The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH: EVIDENCE FROM PANEL DATA

By



Thesis Submitted to Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, in of the Requirements for the award of Master's Degree in Finance

PERMISSION TO USE

In presenting this project paper in partial fulfillment of the requirements for the postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for copying of this project paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s), or in their absence by the Dean of the College of Business or the Dean of Research and Innovation. It is understood that any copying or publication or use of this project paper or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and Universiti Utara Malaysia for any scholarly use which may be made of any material from my project paper.

Request for permission to copy or to make other use of materials in this project paper in whole or in part should be addressed to:

Universiti Utara Malaysia

Dean of Research and Innovation Office

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRACT

This study examines the relationship between financial development and growth in ASEAN by using panel ordinary least squares and causality analysis. In this study gross domestic products (GDP) is used to represent growth and the ratio of money supply to GDP represents financial development. There are also other variables such as exchange rates, foreign direct investment (FDI) and total population are being used as independent variables. Panel Ordinary Least Squares (POLS) had been used to investigate the relationship between growth and financial development and we found that all the independent variables in this study generally have significant relationship with growth. In addition, this study conducted Granger causality test and the test results confirmed that a unidirectional causal relationship exists between foreign direct investment and population has causal impact which run from foreign direct investment to population. There is also a unidirectional causal relationship can be found to exist running from the exchange rate to financial development. Finally in conclusion, in order to improve growth of the country, government as a policy maker play an important role to encourage investment by providing or upgrading infrastructures and facilities in order to generate more opportunities furthermore to create competition and productivity in the economy.

Keywords: Financial development, economic growth, ASEAN

ABSTRAK

Kajian ini mengkaji hubungan antara pembangunan kewangan dan pertumbuhan di dalam ASEAN dengan menggunakan panel biasa dua terkecil dan analisis sebab dan akibat. Dalam kajian ini produk dalam negeri kasar (KDNK) digunakan untuk mewakili pertumbuhan dan nisbah bekalan wang kepada KDNK merupakan perkembangan kewangan. Terdapat juga faktor-faktor lain seperti kadar pertukaran, pelaburan langsung asing (FDI) dan jumlah penduduk yang digunakan sebagai pembolehubah bebas. Panel Biasa kuasa dua terkecil (pöls) telah digunakan untuk mengkaji hubungan antara pertumbuhan dan perkembangan kewangan dan kami mendapati bahawa semua pembolehubah bebas dalam kajian ini umumnya mempunyai hubungan yang signifikan dengan pertumbuhan. Selain itu, kajian juga menjalankan Granger ujian sebab dan akibat serta keputusan ujian mengesahkan bahawa hubungan sebab dan akibat yang satu arah wujud di antara pelaburan langsung asing dan penduduk mempunyai kesan sebab dan akibat yang berjalan daripada pelaburan langsung asing kepada penduduk. Terdapat juga hubungan sebab dan akibat yang satu arah boleh didapati wujud berjalan dari kadar pertukaran untuk pembangunan kewangan. Akhir sekali, kesimpulannya untuk meningkatkan pertumbuhan di negara ini, kerajaan sebagai pembuat dasar memainkan peranan penting untuk menggalakkan pelaburan dengan menyediakan atau menaik taraf infrastruktur dan kemudahan bagi menjana lebih banyak peluang pula untuk mewujudkan persaingan dan produktiviti dalam ekonomi.

Kata kunci: Pembangunan kewangan, pertumbuhan ekonomi, ASEAN

ACKNOWLEDGEMENT

First, I would like to thank Allah (SWT) who has made it possible for me to complete this program successfully and equally thank Him for His continued mercy and blessing. I would like to sincerely thank my supervisor Dr. Sabri Bin Nayan for his constructive comments, valuable suggestions and good guidance. I equally thank him for his kindness and necessary encouragement. I am extremely indebted to him, as I have learnt so much from him. I am also grateful to my lectures at University Utara Malaysia who gave me a lot of knowledge, cultivated my interest in finance and thus led me to the field of academic research. I would always be thankful to them for everything they have taught me through my academic study at the university. I owe my loving thanks to my family for their prayers, supports and encouragement that enable me to successfully complete my postgraduate study in UUM. Not forgetting, special thanks to my lovely husband, Ahmad Farid Zainudin for his understanding and encouragement during my master program; my beloved daughter Aina Amani Jniversiti Utara Malavsia who has given me joy and happiness during this challenging process. I am indebted to my dear friends. Their friendship, love and kindness always encourage me to overcome difficulties in my study. I owe them since they always supported and gave me full attention for me to solve my problems and gave the enjoyable studying environment. They made my life in UUM a truly memorable experience and their friendship is invaluable to me.

Nurzamira Ahmat (812400)

TABLE OF CONTENTS

PERMISSION TO USE	i
ABSTRAK	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	vi
TABLE OF CONTENTS	V
LIST OF TABLES AND FIGURES	⁄iii
CHAPTER ONE	1
1.1 Definition of financial development	1
1.1.1 Background of study	
1.2 Problem Statement	
1.3 Research Questions	4
1.4 Objectives of Study	4
1.5 Scope of Study	5
1.6 Limitation of study	5
1.7 Significance of Study	5
1.8 Organization of the study	6
CHAPTER TWO	7
2.1 Introduction	7
2.2 Theoretical review	7
2.3 Previous empirical work	8

CHAF	TER THREE18
3.1 Int	troduction18
3.2 Da	ta description18
3.3 Pa	nel data20
3.3.1 A	Advantages of Using Panel data20
3.3.2 I	
3.4 Va	riables21
3.4.1 V	Variable of Growth21
3.4.2 I	Financial development21
3.4.3 I	Exchange rate21
3.4.4 I	Foreign direct investment22
3.4.5 I	Population
3.4	Research framework22
3.5	Hypothesis development23
3.5.1	Financial development
3.5.2	Exchange rate24
3.5.3	Population25
3.5.4	Foreign direct investment25
3.6	Research hypothesis
3.7	Method of analysis27
3.7.1	Descriptive Analysis
3.7.2	Correlation Analysis
3.7.3	Pooled Ordinary Least Squares (POLS) Regression Model28
3.7.4	Granger Causality test
3 8	Conclusion 28

CHAPTER FOUR	29
4.1 Introduction	29
4.2 Descriptive analysis	29
4.3 Correlation analysis	30
4.4 Panel Ordinary Least Squares (POLS)	32
4.4.1 Relationship between Financial Development and Growth	33
4.4.2 Relationship between Exchange Rate and Growth	34
4.4.3 Relationship between Population and Growth	34
4.4.4 Relationship between FDI and Growth	34
4.5 Granger Causality	35
CEL COLARA DE LA COLARA DEL COLARA DE LA COLARA DEL COLARA DE LA COLARA DE LA COLARA DEL COLARA DEL COLARA DE LA COLARA DE LA COLARA DEL COLARA	
CHAPTER FIVE	38
5.1 Summary and discussion	38
5.2 Recommendation	39
REFERENCES	41
APPENDIY	15

LIST OF TABLES AND FIGURES

Figure 3.1: Theoretical Framework	22
Table 3.1: Data Set: Key Variables, Descriptions and Sources	18
Table 4.1 : Descriptive Analysis Results	28
Table 4.2 : Correlation Matrix Results	29
Table 4.3 : Panel Least Squares Results	30
Table 4.4 : Pairwise Granger Causality Test	34



CHAPTER ONE

INTRODUCTION

1.1 Definition of financial development

Theoretically, in order to ensure the economic growth is promoted and poverty is reduced, a well-functioning financial system is needed. Levine in 2005 recognized the functions of financial sector under five broad categories. First, produce information about potential investment opportunities. Second, mobilize savings to the most productive investment. The third category is by monitoring firms and exerting corporate governance. Fourth, promote risk diversification and sharing across individuals, firms, and countries. Finally, facilitate the exchange of goods and services. Every function possibly will encourage savings and investment decisions which lead to economic growth. In this scenario, banks are the intermediation agents between savings and investment. Hence, the efficiency of the banks and financial markets are taken into account, as it allows to attract deposits and to channel them in a professional way towards productive opportunities.

1.1.1 Background of study

Over recent years, the relationship between financial development and economic growth has been a major subject in the field of development economics. The basic of this relationship has actually been detected as early as 1911, which was discovered by Joseph Schumpeter. He believed that financial intermediaries that provided services such as monitoring managers, risk managements, mobilized savings, facilitating

The contents of the thesis is for internal user only

REFERENCES

- Adu G., Marbuah G., & Mensah J.T (2013), "Financial development and economic growth in Ghana: Does the measure of financial development matter?", Review of Development Finance 3(2003), 192-203.
- Alfanro L., Chanda A., Ozcan S.K., & Sayek S (2006), "How does foreign direct investment promote economic growth? Exploring the effects of financial markets on linkages", National Bureau Of Economic Research, working paper, no. 12522.
- Alkhuzaim,W (2014), "Degree of Financial development and economic growth in Qatar: Cointegration and causality analysis", International Journal of Economics and Finance, 6(6).
- Arestis, P. & Demetriades, P. (1997), "Financial development and economic growth: Assessing the evidence", Economic Journal, 107, 783-799.
- Asghar N. Nasreen S. & Rehman H (2011), "Relationship between FDI and Economic Growth in Selected Asian Countries: A Panel Data Analysis", Review of Economics & Finance, 01(2012), 84-96
- Bader S.A., & Qarn A.S.A (2007), "Financial development and growth: The Egyptian experience", Journal of Policy Modeling, 30 (2008), 887–898
- Beck, T. (2002)," Financial development and international trade Is there a link?", The Journal of International Economics, 57 (1): 107-31

Universiti Utara Malaysia

- Biswas J. (2008)," Does Finance Lead to Economic Growth? An Empirical Assessment of 12 Asian Economies", The Journal of Applied Economic Research, 2:3 (2008): 229–246
- Bittencourt M. (2012), "Financial development and economic growth in latin America: Is Schumpeter right", Journal of Policy Modeling, 34 (2012), 341–355
- Bojanic A.N (2011), "The Impact Of Financial Developmen t And Trade On The Economic Growth Of Bolivia", Journal of Applied Economics.14(1), 51-70
- Calderon C. & Liu L (2003), "The direction of causality between financial development and economic growth", Journal of Development Economics 72(2003), 321-334.
- Federici D. & Caprioli F (2008), "Financial development and economic growth: An empirical analysis", Economic Modelling, 26 (2009) 285–294.
- Fase M.M.G & Abma R.C.N (2003), "Financial environment and economic growth in selected Asian countries", Journal of Asian Economics, 14, 11-21.

- Greenwood, J. & Smith, B.D (1997), "Financial markets in development and the development of financial markets" Journal of Economics Dynamics and Controls, 21(1), 145-181
- Goldsmith, R.W., (1969), Financial structure and development. Yale University Press, New Heaven, CT. Retrieved from: www.nber.org/chapters/c4417
- Habib M.M, Mileva E. & Stracca L(2016), "The real exchange rate and economic growth: Revisitingthe case using external insruments", European Central Bank, working paper, no 1921
- Halkos George E., & Trigoni Marianna K (2010), "Financial development and economic growth:evidence from the European Union", Managerial Finance, 36, 949-957.
- Herzer D. (2010), "Outward FDI and economic growth", Journal of Economics Studies, 37, 476-494.
- Hsueh S.J, Hu Y.H, & Tu C.H (2013), "Financial development and economic growth: evidence from China", China Economic Review, 17 (2006) 395–411
- Jalil A. & Ma Y (2008), "Financial development and economic growth: time series evidence from Pakistan and China", Journal of Economic Cooperation, 2 (2008) 29-68
- Khaliq A. & Noy I (2007), "Foreign direct investment and economic growth: empirical evidence from sectoral data in Indonesia", working paper, University of Hawai'i.
- Khondker B.H, Bidisha S.H & Razzaque M.A (2012), "The exchange rate and conomic growth: An empirical Assessment on Bangladesh", International Growth Center, working paper, University of Dhaka
- King, R., & Levine, R (1993), "Finance and growth: Schumpeter might be right.", Quarterly Journal of Economics 108, 717-737
- Liang, Q., & Teng J (2006), "Financial development and economic growth: evidence from China", China Economic Review 17, 395-411
- Levine, R. (1997), "Financial development and growth: Views and Agenda.", Journal of Economic Literature 35, 688-7267
- Levine, R. (2005), Finance and growth: theory and evidence. In: aghion, P., Durlauf, S. (Eds.), Handbook of Economic Growth 1. Elsevier

- Liang Q,. & Teng J (2005), "Economic growth and financial development in Asian countries: a bootstrap panel Granger causality analysis", Economic Modelling, 32 (2013) 294–301
- McKinnon, Ronald, I. (1973), "Money and capital in economic development. Washington, D.C.: Brookings institutions. Retrieved from: https://repositories.lib.utexas.edu/bitstream/handle/2152/24155/Rostow_W W_1974.pdf?
- Anwar S & Nguyen L.P (2009), "Financial development and economic growth in Vietnam", Journal of Economics and Finance, 35, 38-360
- Onuonga S.M (2014), "Financial development and economic growth in kenya: an empirical analysis 1980-2011", International Journal of Economics and Finance, 6(7)
- Oriavwote V.E & Eshenake S.J(2014), "an empirical assessment of Financial sector development and economic growth in Nigeria", International Review of Management and Business Research, 3(1)
- Pradhan P. P., Mukhopadhyay B., Gunashekar A, Samadhan B & Pandey S (2013), "Financial development, social development and economic growth: the causal nexus in Asia", 40(1–2), 69–83. doi:10.1007/s40622-013-0011-3
- Rajan, R. and Zingales, 1.(1998), "Financial Dependence and growth", American Economic Review, 88(3)
- Rousseau P. & Wachtel P. (2000), "Equity markets and growth: cross country evidence on timing and outcomes, 1980-1995", Journal Bank Finance 24(12):1933-1957
- Salari N., Hassanzadeh M & Ebrahimpour H (2014), "The relationship between Financial development and economic growth in Iran", Arabian Journal of Business and Management Review, 4(1)
- Savas B (2008), "The relationship between population and economic growth: empirical evidence from the central Asean economies", OAKA, 3(6), 161-183.
- Seetanah B, Ramessur S.T & Rojid S (2008), "Financial development and economic growth: New evidence from a sample of island economies", Journal of Economic Studies, 36(2), 124-134
- Sehrawat M,. Giri A.K (2015), "The role of Financial development and economic growth: empirical from Indian States", International Journal of Emerging Markets, 10, 340-356.

- Shahbaz M,. & Rahman M.M, (2012), "Exports, Financial development and economic growth in Pakistan", International Journal of Development, 13(2), 155-170.
- Tekin R.B (2011), "Economic growth, exports and foreign direct investment in least developed countries: A panel Granger causality analysis", Economic Modelling 29, 868-878.
- Tuku G.K, Paul G. & Almadi O. (2013), "The impact of population change on economic growth in Kenya", International Journal of Economics and management Sciences, 2(6), 44-60
- Vazakidis A. & Adamopoulos A, (2011), "Financial development and economic growth: An empirical analysis for the UK", European research studies, 14(2), 136-148
- Uddin G.S,. Sjo B., & Shahbaz (2013), "The causal nexus between Financial development and economic growth in Kenya", Economic Modelling, 35 (2013) 701-707
- Zhang J., Wang L., & Wang S., (2010), "Financial development and economic growth: Recent Evidence from China", Journal of Comparative Economics, 40 (2012)393–412

Universiti Utara Malaysia