



MALAYSIAN DOMESTIC DEBTS AND ECONOMIC GROWTH

FADZYINIE DULLIE

FEP 2012 15

MALAYSIAN DOMESTIC DEBTS AND ECONOMIC GROWTH

FADZYINIE DULLIE

MASTERS OF ECONOMICS

FACULTY OF ECONOMICS AND MANAGEMENT

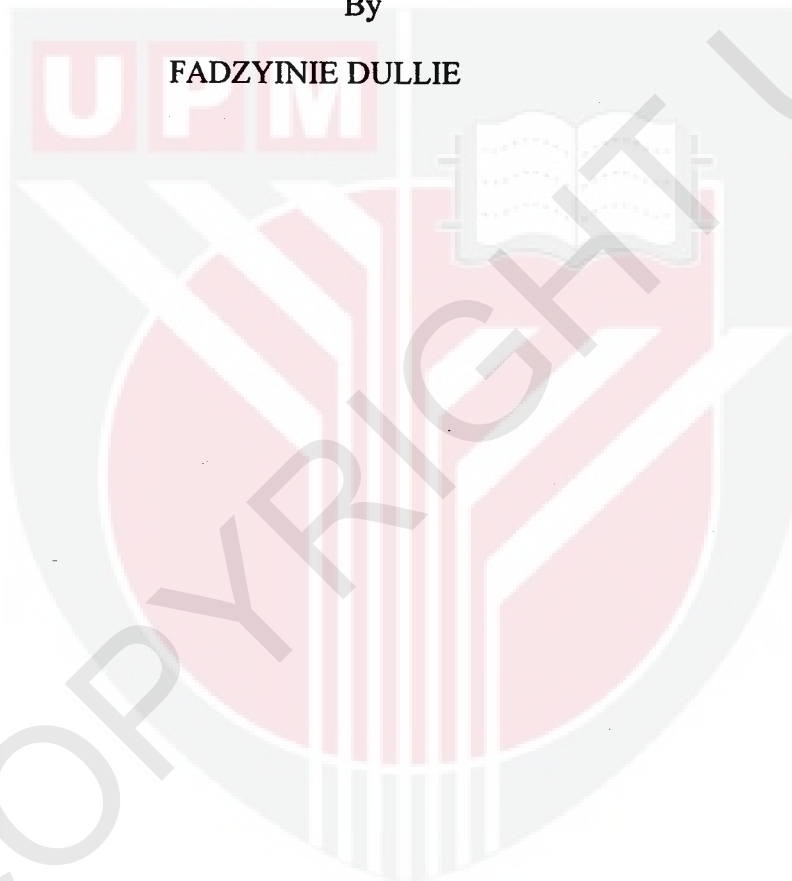
UNIVERSITI PUTRA MALAYSIA

2012

MALAYSIAN DOMESTIC DEBTS AND ECONOMIC GROWTH

By

FADZYINIE DULLIE



Project Paper Submitted in Partial Fulfillment of the Requirement for the Degree of Masters of Economics in the Faculty of Economics and Management Universiti Putra Malaysia

DEC 2012

Abstract of project paper presented to the Senate of University Putra Malaysia in partial fulfillment of the requirements for the degree of Masters of Economics

MALAYSIAN DOMESTIC DEBTS AND ECONOMIC GROWTH

By

FADZYINIE DULLIE

Supervisor : Professor Dr. Ahmad Zubaidi Baharumshah

Faculty : Faculty of Economics and Management

Since its independence, the government has always been setting goals and implemented policies that intervene in the Malaysian economy. The Malaysian economy has a strong base on electronic components and electronic goods, on top of the abundance of natural resources such as timber, oil, palm oil, rubber and so on. However, it is arguable that, the economy needs government's intervention and policies to set its direction and as a result the federal government has long and always been spending on expenditures for public schemes, projects and programs to support the people and attract private investments especially foreign capital into the country to

fuel growth in the economy. Therefore, these policies led to huge amounts of fiscal spending where the federal government today incurred large amounts of domestic debts to finance its budget deficits year on year.

This study aims to investigate the effect of the federal government's level of domestic debts on economic growth in Malaysia. This involves estimating long-run and short-run coefficient looking at the relationship between gross domestic product with government domestic debt to GDP ratio, inflation and the federal government's budget deficits using the Autoregressive Distributed Lag (ARDL) approach. The period sample is from 1998 to 2010 using quarterly data. Through ARDL estimation, the long-run result shows that domestic debt to GDP ratio has a positive relationship with economic growth, while in the short-run result, domestic debt to GDP has a negative relationship with economic growth. However, inflation and budget deficit do not play any role in economic growth.

Abstrak kertas project yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian untuk jazah Sarjanah Ekonomi

HUTANG DALAMAN KERAJAAN MALAYSIA DAN PERTUMBUHAN EKONOMI

Oleh

FADZYINIE DULLIE

Penyelia : Professor Dr. Ahmad Zubaidi Baharumshah

Fakulti : Fakulti Ekonomi dan Pengurusan

Semenjak kemerdekaan, kerajaannegara Malaysia sentiasa menetapkan matlamat melalui polisi-polisiter tentu dimana ekonomi Negara akan tuju. Ekspot utama ekonomi Malaysia adalah dalam barangan elektronik dan komponen-komponen elektronik dan juga sumber asli seperti minyak mentah, minyak kelapa sawit, getah, kayu balak dan banyak lagi. Walaubagaimana pun, oleh kerana kerajaan yang sentiasa menetapkan matlamat dan polisiter tentu dalam ekonomi negara, disebabkan oleh projek-projek, skim-skim dan program-program yang membantu dalam menarik pelabuh anasing ke dalam Negara serta membantu untuk memberangsangkan

pertumbuhan ekonomi secara dalaman, kerajaan Malaysia menanggung hutang yang tinggi terutamanya hutang dalaman untuk membiayai bajet deficit yang semakin meningkat setiap tahun.

Kajian ini bertujuan untuk menyiasat kesan hutang dalam kerajaan, inflasi and bajet deficit ke atas pertumbuhan ekonomi. Kaedah ARDL digunakan untuk menganalisis hubungan antara faktor-faktor ini ke atas pertumbuhan ekonomi. Data sukuan yang digunakan adalah dari tahun 1998 hingga 2010. Melalui kaedah kajian ARDL, keputusan yang diperolehi menunjukkan bahawa, dalam jangkaan masa yang panjang dan pendek, hutang dalaman kerajaan mempunyai hubungan positif terhadap pertumbuhan ekonomi.

ACKNOWLEDGEMENT

Firstly, I would like to offer my sincere gratitude to my supervisor, Professor Ahmad Zubaidi Baharumshah, who has been very patient and keen on ensuring that I would be learning instead of just concerning about completing this study. I appreciate his willingness to spend his time and encouragement throughout completing this study.

In addition, I would like to thank all the lecturers that have taught me throughout my Master's study. I am grateful for their patient assistance in teaching me in these past couple of years.

This project paper would not have been possible without the support of many people. I would like to express my sincere gratitude to the entire course mates whom have supported me and encouraged me throughout my university life.

And finally, I would like to thank my family for their continuous support and patients, their understanding and motivation that they gave me in pursuing my goals.

DECLARATION

I hereby declare that this project paper 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 University Putra Malaysia or at any other institutions.

FADZYINIE DULLIE

Date: 1st February 2013

TABLE OF CONTENT

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENT	v
DECLARATION	vi
TABLE OF CONTENT	vii
LIST OF TABLES	ix
LIST OF FIGURES	x
 CHAPTER 1: INTRODUCTION	
1.1 Background of study	1
1.2 Problem statement	5
1.3 Objectives of study	6
1.4 Contribution of study	6
1.5 Organization of study	7
 CHAPTER 2: LITERATURE REVIEW	
2.1 Introduction	8
2.2 Theoretical and Empirical Reviews	8

CHAPTER 3: DATA AND METHODOLOGY

3.1 Introduction	13
3.2 Model specification	14
3.3 Data of Study	15
3.4 Econometric technique	
3.4.1 ARDL Bound Test	15
3.4.2 ARDL Modeling Approach	17
3.5 Diagnostic Checking	17

CHAPTER 4: EMPIRICAL RESULTS AND DISCUSSIONS

4.1 Introduction	18
4.2 Co-integration Test	19
4.3 ARDL Long Run Coefficient	20
4.4 ARDL Short Run Coefficient	21
4.5 Diagnostic Test	22

CHAPTER 5: CONCLUSION

5.1 Summary	23
-------------	----

5.2 Further Research Directions	24
BIBLIOGRAPHY	25
APPENDIX	29

LIST OF TABLES

No. Table	Page
4.1F-Statistics for Testing the Existence of Long-Run Co-integration	19
4.2 Long-Run Elasticity	20
4.3 Short-Run Elasticity	21
4.4 Diagnostic Tests	22

LIST OF FIGURES

No. Figure

Page

1.1 Malaysian Government's Domestic Debts

2



CHAPTER 1

INTRODUCTION

1.1 Background of Study

The government issue debts either domestically or externally, where domestic debts is when the government borrows from within the country itself whilst external debts is when the government borrows from other countries, the International Monetary Fund (IMF) or the World Bank. Governments would usually prefers issuing debts domestically as it is deemed that it is much safer and free risk as the government can raise taxes and control fiscal policies. The types of debts issuance that the government can issue with different maturities, which includes treasury bills and commercial papers that have maturities period of no longer than one year, while the medium term debt issuance is more than one year but less than five years while long term debt issuance like government bonds are over ten years.

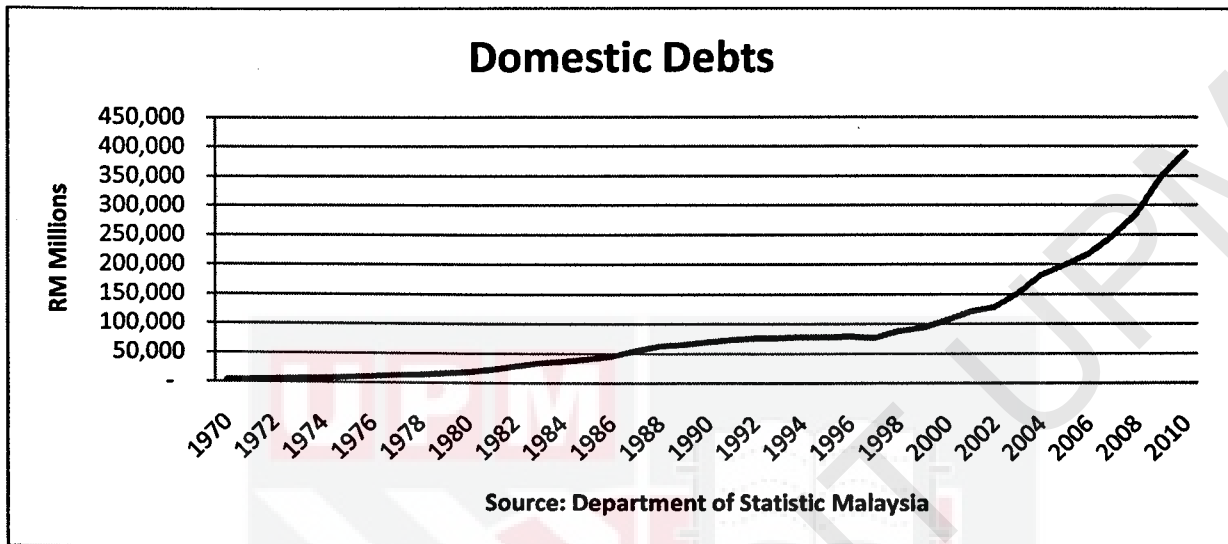


Figure 1.1: Malaysian Government's Domestic Debts

By 2010, the government's domestic debt had amounted to RM 390, 356 million where RM4, 320 million are treasury bills, RM81, 500 million are investment issues and RM260, 994 million are government securities. Government securities covers 66% of the total government's domestic debts by 2010. And year on year, the amount of domestic debts incurred have been increasing, Malaysia is then relied heavily on domestic debt rather than external debts to finance its budgets.

Malaysia is regarded as one of the most successful country in Asia to have achieved a relatively smooth transition to modern economic growth in the past few decades. The country has been a major supplier of primary products to industrialized nations such as tin, rubber, palm oil, timber, oil and many more (Andaya, 2001). Ever since its independence, the Malaysian economy has always been very heavily dictated by its government, through the government's policies it sets targets and directions on how the country should and would go forward in other words guiding economic activity through macroeconomic plans.

And intervention by the government in the economy since 1955 such as the First Malayan Five Year Plan is deliberately been put in place to jump start the economy through infrastructure projects. And the adoption of the New Economic Policy in the early 1970s ensures that the country's economy goes as how it is planned. The New Economic Plan was mainly a policy to redistribute corporate equity so that *bumiputera* would have a bigger share, in other words, to eliminate poverty irrespective of races. These policies then led to structural shift both in the private sector and public sector (Vincent, 1995).

However, by the early 1990s, the implementation of the New Development Policy which emphasized assistance on *bumiputera* with potential, committed and with good track records. Where the previous New Economic Plan was more on redistribution of wealth, the New Development Plan was a long term program known as Vision 2020, where by the year 2020 Malaysia will be a fully industrialized nation with a huge increase in per capita income. As a result, the Malaysian economy grew at a staggering 8 to 9 percent year on year, with a very heavy

increase in infrastructure expenditures and manufactured goods especially electronic goods and components.

And then the Asian financial crisis hits Malaysia in 1997 which saw drastic changes in the country. The fact that, the Malaysian economy is quite dependent on foreign direct investments to fuel growth, and focusing on this fact, where government expenditures are spent in providing infrastructures and services to support the flow of foreign direct investment. Therefore when there was speculation on the Malaysian currency, the Ringgit, foreign direct investments fell dramatically, and as capital flows out of the country the government pegged and imposed capital controls on the ringgit. As a result, post the Asian financial crisis of 1997, to rejuvenate the economy, the government spent massively which led to high levels of budget deficits. And although later on, Malaysia enjoyed faster economic growth compared with other neighboring countries, according to theory, government should try to clear down its debts in good times so that during the bad times there are revenues to support public finances, however this did not come in to play for Malaysia just yet.

And today with the 10th Malaysia Plan, given that budget deficits have been rising year on year as a result of government policies such as subsidies and price controls and a huge public sector, there are plans to implement social programs, projects and schemes to support the people. projects such as the building of the Mass Rapid Transit (MRT), and scheme such as the First Home Scheme and the Talent Corp Project, where all these have been funded by the government and sees these policies as beneficial to the people and the country in the long run. However, there are some expenditures that are considered by the population as wasteful spending by the

government. Therefore, over the years the society and the economy have always been guided through the interventions made by government policies and this have made a lot of impact on the society's thinking and thus economic activity.

1.2 Problem Statement

Even prior to the 1997 Asian financial crisis, the Malaysian economy has always been micro-managed by the government through its policies with the determination to provide infrastructures and services so that foreign capital would go in to the economy and support the private sector and at the same time providing social or public programs schemes and projects for the benefit of the people. And as a result, the government has constantly in budget deficits year by year and level of domestic debts is increasing. this then raises the question of the impact towards the economy whether the government's domestic debt hurts growth or complements growth in the country? There have been numerous studies made on the issue of public debts on economic growth and its importance, for example Checherita and Rother (2012), investigates the impact of high government debt on economic growth and the channels that debts may influence economic growth. While Reinhart and Rogoff (2010) investigates the impact of debts on economic growth in countries that has a debt to GDP ratio of less than 90%, the significance of the study is to find out the impact of debts on economic growth may differ on different threshold levels.

1.3 Objective of Study

The general objective of this study is to re-examine at the impact of domestic debts on economic growth in Malaysia. The specific objectives of the present study include:

- (i) to test for long run and short run relationship between economic growth and domestic debts.
- (ii) To investigate the determinants of economic growth.

1.4 Contribution of Study

The issue of government spending has always been a matter of concern, as some studies have looked at for example by Rogoff and Reinhart (2010) predicted that at certain level in which public debts may hinder economic growth. While some studies have shown government expenditure even through issuance of debts, if the expenditures go in to productive parts of the economy such as healthcare, education and facilitating private investments then there is a positive relationship towards economic development. Therefore, this study can provide some insight on the direction of where the Malaysian economy is moving towards given its level of government's debts.

1.5 Organization of Study

There are five chapters in this study. The first chapter would be on the background of the study, the problem statement, the objective and the contribution of the study. The second chapter would discuss the literature review. The third chapter would be on describing the methodology and data used in this study. The fourth chapter is on empirical findings and results by testing the research model using Autoregressive Distribution Lag (ARDL) approach. While the last chapter, chapter five would be on the conclusion of the study.

Bibliography

Adel M. El-Mahdy and Neveen M. Torayeh (2009). Debt Sustainability and Economic Growth in Egypt. *International Journal of Applied Econometrics and Quantitative Studies*, vol. 9, issue 1.

Andaya, L.Y. and Andaya, B.W (2001). *A History of Malaysia*, second edition. Basingstoke: Palgrave.

Aizenman, J., Kletzer, K., Pinto, B. (2007) Economic Growth with Constraints on Tax Revenues and Public Debt: Implications for Fiscal Policy and Cross Country Differences. NBER Working Paper 12750.

Barro, R. J. (1995). Inflation and Economic Growth. NBER Working Paper Series.

Bruno, M. Easterly, W. (1998). Inflation Crisis and Long Run Growth. *Journal of Monetary Economics*, 41, 3-26.

Bullard, J. Keating, J. W. (1995). The Long Run Relationship between Inflation and Output in Postwar Economies. *Journal of Monetary Economics*, 36, 477-496.

C. M Reinhart and K. S Rogoff (2010). Growth In Time of Debt. *The National Bureau of Economic Research*, no. 15639, 2-25.

Cebula R. J. (1995). The Impact of Federal Government Budget Deficits on Economic Growth in the United States: an Empirical Investigation, 1955-1992. *International Review of Economics and Finance*, Elsevier, Vol. 4(3), 245-252.

Cebula R. J. (1988). Federal Budget Deficits and Interest Rates. *Southern Economic Journal*, 55, 206-210.

Checherita, C., Rother P. (2012). The Impact of High Government Debt on Economic Growth and its channels: An Empirical Investigation for the Euro area. *European Economic Review*, Elsevier, 56, 1392-1405.

Demirguc-Kunt, Asli & Detragiache, Enrica (2002). Does deposit insurance increase banking system stability? An empirical investigation, *Journal of Monetary Economics*, Elsevier, vol. 49(7), 1373-1406.

Esso, L.J., (2010). "Threshold Cointegration and Causality Relationship between Energy Use and Growth in Seven African countries". *Energy Economics* 30, 2391–2400.

Hoelscher, G. (1986). New Evidence on Deficits and Interest Rates. *Journal of Money, Credit and Banking*, 18, 1-17.

J. Bivens and J. Irons (2010). Government debt and economic growth. *Economic Policy Institute*, [Online] <http://www.epi.org/publication/bp271>.

Khan, M.S., Senhadji, A.S. (2001). Threshold effects in the relationship between inflation and growth. *IMF Staff Papers* 48 (1), 1-21.

Kumar, M., Woo J. (2010). Public Debt and Growth. *IMF Working Paper* 10/174

Cebula R. J. (1988). Federal Budget Deficits and Interest Rates. *Southern Economic Journal*, 55, 206-210.

Checherita, C., Rother P. (2012). The Impact of High Government Debt on Economic Growth and its channels: An Empirical Investigation for the Euro area. *European Economic Review*, Elsevier, 56, 1392-1405.

Demirguc-Kunt, Asli & Detragiache, Enrica (2002). Does deposit insurance increase banking system stability? An empirical investigation, *Journal of Monetary Economics*, Elsevier, vol. 49(7), 1373-1406.

Esso, L.J., (2010). "Threshold Cointegration and Causality Relationship between Energy Use and Growth in Seven African countries". *Energy Economics* 30, 2391–2400.

Hoelscher, G. (1986). New Evidence on Deficits and Interest Rates. *Journal of Money, Credit and Banking*, 18, 1-17.

J. Bivens and J. Irons (2010). Government debt and economic growth. *Economic Policy Institute*, [Online] <http://www.epi.org/publication/bp271>.

Khan, M.S., Senhadji, A.S. (2001). Threshold effects in the relationship between inflation and growth. *IMF Staff Papers* 48 (1), 1-21.

Kumar, M., Woo J. (2010). Public Debt and Growth. *IMF Working Paper* 10/174

- Martin, R., & Fardmanesh, M. (1990). Fiscal variables and growth: some empirical evidence. *Public Choice*, 64(March), 239-251
- Narayan, P. K. (2005), "The Relationship between Savings and Investment for Japan." *Japan and the World Economy* 17, 293-309.
- Nur Hayati Abd Rahman (2012). How Federal Government's Debt Affect the level of Economic Growth?. *International Journal of Trade, Economics and Finance*, Vol. 3, No. 4.
- Pesaran, M. H., Shin, Y., Smith, R. J. (2001). Bounds testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics* 16, No. 3, 289-326.
- Peter A. Diamond (1965). "National debt in a Neoclassical Growth Model. *The American Economic Review*, Volume 55, Issue 5, 1126-1150.
- Schclarek, A. (2004). Debt and Economic Growth in Developing Industrial Countries. Mimeo.
- S. M. Ali Abbas and Jakob E. Christensen (2007). The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-income Countries and Emerging Markets. IMF Working Papers.
- S. M Freeman, and D. J. Webber (2009). Basic needs, government debt and economic growth. *The World Economy*., vol. 32, no. 6, 965-994.
- U. Panizza and A. F. Presbitero (2010). Public debt and economic growth, is there a causal effect. POLIS Working papers, no. 198, pp. 1-47.

Vincent, J.R., R.M. Ali and Associates (1997). *Environment and Development in a Resource-Rich Economy: Malaysia under the New Economic Policy. Cambridge, MA: Harvard University Press.*

Tenth Malaysia Plan (2010), The Economic Planning Unit, Prime Minister's Department Putrajaya.

