UNIVERSITI PUTRA MALAYSIA

SOURCES OF FINANCIAL DEVELOPMENT AND THEIR EFFECTIVENESS IN THE MIDDLE EAST AND NORTH AFRICAN REGION

MANIZHEH FALAHATY

FEP 2011 12
SOURCES OF FINANCIAL DEVELOPMENT AND THEIR EFFECTIVENESS IN THE MIDDLE EAST AND NORTH AFRICAN REGION

By
MANIZHEH FALAHATY

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in fulfilment of the Requirements for the Degree of Doctor of Philosophy

November 2011
Abstract of thesis presented to the Senate of University Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

SOURCES OF FINANCIAL DEVELOPMENT AND THEIR EFFECTIVENESS IN THE MIDDLE EAST AND NORTH AFRICAN REGION

By
MANIZHEH FALAHATY
November 2011

Chairman: Associate Professor Law Siong Hook, PhD
Faculty: Economics and Management

Following the relatively poor economic performance and low economic growth experienced by Middle East and North Africa (MENA) countries, many of these nations have implemented financial reforms and structural adjustment programs over the past three decades. A more efficient financial system provides better financial services which enable an economy to increase its GDP growth rate. Conversely, a weakened financial system spills over unfavorably into the economy. With respect to the increase in financial development indicators, economic growth has experienced more fluctuations and has increased albeit weakly over the period 1991-2007. Moreover, mixed results have been obtained from the empirical studies that have focused on this region.

Therefore, this study aims to investigate the effectiveness and sources of financial development for the MENA region during 1991-2007, using the Pedroni co-
integration technique, cross-sectional dependency test, fully modified ordinary least square (FMOLS) estimation, dynamic OLS (DOLS) estimation and the panel vector autoregressive (PVAR) method. Both banking sector development and stock market development are employed as financial development measures. First, the empirical results of the panel co-integration test reveal that there is a long-run relationship between the financial development indicators and economic growth as measured by real GDP per capita and non-oil GDP per capita. The findings also indicate that each financial sector (the banking sector and stock market) has a unique and different effect on economic growth, where stock market indicators reveal a stronger effect compared to the banking sector indicators. The negative contribution from the banking sector indicators in the financial development process is mainly due to the inefficiency of the credit allocation process, credit regulation and the existence of state owned banking in the MENA region. With respect to the determinants of financial development, the empirical results show that economic growth, openness, bank concentration and institutions have significant and positive effects on financial development in the MENA region. On the other hand, the bank's ownership structure has had favorable effects on financial development.

Finally, in terms of globalization and its effect on institutional reforms, the empirical results using the PVAR and FMOLS methods do not support the hypothesis that globalization affects institutional reforms which promote financial development and economic growth. In fact there is no significant evidence which suggests that there is a relationship between globalization and institutional reform. However, it is interesting to note that the response of institutions to economic globalization is found to be positive and significant. These results indicate that causality may run from
economic globalization to institutions. The variance decomposition and general impulse response function also confirmed these results. Therefore the following improvements for the banking sector are provided in order to strengthen the financial development programs and stimulate economic growth. The credit allocation process and credit regulations need to be strengthened and competition in banking sector needs to be reinforced by privatizing the state owned banks.

In addition, developing and enhancing growth and liquidity as well as regulatory reforms and increased liberalization in the stock markets is expected to enhance the regional intermediation of resources through the close integration of financial markets which will stimulate economic growth. On the other hand, improving economic growth, financial liberalization and openness policies as well as institutional reforms will encourage the development of financial markets. Also institutional reform policies can be important for accelerating economic globalization and financial development.
Abstrak tesis yang dikemukakan kepada senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

SUMBER PEMBANGUNAN KEWANGAN DAN KEBERKESANANNYA DI TIMUR TENGAH DAN AFRIKA UTARA WILAYAH

Oleh
MANIZHEH FALAHATY
November 2011

Pengerusi: Profesor Madya Law Siong Hook, PhD
Fakulti: Ekonomi dan Pengurusan

Berikut prestasi ekonomi yang secara relatifnya kurang baik dan pertumbuhan ekonomi yang rendah di negara-negara Timur Tengah dan Afrika Utara (MENA), kebanyakang negara ini telah melaksanakan program penyusunan semula dan pengubahsuaian struktur kewangan sepanjang tiga dekad lalu. Sistem kewangan yang lebih cekap menyediakan khidmat kewangan yang lebih baik dan membolehkan ekonomi meningkatkan pertumbuhan kadar KDNK. Sebaliknya, sistem kewangan yang lemah akan memberi limpahan tidak baik kepada ekonomi. Tidak seperti indikator pembangunan kewangan yang berkembang, pertumbuhan ekonomi merekodkan turun-naik dan peningkatan yang lemah sepanjamg tempoh 1991-2007. Kajian empirik ke atas hubungan antara pembangunan kewangan dan pertumbuhan ekonomi menghasilkan keputusan yang bercampur untuk wilayah ini.

Petama, hasil empirik kajian “panel co-integration” menunjukkan terdapat hubungan jangka panjang antara indikator pembangunan kewangan dan pertumbuhan ekonomi yang diukur menggunakan KDNK per kapita malar dan KDNK bukan minyak per kapita malar.

Hasil kajian juga menunjukkan setiap sektor kewangan (sektor perbankan dan pasaran saham) mempunyai kesan unik yang berbeza ke atas pertumbuhan ekonomi, di mana indikator pasaran saham memberi kesan yang lebih besar berbanding indikator sektor perbankan. Sumbangan negatif oleh sektor perbankan kepada proses pembangunan kewangan adalah disebabkan terutamanya oleh ketidakcekapan proses pengagihan kredit, kawalan kredit dan perbankan milik kerajaan di wilayah MENA. Berhubung penentu pembangunan kewangan, hasil empirik menunjukkan pertumbuhan ekonomi, keterbukaan, konsentrasi bank dan institusi mempunyai kesan positif dan signifikan ke atas pembangunan kewangan di wilayah MENA.

Sebaliknya struktur pemilikan bank memberi kesan baik kepada pembangunan kewangan.

Akhirnya, berkait dengan globalisasi dan kesannya ke atas penyusunan semula institusi, hasil kajian empirik menggunakan kaedah PVAR dan FMOLS tidak

ACKNOWLEDGEMENTS

All praise and thanks due to Allah for His innumerable bounties and favours. This dissertation would not have been accomplished without the will of Allah and then the help of many people.

My deepest gratitude and appreciation goes to my advisor, Associate Professor Dr. Law Siong Hook, for his invaluable advice, guidance, and encouragement during the writing of this dissertation. My gratitude also goes to the other committee members, namely Associate Professor Dr. Zulkarnian B Yusop and Dr. Lee Chin for serving on my committee and for offering constructive suggestions and comments. I also would like to acknowledgment Dr. Neeraj Kumar for giving me excellent advice and encouragements.

Finally, I am eternally indebted to my parents for their constant prayers and support; I owe them a debt of gratitude I can never repay.
I certify that an Examination Committee has met on 16 November 2011 to conduct the final examination of Manizheh Falahaty on her Ph.D thesis entitled “Sources of Financial Development and Their Effectiveness in the Middle East and North African Region” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The committee recommends that the student be awarded the Ph.D degree.

Members of the Examination Committee were as follows:

Professor Dr. Muzafar Shah Habibullah
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Professor Dr. Mansor bin Ibrahim
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Dr. Wan Azman Saini bin Wan Ngah
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Assoc. Professor Dr. Muhsin Kar
Department of Economics
Faculty of Economics and Administrative Sciences
Yukurova University
Turkey
(External Examiner)

--

SEOW HENG FONG, PhD
Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:
This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Ph.D. The members of the Supervisory Committee were as follows:

**Law Siong Hook, PhD**  
Associate Professor  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Chairman)

**Zulkarnian B. Yusop, PhD**  
Associate Professor  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Member)

**Lee Chin, PhD**  
Senior Lecturer  
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 duly 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 institutions.

MANIZHEH FALAHATY

Date: 16 November 2011
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>viii</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>ix</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>xi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xvi</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xviii</td>
</tr>
</tbody>
</table>

## CHAPTER

### 1 OVERVIEW OF THE STUDY

1.1 Background of the Study  
1.2 Overview of the MENA Region
  1.2.1 Banking sector  
  1.2.2 Stock market  
  1.2.3 Rating of Globalization  
1.3 Problem Statement  
1.4 General and Specific Objectives of the study  
1.5 Significance of the Study  
1.6 Scope of the Study  
1.7 Organization of the Study  

### 2 LITERATURE REVIEW

2.1 Financial Development and Economic Growth  
  2.1.1 Theories  
  2.1.2 Empirical Studies  
2.2 The Determinants of Financial Development
  2.2.1 Theories  
  2.2.2 Empirical Studies  

### 3 METHODOLOGY AND DATA

3.1 Specification of the Model  
3.2 Financial Development and Economic Growth
  3.2.1 Extension of the model  
3.3 Estimation Procedure  
  3.3.1 Panel Unit Root Tests  
  3.3.2 Panel Co-integration Tests  
  3.3.3 Cross-sectional Dependency Test  
  3.3.4 Fully Modified Ordinary Least Squares (FMOLS)
RESULTS AND DISCUSSION

4.1 The Effect of Financial Development on Economic Growth
4.2 The Determinants of Financial Development
4.3 Causality Relationship between Globalization and Financial Development
   4.3.1 Variance Decomposition (VDC)
   4.3.2 Generalized Impulse Response Function (GIRF)

SUMMARY, CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 Summary and Conclusion
5.2 Policy Implications
   5.2.1 Policy on Improving Stock Market and Banking Sector
   5.2.2 Policy on Development of Financial Markets
   5.2.3 Globalization
5.3 Recommendation for Further Studies

REFERENCES

BIODATA OF STUDENT