 Panel Cointegration Tests	109
	4.4.2.2 Fully Modified Ordinary Least Squares (FMOLS) Estimation	114
4.5	Data and Choice of Variables	117
4.6	Conclusion	118
CHAPTER FIVE	EMPIRICAL ANALYSIS AND FINDINGS	119
5.1	Results of Unit Roots Test	119
5.2	Regression Results of the Simultaneous Equations Model	123

	5.2.1: Regression of Economic Growth Equation	124
	5.2.2: Regression of Debt Service Equation	132
	5.2.3: Regression of Foreign Direct Investment Equation	140
5.3	Diagnostic Test	147
5.4	Conclusion	151
CHAPTER SIX	ANALYSIS ON THE LONG RUN RELATIONSHIP BETWEEN THE ECONOMIC GROWTH AND ITS DETERMINANTS OF SELECTED NORTH AFRICAN COUNTRIES	152
6.1	Results of The Panel Unit Root Tests	152
6.2	Cointegration Test	157
	6.2.1 Panel Cointegration Tests	157
6.3	Cointegration Estimation Results – FMOLS	160
6.4	Conclusion	164
CHAPTER SEVEN	DISCUSSIONS, CONCLUSIONS AND POLICY IMPLICATIONS	165
7.1	Discussions	165
7.2	Conclusions	170
7.3	Policy Implications	173
7.4	Limitations of the Study	177
7.5	Suggestion for Further Studies	178
		179
<b>REFERENCES</b>		
Appendix 1		190

## LIST OF TABLES

Table		Page
Table 1.1	Important Growth Trends in North African Countries, 2002-2012	10
Table 2.1	Inflation and Growth in North African Countries	27
Table 2.2	Algeria's External Debt Situation (2003 – 2011)	32
Table 2.3	Tunisian Economy: Performance of the Economy, 1980-2000	40
Table 2.4	External Debt: Global Ranking, 1991- 2012 (Mauritania)	42
Table 5.1	Algeria: ADF Test for Unit Root	120
Table 5.2a	Egypt: ADF Test for Unit Root	121
Table 5.2b	Tunisia: ADF Test for Unit Root	121
Table 5.3a	Mauritania: ADF Test for Unit Root	122
Table 5.3b	Morocco: ADF Test for Unit Root	122
Table 5.4	Regression of Economic Growth Equation	126
Table 5.5	Regression of Debt Service Equation	134
Table 5.6	Regression of Foreign Direct Investment Equation	143
Table 5.7	Robustness Tests – Economic Growth Equation	147
Table 5.8	Robustness Tests – Debt Service Equation	148
Table 5.9	Robustness Tests – FDI Inflows Equation	149
Table 6.1	Panel Unit Root Tests	155
Table 6.2	Panel Cointegration Tests for Heterogeneous Panel	158
Table 6.3	FMOLS (Individual) Results, Dependent Variable: Economic Growth ( $\ln Y_{it}$ )	161
Table 6.4	FMOLS (Group) Results, Dependent Variable: Economic Growth ( $\ln Y_{it}$ )	163
Table 7.1	Regression of Economic Growth Equation	168
Table 7.2	Regression of Debt Service Equation	168

Table		Page
Table 7.3	Regression of Foreign Direct Investment Equation	169
Table 7.4	FMOLS (Individual) Results; Dependent Variable: Economic Growth ( $\ln Y_{it}$ )	169

## LIST OF FIGURES

Figure	Page
Figure 2.1 Mauritania External Debt Trend (data above), 1991-2012	43

## **LIST OF ABBREVIATION**

2SLS	=	Two Stages Least Square
3SLS	=	Three Stages Least Square
ADF	=	Augmented Dickey-Fuller
BOP	=	Balance of Payment
DF	=	Dickey-Fuller
DSR	=	Debt Service Ratio
FCI	=	Foreign Capital Inflows
FDI	=	Foreign Direct Investment
GDP	=	Gross Domestic Product
GMM	=	Generalized Method of Moments
GNP	=	Gross National Product
HIPC	=	Heavily Indebted Poor Countries
IMF	=	International Monetary Fund
IV	=	Instrumental Variables
LDC	=	Less-Developed Country
LR	=	Likelihood Ratio
NPV	=	Net Present Value
OLS	=	Ordinary Least Squares
WAMZ	=	West African Monetary Zone

# **CHAPTER ONE**

## **INTRODUCTION**

This chapter outlines the introduction of the thesis. In this context, the rationale of the study is presented in the form of a problem statement, research questions and research objectives. The importance and scope of the study are also outlined in this chapter. The chapter closes with the research organization.

### **1.1 Background of the Study**

At the global scene, external debt and foreign direct investment (FDI) have been considered as major sources of capital financing. FDI is the main form of capital inflow to many countries, while nations experiencing account deficit are advised to borrow funds, external debt, from the international community to boost their economic growth (Malik, Hayat and Hayat, 2010). Unfortunately, external debt and its repayment have become a hindrance to several developing North African countries' economic growth like in Algeria, Egypt, Mauritania, Morocco and Tunisia. As noted by Malik *et al.*, (2010), in the past thirty years, it has been seen that foreign debt had been the major culprit in the decline in investment and growth performance of many countries. International debt can be likened to unnecessary tax paid by future generations on wasted services; in addition, the rise of debt servicing ratio can adversely affect economic growth of any country (Chowdhury, 1994).



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