GOVERNMENT DEVELOPMENT EXPENDITURE AND GOVERNMENT DEBT IN MALAYSIA

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Statement of Originality

The work described in this Final Year Project, entitled “Government development expenditure and government debt in Malaysia” is to the best of the authors’ knowledge that of the author except where due reference is made.

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Abstrak

PERBELANJAAN PEMBANGUNAN KERAJAAN DAN HUTANG NEGARA
DI MALAYSIA

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Government debt in Malaysia sharply increased in recent years and Malaysian government run budget deficit along the years since 1997 Asian financial crisis. Government debt accumulated mainly due to overspending of its finance. This study is done to determine the relationship between government development expenditure components and government debt in Malaysia for the period of 1970-2014. The variables adopted in the analysis are government debt (GD), development expenditure for defense and security (DEFS), for economic services (ECOS) and for social services (SOCS). All the variables has been transform into natural logarithm form for analysis purpose. The methods used in this study are Augmented Dickey-Fuller (ADF) Unit Root Test, Phillips-Perron (PP) Unit Root Test, Johansen-Juselius Cointegration test and Vector Error Correction Model (VECM)-based Granger Causality test. The findings of this study confirm that LGD, LDEFS, LECOS and LSOCS are cointegrated in the long run. LECOS and LSOCS have a significant and positive relationship with LGD; while LDEFS has negatively impact on LGD.
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Chapter One

Introduction

1.1 Introduction

Government debt’s alarm bell sounded in Malaysia. Malaysia will go bankrupt by 2019 if government does not manage to cut subsidies and limit the borrowing which is stated by Idris (2012). To our best knowledge, government debt incurred when government overspending be financed by borrowing in particular year. Besides, debt accumulation due to the government consistently run budget deficit along the time. Since 1997 Asian Financial crisis, Malaysia’s government debt kept increased, especially from 2007 onwards increased exponentially. In 2013, government debt to GDP ratio almost hit the debt ceiling, 55 percent that imposed by government. This situation shows that Malaysia government has responsible to address this issue.

Government overspending its revenue as the main reason of debt accumulation increase. However, Keynesian approach advocated that government expenditure increase will lead a Keynesian multiplier effect on GDP growth (Cwik & Wieland, 2011). Thus, the importance of government expenditure cannot be ignored, but the government debt issue also has been concerned by government. Government expenditure in Malaysia has been classified into two components which are operating and development expenditure. Government operating expenditure consists emoluments, subsidies, debt services charge, pension and gratuities, suppliers and services, asset acquisition, grants and transfers and others; while development
expenditure includes defense and security, economic services, social services and general administration.

The relationship between government expenditure and government debt can be concluded as positive relationship based on Ricardian Equivalence Theorem. David Ricardo (1817) argued that the government spending be financed based on equivalence of debt and taxes (Alam & Taib, 2012). Thus, there is no difference between financed by borrowing and taxation. However, as mentioned by previous, Keynesian approach encourages policy makers decide financed for spending by borrowing rather than by taxation. Hence, this situation reflects government expenditure increase will lead government debt kept rising.

One of the reviews for this study had been conducted by Kohler-Toglhofe and Zagler (2007). They examined the effect of fiscal consolidation on debt dynamics in EU15 countries without Luxemburg, Norway and United State for a period of 1960-2002. Fiscal consolidation variables included components of government expenditure and revenue. Kohler-Tolghofer and Zagler (2007) confirmed that positive relationship between government wage and government debt. They also found that cut in government expenditure bring more significant effect for reducing the debt level than rising tax revenue.

Malaysia aims to achieve the Vision 2020 goal of becoming high income nation, however, the alarm bell of government debt sounded to present Malaysia will go bankrupt by 2019. Therefore, it is interesting to examine the effect of government expenditure components on government debt. Moreover, government will understand the significant effect of each component of government development expenditure and manage to cut its expenditure based on the findings in this study. Hence, the related
question will be answered is: Is there any relationship between government development expenditure components and government debt in Malaysia.

Based on the related question, the general objective is to examine the relationship between government development expenditure components and government debt in Malaysia. Three specific objectives are to investigate whether each component of government development expenditure and government debt are related in the short run and long run in Malaysia. In this study, there is total of four variables namely government development expenditure for defense and security (DEFS), economic service (ECOS), social services (SOCS), and government debt (GD). The yearly data for the variables obtained for period of 45 years from 1970 to 2014. Data was collected from Bank Negara Malaysia. Lastly, methodologies that will be applied in this study are Unit Root tests, Johansen-Juselius Cointegration test and VECM Granger Causality test.

1.2 Background of study

1.2.1 Government Debt

Figure 1.1 presents the total Malaysia government debt in Ringgit Malaysia and government debt has been expressed as a percentage of gross domestic product (GDP) from 1980 to 2013. Based on the Figure 1.1, the total government debt increased by RM 75633 million from year 1980 to year 1991. Increase in government debt is usually incurred because of financing the budget deficit in that period.

In the mid-1980s, Malaysia experienced recession and debt to GDP ratio increase rapidly from 43 percent in 1980 to 101.7 percent in 1987. This is mainly due to
Malaysian government implement a lot of development policy for stimulating economic growth and development. The First Industrial Master Plan (1985-1995) aimed to develop the heavy industries, but, it only presented Malaysia heavy industries suffered with high production cost, heavy debts and excess supply. Therefore, government financed budget deficit in early 1980s merely enlarge budget deficit and government debt at that period (Ariff,1998).

On the other hand, the debt to GDP ratio peaked at approximately 100 percent in year 1986 and 1987. This is because of a huge appreciation of Yen due to the Plaza Accord and a large portion of external debt was denominated in Yen (Twomey, 2010 as cited in Cheong et al, 2011). After 1987, Malaysia economy enjoyed high economic growth induced the debt to GDP decline until 32 percent in year 1997. In addition, Malaysia run a fiscal surplus for a short period during 1993-1997.

Figure 1.1: Total government debt and debt to GDP in Malaysia (1980-2013)

Source: Bank Negara Malaysia, 2014
During 1997 Asian Financial crisis, the Riggit depreciation but the impact on debt level relative smaller in this time (Ariff, 1998). This is because of the portion of external debt was relatively low compared to domestic debt. Despite merely small impact, the debt level still increase from 32 percent in 1997 to 37 percent in 1999.

After the 1997 Asian Financial crisis, total government debt increased by fivefold from RM 112,119 million to RM 539,858 between 1999 and 2013. Government debt increased sharply approximately RM 45,000 million annually from 2007 until 2013. The debt to GDP ratio had been pushed to 54.8 percent which is close to the debt ceiling of 55 percent that imposed by authorities. This significantly increased in 2009 represent the substantial discretionary fiscal stimulus during the global financial crisis and a large reduction of oil prices (Kim et al., 2014).

1.2.2 Government Expenditure

In general, government expenditure is the expenditure that used for stimulating economic growth and social welfare in the country. Malaysian government spends its revenue that collected from citizens based on the Malaysia planning and budget. That particular allocation are divided into operating expenditure and development expenditure. Operating expenditure can be considered as the expenditure for the government activities that are recurrent and continuous. Development expenditure is used for the budget of development programme under Five-Year Malaysia Plan.

Figure 1.2 presents that total amount of operating expenditure and development expenditure in Malaysia from 1970 to 2013. Since 1970, development expenditure had always been less than operating expenditure in Malaysia as shown in the Figure 1.2.
Total development expenditure increased from RM725 million to RM11,485 million between 1970 and 1982, and then reduced to RM4,741 in 1987. The development expenditure decline had been affected by world crude oil price shock (Tan, 2010).

During 1971-1990, Malaysia government launched New Economic Policy (NEP) in order to achieve socio-economic growth. There are two major strategies to achieve the goals. First is to increase income levels and employment opportunities for all Malaysian. Secondly, restructure society to eliminate economic imbalances among the ethnic groups in Malaysia (Economic Planning Unit, 2014).

In the period of 1991-2003, total development expenditure increased by RM29,788 million from RM9,565 million to RM39,353 million and then decline to RM28,864 million in year 2004 (Figure 1.2). Sixth Malaysia plan in 1991 introduced the Vision 2020 to attain an industrialized nation by the year 2020, pursuing economic prosperity, social welfare, educational world class as well as political stability (Economic Planning Unit, 2014). Malaysia government continued increase the devel-

![Figure 1.2: Total Government expenditure (1970-2013)](source: Bank Negara Malaysia, 2014)
Development expenditure to RM52,794 million in 2010. Compared to 2010, the development expenditure decline to RM42,210 million in 2013. Based on this situation, Malaysia government reduces development expenditure consistently in order to ensure the fiscal deficit further decline to 3% of GDP in 2015 (Ministry of Finance, 2014).

Operating expenditure had a slow increase trend for the period of 1970-2000 (Figure 1.2). However, a sharply increased of operating expenditure from 2000-2013. Between 2000 and 2013, operating expenditure increased from RM56,547 to RM211,270, an increase of approximately 270 percent. This is because of the huge increase spending in subsidies. Figure 1.3 shows that the components of operating expenditure. The subsidies increase of 852 percent, from RM4,552 in 2000 to RM43,349 in 2013. In year 2008, the impact of world crude oil price raise led to increase of subsidies from 8.51 percent in 2007 to 22.9 percent of overall operating expenditure (Kamal, 2008).

Figure 1.3: Components of government operating expenditure (2000-2013)

Source: Bank Negara Malaysia, 2014
The main components of presenting a rapid increase in operating expenditure is emoluments for civil servants. During 2000-2013, emoluments increase of 250 percent from RM16,537 to RM61,002. All the components of operating expenditure presents a increase trend except other expenditures. Government cut the other expenditure from RM2,435 to RM1,232 for a period of 2000-2013 (Figure 1.3).

Development in defence and security plays a crucial role to ensure a country which free from internal and external threats. The development expenditure on defence and security is used for purchasing new capabilities such as capital items, infrastructure and military bases development, weapon procurement and others. Figure 1.4 shows that the defence and security peaked at RM6,029 million in 2003 and a fluctuation trend between RM 3,956 million and RM 5,779 million for the period of 2004-2013.

Development in economic services included the provision of agriculture and rural development, trade and industry, transport, public utilities, and others. Under New Economic Policy (NEP), there are few public enterprises in the agriculture sector such as FELDA, FELCRA and KEJORA involve in the land development in order to eliminate poverty in rural areas (Aslam & Hassan, 2003). Therefore, the expenditure in economic services had always been accounted for more than half of the total development expenditure during 1971-1990 (Figure 1.4).

Besides, share of economic services in the total development expenditure still hold more than half except in 1999 and period of 2001-2003. New Development Policy (1991-2010) which is the Second Outline Perspective Plan (OPP2) implemented the idea of the Specialized Industrial Estate (SEI) such as high-tech industries, wood-based industries and others based on different location (Aslam &
The Third Outline Perspective Plan, National Vision Policy (2001-2010) aims to achieve the knowledge-based economy through enhancing the manufacturing sector, restructuring and modernizing the agriculture sector as well as increasing the usage of ICT in all sectors (Economic Planning Unit, 2014).

On the other hand, the portion of social services in the total development expenditure increases from 11 percent in 1970 to 26 percent in 2013 and peaked 50% in 2002. Total government development expenditure for social services increased from RM81 million in 1970 to RM10,884 million in 2013. Expenditure on social services included for education, health, housing and social and community. Education has been the major portion of government development expenditure on social services and the following is health. Development expenditure on education in order to achieve universal primary education, investment in secondary and higher education in Malaysia. Besides, gender equality and empower woman in education as well as occupational sectors (United Nations Country Team, Malaysia, 2005).

In health side, Malaysia government managed to reduce child mortality through developing primary health care system and upgrading the training level of public health workers. In addition, Malaysia government reduced the rate of malaria by understanding the location of specific epidemiology of malaria and applying a combination of strategies for targeting host, parasite, mosquito and environment. In order to raise public awareness on HIV/AIDS, government introduced the education programme for youths which is Program Sihat Tanpa AIDS untuk Remaja (PROSTAR) to deliver the education messages (United Nations Development Programme, 2005).

The last component in the development expenditure is general administration with the smallest portion in the total development expenditure. General administration
is allocated for enhancing computerization systems in government departments. Besides, expenditure also included renovation, refurbishment and maintenance of government facilities such as government buildings, judicial courts and others (Ministry of Finance, 2012). In 2006, the development expenditure in general administration peaked at RM4,076 million with 11 percent of overall development expenditure. Development expenditure for general administration increased of RM2,010 million from RM 21 million in 1970 to RM2,031 million in 2013.

Figure 1.4: Components of government development expenditure (1970-2013)

Source: Bank Negara Malaysia, 2014
1.3 Motivation of study

Government debt study had always been discussed among the researchers in developed as well as in developing countries. Generally, previous researchers had conducted the study to examine the relationship between government debt and economic growth. Besides, another group of researchers investigated the effect of fiscal consolidation which included components of primary expenditure and current revenue on government debt.

Unlike the existing studies that focuses on to examine the effect of total government expenditure, this study is conducted for investigating the relationship of components of government development expenditure and government debt. Although government expenditure plays a vital role in promoting economic growth, however, government debt issue incurred due to overspending of government expenditure. Hence, whether there is a significant relationship among government development expenditure and government debt must been concerned.

The findings of this study will present significant interaction between components of government development expenditure and government debt. Policy makers will more understand the relationship of government development expenditure components with government debt, therefore, they able to make decision that deal with the rising debt problems involved government expenditure factors. Based on Kohler-Tolghofer and Zagler (2007) study, the results showed that cut in government expenditure reduced the debt level significantly than raise the tax revenue. This will become the motivation of conducting this study in order to investigate the relationship
between government development expenditure components and government debt in the long run and short run.

1.4 Problem Statement

Idris Jala (2012) stated that Malaysia will be bankrupt by 2019 if government does not cut subsidies as well as limit in borrowings and Malaysian economic growth below 3 percent annually. This statement reflects that Malaysia government must take actions about budget deficit and debt issue.

Between 1997 and 2007, total government debt increased in a steadily trend from RM88,197 million to RM247,120 million. However, from 2007 onwards, the government debt increased drastically. Total government debt increased by RM236,974 million from RM286,121 million in 2008 to RM523,095 million in 2013. In 2013, debt to GDP ratio had been pushed to 54.8 percent and almost reached the debt ceiling level that set by authorities.

Keynesian approach advocated government expenditure increase aggregate demand and economic growth with multiplier effect, but, government debt problem incurred due to overspending also cannot be ignored. In fact, rising in government debt incurred because of Malaysia government runs budget deficit since 1997 Asian Financial crisis. Especially, government debt increased exponentially late 2000s. Hence, debt accumulation reducing unable been covered in those 15 years.

Based on this situation, Malaysian government managed to reduce the budget deficit to 3 percent by 2015 and to approximately zero by 2020 (IMF, 2014). Nonetheless, government cut its expenditure especially development expenditure will bring a
negative impact on economic growth in Malaysia. However, Malaysia economy will not be able to accomplish high and sustainable economic growth in the long run if Malaysian government finance the budget deficit through borrowing (Rahman, 2012). Hence, this will retard movement of Malaysia to achieve vision 2020. Malaysian government cannot ignore the important of relationship between government expenditure and debt accumulation problem. This study separates the government development expenditure into defence and security, economic services, social services as the explanatory variables. This is because of the significant relationship between components of government development expenditure and government debt must be concerned rather than total government expenditure. Therefore, the related question to be addressed in this study is: Is there a relationship between government development expenditure components and government debt in Malaysia?

1.5 Objective of Study

1.5.1 General Objective

The main objective of this study is to investigate the relationship of government debt with government development expenditure for defense and security, economic services and social services in Malaysia.
1.5.2 Specific Objectives

The specific objectives include:

i. To investigate whether development expenditure for defence and security and government debt are related in the short run and long run in Malaysia.

ii. To investigate whether development expenditure for economic services and government debt are related in the short run and long run in Malaysia.

iii. To determine whether development expenditure for social services and government debt are related in the short run and long run in Malaysia.

1.6 Significance of Study

Malaysia aims to achieve its Vision 2020 goal of becoming a high income nation. However, Malaysia’s government debt increased exponentially incurred, so that, policy makers and even the citizens concern about whether Malaysia will go bankrupt in 2019. Government expenditure increased drastically in these five years led the government debt close to the ceiling of government debt that set by government which is 55 percent.

This study focuses on examining to the relationship of government debt with government development expenditure for defense and security, economic services and social services in Malaysia. The findings of this study will present the individual relationship between components of government development expenditure and government debt as well as either it is positively or negatively. Instead of reducing the overall government expenditure, there is more important for policy makers understand the individual effect of each component in order to make decision efficiently.
Therefore, government may manage to priority cut down the components of government development expenditure that are significantly increase the government debt.

1.7 Scope of study

The purpose of this study conducted is to examine the relationship of government debt with government development expenditure for defence and security, economic services and social services in Malaysia from 1970 to 2014.

The remainder of this study is organized as followings: The chapter two, literature review explains theoretical framework and the previous studies. The data employed and methodologies that will be applied are described in chapter three. The chapter four will discuss the findings and results. Lastly, the chapter five will provide that conclusion of this study and policy recommendation.