RELATIONSHIPS AMONG FOREIGN AID, FOREIGN DIRECT INVESTMENT, AND ECONOMIC GROWTH IN EAST AFRICAN COMMUNITY MEMBERS

MASOUD MOHAMMED ALBIMAN

FEP 2013 6
RELATIONSHIPS AMONG FOREIGN AID, FOREIGN DIRECT INVESTMENT, AND ECONOMIC GROWTH IN EAST AFRICAN COMMUNITY MEMBERS

By

MASOUD MOHAMMED ALBIMAN

Thesis submitted to the School of Graduate Studies, Universiti Putra Malaysia, in the fulfillment of the requirements for the Degree of Master of Science

June 2013
COPYRIGHT

All the material contain within the thesis, including without limitation text, logos, icons, photographs and all other arts works, is copyright material of Universiti Putra Malaysia unless otherwise stated. Used may be made of any material contained within the thesis for non-commercial purposes form the copy right holder. Commercial use of the material may be only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia
DEDICATION

Specially dedicated to my beloved family
RELATIONSHIPS AMONG FOREIGN AID, FOREIGN DIRECT INVESTMENT, AND ECONOMIC GROWTH IN EAST AFRICAN COMMUNITY MEMBERS

By

MASOUD MOHAMMED ALBIMAN

June 2013

Chairperson: Shivee Ranjanee a/p Kaliappan, PhD

Faculty: Economics and Management

This study has been conducted on a selected sample of EAC members, namely Kenya, Uganda, Rwanda, and Burundi. The study has two main objectives, first being to examine the role of foreign aid in economic growth in the long run, and their interaction in the short run. Second objective is to examine the role of foreign aid (bilateral and multilateral) in FDI inflows in the long run, and their interaction in the short run. In achieving these objectives, the study utilized endogenous growth model originated from neoclassical growth theories. To accomplish these objectives, the study used Dynamic
Ordinary Least Square (DOLS) and Vector Error Correction model (VECM). DOLS method is more suitable in cases which there are serial correlation and a small sample size.

The study found that, in the long run FDI has significant positive impact on economic growth for Kenya and Burundi. On the other hand, the impact is negative for Uganda. In the short run, the study found that, FDI has no impact on economic growth for all EAC members. However, the study revealed that, in the short run, increase in FDI enhances more foreign aid inflows in Rwanda; whilst in Burundi FDI promotes domestic investment.

The study also found that, in the long run, export does not have any impact on economic growth Kenya, Uganda and Rwanda. However, in Burundi, export has a positive and significant role in economic growth. Moreover, in the short run, the results suggest that, export does not have any impact on economic growth for three EAC members out of four. The only impact is found in Uganda, where export granger causes economic growth.

Furthermore, for the case of foreign aid we found that, in the long run it has a positive and significant impact of economic growth for Kenya and Burundi. In contrast, we found the negative and significant impact of foreign aid on economic growth of Uganda. On the other hand, in the short run, the results suggest that, foreign aid causes economic growth and domestic investment in Uganda. Furthermore, we found that, an increase in foreign aid causes increase in exports in Kenya whilst, in Burundi foreign
aid promotes domestic investment. However, this impact failed to interact with the economic growth in either country.

According to the results, it is worthwhile to form appropriate policies that will ensure positive impact of FDI on economic growth for all EAC members in the long run and the short run. On the other hand, major policies to improve export performances and ensuring a positive impact on economic growth have to be reformed. Furthermore, it is worthwhile to reform policies so that, foreign aid would have a sustainable positive impact on economic growth.

For the second objective, the impact of bilateral aid in the long run is negative in the case of Rwanda and positive for Uganda. On the other hand, in the short run bilateral aid does not have any impact on FDI for any countries. In the long run, multilateral aid has significant positive and negative impact on Rwanda and Burundi respectively. Furthermore, results suggest that, multilateral aid has no impact to FDI inflows in Uganda and Kenya. Not only that, but also, in the short run, multilateral aid has no impact to FDI for any EAC members. In general, to enhance FDI inflows, Rwanda and Burundi have to encourage more multilateral aid whilst Uganda, has to encourage more bilateral aid.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

HUBUNGAN ANTARA BANTUAN ASING, PELABURAN LANGSUNG ASING DAN PERTUMBUHAN EKONOMI DI KALANGAN AHLI KOMUNITI AFRIKA TIMUR

Oleh

MASOUD MOHAMMED ALBIMAN

Jun 2013

Pengerusi: Shivee Ranjane a/p Kaliappan, PhD

Fakulti: Ekonomi dan Pengurusan

Kajian ini dijalankan dengan menggunakan sampel yang dipilih daripada ahli EAC, iaitu, Kenya, Uganda, Rwanda, Burundi, dan Tanzania. Dua objektif kajian ini adalah: pertama, untuk meneliti peranan bantuan asing terhadap pertumbuhan ekonomi bagi jangka panjang dan interaksi mereka untuk jangka panjang. Objektif kedua, untuk meneliti peranan bantuan asing (bilateral dan multilateral) terhadap aliran masuk FDI bagi jangka panjang dan interaksi mereka bagi jangka pendek. Bagi mencapai objektif tersebut, kajian ini menggunakan pakai model pertumbuhan endogenous yang berasal daripada teori pertumbuhan neoklasikal. Bagi mencapai kedua-dua objektif tersebut, kajian ini menggunakan “Dynamic Ordinary Least Square” (DOLS) dan Model
Pembetulan Kesilapan Vector (VECM). Kaedah DOLS adalah sesuai bagi kes yang terdapat korelasi bersiri dan bagi saiz sampel yang kecil.


Kajian ini juga mendapati bahawa untuk jangka panjang, FDI mempunyai impak yang signifikan dan positif bagi Kenya dan Burundi. Sebaliknya, impak negatif adalah bagi Uganda. Untuk jangka pendek, kajian ini mendapati bahawa, FDI tidak mempunyai kesan terhadap pertumbuhan ekonomi bagi semua ahli EAC. Walau bagaimanapun, kajian ini menunjukkan bahawa, bagi jangka pendek, peningkatan FDI merangsang kemasukan lebih banyak bantuan asing di Rwanda, manakala di Burundi, FDI mempromosi pelaburan domestik.

Kajian ini juga mendapati bahawa bagi jangka panjang, eksport tidak mempunyai sebarang kesan terhadap pertumbuhan ekonomi bagi—Kenya, Uganda dan Rwanda. Walau bagaimanapun, di Burundi, eksport mempunyai peranan yang positif dan
signifikan terhadap pertumbuhan ekonomi. Oleh itu, untuk jangka pendek, hasil kajian menunjukkan bahawa eksport tidak mempunyai sebarang kesan terhadap pertumbuhan ekonomi bagi tiga daripada empat ahli EAC. Hanya satu impak didapati di Uganda, yang memperlihatkan eksport menyebabkan pertumbuhan ekonomi.

Berdasarkan hasil dapanan, adalah wajar untuk membentuk polisi yang sesuai yang akan memastikan impak PLA yang positif terhadap pertumbuhan ekonomi bagi semua negara EAC untuk jangka panjang dan pendek. Sebaliknya, polisi utama untuk memperbaik performan eksport, memastikan kesan positif bagi pertumbuhan ekonomi harus dibentuk. Adalah juga wajar untuk mereformasikan polisi yang sesuai supaya bantuan asing dapat memberikan kesan positif yang mapan terhadap pertumbuhan ekonomi bagi semua ahli EAC.


Umumnya, untuk merangsang aliran PLA -Rwanda dan Burundi harus menggalakkan lebih banyak bantuan multilateral, manakala, Uganda harus menggalakkan lebih banyak bantuan bilateral.
ACKNOWLEDGEMENTS

This thesis is not completed by my own hard work. I received several operations and advice from my colleagues and my supervisors. Firstly, I would like to extend my appreciation to my family for their financial supports to complete this research, especially my uncles Mr. Ali Omar Aziz and Said Omar Aziz. Furthermore, I would like to give my special thanks to my beloved supervisors Dr. Shivee Ranjanee a/p Kaliappan and Assoc. Prof. Dr. Normaz Wana Ismail. Not only that but also I would like to offer my gratitude to Assoc. Prof. Dr. Law Siong Hook, Prof. Mansor Ibrahim, Assoc. Prof. Dr. Wan Azman Saini and Mr. Masoud Rashid Mohammed for their support and advice concerning time series analysis and other advice concerning the improvement of this thesis. On the other hand, I cannot forget the supports of my friends who supported me to be patient and encourage me to work to complete this thesis. I would be happy to mention a few of them namely: Salha Mohammed Suleiman, Najat Nassor Suleiman and Khamis Mslem Khamis. May God bless them all who have supported me, even for those who I have not mentioned here. God Bless you for your support.
I certify that a thesis examination committee has met on 11 June 2013 to conduct the final examination of Masoud Mohammed Albiman on his Master of Science thesis entitled “Relationships Among Foreign aid, FDI and Economic Growth in East African Community (EAC) members” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia (P.U. (A) 106) 15 March 1998. The committee recommends that the student be awarded the degree of Master of Science.

Members of the Thesis Examination Committee were as follows:

Norashidah binti Mohamed Nor, PhD
Senior lecturer
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Wan Azman Saini bin Wan Ngah, PhD
Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Zaleha Mohamed Noor, PhD
Senior lecturer
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Gairuzazmi M Ghani, PhD
Associate Professor
International Islamic University of Malaysia
Malaysia
(External Examiner)

NORITAH OMAR, PhD
Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 17 October 2013
This thesis was submitted to the Senate of the University Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Science. The members of supervisory committee were as follows

**Shivee Ranjanee a/p Kaliappan, PhD**
Senior Lecture
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

**Normaz Wana Ismail, PhD**
Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

**BUJANG BIN KIM HUAT, PhD**
Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:
DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been dully acknowledged. I also declare that it has not been previously, and is not concurrently submitted for any other degree at Universiti Putra Malaysia or at any other institution.

MASOUD MOHAMMED ALBIMAN

Date: 11 June 2013
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>vi</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ix</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>x</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xvii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xx</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xxi</td>
</tr>
</tbody>
</table>

## CHAPTER

### I INTRODUCTION

1.1 An Overview                           1
1.2 Background Of The Study               4
   1.2.1 An overview of East Africa Community (E.A.C) 9
   1.2.2 Economic Performance of the EAC Members 9
   1.2.3 Foreign Aid in EAC Countries           11
   1.2.4 Trend of Multilateral and Bilateral aid Inflows in EAC 15
   1.2.5 Trend of FDI inflows to EAC            16
1.3 Problem Statement                     19
1.4 Objectives Of The Study               23
1.5 Significance Of The Study             24
1.6 Organization Of The Study             25
2 LITERATURE REVIEW 26

2.0 Introduction 26

2.1 Review Of Theoretical Literatures 26

2.1.1 Determinants of the Economic Growth 26

2.1.2 Foreign Aid and Economic Growth 29

2.1.3 Foreign Aid and FDI 31

2.2 Review of the Empirical Literature 33

2.2.1 Foreign Aid and Economic Growth 33

2.2.2 Foreign Aid and FDI 39

2.3 Conclusion and Gap in The Literature 41

3 RESEARCH METHODOLOGY 43

3.0 Introduction 43

3.1 Theoretical Framework 43

3.1.1 Foreign Aid and Economic Growth. 43

3.1.2 Foreign Aid and FDI 45

3.2 Model Specification 47

3.2.1 Economic Growth Model 47

3.2.1.1 Relationship between variables in economic growth model 49

3.2.2 FDI –Foreign Aid Model 51

3.2.2.1 Relationship Between Variables for FDI model 52

3.3 Equations of Dynamic OrdinaryLeast Square (DOLS) 54

3.4 Vector Error Correction Model (VECM) 55

3.5 Empirical Methodology (Estimation Procedures) 58

3.5.1 The Time Series Properties 58

3.5.2 Unit root Test 60

3.5.3 Cointegration Test 64
3.5.4 Cointegration Test under Johansen and Juselius System 66
3.5.5 Vector Error Correction Model (VECM) 68
3.5.6 Granger Causality Test 70
3.6 Justification Of The Selected Methods 72
3.6.1 Dynamic Ordinary Least Square (DOLS) 72
3.6.2 Johansen and Juselius Multivariate Test 74
3.7 Descriptions Of Data And Sources 76

4 EMPIRICAL RESULTS AND DISCUSSIONS 77
4.0 Introduction 77
4.1 First Objective: Foreign Aid-Growth Model 77
4.1.1 Description Statistics and Correlation Analysis 77
4.1.2 Unit root test results 82
4.1.3 Multivariate Cointegration Test Results 88
4.1.4 Analysis of the DOLS Results: Long Run Relationship 92
4.1.4.1 Discussion of DOLS Results: Long Run Relationship 96
4.1.5 VECM Model And Causality Test: Short Run Relationship 100
4.2 Second Objective: FDI–Foreign Aid Model 104
4.2.1 Unit Root Test Results 105
4.2.2 Descriptive Statistics and Correlation Analysis 105
4.2.3 Multivariate Cointegration Analysis 110
4.2.4 Analysis and Interpretations of DOLS Results 112
4.2.4.1 Discussion of the DOLS Results 116
4.2.5 Vector Error Correction Model (VECM) And Causality 118
4.3 Conclusion 122
5 CONCLUSION AND POLICY IMPLICATIONS

5.0 Introduction 125

5.1 Summary Of The Findings And Policy Implications 125

5.1.1 Objective 1: Foreign Aid and Economic Growth. 130

5.1.2 Objective 2: FDI and Foreign Aid 134

5.2 Limitations And Future Policy Recommendations 136

REFERENCES 139

BIODATA OF STUDENT 150