IMPACT OF BUDGET DEFICIT FORMATION ON ECONOMICS GROWTH IN MALAYSIA

ASMAWI BIN HAJI HASHIM

SULTAN IDRIS EDUCATION UNIVERSITY

2021

IMPACT OF BUDGET DEFICIT FORMATION ON ECONOMICS GROWTH IN MALAYSIA

ASMAWI BIN HAJI HASHIM

THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

FACULTY OF MANAGEMENT AND ECONOMICS
SULTAN IDRIS EDUCATION UNIVERSITY

2021

UNIVERSITI PENDIDIKAN SULTAN IDRIS
اونيۏرسيتي ڤنديديقن سلطان ادريس
SULTAN IDRIS EDUCATION UNIVERSITY

Please tick (√)
Project Paper
Masters by Research
Master by Mixed Mode
PhD

INSTITUTE OF GRADUATE STUDIES

DECLARATION OF ORIGINAL WORK

This declaration is made on the ……………..day of……………..20……..

i. Student's Declaration:

I, ______________________________ (PLEASE INDICATE STUDENT'S NAME, MATRIC NO. AND FACULTY) hereby declare that the work entitled ______________________________ ______________________________ is my original work. I have not copied from any other students' work or from any other sources except where due reference or acknowledgement is made explicitly in the text, nor has any part been written for me by another person.

____

Signature of the student

ii. Supervisor's Declaration:

I ______________________________ (SUPERVISOR'S NAME) hereby certifies that the work entitled ______________________________ ______________________________ ______________________(TITLE) was prepared by the above named student, and was submitted to the Institute of Graduate Studies as a * partial/full fulfillment for the conferment of ______________________________ (PLEASE INDICATE THE DEGREE), and the aforementioned work, to the best of my knowledge, is the said student's work.

______________ ______________

Date Signature of the Supervisor

INSTITUT PENGAJIAN SISWAZAH /
INSTITUTE OF GRADUATE STUDIES

BORANG PENGESAHAN PENYERAHAN TESIS/DISERTASI/LAPORAN KERTAS PROJEK
DECLARATION OF THESIS/DISSERTATION/PROJECT PAPER FORM

Tajuk / *Title*: ____

____

No. Matrik /*Matric's No.*: ____

Saya / *I* : ____

(Nama pelajar / *Student's Name*)

mengaku membenarkan Tesis/Disertasi/Laporan Kertas Projek (Kedoktoran/Sarjana)* ini disimpan di Universiti Pendidikan Sultan Idris (Perpustakaan Tuanku Bainun) dengan syarat-syarat kegunaan seperti berikut:-
acknowledged that Universiti Pendidikan Sultan Idris (Tuanku Bainun Library) reserves the right as follows:-

1. Tesis/Disertasi/Laporan Kertas Projek ini adalah hak milik UPSI.
   The thesis is the property of Universiti Pendidikan Sultan Idris

2. Perpustakaan Tuanku Bainun dibenarkan membuat salinan untuk tujuan rujukan dan penyelidikan.
   Tuanku Bainun Library has the right to make copies for the purpose of reference and research.

3. Perpustakaan dibenarkan membuat salinan Tesis/Disertasi ini sebagai bahan pertukaran antara Institusi Pengajian Tinggi.
   The Library has the right to make copies of the thesis for academic exchange.

4. Sila tandakan (√) bagi pilihan kategori di bawah */ Please tick (√) for category below:-*

☐	**SULIT/*CONFIDENTIAL***	Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub dalam Akta Rahsia Rasmi 1972. / *Contains confidential information under the Official Secret Act 1972*
☐	**TERHAD/*RESTRICTED***	Mengandungi maklumat terhad yang telah ditentukan oleh organisasi/badan di mana penyelidikan ini dijalankan. / *Contains restircted information as specified by the organization where research was done.*
☐	**TIDAK TERHAD / *OPEN ACCESS***	

______________________________ (Tandatangan Pelajar/ Signature)

______________________________ (Tandatangan Penyelia / *Signature of Supervisor*) & (Nama & Cop Rasmi / *Name & Official Stamp*)

Tarikh: ________________

Catatan: Jika Tesis/Disertasi ini **SULIT** @ **TERHAD**, sila lampirkan surat daripada pihak berkuasa/organisasi berkenaan dengan menyatakan sekali sebab dan tempoh laporan ini perlu dikelaskan sebagai **SULIT** dan **TERHAD**.

Notes: If the thesis is CONFIDENTAL or RESTRICTED, please attach with the letter from the organization with period and reasons for confidentiality or restriction.

APPRECIATION

First of all, I would like to thank Alhamdulillah to Allah S.W.T, because of His bounty and grace, then I was able to complete this thesis successfully despite various trials and tribulations. Alhamdulillah.

Thanks to my late mother and father who always prayed, gave love, encouragement, reminders and life guides that I desperately needed for my success, during their lives. Al-Fatihah for both. Thanks also to my beloved wife, loving children, remembered relatives, for your patience, support, help, tolerance, love, encouragement, hope and prayers, for the completion of this thesis. Without you all, this success may not be possible. I love you all.

On this occasion, I would like to thank the Associate Prof. Dr. Norimah Rambeli @ Ramli, as my supervisor on patience, support, advice and guidance, given a lot of help to success in completing this thesis. All help, enthusiasm, strategy and her wisdom has taught me a lot to be a good researcher and educator. To Associate Prof. Dr. Norasibah Abdul Jalil, thank you for always giving unceasing support and prayers. Not to forget the friends, who are willing to share experiences throughout this study. All the experiences are definitely unforgettable.

Thank you to the Institute of Graduate Studies, in particular, and the Sultan Idris University of Education, in general, for giving me the opportunity to further my studies to this level. Thanks also to the Faculty of Management and Economics for giving full support in the course of my studies so that this study can be completed successfully. Indeed, all the sacrifices that have been done, I greatly admire and will remember for the rest of my life. Finally, thank you also to all who are directly and indirectly involved in providing suggestions and assistance in completing this thesis. Hopefully this research / thesis can be used as a useful knowledge base for future generatio

ABSTRACT

The relationship between budget deficit and economic growth is one of the most important issues debated by economists and policymakers in developed and developing countries. The purpose of this study is to examine the relationship by concentrating on theoretical debates, empirical studies and econometric models to obtain substantive conclusions. These conclusions are beneficial in the field of macroeconomics. Construction or development of macroeconomic models is used to analyze the impact of budget deficit on Malaysia's economic growth. The effects of the budget deficit formation would lead to the formation of other macroeconomic variables, such as debt, rising interest rates and decreasing government spending, productive or non-productive. This study was conducted using time series data collected from 1985 to 2018 to fulfil three specific objectives. The first objective is to identify the relationship that exists between all the selected variables and Gross Domestic Product (GDP) in the prescribed regimes. The second objective is to compare the effects of deficit formation on economic growth and the last objective is to investigate the dominant factor across regime. The Auto-Regressive Distributed Lag (ARDL) model is used to analyze the co-integration and causal direction relationship between budget deficit and economic growth. The results show a long-term relationship of all the selected variables with GDP. This finding supported with the value of Error Correction Term (ECT) at -3.9874 and significant at level 99 percent, in general model. In addition, there are different effects of budget deficits and dominant factor in each regime. This result supports the hypotheses set out in this study. There are existences of a long-term relationship between the two variables, a deficit-GDP effect and different dominant factor in each regime. In conclusion, the formation of a budget deficit that further forms other macroeconomic variables in the economy is seen to have an empirical impact on Malaysia's GDP. This study is expected to contribute to the idea that, there are several dynamic factors impacting the formation of budget deficit on GDP. Comprehensive knowledge is a necessary in efforts to increase productivity and living standards of people to ensure the stability of Malaysia's economic system in future.

IMPAK PEMBENTUKAN BELANJAWAN DEFISIT TERHADAP PERTUMBUHAN EKONOMI DI MALAYSIA

ABSTRAK

Hubungan antara belanjawan defisit dan pertumbuhan ekonomi merupakan salah satu isu yang sangat penting diperdebatkan oleh ahli ekonomi dan pembuat dasar di negara maju dan membangun. Kajian ini bertujuan untuk memeriksa hubungan tersebut, dengan menumpukan kepada perdebatan teori, kajian empirikal dan model ekonometrik bagi mendapatkan kesimpulan substantif. Kesimpulan ini penting dalam bidang makroekonomi. Pembinaan atau pengembangan model makroekonomi digunakan untuk menganalisis impak belanjawan defisit terhadap pertumbuhan ekonomi Malaysia. Kesan pembentukan belanjawan defisit pula akan membentuk pembolehubah makroekonomi yang lain seperti hutang, peningkatan kadar faedah dan pengurangan perbelanjaan kerajaan, secara produktif ataupun tidak produktif. Kajian ini menggunakan data siri masa yang telah kumpul dari tahun 1985 sehingga 2018 secara bulanan untuk memenuhi tiga objektif spesifik. Objektif pertama adalah untuk mengenalpasti hubungan yang wujud antara kesemua pembolehubah terpilih dan Keluaran Dalam Negara Kasar (KDNK) dalam rejim yang telah ditetapkan. Objektif kedua adalah untuk membandingkan kesan pembentukan defisit terhadap pertumbuhan ekonomi dan objektif terakhir adalah untuk menyelidik faktor dominan yang mempengaruhi KDNK merentasi rejim. Model *Auto-Regressive Distributed Lag* (ARDL) digunakan untuk menganalisa hubungan kointegrasi dan arah sebab antara belanjawan defisit dan pertumbuhan ekonomi. Hasil penemuan menunjukkan hubungan jangka panjang bagi kesemua pembolehubah yang dipilih dengan KDNK. Penemuan ini disokong dengan nilai koefisyen pembetulan ralat (ECT) pada -3.9874 yang signifikan pada aras keyakinan 99 peratus, pada model umum. Di samping itu, terdapat kesan belanjawan defisit dan faktor dominan yang berbeza bagi setiap rejim. Hasil tersebut menyokong hipotesis yang telah ditetapkan dalam kajian ini. Terdapat hubungan jangka panjang antara kedua-dua pemboleh ubah, kesan defisit-KDNK, dan faktor dominan yang berbeza dalam setiap rejim. Kesimpulannya, pembentukan belanjawan defisit yang membentuk pembolehubah makroekonomi lain dalam ekonomi, dilihat memberi kesan empirikal terhadap KDNK Malaysia. Kajian ini dijangka menyumbang idea bahawa wujudnya beberapa faktor dinamik dari impak pembentukan belanjawan defisit terhadap KDNK. Pengetahuan komprehensif adalah perlu dalam usaha untuk meningkatkan produktiviti dan taraf hidup rakyat bagi memastikan kestabilan sistem ekonomi Malaysia pada masa depan.

TABLE OF CONTENTS

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

LIST OF TABLES

LIST OF CHART

LIST OF DIAGRAM

LIST OF ABBREVIATION

GDP	Gross Domestic Product
ARDL	Auto-Regressive Distributed Lag
MVNR	Malaysia's Voluntary National Review
SDGs	Sustainable Development Goals
NEM	New Economic Model
ECT	Error Correction Term
ECM	Error Correction Model
CUSUM	Cumulative sum
PEMANDU	Performance Management and Implementation Unit
MITI	Ministry of International Trade and Industry
MATRADE	Malaysia External Trade Development Corporation
AFC	Asian Financial Crisis
WFC	World Financial Crisis
GEDU	Government expenditure on education
GSUB	Government expenditure on subsidies
MIDF	Malaysia Industrial Development Finance
IMF	International Monetary Fund

CHAPTER 1

INTRODUCTION

1.1 Introduction

In this section, several sub-topics will discuss in detail about the variables to be tested. In general, it is explained about the relationship between the deficit budget and the growth of the Malaysian economy around the 1980s until the latest year, 2020. This is roughly describing the understanding of this study to be conduct. This section will also explain the objectives and hypotheses of the study that has been form to illustrate the impact of budget deficit formation on the country's economic growth. The theoretical framework obtained based on Keynes' theory will be used to describe the whole study. A comparison of the effects of macroeconomic factors formed as a result of the formation of the national deficit budget in 1980-2018 will be done in this study. It is also explained about the definition of the variable, which will be test to relate it to the implications for the economic growth of the country, as has been targeted.

1.2 Background of the Study

The annual budget is the annual planning of the country's economic, financial and fiscal position. Thus, the Budget can be defined as a statement of the socio-economic policies and Government plans for the society as a whole for a period of one year. Budget refers to several documents debated in Parliament on Budget day. The most awaited document is the Budget Speech by the Minister of Finance. In the speech, the Minister of Finance will explain the economic policies and allocation proposals for the purpose of expenditure covering development budgets and operating budgets. In this speech, the Minister of Finance will explain the source of revenue as well as the source of financing for development expenditure either through domestic or foreign loans. The Budget speech aims to obtain Parliamentary approval to use the funds to be used for development and management purposes throughout the Budget year, to ensure the Government machinery runs smoothly and enables the Government to provide Government services such as education, health, security and provision of infrastructure facilities such as roads, ports, airports, and so on.

The Minister of Finance will formulate a Budget strategy and fiscal policy including tax proposals. The new tax proposal not only aims to increase Government revenue but also has specific purposes and directions in line with national fiscal policy. The Budget examination will be discussed with each Ministry and Government agency to determine the total allocation ceiling for the Ministry / agency for the following year. This includes management allocation and development allocation. Budgeting strategies based on the latest data and current economic position and prospects will be well plan. For example, if a prudent Budget is set to reduce the fiscal deficit, the estimated total revenue for the following year will be project in advance to set the operating budget and development ceiling that needs to be allocate to ensure fiscal deficit limits. For example, if the fiscal deficit is set at 4%, based on the projected total revenue to be obtained, the total operating and development expenditure to be distributed to all Ministries / agencies can be estimated. Estimate the amount of this allocation to set the allocation ceiling for each Ministry / agency. If the number of proposals submitted by all Ministries / agencies exceeds the appropriate ceiling estimates to obtain a fiscal deficit of 4%, then each Ministry / agency will reduce their respective Budget proposals. It is at this time that every Ministry will complain if many deductions have to made and feel relieved if the proposals submitted do not involve reduction.

Many do not understand about the deficit because it is actually a situation, where the country's income comes from taxes, then deducted for the purpose of management expenses, development expenses and so on. The negative amount after that is the deficit. The high deficit causes the government to have to borrow more to cover the gap due to the declining national income. In a speech by the Prime Minister, Datuk Seri Najib Razak at the National Economic Summit in 2014, he admitted that the deficit and debt could endanger the country, but it is not necessarily bad. From around 15% to over 21% between 2010 and 2012. For the record, from 1970 to 2013, Malaysia experienced a deficit of 41 times. According to the Malaysian Economic Report 2013/2014, the national debt increased from 36% of Gross Domestic Product (GDP) in 1998 to 52.6%

of GDP.

In the economic context, some justify the country's debt at this time is not a big deal because a large percentage are domestic debt. In addition, justification also given to the deficit as a need for development, based on Keynesian economic theory. Malaysia's national debt has increased from RM681 billion in April 2018 to RM799, billion before the 2020, Budget is debate and there is a possibility that it will continue to increase. The government needs to find the best way and tell the people that if this situation continues the country's economy will not be good and income will decrease.

However, it is hope that the situation will not continue. The government needs to ensure that the country does not reach the level of not being able to generate good income, get good returns, and fail to attract investors. The government is always trying to reduce this deficit in the hope of being able to borrow less. When there is a deficit, the government needs to borrow to cover this shortfall. If this deficit is low, then the government does not need to borrow much, to cover the shortfall and the country can be develop as best as possible. This term applies to governments, although individuals, companies, and other organizations can run deficits. Good or bad debt depends on the government's ability to repay in the future. Studies by IMF economists Abdul Abiad and Jonathan Ostry (2005) show that a reasonable level of debt is at 30% of a country's GDP.

Many countries have its inspiration and goals to drive and direct the sustainable economic growth based on the vision that has been set. Malaysia for example, has set a target of Vision 2020[1] as a country's vision to achieve developed nation status by the year 2020 in the hope of achieving economic growth of six to seven percent per annum. By maintaining striking goals and achievements, Malaysia are seen to spur her economic growth from year to year. It will also provide for inclusive growth, with a broad-based increase in the incomes of their citizens. It must also be a vibrant and distinctive global city – open and diverse, the best place to grow and reach out to a rising one of the Asia country, and a home that provides an outstanding quality of life for their people.

However, due to external factors, imbalances and global economic uncertainty, every country must indeed depend on the domestic economy, which is the main source of growth. Nevertheless, it is quite difficult to observe the domestic macroeconomic condition such as inflation and government spending of a country. This is because government spending is necessary for driving the economy into a developed country. In this matter, fiscal policy plays a main role in driving the economy to the destiny. In economics and political science, fiscal policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are government taxation and changes in the level and composition of taxation and government spending can affect the following variables in the economy. Governments typically use fiscal policy to promote strong and sustainable growth and reduce poverty (Mark and Asmaa, IMF, 2012).

[1] Was announced by Tun Mahathir Mohamed, former Prime Minister of Malaysia in 1991. The aim of Vision 2020 is to provide a vision for Malaysia to achieve developed nation status and fully industrialized to maintain growth at a rate of 7 per cent per annum and initiating changes in the economic structure as well as in the manufacturing sector. (Economic Planning Unit).

The cost of growth is an expense that must be paid by the government. Most countries will spend more than the revenue obtained for the purpose of development. Expenses that exceed the government revenue will lead to the formation of a nation's budget deficit, and if not controlled would cause ongoing deficits occur in the country. According to Keynesian theory, if the budget deficit occurs in a long period of time, it will cause a decrease in the rate of economic growth. Therefore, each country needs to monitor the problem and the need to address emerging intelligence in balancing the development and needs of the country, so that extreme levels of debt would not burden the country. Patterns of debts incurred by each country play a big role in ensuring the pace of the level of economic growth. In the event that the country has a lot of debt that cannot afford to pay it back, this will affect the rate of economic growth.

However, if the debt incurred affordable, the situation may not affect economic growth, but should be monitored and controlled. For example, although faced a long period of budget deficit, Malaysia's budget deficit pattern is more towards the domestic debt rather than international debt, to ensure that the economic growth rate is not affected; the level of the national debt should be effectively controlled. All ASEAN countries must practice this to facilitate sustainable economic growth, especially for upper middle-income country status like Malaysia. This will help this country reach a developed country as it is dreamed of.

Although various goals have been set by each country in order to achieve the status of a developed nation, the issue of state budgets is the main subject matter. For the purpose of achieving the status of developed countries, each country must plan expenditures for development purposes. Planned expenditure can help developing countries without facing other economic problems such as budget deficits. Unplanned economic planning, for example expenditures that exceed the country's revenue cause the formation of deficit budget. With the creation of this deficit budget, it is indirectly inviting to other issues that disrupt the economic development of the country. Among the consequences is, the country will be burdened with debts created for the purpose of helping the country's finances. In addition, there has been an increase in interest rate payments on the created debt. Inflation problems will also exist, the impact of these problems. In extreme circumstances the government may increase the money supply to pay the debt, then the inflation will occur.

The issues of budget deficit have long been debatable over their consequences on the economy, which would include the impact on macroeconomic variables as well as its effect on the long-term economic growth. How budget deficits affect growth rate is, depending on economic planning for the country. As economic planning, reliance on the imposition of taxes and government spending is a reasonable step that is often played by all countries in the world to increase the savings of his country, and directly drive sustainable economic growth. In spite of this, it should be noted, the imposition of tax, seen as a burden to the people, and reduced government spending for development will also give the effect of unbalanced development of the country. Such things become a "problem" to economic planner and give great blow to the credibility of the leader of a country.

On the other hand, the former member of the Council of Economic Adviser, William D. Nordhaus (1996) in his writing about "Budget Deficit and National Saving" stressed out that low saving is not a problem (for America's case). The problem is that wasteful government programs which will crowding out productive ones. In this case, what was the rationale for balancing the budget? Appropriate approach should be taken to implement and enhance the performance of the economy and need to take action to improve the damaged - at least the government of each country has its own determination of whether a traditional or more conventional. Again, William D. Nordhaus highlighted that government are different things to different people, but to economist's government are responsible for three roles: stabilizing the economy, ensuring a fair distribution of income and promoting economic efficiency.

To accomplish these responsibilities, the government must consider its impact on society and economic development in the future if that is not fully implemented. But, the government should take the initiative if the obligation should be implemented; the budget deficit (the effect of tax reduction: for the purpose of increasing disposable incomes of the population, and increased government spending: for the purpose of development of the country) will occur and affect the rate of economic growth in the future. Nevertheless, the extent of the impact on the economy of a country should be reviewed and evaluated.

In general, Wadad and Kamel (2009) in their study expressed the issue about budget deficit, which is representing a demand for funds by the government. This demand must be meet from an excess of domestic saving over investment and by borrowing from abroad, taxes, or the use of monetary policy. The increasing budget deficit will drive up the interest rates since treasury bids funds to finance the budget. In turn, high interest rate may occur and crowd out private investment spending. This situation was call crowding out effect. If this occurs in an economy on an ongoing basis, it will form a continuous deficit budgets or classified it as sustained budget deficit. With this sustained growth of budget deficits, the economy of a country will be experienced high and variables interest and inflation rate, and will also impact on others macroeconomic variables. With all this, the development of the economics of one country will be effect by the formation of the budget deficit. With sustainably increasing or prolong budget deficit, it is important to analyzed the behavior of it and detect if these deficits have a significant impact on economic.

Generally, this study will analyze the relationship of several selected macroeconomic variables for Asian countries categorized as upper-middle income countries. The variables that have been chosen are the variables formed from the creation of deficit budget in the economy. Five selected variables will explain the impact of the budget deficit on economic growth for the two chosen countries. Among the variables chosen are, national debt, interest rates, inflation, productive expenditures and non-productive expenditure.

Base on the data available from the World Bank (2012), Malaysia is lies under Upper-Middle Income (UMI) countries. In order to explain the effect of budget deficit formation across regimes, the study tried to give a positive explanation for the observed pattern in deficits. With the inclusion of these countries under review, the findings hopefully will be better, when the results of the study can be used as a key for policy maker to planning their idea for the future development of the country. It is also can be compared according to a predetermined income groups as mention earlier. Income group differences of the country will explain the difference budgeting process and the difference determination of other factors such as productive expenditure and non-productive expenditure different for each regime.

Table 1.1

Average Budget Deficit (BD) and Gross Domestic Product (GDP) from 2008-2018 of 5-ASEAN Countries

Countries	Budget Deficit/Surplus	Gross Domestic Product
Singapore	+6.54	5.99
Malaysia	- 4.38	5.02
Thailand	-0.18	4.40
Indonesia	-1.39	5.23
Philippines	-3.09	4.74

Source: World Economic Outlook (WEO),IMF

In the case of Malaysia, from the data obtained, although Malaysia experienced a budget deficit every year, but the growth rate is still at a good level. During the eleven-year period from 2008 to 2018, the average rate of budget deficit is 4.38%, but the rate of economic growth is still at a level that is stimulating, which is an average of 5.02%. This shows, although Malaysia experienced a budget deficit in the long period, but did not interfere with his country's economic growth rate. For Thailand case, the deficit is look lower than a Malaysian case, where the different of the budget quite big, is about 4.20%, which show the best economic situation, occur in Thailand. But when comparing the level of GDP for both, it shows that even though Thailand only faced the lower deficit of budget, but the GDP is only 1.59% different from Malaysia. This situation mentioning that, even though the country faced the lower deficit, but the development of the growth of economic not very much different. This case providing a clue to the researcher to establish the study on this matter, to gain the best reason why all this happen in economy.

In the case of Indonesia, in the same time period, found on average, for the country's budget deficit are only 1.39%, but the average economic growth rate of about 5.23%. Although Indonesia seen on, average for a period, only experienced a small budget deficit, a 2.99% difference from Malaysia, but the growth rate is only 0.21% different from Malaysia. This situation requires a comprehensive study to identify the factors that result in these situations. If we look at the case of developed countries such as Singapore, although Singapore has a surplus every year for a period of years 2008 to 2018, except in 2010, the average budget surplus amounted to 6.54%. However, when compared with the country's economic growth rate, the average growth rate is 5.99% only different from Malaysia by 0.97% only. This is a situation that requires a detailed study to investigate and see what other factors contribute to this situation occurs. Why does this situation contrast with the theory put forth by Keynes?

Most researchers did investigate the relationship between budget deficit and economic growth from the cross-country perspective. The common method used was panel data analyses, in which it is able to investigate the relationship between series by integrating time dimensions and various countries at a time. The result for sure varies between various researchers. Some found that budget does not give harms to the level of economic growth, while other found the opposite. Apart from that, some researchers also found that there is no relationship between these two variables. Therefore, this study will investigate the relationship between these two variables for UMI countries, as comparison across regimes. Study wills focus on factors contributing to the effect on the rate of economic growth for Malaysia by budget deficit creation. The aim is to obtain results that can be proposed and adopted for the purpose of enhancement of other countries.

1.3 Malaysia's Budget Context

In times of economic crisis, governments often have less funds to spend. This can see during the fall in crude oil prices in 2016 and 2017, which affected the country's income. To continue to drive the economy, the government is committed to maintaining spending in the country's Budget in the years to come. However, how can the government spend more with less funds? The trick is to make more loans. With the country's economic downturn in 1998 and the global economic downturn in 2008 that began in the United States, oil prices also fell, and this affected the government's petroleum income tax. Many businesses run domestically have gone bankrupt and the problem of job loss has occurred in the economy at that time. This means that the government has lost many sources of income tax and corporate tax.

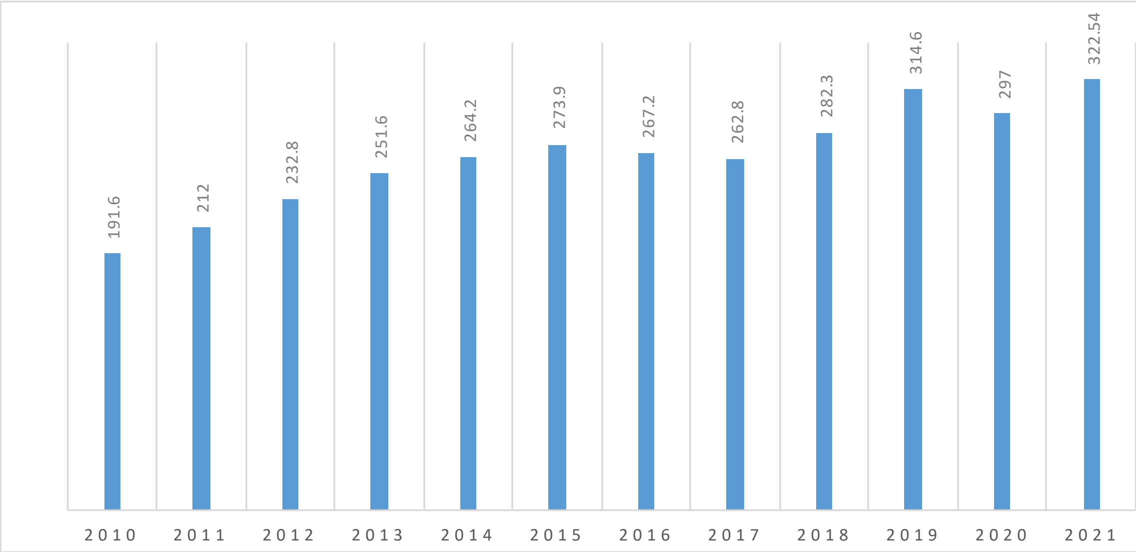

Chart 1.1. Total Government Expenditure 2010-2021. Source: Ministry of Finance Malaysia

The chart shows the fluctuations in government spending from 2010 until the target of 2021. The federal government continues to place emphasis on improving the efficiency and effectiveness of spending. The move is in line with the government's commitment to recover public finances to ensure a strong fiscal position and sustainable economic growth. In addition, the Government will also focus on more transparent and responsible spending reporting.

The government has improved the efficiency of the country's expenditure by prioritizing programs and projects based on needs and interests as well as obtaining more cost savings through the review of several projects. The project, which continues with a revision of the scope and lower costs, is expected to increase the value of the best interest and reduce leakage while generating a high multiplier effect on the national economy.

This exacerbated when Malaysia, in particular, the world in general, is facing a Covid-19 pandemic that is disrupting the global economy as a whole. The world is now in the grip of a very burdensome Health Crisis. As a result, the government estimates revenue is 17.26 billion lowers than the initial estimate for 2020, before the outbreak of the covid-19 outbreak. Therefore, the Government expects recovery in 2021 to be expect at a slower pace. Economic recovery measures are being plan as best we can to deal with this volatile situation. At a time when the country is facing a Financial Crisis and the Global Crisis, various drastic measures have taken to help local industries; investment and support to the people, are channel to reduce the burden. The government spending has caused the country to face an acute saving crisis. Expected for 2021, the government also expects revenue to be 7.4 billion lowers than the initial estimate for 2020. This does not include expenses to be incur to address the effects of Covid-19, such as economic stimulus packages and costs to curb the virus.

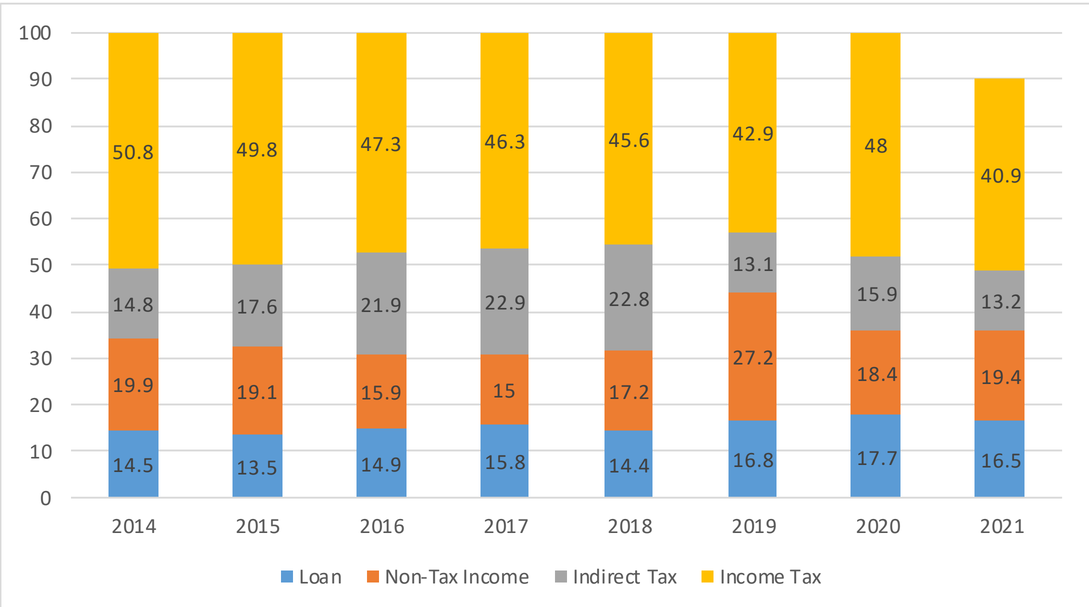

Chart 1.2. Loan and Income 2014-2021 Source: Ministry of Finance Malaysia

The chart above shows the total percentage of loans and the amount of income earned by the government in the period 2014 to the targeted year. It found that the level of government debt or loan is still under control. Although the country is in a state of budget deficit, which causes the occurrence of debt in the economy that has to made, this is aim at the development of the country. The debt created is still within the range of debt allocation recommended by the Ministry of Finance Malaysia. However, the level of debt dependence based on the current economic situation. Therefore, in this study will be seen the implications that will be received on the economic growth of the country as result of the debt formed, in the current crisis regime.

The government plans to spend 297 billion in the 2020 Budget, but it is now expected to increase to 314.7 billion. This includes 38 billion for economic stimulus packages. As a result, the government had to cut 20.3 billion in expenses for other matters. The country is expecting to face similar challenges by 2021. Development expenditure, which is used for things like the construction of hospitals and schools, increased by RM13.18 billion. Here it can be seeing that government spending is increase to assist the people in restoring health and improving the country's education sector. This budget crisis has caused the country's deficit to worsen in the future. This will cause the government's expenditure in the following years to be reduce to cover the deficit. Operating expenses used for government operations such as paying salaries and rent, decreased by RM4.76 billion. Thus, a new allocation category was created in 2020, namely the Covid-19 Fund, aimed at addressing the epidemic. This is the government's initial step in planning the possibilities that will be face in the future.

1.3.1 Methods of Distribution of Financial Resources

The previous, current and future budgets will focus on four main thrusts, namely driving economic growth in the new economy and the digital age; investment in the people to enhance human capital capacity; creating a united, inclusive and equitable society; as well as rehabilitating public institutions and finance. Efforts to make Malaysia the main choice of investment destination, increase competitiveness including facilitate business and accelerate the digital economy are among the government's efforts to stimulate the country's economic growth every year, based on the estimated expenditure distribution.

Government policies, goals and strategies that will be implemented in the years before, during and in the future are based on the budget projections that have been made for programs, activities and projects which will be implemented to achieve the strategy and goals set each year. Distribution of financial resources according to programs, activities and projects. The amount of financing for each program and project that has been plan based on the loan source that has been identify.

In general, the rationale for budget needs is it is a distribution of limited national revenue sources to meet the needs and wants of the people who do not limited. Apart from that, “the budget is intended to optimizing benefits to the people and the country than limited use of resources.” In other respects, the budget also aims to give direction to Government actions, determine Government priorities, enforce laws and implement manifestos that affect the country's economic activities and distribute wealth to ensure social justice society.

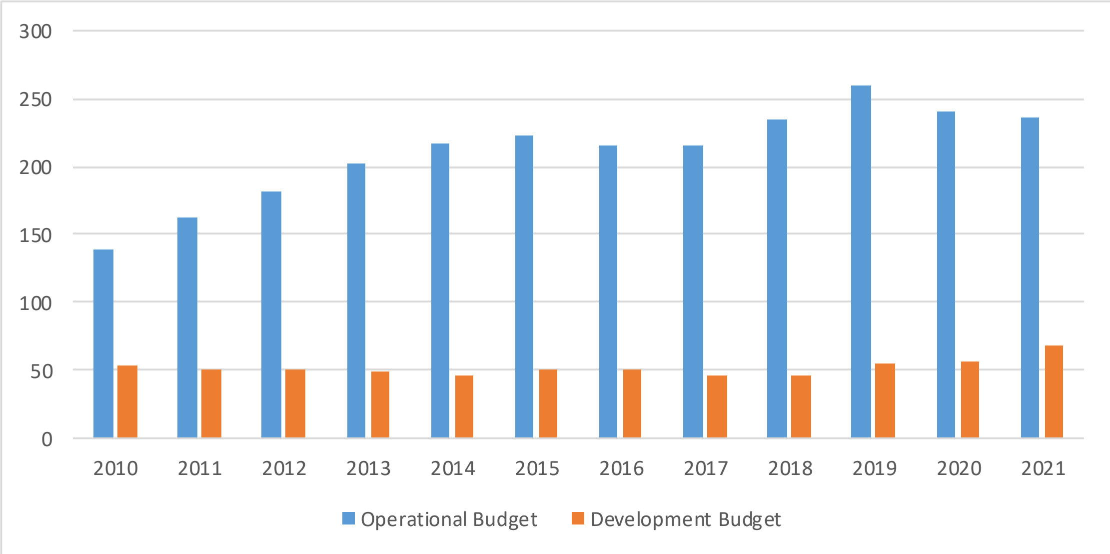

Chart 1.3. Budget Allocation 2015-2021 (billion). Source: Ministry of Finance Malaysia

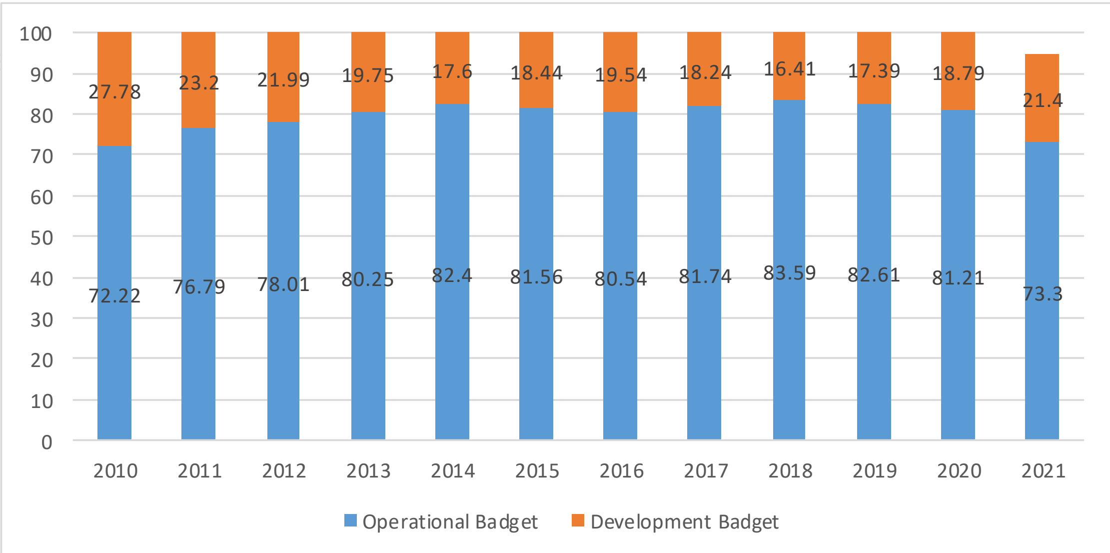

Chart 1.4. Budget Allocation 2010-2021 (percentage).Source: Ministry of Finance Malaysia

Based on the chart above shows the trend of the budget that has set by the government for the purpose of operation and development of the country from 2010 to the targeted year. The total expenditure is a measure of the government's commitment in developing the economy during the year before, during and in the targeted future.

1.3.2 Government Expenditure Methods

As the country faces the crisis of the Health Crisis due to Covid-19, which hit the world at the end of 2019, it puts the country in a situation it has never encountered before. Whatever steps taken, there will be consequences. The government expects revenue of RM236.42 billion in 2021 but plans to spend RM322.54 billion to deal with this epidemic. Similarly, in 2020, the government spends RM314.7 billion compared to the projected revenue of RM227.27 billion. In short, the government spends more than its revenue. As a result, the deficit is expect to double almost the original target of 3.2 percent, to 6.0 percent for 2020 - the highest since 2009.

The government hopes to reduce it to 5.4 percent by 2021. Malaysia has not had a surplus budget (spending less than revenue) since 1997. Imagine if a person falls ill, then his family has to borrow money for medical expenses, then for years to come, their finances will be tighter because it has to pay off the debt. So for the coming years, larger allocations in the national budget will used to repay loans, meaning fewer allocations for development. This will further burden the government with endless debt burden.

The chart below shows the proportion of annual budgets allocated to pay off debts. One way to overcome this is to grow the economy faster, or in other words, make more money than you spend. However, with high debt in the economic crisis, there is not much that a country can do, like people who have many loans, definitely will stuck when salary cuts. This is the reason why the government is always trying to reduce the deficit. However, the effort was hampered by the fall in oil prices in 2016-2017, the abolition of goods and services tax (GST) in 2018, and now, the Covid-19 outbreak in 2020-2021.

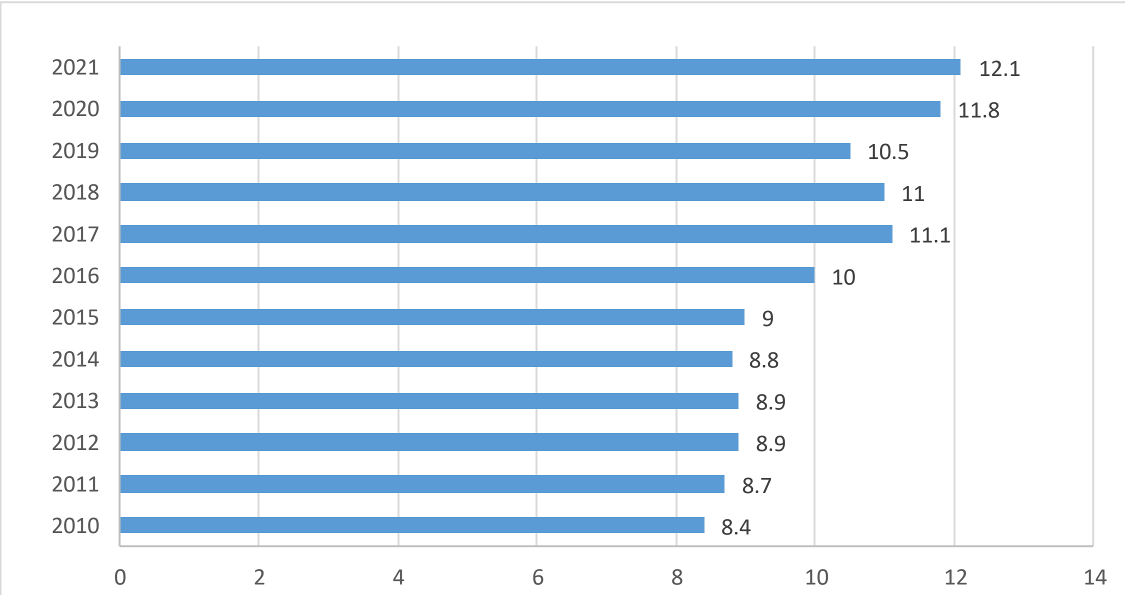

Chart 1.5. Percentage of Budget Distribution for Debt Repayment. Source: Ministry of Finance Malaysia

The debt-to-GDP ratio also jumped twice in 12 years, as can see in the chart below. The government has set limits on how many loans can be make compared to GDP, but the government has also raised the debt ceiling. In 2009, the debt ceiling was raised from 45 percent to 55 percent to face the economic crisis at that time. This year, the debt ceiling was raised to 60 percent to cope with the Covid-19 outbreak. The government is expected to take full advantage of the debt ceiling.

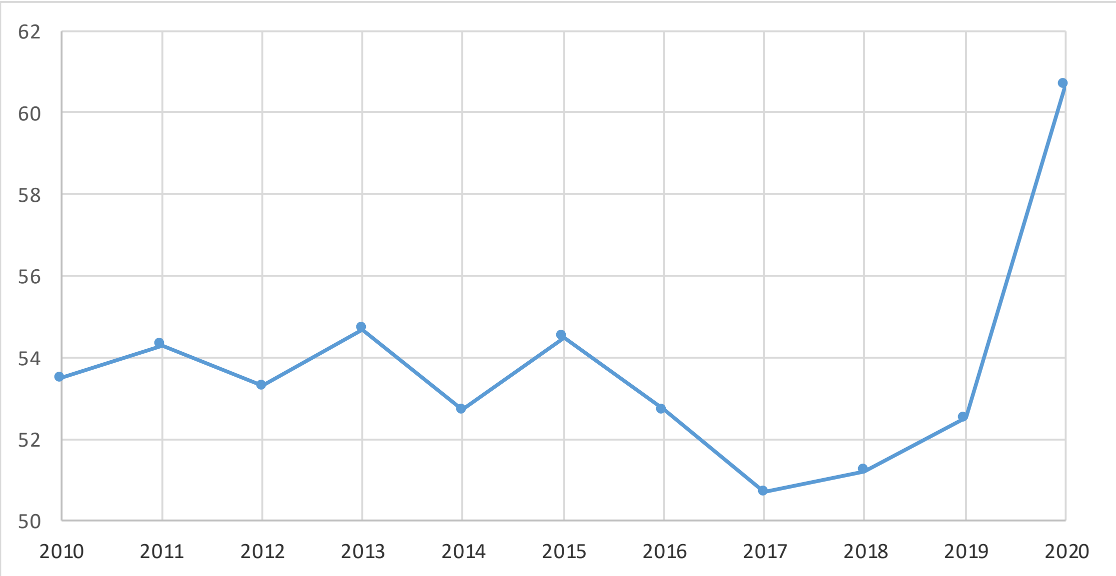

Chart 1.6. Debt Percentage vs. GDP. Source: Ministry of Finance Malaysia

As seen in the chart above, once the debt ceiling is raising, it is difficult for the government to lower it to the previous level. In the end, Malaysia needs to accept and face the national debt. This shows that, when the country is faced with various crises that hit uninvited, the country will face a deficit every year, and will eventually lead to changes in macroeconomic factors that will disrupt the country economic growth.

1.4 Economic Performance and Challenges

Recently, the world economy is in a precarious situation, this is cause by a trade war between the United States and other countries, especially the People's Republic of China. The International Monetary Fund (IMF) has lowered its global economic growth forecast for 2019 from 3.9 per cent in July 2018 to 3.2 per cent in July 2019. World Trade Growth (WTO) growth has also lowered its projected world trade growth for 2019 from 2.6 per cent in April. 2019 to 1.2 percent in October 2019, the lowest rate since 2009.

In such an economic climate, as a trading nation, the Malaysian economy will inevitably be affected. However, through the economic policies and reforms that have carried out by the government, the country's economy seen as stable and resilient. In the first half of 2019, Gross Domestic Product (GDP) growth was 4.7 percent, with a second quarter growth rate of 4.9 percent. In fact, Malaysia is one of the few economies in the world that recorded higher growth in the second quarter compared to the previous quarter in 2019.

While Malaysia was still in a stable economic situation, before 1997, the annual GDP growth rate was 9.3 percent. This also raises Malaysia as an Asian Tiger in the world economy. The influx of foreign direct investment (FDI) not only creates new employment opportunities, but also provides good salary returns to Malaysians. Apart from this, generating new business into the market and opening up new economic opportunities, and even upgrading the structure of the agricultural-based domestic economy to an export-oriented industrial economy. However, by late 1997, the devastating Asian Financial Crisis, that led to a great impact on the country economic growth, at that time, shocked Malaysia.

However, at the beginning of this century, Malaysia's economic growth has slowed to an average of 5.1 per cent since 2000. The premature deindustrialization of industry in the Malaysian economy has caused the economic structure to become increasingly dependent on labor, unskilled workers and low-cost structures. As a result, we continue to be trapped in a middle-income status and avoid being a developed economy based on shared productivity, innovation and prosperity.

The Government is committed to further improving the business environment in Malaysia for expanding the domestic economy. This can help to economic growth even though the country has to deal with the budget deficit because of development and management. A good investment and logistics system is important for a trading country like Malaysia. A report from Global Competitiveness by the World Economic Forum (WEF) 2018 shows that Malaysia's maritime transport infrastructure is among the best in the world. This contributes to the economic development of the country at this time. Apart from that, various sectors are also developed and assisted to help develop the economy. At the same time, the government still takes into account the best financial planning to avoid the expansion of excessive deficits in the economy. This is feared to exacerbate more severe macroeconomic problems.

1.5 Economic Effects of a Budget Deficit

Implementation of the national budget is a planning and efforts of the government, to move the economy in a period. The momentum of economic growth is highly dependent on the level of budget implementation, taking into account economic developments during the year. Nevertheless, despite the excitement of implementation, economic planners need to consider the implications on national savings, so that its implementation will not affect the overall economic development. However, in order to enhance the development of national development, each country usually will distribute its budget for national development in various sectors such as military, education, health, agricultural, manufacturing etc. This is for the purpose of national development to keep pace with world developments. For some countries, the tax rate will be reduced for the purpose of wellbeing of its people, and some are raising taxes to cover the lack of revenue. In this way, the economy will not be through the era of budget deficits, but will burden the people. This dilemma must be faced and need to be addressed by all countries, so that the economy will not remain in the era of budget deficits.

Among the disadvantages of the deficit are:

1) Debt increment and debt interest (costs released)

2) Inflation

3) Crowding out effect

4) Tax increases

5) Interest rates increases

6) Reducing the government expenditure (productive and non-productive expenditure)

When a country is in debt, whether at the domestic or foreign level, this debt still has to be paid. Each of these debts has its own benefits. The larger the amount of debt, the greater the interest to be paid. With a total debt of RM500 billion, interest as small as one percent is equivalent to the value of RM5 billion. That is if the value is one percent. If the value is five percent, it means the value is RM25 billion. According to the Malaysian Economic Report, the total actual payment of national debt services is 10.7% (budget estimate) or equivalent to almost RM23.2 billion. Typically, bonds will be issued to address the deficit. If these bonds are issue to the public, then the deficit will not result in inflation. This is because no new money issued. People buy these bonds from their own savings. However, these bonds may also sell to the banking system. Through it, new money issue and it will generate inflation.

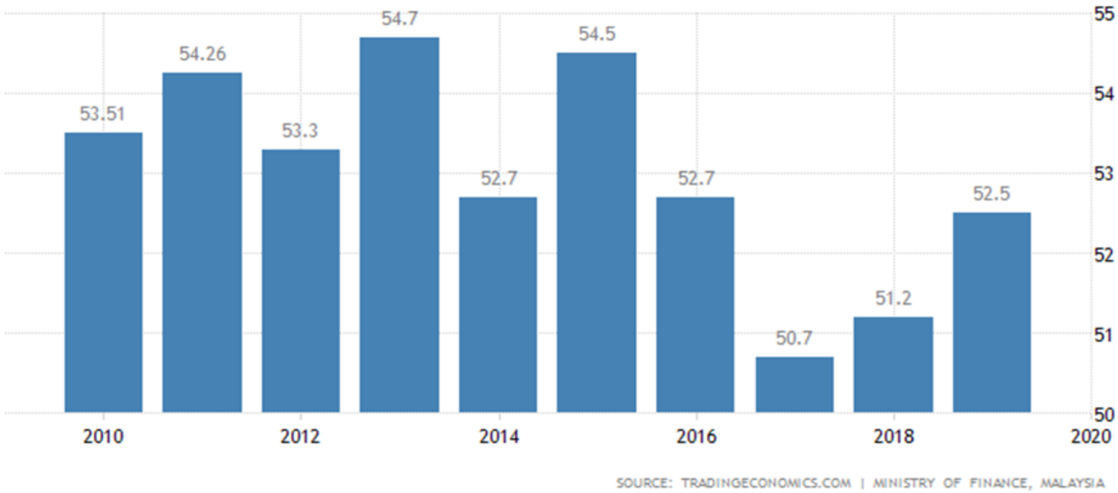

Chart 1.7. Malaysia Government Debt to GDP – 2010-2019. Source: Trading Economics.com Ministry of Finance

Chart above shows the development of the Malaysian government's debt over a period of 10 years formed from the budget deficit planned for the purpose of national development. Malaysia recorded a government debt equivalent to 52.50 percent of the country's Gross Domestic Product in 2019.

Crowding out effect mean that party other than the government denied or minimized the opportunity to borrow, invest or spend their savings or income. When the government does something, the role of the other party decreases. In fact, all the tax revenue collected by the government squeezes out the actual expenses that may incurred by the taxpayer. In addition, outflows occur when interest rates on borrowings rise due to large government loans. This prevents non-government parties from borrowing and investing. Here it is clear that even though the public, not funded by the bank, makes the purchase of bond, it still has the effect of squeezing out.

Sometimes, a government tackles the problem of deficit by introducing new taxes or expanding tax collection. As Cyril Northcote Parkinson once stated in Parkinson's Law: The Pursuit of Progress: "Expenditure will be increased to match income". In other words, if the government wants to make a deficit at a certain rate, say 5%, then it will ensure that, even if the amount of income available is large enough, the expenditure is added in line with the value of the deficit. Sometimes, inflation is equated with taxes. Only inflation is an indirect tax. If inflation is often considered a problem, then taxes should also be seen as a problem. But in fact taxes are worse. With inflation, at least the surplus can still be used to buy the goods or services we need. Instead the money given on taxes will be used by the government for purposes we may not need. There are no easy shortcuts to deal with a large deficit. The government needs to take firm measures to reduce its spending.

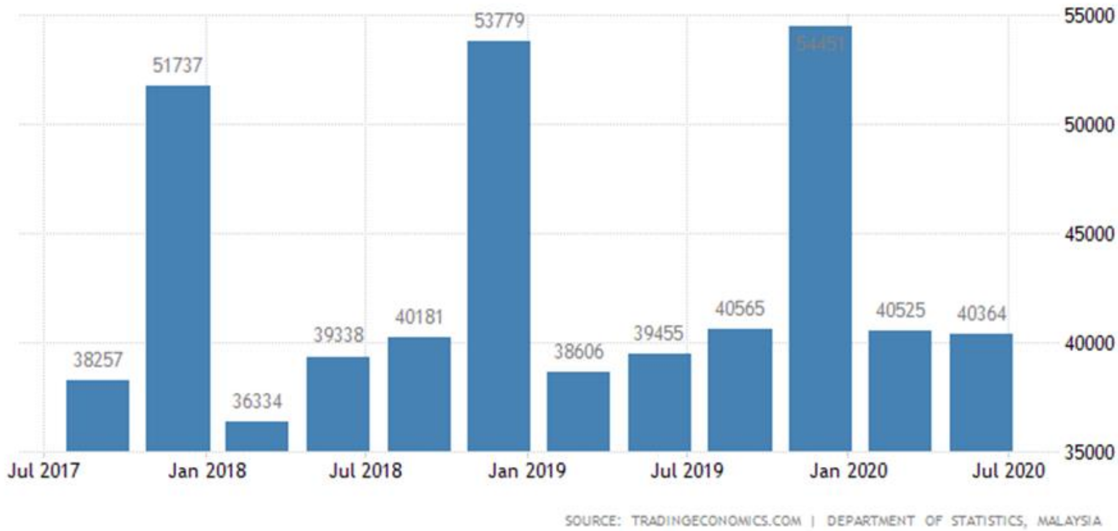

Chart 1.8. Malaysia Government Spending - 2005-2020. Source: Trading economics.com Department of Statistics Malaysia

Chart above show the Government Spending in Malaysia decreased to 40364 MYR Million in the second quarter of 2020 from 40525 MYR Million in the first quarter of 2020. In July 2017, the spending was at 38257 MYR Million since Malaysia was in the era of high debt due to the development planning from the government on that time. In this phase, recovery plans have made to curb the problems that occur after facing the global crisis that harm the economic development planning. Government spending is arrange as best as possible so that the country is not too expose to more severe deficits that could affect the economy in the future. At this point, the country's politics is not very stable. However, by 2019, the country's expenditure is seen to have increased to 53779 MYR Million, show that the economic situation is improving and development projects need to be continued as well as human resource development that needs to be emphasized.

In the case of interest rates, it found that there is a turn up in the implementation of interest rates in the economy during the crisis regime period. This aims to control the current lending rate, which will lead to inflation in the economy. In Malaysia, The Central Bank of Malaysia (Bank Negara Malaysia) takes the interest rate decisions. The official interest rate is the Overnight Policy Rate.

Chart 1.9. Malaysia Interest Rate - 2004-2020. Source: Tradingeconomics.com Department of Statistics Malaysia

Chart above show that Bank Negara Malaysia left its key Overnight Policy Rate (OPR) unchanged at 1.75 percent on November 2020, as widely expected. In 2007 before the Global Crisis occurs in economy, the interest rate was at 3.5 percent and reducing to 2.0 percent by 2010 due to the crisis occurs in 2008. The central bank said the current monetary policy stance remains accommodative given the outlook for growth and inflation. The board added that the cumulative 125bps reduction in the key interest rate so far this year would continue to provide stimulus to the economy. Policymakers expect the economic recovery in Malaysia to continue into several years after the crisis occurs, underpinned by the recovery in global demand, turnaround in public, and private sector expenditure amid continued support from policy measures. However, the pace of recovery will be uneven across sectors, with economic activity in some industries remaining below pre-pandemic levels, which occurs in 2019, and a slower improvement in the labor market. This outlook is still subject to downside risks, particularly from ongoing uncertainties surrounding the course of the pandemic domestically and globally.

1.6 Evaluation of the Effects of Budget Deficit

1.6.1 Depends on the Situation of the Economy

Because of the formation of the budget deficit in the economy, several other issues have been form in the macroeconomics that disrupt the country's economic growth. Among them is the debt that arises because of loans made by the government for development purposes. In 2007, the global economy hit the worst recession in the history of modern civilization. This economic crisis stems from the crisis in the USA due to the problem of subprime loans, which in turn affects the economy in Europe. The effects of the USA economic downturn undermined investors' confidence in the economic strength of European countries. Before the global economic crisis in 2007-2008, most countries in Europe had high government debt of 60% -90% compared to GDP. It is considered normal because the economy in Europe before the crisis was lively and rapid.

After 2008 investor confidence including government bond (debt) borrowers in European countries such as Greece, Portugal, Spain, and Ireland declined sharply. As a result, most borrowers intend to redeem the debts of the governments of the countries (apply for debt repayment) making the interest rate for bonds issued increase sharply and make the cost of paying bond interest rates higher and it adds to the financial burden of national governments- the country.

We often see how some people compare the debt problem in Greece, Spain, and Ireland and so on. There is no denying that the high level of debt in the country contributes to the current economic crisis although unlike Malaysia, these countries do not have full control over their country's financial system. The Euro one-currency system used by most European countries makes it impossible for them to control the money supply or the simple language of not being able to print their own money. The Euro is regulated by a central agency, the European Central Bank (ECB), which jointly monitored by all countries that use the Euro. This makes the crisis in Greece worse and their debt levels rise because they are unable to control the money supply for their own country. The ECB also plays a key role in controlling interest rates as a mechanism to address the economic slowdown.

Compared to Malaysia, our country has Bank Negara Malaysia which has the freedom to control the money supply, the next interest rate can respond to the external and internal economic slowdown. Therefore, to illustrate that Malaysia is going to be like Greece, Spain or Ireland is not appropriate at all because our economic and financial structure is different from theirs.

The national debt is to be at a critical level because it almost reached the national debt ceiling limit of 55% of the country's GDP. The Local Loans Act (1959) limits the national debt to a ceiling limit of 55% however; it can be amended at any time if it has the support of the majority in parliament. This means that the national debt limit is not a benchmark whether the government's debt level is at risk or not.

However, this is not an excuse for the government to be indebted indiscriminately. People like us have the right to know what the purpose of the government is to borrow a lot and where to go for the money borrowed. The most important issue that all of us should focus on is what the government spends, what government revenue owes and so on. Debt for the development of the country is allow but is it true that loan money is really channel for development that will bring benefits to the country and the people?

The development of the world economy in general, is very volatile. It has a direct impact on the development of the Malaysian economy in particular. For the purpose of national development, the government needs to think about the funds needed for the purpose of capital channels to mobilize the projects that have planned. Through government, loans can increase the available funds as well as help the implementation of national development within the stipulated period. However, the loan made should not lead to problems in the future. Uncertain economic conditions limit loans and at the same time hinder the development of the country. If during the crisis in the economy, then it is not possible to get many loans to help the flow of capital. In the current economic downturn, we are experiencing declining private sector spending and investment - and rising private sector savings. This is because during the recession, most development projects were postponed. In other words, in a recession, there is a surplus of savings and therefore a higher demand for 'relatively safe' government bonds. However, if the government increase borrowing during a period of rapid economic growth – it is more likely to cause crowding out and rising bond yields.

1.6.2 Depends on Why the Government Borrow

A country in debt is not an awkward or abnormal thing. Almost all countries in the world borrow money through debt (bonds) either to cover the government's annual expenses or to make investments. The debt of any government that is higher than the country's GDP does not necessarily mean that the country is in a state of crisis or will go bankrupt. It should be note that comparing the debt of the Malaysian government with any country is unwise. Not necessarily a country in high debt they do not manage the economy well and vice versa, not necessarily a country with low government debt their economy is well managed. Comparison of Malaysian government debt with other country's government debt usually does not take into account how much their GDP, their economic strength, national population and so on.

What is foreign debt? It refers to debts taken in currencies other than the Malaysian Ringgit such as the Euro, USD, and Yen from foreign banks, foreign governments and financial institutions such as the World Bank and the IMF. (For the record, Malaysia does not have any loans from the World Bank or IMF.) These debts not only taken by the government, but also by companies, private parties, and individuals. This means that foreign debt is not 100% government debt.

This is because the standard of international financial reporting in defining *foreign debt* has changed. If in the past it only referred to external debt, public company debt and private sector debt, but now it also includes deposits and debts taken by foreigners. As such - the definition of debt has expanded its scope. Therefore, it is not surprising that so many things were not previously considered foreign debt, but are now refer to as foreign debt. In 2013 the external debt was RM196 billion. If the new standard is adopted, the amount will be RM696.6 billion. Therefore, the rate of increase in Malaysia's external debt did not triple but only increased by 6.9%.

What is the percentage of government debt, public company debt, private sector debt and debt taken by foreigners? Of the RM 744.7 billion, 42% are foreign deposits and debts, 37% are private sector debt, 10% are public company debt, 9% are investment and guarantee credit and only 2% are central government debt. The high percentage of foreign deposits and debts is due to the high demand for government-issued bonds / securities used for development projects such as MRT and ETP.

Why should the issue of bonds or securities have taken into account? It aims to assess the liability of a country. This includes warranty liability and actual liability. Debt taken is like the central government's offshore debt for economic development projects. This is a ‘real’ debt and is consider a real liability - meaning the government is the one who is in debt. While in the example of MRT issued bonds for example, it is guarantee by the government. This means that this debt is a guarantee liability. However, this debt is only on paper for the government. It is so because the debtor is the MRT.

The analogy is like a father who is the guarantor of PTPTN his three children. In calculating the net worth of the father, we need to take into account the debt guarantee of his children. However, does this mean that the father is really 'less rich' due to the guarantee of his children's debt? Alternatively, is the richness of his wealth on paper? The same is true of government liability. Previously, the assessment of a country's liability was to look at the actual liability. However, in ensuring a country's finances are strong, collateral liabilities are also included.

Is this foreign debt rate high and worrying? To compare whether Malaysia's external debt is high or not, we can compare it with other countries. In Singapore, its external debt is RM3.13 trillion. South Korea is RM1.13 trillion. Indonesia, is RM927 billion. We can also guess how trillion the external debt is for countries such as the UK, Japan, Germany, France, Brazil, Turkey and others. Therefore, Malaysia's external debt is still reasonable and normal.

1.7 Problem Statement

In general, the debate over the budget deficit and other factors relationship with the country's economic growth rate was so controversial. Theoretically, the formation of the budget deficit would affect national savings and thus affect the rate of economic growth of a country. When talking about the budget deficit, the public will assume the presence of budget deficits will cause the downfall of the country. Caused by the budget deficit in economy, the country will be seen not develop and the government is considered failed to discharge an obligation perfectly. For economists, the government is responsible for performing three roles: to stabilize the economy, ensure equitable distribution of income, and promote economic growth and efficiency.

According to Rabiatul (2013), the government will make the budget balance the focus and the key issue in developing the economy of a country. Most economists agree with those roles, and many attempts to study on this matter. The questions raised to ask what the real reason behind this focus is. Is this whether the government dis-saving will reduce domestic savings, then it will be reducing capital formation, lower potential output growth to develop the economy and reduce the consumption opportunity in the future of the country? Is this whether the formation of high deficits will lead to increase in government debt due to the increase in interest rates faster than national income? In addition; is this because of the high deficit then it will create a competitive disadvantage among ASEAN countries?

Besides, other question also arises to discuss the relationship. Under what circumstance will changes in government macroeconomic variable such as budget deficits (BD) cause Gross Domestic Product (GDP) to vary, and subsequently bring a negative impact on economic development of the country? Virtually all economists agree that an increase in the deficit caused by a rise in government purchases or expenditure – say, to increased development - reduces national saving and creating other macroeconomics problem, and imposes a real burden on the economy.

However, whether a deficit caused by a cut in current taxes or an increase in current transfers reduces national saving, increase the debt of the country for the country's development, restructuring the interest rate in loan and the government expenditure, is giving an impact on growth is much less clear. This is because, although economists assess that, in the event of a reduction in taxes or an increase in government spending, and other situation occurs, the budget deficit will be formed, thus exerting a negative impact on economic growth of a country. However, bear in mind, which while the budget deficit is present in the economy, growth economic may not be affected or in other words, may not experience any real change. This is due to the availability of other factors that also have an impact on these changes. In fact, although the budget deficit had a negative impact, however, the possibility of other factors helped raise the economic growth rate, depending on the situation of a country.

Various factors may also contribute to the economic growth of a country even when the country is faced with huge budget deficit; namely labor force, technology, capital, knowledge, natural resources and so on[2]. Some other factors that also see to be contributing factors that can influence the growth rate of the country are categories under productive expenditure (PROexp) and non-productive expenditure (NONPROexp). Bank Negara Malaysia (BNM) listed the component of productive expenditure as development expenditures such as defense and security; agricultural and rural development; trade and industry; transport; education; health as well as housing. Meanwhile, non-productive expenditures are referring to lump-sum payment paid by the government such as subsidies. These other factors are including in the study in order to investigate their impact on the economic growth. It is important to know their relationship since both types of expenditures contributes to the level of budget deficit.

Keynes in his thinking emphasizes that there is a connection between budget deficits and growth. When deficits occur in the economy, government was force to make loans and this could lead to the country's debt. That eventually will affect the national savings. Therefore, it will have an impact on other macroeconomic variables such as money supply, inflation, interest rate and real output of the country. Keynesian economies argued that there is a positive relationship between budget deficit and economic growth in the short-run, but in the long run, budget deficit can harm the development of the economy of a country. While new classical economies argued, the opposite and Ricardian equivalence hypothesis claimed that there is neutral relationship between budget deficit and economic growth[3].

---

[2] B. Snowdon, and H.R Vane. 2005. Modern macroeconomics: Its origins development and current state. Northamton: Edward Elgar.

[3] M.G. Briotti. Economic reaction to public finance consolidation: A survey of literature occasional paper series. *European Central Bank*. 2005,38.

The differences in term of opinions and analyses of the study regarding this relationship arise out of various factor such as time dimension, types of countries, types of government administration and method of analysis as well as the degree of budget deficit. By definition according to Ball and Mankiw (1995), a country faces a problem of budget deficit if the government expenditures exceed its revenues. In other words, the level of public savings is negative. This scenario may give harm to the economic growth of the country. It can be measure by looking at the increasing pattern of real Gross Domestic Product (GDP) from time to time. In some cases, in the short-run, the formations of the budget deficit were look as an agent in helping the country to grow. However, in the long run, huge budget deficit for these two countries was ruined the economic growth since they have to struggle in paying back all the national debts.

As discussed earlier, deficits can boost the economy in short run, but for the same reason, they constrain the economy in the long run by reducing national saving, For example, increase aggregate demand in a slack economy. In a short-term it can boost to aggregate demand can improve economic prospects by encouraging people to spend more and firms to use more of their existing capacity. Over the long term, however, a key to raising future national income is higher national saving and national investment, which deficits inhibit (William G.G and Peter R.O (2003)). From this conclusion study, show that how budget deficit can help to develop and harm the economy in the short-term and long-term. But the problem rises of how this deficit can be reduce in order to increase the economic in the long term, when the government needed to spend to develop the country to be at par with other developed countries. In addition, if seen in the development of the developed countries themselves, they are experiencing budget deficits every year due to an increase in government spending.

Therefore, the question rise, does the budget deficit is good or not to the growth of a national economy? What percentage of the budget deficit that could damage a country's economic development? What will happen if this deficit sustained for a longer period? Or in other words, the economy experienced prolonged budget deficits every year. These questions injected the idea to study the relationship between the budget deficits formation with the country's economic growth rate in comparison to Malaysia.

Based on the questions raised, and then comes the main question that should be discusses in this study. Coming back to the original theory proposed by Keynes, said that the relationship between the budget deficit and economic growth was negative in the long-term relation - having regard to the impact of the budget deficit on national saving. However, based on data obtained, in many cases in ASEAN countries especially in 5 original Asians countries, show that there is a positive relationship between the two variables, although the country was experiencing a budget deficit in the long period of time. Therefore, this study attempts to unlock, what are the other factors that contribute to the contradiction of the theory that has been suggest by Keynes for Malaysia.

In conclusion, this study will focus into this subject matter to make the study difference from others. Base on the discussion this study concludes the problem of this study as:

1. To the best of the researcher's knowledge, there has not been much attempt in measuring the effects of budget deficit formation on economic growth for Malaysia countries across regimes.

2. To date, the effect of budget deficit formation on GDP on Malaysia countries has never estimated simultaneously by comparing across regimes. The ability to measure the relationship or the level of signification of those variables, allows a comparison across the regimes studied. Thus, such comparison would determine whether the same occur in all regimes or the differences, in term of the relationship and the parameter.

3. It is important to understand the reason why budget deficit continue to exist in the economy and how it can harm the economic growth, if it occurs in a long period, and whether it can really damage the economy of Malaysia.

4. It is also important to understand the contribution of macroeconomics factors, formed from the budget deficit formation, to the development of the economic. Thus, the dominant factors that influence the growth need to identify.

5. Lack of the studies conducted to investigate the most dominant factor impacted by the formation of a deficit budget in the economy. It can help other country to modify that factor for the better development of GDP.

6. Lack of the studies were conducted to investigate the relationship of the variables across the regimes namely; Asian Financial Crisis Regime (AFCR) and World Crisis (WC) to look what are the contribution of the variables to the GDP during the 4 phases of the crisis – before AFC, after AFC, before WC and after WC.

1.8 Research Question

Given the above discussion, this study will address the following issues:

1. What is the affect of the variables in long-tern and short-term? Are the selected macroeconomics factors formed from the formation of budgets deficit (BD) affect economic growth (GDP) in long-term and short-term in Malaysia across regimes?

2. What is the effect of the variables on economics growth? Are there similarities or differences effect between these selected macroeconomics factors on economic growth (GDP) in Malaysia across regimes?

3. What is the magnitude and the most dominate factor influencing the GDP of Malaysia? How much of that factor contributed to development of economy, to overcome the Budget Deficits occurs?

1.9 Objectives of the Study

Theoretically, there are controversial thoughts that discussed on the relationship between budget deficit formation and economic growth (GDP) due to the differences in an economy of a country. The difference may be due to the country's political situation, different economic issues or natural factors such as natural disasters. Based on Keynes proposition, in relation to the implication of changes of those variables formed on economy growth, the objectives of this study were designed to examine clearly what the theory put forward in line with the changing economy in Malaysia. The general and specific objectives have been established to describe in more detail the implication of study.

1.9.1 General Objective

The general objective of this study is focusing on analyzing the effect of budget deficit (BD) formation on economic growth (GDP) of Malaysia. The result from this study will used as a point for the policy maker to find the different impact of the variables tested on all regimes to enhance the performance of country’s growth in the future.

1.9.2 Specific Objectives

Specifically, this study intends to focus on the following objectives:

i. To identify the short run and long run relationship between macroeconomics variables (Debt (DEBT), Interest Rate (IR), PROexp. (GEDU), and NONPROexp. (GSUB)) formed by the Budget Deficit (BD) formation on Economics Growth (GDP) in Malaysia.

ii. To compare the effect of budget deficit formation on Economic Growth (GDP) across regimes.

ii. To investigate the magnitude and most dominant of the factors that influences the Economics Growth (GDP) across regimes in Malaysia.

1.10 Hypothesis of the Study

Research hypothesis are developed in the framework in line with the objectives set. The basis for the formation of this hypothesis based on studies done by some researchers generally and specifically the relationship between budget deficits and economic growth in some countries.

Therefore, research hypothesis has formed, which are:

H1: There is a significant long-run relationship between selected variables formed by the formation of Budget Deficit on GDP.

H2: There is a significant short-run relationship between selected variables formed by the formation of Budget Deficit on GDP.

H3: There is a different effect of selected variables across regimes formed by Budget Deficit formation on GDP in Malaysia.

H4: There is exist the most dominant selected factors that influence the GDP formed by the Budget Deficit formation across regimes.

1.11 Theoretical Framework

There are several theories / models used by many researchers to link the variables between budget deficit and economic growth. Referring to Nkrumah (2016), the theories based on the three (3) mainstream analytical perspective, the neoclassical economist consider fiscal deficits detrimental to investment and growth, while in the Keynesian paradigm, it constitutes a key policy prescription. Theorists persuaded by Ricardian equivalence assert that fiscal deficits do not really matter except for smoothening the adjustment to expenditure or revenue shocks. According to Van and Sudhipongpracha (2015), neoclassical and Ricardian schools focus on the long run, meanwhile, the Keynesian view emphasizes the short run effects.

From the theories built, this study will be focusing on the effect of budget deficit formation on Malaysia economic growth by using a data from 1980-2018. The framework of the study has been developed to describe the link of the variables. This link is to reveal the relationship among variables formed by budget deficit formation on economic growth in both countries.

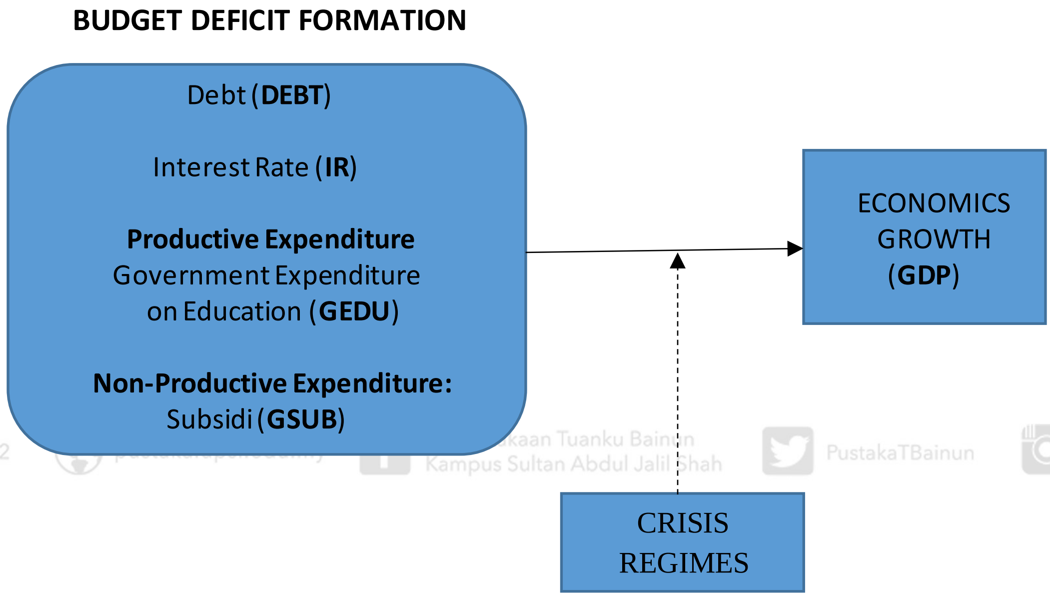

Diagram 1. Budget Deficit Formation Impact on Economic Growth Framework

From the diagram, it shows the relationship between budget deficit and economic growth. This situation reflects the impact of government deficit formation by forming other macroeconomics variables that influencing the economic growth. Thus, this study wanted to see whether it is true there is a relationship between these conditions, or vice versa, for Malaysia.

1.11.1 Link Between Budget Deficit and Growth

The link focuses on the Keynesian model, in discussing the relationship between budget deficits to GDP through national savings. This theory or model, which sparked by Keynes, is more clearly shows the relationship between budget deficits and national savings and hence impact on GDP compared with the theory put forward by Ricardo.

Effects of budget deficits on national savings have been much discussed by many researchers. All the results obtained, basically point toward *budget deficits reducing national savings* which in line with Keynes prediction. From the definition, national savings is a combination of private savings and public/government savings. When the state experienced a budget deficit, government savings will experience a decrease (negative), which will reduce national savings below private savings (public savings < private saving). For Keynes, the creation of budget deficits not only occurs due to a reduction in taxes, but also due to government spending. Higher budget deficit result in the increase in government spending, which ultimately will have an impact on a number of other macroeconomic variables such as, national debt, national savings, inflation, rising interest rates, changes in foreign exchange, government spending reduction, subsidies implication and etc. Then directly affects the improvement of the increments in national output growth.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Keynes in his proposition (the conventional view) stressed that *high budget deficit financed by issuing bonds increases national debt and affect several macroeconomic variables such as real output, inflation, money supply, interest rate,*

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

current account etc. High budget deficit immediately reduces national savings. (George A. Vamvoukas, 2008)

In this framework, the changes in the level of the main macroeconomic variables as a result of the increment of national debt due to the issuing bond to finance budget deficit, will effect the national saving of a country. Beside, an increase in government expenditures, tax cuts, or both, which contribute to increase in budget deficit, will cause a reduction in desired national savings too. The IS curve would shift to the right and hence increasing aggregate demand. The result will be a rise in the price level causing the interest rate to increase. Thus, in the Keynesian model, budget deficits will be correlated with inflation and interest rate increases.

The Keynesians also argue that higher interest rates and inflation are the result of the positive effects of budget deficits on money supply. As commonly known, the central bank can finance government deficit by printing money or selling bonds. The government may deliberately raise the supply of money in an effort to obtain revenues and thus to cover the deficits. In general, an increase in money supply caused by financing deficits will tend to feed inflation and to raise interest rates give an impact on national saving.

While to see the relationship between national savings rate and economic growth, the study will take into consideration the effect of budget deficit on national saving, thus affect growth of the economic. Keynesian economics support the idea that budget deficits have, by the working of the multiplier, a positive effect on the macroeconomic activity, thus, effect the economic growth through the variation of national saving. The conventional wisdom is that a large budget deficit is a source of economic instability.

Base on the idea of Keynes, the Solow model of development was developed to support this idea and will be use in this study. This model also been used by other researchers to investigate the nexus of these variables but in the inverse relationship (see Sinha and Sinha (1998) Anoruo and Ahmad (2001) where they conclude that causality runs from economic growth to saving (growth-saving). Some researches were done to examine the relationship between these variables (Agrawal, 2001, Baharumshah et. al., 2003) no studies have yet to clearly describe the relationship of both variables. The illustration of relationship through the experimental study is still unclear. Causal relationship is described less accurately the reflection of the factors: saving affect economic growth or growth affects savings.

Tang (2006) in his study of the case of Malaysia, regardless of the various techniques used in the study to examine the causality between national saving and economic growth, result show that national saving contribute to economic growth. These finding was support by Lewis (1955) by stating that the savings contributed to economic growth but contradicts from other studies such as Sinha and Sinha (1998); Carroll, Overland and Weil, 2000; and Rodrik, 2000. The sequences of this problem, then this study are highlighted in order to see with greater clarity and detail the factors that influence and are influenced by such factors.

This study is focusing on adaptation in the Solow model base on Keynesian economic, to study the outcome for the case of Malaysia by looking at the nexus of the saving-growth approach. The model support will be discussed in the chapter three under methodology and model estimation.

To form a model to illustrate the relationship between the budget deficit, national saving and economic growth, consider some simple (and irrefutable) accounting identities below. Let,

$$NS = S^p{}_t + S^g{}_t \tag{1.1}$$

Where NS denotes national savings, $S^p{}_t$ is a private saving and $S^g{}_t$ is a public/government saving. From equation (3.1), we disaggregate the national saving to show the single pattern of the private and public saving to illustrate the gross national savings into their components:

$$S^p{}_t = Y_t – T_t - C_t \tag{1.2}$$

$$S^g{}_t = T_t - G_t \tag{1.3}$$

Y_t denote gross domestic product, T_t taxes, C_t consumption, and Gt government spending. Combining equations (3.2) and (3.3) we obtain the gross national saving equation; NS as,

$$S^p{}_t + S^g{}_t = (Y_t - T_t - C_t) + (T_t - G_t)$$

$$NS = Y_t - C_t - G_t \tag{1.4}$$

Equation (3.4) shows the real gross national saving, defined as current income, not used immediately to finance consumption by household or purchases by the government.

To illustrate the link between budget deficit and national saving, and the impact of variation on national saving, affected by deficit, on growth, the second crucial accounting identity will be used. This identity is the one that divides GDP into four types of spending:

$$Y = C_t + I_t + G_t + NX \tag{1.5}$$

Output Y is the sum of consumption C, investment I, government spending G, and net export NX. Substituting this expression for Y into the previous equation for national savings yields:

$$NS = Y_t - C_t - G_t$$

$$= (C_t + I_t + G_t + NX) - C_t - G_t$$

$$NS = I_t + NX \tag{1.6}$$

Equation 1.6 sheds considerable light on the effects of budget deficits. The equation shows the national saving equals the sum of investment and net export. What can be described by this equation is the effect of budget deficits on national savings, thus giving the implications for economic growth. When the country experienced a budget deficit, where expenses exceed revenue of countries: (G-T), will provide the initial implications of changes in interest rates and exchange rates. The rise in interest rates and currency appreciations will directly exert impact on investment and changes in net exports of the country or both. The total fall in investment and net export must exactly match the fall in national saving. To the extent, this deficit will increase the trade deficit (that is, reduce net export (NX)) and giving the immediate effect by creating a flow of asset abroad.

To show the link between all these variables, we demonstrate the following illustration:

$$NS = f(I, NX) = f(IR, ER) = f(BD) = f(G\text{-}T) \qquad (1.7)$$

From the illustration above, the study conclude the budget deficit impact on national saving by simplify the link by;

$$NS = f(BD)$$

$$NS = \alpha_0 + \alpha_1 BD_t + \mu_t \qquad (1.8)$$

The link above demonstrates the impact of budget deficit on national saving through others variables. When one country start running the budget deficit, either by raising government spending or by cutting taxes, the question that arises is how will this budget deficit affect the major economic variables, especially the growth of the economy (GDP), and other variables. This situation prompts the researchers to study on this matter further. Base on the question, the link between budget deficit and growth has been developed to observe the effect of budget deficit on GDP after affecting on the national saving of the country;

$$GDP = f(NS) = f(BD) \tag{1.9}$$

Hence;

$GDP = f(NS)$

$$GDP = \beta_0 + \beta_1 NS_t + \mu_t \tag{1.10}$$

Based on Solow model of growth, which is argued that saving preceded economic growth, the link above has been drown to show the link between variables to derive the result for Malaysia. Basically the link was based on Keynes model, which stated that saving “S” is a function of the income (output) “Y”. Keynes believes that saving is determined by the output of the country. However, as discussed above, Keynes also stress that budget deficit affected the growth through national saving, when the budget deficit giving the impact on the macroeconomic variables such as interest rate, exchange rate, and money supply for example. But the nexus of these two variables had been a crucial discussion among researchers all over the world. This study will still capture Keynes model as a main idea, which focuses the impact of the BD on NS, but when negotiate about the link between BD and GDP through NS, following the Solow hypothesis has used the idea of Keynes.

The link of 1.7 and 1.8 pursued by Ball and Mankiw (1995) when they talk about *What do Budget Deficit Do?* in their study . Their focus are on discussing the effect of budget deficit on the economy in three steps; first by reviewing the standard theory about how budget deficits influence saving, investment, the trade balance, interest rate, exchange rates and long-term growth. Second step they estimate of the magnitude of some of the effect. Third, discusses how budget deficit affect economic welfare and finally considering the possibility of continuing budget deficit in a country. Their study had been an inspiration to this study to discuss in the context of Malaysia by comparing the result across the regimes. But to add the gap of knowledge, this study will observe the finding to discuss the similarity and the differences of the relationship of the variables studied across regimes.

For the purpose of studying the direct relationship between budget deficits formation and economic growth, the Keynesian theory will be used by focusing on IS-LM framework in more detail. This link explaining the sustain budget deficit impact on economic growth of Malaysia. According to Keynes, fiscal policy can have an impact on economic growth if aggregate demand is influenced by several factors such as occurred on the government budget deficit. This is because if the country experiences non-utilized resources, deficit budget will increase in a country and give an impact on aggregate demand – due to government needs to reduce taxes and increase the spending. Changes in aggregate demand will have an impact on national income through the IS curve shifts to right by increased output and interest rates. This condition will cause the crowd out effect of local investors and thus reduce economic growth. IS can be define by equation:

$$Y = C\,(Y\text{-}T(Y)) + Ir + G + NX(Y) \tag{1.11}$$

Where:

Y = income

C (Y-T(Y)) = represent consumer spending as an increasing function of disposable Income (Y-T(Y)) : (income – tax)

Ir = Investment as a decreasing function of interest rate

G = Government spending

NX(Y) = Net export (X-M) as a decreasing function of Y (decreasing because import are an increasing function of income)

From equation 1.11, explain the derivation of IS, to show the element of budget denote by T(Y) and G. Tax (T(Y)) and government spending (G) are the key factors of budget element in determining the income (GDP) of the country. The changes of the government spending or taxes can generate the deficit for the country if the spending activities highly increase compare to the revenue obtained by the government from collecting the tax (G-T). The complete analysis should take into account the direct and indirect effects of this in deficit. Even though the deficit created does not imply the harmful effect of the policies, it is just likely to be an important component of the overall effects from a policy shift that is not revenue-neutral. For example, the reductions in marginal tax rates, may spur supply-side responses that raise growth, at the same time that the deficits created by the tax cuts would reduce growth. This effect is ambiguous in theory and depends on the structure and magnitude of the tax cut.

1.12 Operational Definition

1.12.1 Budget Deficit

The Government Budget is an accounting detail of payments received by the government (taxes and other expenses) and payments made by the government (purchase and transfer payments). The budget deficit occurs when the government spends more money than it needs. Its means the government spends more than income (read: taxes collected). The deficit is shown in the annual budget. Since 1970 to 2014, Malaysia has adopted a deficit budget of 43 times, and it has increased significantly since 2005. As a result of this continuous deficit. The government expects a deficit of 2.63 per cent for 2014 and a decline of 2.55 per cent for 2015. In 2018 it was found that the deficit increased to 3.7 percent and fell to 3.2 percent in 2019.

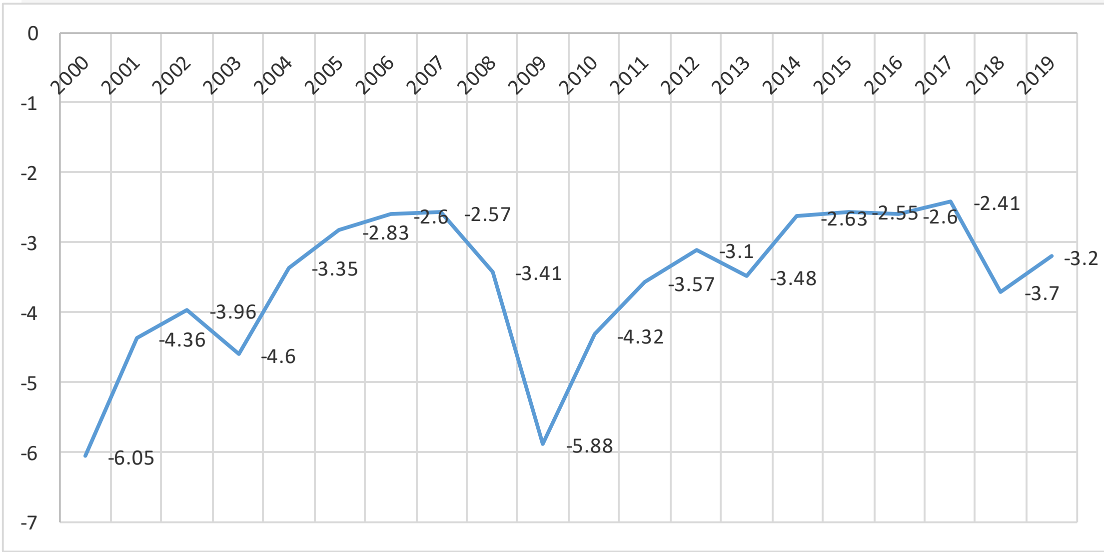

Chart 1.10. Malaysia Government Budget 2000- 2019.Source: Trading economics

The reasons for budget deficits can range from cost reductions to changing cash flows for the development of certain segments, to the existence of ineffective financial systems and national fiscal policies. A major concern for countries with budget shortages is inflation, which has a negative impact on the country's economy. However, it can also have a positive effect, as it can encourage demand, while stimulating economic development.

The budget component of the deficit consists of:

i. Income

For non-governmental organizations and companies, income comes from the sale of goods and services. For the government, most of the country's income earned through income tax, corporate tax, consumption tax, and social insurance tax.

ii. Expenses

For non-governmental organizations and companies, expenses include the amount spent on day-to-day operations and factors of production, including rent and wages. For governments, expenses include government spending on health care, infrastructure, defense, subsidies, pensions, and other contributing items to overall economic health.

Implications Budget deficits can cause several other conditions to exist in the economy. What is often hear is that the deficit will have negative implications for the country's economic growth. However, there are also studies that show that the deficit has a positive effect on growth. This is because budget deficits are not always a negative indicator of economic health. Some implications of the budget deficit are described below:

i. Increase aggregate demand

Budget deficits can lead to tax cuts and increased government spending, the impact of this situation; will result in increased national aggregate demand and subsequent economic growth, ceteris paribus.

ii. Improving the economy during the recession

During the recession, economic conditions at that time were more likely to experience a decline in expenditure, particularly a decline in investment from the private sector, along with lower aggregate consumption and demand. Therefore, the government can choose to borrow and suffer a deficit to combat the situation by taking measures to spend effectively.

iii. Increase government spending

Government spending will indeed help enhance various government needs and plans and fulfill many purposes, including investment in infrastructure, healthcare, human capital, unemployment benefits, pension programs, and so on. The state government can choose to spend more than the income allowed by experiencing a deficit.

iv. Fiscal policy

Budget deficits can used to finance expansion fiscal policy, which involves increasing government spending on infrastructure and investments to attract foreign capital and boost economic growth. In addition, there is a decrease in corporate income and taxes (thus reducing income for the government)

v. Higher taxes in the future

The current budget deficit requires government action to pay off the accumulated debt. Therefore, if the deficit continues, it often implies that the government will have to raise taxes in the future. This is because taxes are one of the main sources of government revenue.

vi. Higher interest rates and bond yields

Increased government loans result in higher interest rates and bond yields due to investors, and banks need to compensate for those risks through interest payments. To borrow large amounts, governments often offer higher interest rates to investors and international banks that lend them money. In this way, the returns earned will yield revenue to the government for developing the country.

Deficit Budget Theory explains about:

i. Ricardian Equality Theory

Based on the theory put forward by the Ricardian Theory of Equality, argues that to stimulate the economy, the government uses a budget deficit, or lending is ineffective. This is because there are many assumptions from economists who say it depends on many assumptions, among them including those who state that the government will raise taxes to pay the current deficit. This is because by raising taxes, government revenue will increase.

According to the theory, households or corporations will take into account the current economic situation before making investment decisions or saving, If the economy is volatile, they will choose to save more to offset future tax increases. As a result, consumption in the economy will decline, and the increase in government spending funded by the deficit will not affect the economy.

ii. Theory of Crowding Out

Based on The Crowding Out Theory, it is stated that the increase in government loans and expenditure can lead to a decrease in investment, especially from the private sector. Among the loan methods implemented by the government is by selling bonds to the private sector or by borrowing from foreign sources, such as international banks from other countries. However, in this way the private sector often generates higher interest rates and bond spending, - this will result in lower funds for private sector investment and higher borrowing costs (due to higher interest rates).

1.12.2 Economic Growth (GDP)

Economic growth is a state of increasing income that occurs due to increased production of goods and services. This increase in income is not relate to the increase in population, and can be judge from the increase in output, growing technology, and innovation in the social field. Economic growth also means a process of economic change that occurs in the country's economy over a period better economy. In general, this economic growth is synonymous with the increase in production capacity realized by the increase in national income.

Some economists have explained economic growth in various sources, some of which are as follows. Based on Adam Smith argues that economic growth is a change in the level of the economy experienced by a country that depends on the development of population. With the development of population, then the results of the production of a country will also certainly increase.

According to Classical Economists and neoclassical economists such as Adam Smith, David Ricardo, Thomas Robert Malthus, Robert Solow, Trevor Swan, and John Stuart Mill explain that there are at least several factors that can affect the growth of a country, namely population, capital stock, natural and land resources, as well as technological developments.

Characteristics of Economic Growth according to Prof. Simon Kuznets argues that there are six characteristics of modern economic growth born in analysis based on national products and their components, population, labor, etc. The six characteristics are the rapid growth of population and per capita products, the development of community productivity, the rapid growth of structural levels, the high level of urbanization, the expansion of developed countries, and the flow of goods, capital and human beings in various countries.

Economic growth will be asses using a comparison of components that can represent the economic situation of a country against the previous period or year. Two components can used to assess or measure economic growth in a country, namely:

i. Gross National Product

Gross National Product, which is often abbreviate as GNP is the income earned by the country in a certain period based on the income earned by its people. The way to calculate economic growth using GNP is to compare GNP in the period that lasts with the previous period.

ii. Gross Domestic Product

Gross Domestic Product (GDP) is measure from state revenue based on its territory. The formula calculates economic growth by utilizing GDP the same as GNP, which compares GDP in the current period with the previous period.

Economic growth can used as a benchmark that looks at the progress of a country and how the results of development done during that period. If the development carried out by the government is successful, then there will be significant economic growth in society. Economic growth also reflects how the people prosper because they see based on per capita income or the average income of the population of a country.

By knowing the level of economic growth, the government can make plans on the acceptance of the country and development plans that will done. Poor economic growth can used as a platform to receive financial assistance from international parties, such as the World Bank or other countries. The level of economic growth can used as a basis in creating a product development plan and resources owned by the company.

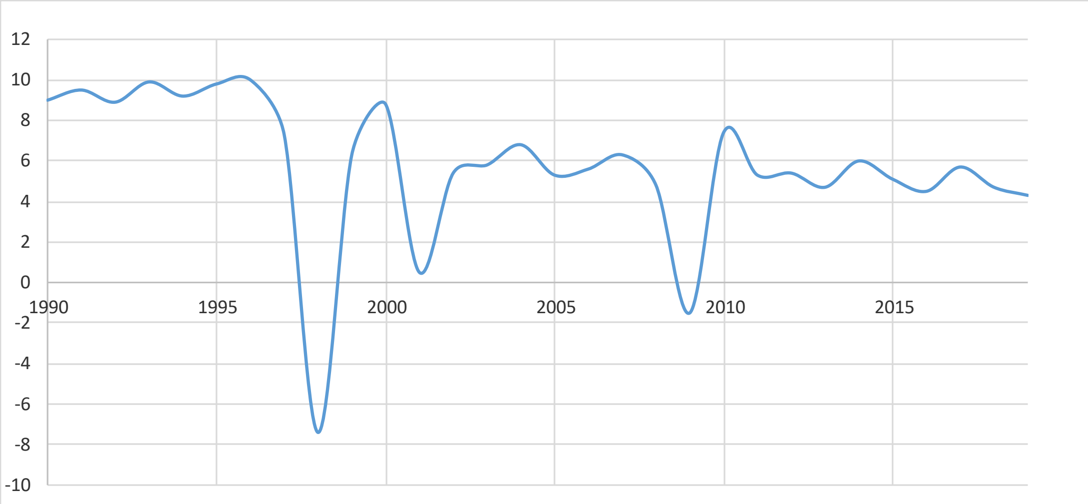

Chart 1.11. GDP growth (annual %) – Malaysia. Source: The World Bank

The chart shows the growth rate of the percentage of Malaysian GDP from 1990 to 2019. The movement of the graph shows the volatility of GDP through the phase of the crisis regime that occurred in the Malaysian economy in 1998 and 2008. In 2019, the annual growth of Malaysian GDP is 4.3 percent - the lowest level since the Global Financial Crisis in 2009.

There are three methods to measure GDP in the country;

GDP based on production approach (also known as value-added approach) - This approach shows the contribution of individual economic activities to overall GDP. Through this method, the sum of value added, that is, the total difference between the gross output value of the population production unit (measured at the producer price) and the intermediate consumption value (measured at the buyer price) plus import duty. The difference between gross output and consumption between is value added.

The second is GDP based on the expenditure approach. This approach measures the value of goods and services used by end users on goods and services produced by the population. This is referring to as the category of "final demand" or "final expenditure."

The third is GDP based on income approach. The income components are Workers' Compensation (ie wages & wages), Gross Operating Surplus (i.e. operating surplus & mixed income) and Tax less Production and Import Subsidies. Through this method will made the sum of all income that includes production in the economy.

1.12. 3 Debt

Debt is the amount of government loans from other parties to cover the budget. High deficits cause the government to borrow more to cover the gap due to declining national income. Lately many parties are questioning the position Federal Government debt soared at an extraordinary rate. There are opinions stating that the domestic debt of the Government The federation has been at a critical stage and can causing a debt crisis. The Wall Street Journal reported that economists warned of a rise domestic debt could lead to a strong Asian economy (including Malaysia) facing crisis risk. Rating agency internationally, Fitch Rating states the Government should have short-term plan to reduce fiscal deficit to 3% and reducing the debt / GDP ratio to 50% in 2015. The Fitch Rating also recommends that the Government implement fiscal reform to reduce subsidies, widen the tax base as well as reducing revenue dependence on that resource based on petroleum. The fact of the matter is the percentage of Malaysia's debt / GDP at the time this is not at its worst in history.

Since 1970, the percentage of the Federal Government's debt to GDP is fluctuated from 36.1% in 1970 to a high of 103.4% in 1986. This percentage decreased to 41.3% in 2008, and return increased to about 50.9% in 2012 following implementation of fiscal stimulus packages in 1999 and 2000 for overcoming the problem of the 1998 economic recession but the debt covers the total deficit accumulated from previous years. The national debt increased from 36.0 % Gross Domestic Product (GDP) in 1998 to 52.6% GDP in 2013. In the Malaysian Economic Report 2014/2015, it was stated that the country's domestic debt, as at end-June 2014, was at RM552.652 billion, while external debt for the period long, medium and short term, up to the same period, is at the rate of RM335.572 billion (including private debt). Since 2010, interest charged on domestic and foreign net loans amounted to between RM15 billion to RM22 billion per year.

Therefore, to assess whether a country experiencing a debt burden or otherwise it should be assessed based on a country’s ability to pay its debts. The ability of a country to pay off debt depends on the fiscal sustainability and the strength of a fundamentals country economic and not based on the percentage of total debt to GDP alone. Japan is the country with the highest percentage of debt in the world at 221.3% in 2012. Among ASEAN countries, Singapore has the highest percentage of debt at 107.6% of GDP in 2012. However, the two countries are between the two economic powers major Asia besides China and Korea, which have strong economic fundamentals. Likewise

Malaysia, domestic debt accounted for 96.2% of the total the total debt of the Federal Government. Dependence on domestic debt causes a country to be able to minimize the risk of foreign exchange. The sustainability of a country's debt also depends on some other indicators such as GDP growth, deficit percentage fiscal, trade balance, inflation rate, unemployment rate, rate savings and so on. Something to be proud of for Malaysia is about its macroeconomic stability. Despite the moderate growth of the world economy due to the crisis in the Euro as well as the slowdown in the US economy, Malaysia continued to record impressive growth on a quarterly basis in 2012. In the first quarter of 2012, GDP grew by 4.9%, the second quarter by 5.4%, quarter third by 5.2% and fourth quarter by 6.4%. Therefore, in the whole of 2012, Malaysia's GDP estimated to increase by 5.6% compared to 5.1% in 2011.

Malaysia's economic growth driven by the domestic economy through private consumption and investment that can reduce the impact of moderation on export demand. There is no denying that development the rapid growth of the domestic economy stems from the Government's measures to introduce various initiatives such as the ETP and so on. Therefore, the Government needs to make loans to finance the implementation of development projects. Loans are a long-term investment as the implementation of development projects will not only increase the growth of the construction sector but will also have a multiplier effect and a spread effect on other sectors in the economy such as the manufacturing and services sectors. Loans made are not use to finance operating expenses because since the late 1980s, Malaysia has never experienced a deficit in the operating balance (total revenue minus operating operations). This means that all operating expenses are fully fund by revenue sources.

The government, there is even a surplus of management to help cover government development expenses. Apart from the commendable GDP growth, Malaysia also always recorded a low inflation rate and in 2012 with The Consumer Price Index rose only 3.2%. Malaysia also consistently recorded a low unemployment rate of 3.2% in 2012. In addition, Malaysia also recorded a trade surplus of 17.5% of GDP as well as a current account surplus balance of payments at 11.5% in 2012. All these indicators reflect the fundamentals Malaysia's strong economy.

Comparison in terms of fiscal sustainability between Malaysia and troubled Euro countries also show very significant differences. Greece's GDP contracted 6.8% in 2012. Greece has a Government debt / GDP percentage of about 100% over the past two decades and in 2012 Greece's GDP debt rate was 166.8%. Greece experienced an inflation rate of 7.4% (2011) and an unemployment rate of 24.6% (2012). The trade balance recorded a deficit of US $ 25.7 billion in 2012. The Portuguese economy contracted 3% in 2012. The debt / GDP rate was 119.4%, the unemployment rate was 15.4% and the trade balance recorded a deficit of US $ 10.8 billion in 2012.

Therefore, despite the current total debt of the Federal Government has exceeded 50% of GDP but the Government's ability to repaying loans made as well as interest payments is not necessary is questioned given the strength of the fundamentals of the Malaysian economy at this time. Loans made with low interest rates is a long-term investment when the projects are financed through such loans mainly projects infrastructure is able to generate economic growth of the country and has a positive impact on the development of various other sectors in economy. However, as a prudent measure, the Government needs to slow down the debt growth rate to avoid crisis risk economy in the future. Loans made are necessary used to fund projects that can have an impact significant to the production capacity of the national economy.

1.12.4 Interest Rate

One of the reasons why the government is lowering the Overnight Policy Rate (OPR) is to ensure that the domestic economy remains on a sustainable growth path, in a state of stable inflation. The government wants to encourage local and business consumers to borrow from banks to spend and invest. This is to help to a healthier economic cycle in the economy. The decline in the OPR will also have an impact on the Ringgit. Decreasing bank interest rates will usually weaken the national currency as it makes foreign investment in local bonds / *sukuk* less attractive as interest rates decline. However, the decline in interest rates by Bank Negara is due to the current economic situation, which requires the central bank to act accordingly. First, based on the basic concept - when the economy is in good shape and growing too fast, interest rates will be raising. However, as the economy slows down due to uncertain economic conditions such as the crisis, interest rates will be reduced.

This relationship can be explained as follows, where when the economy is too fast, companies or factories make a lot of profit, workers' salaries can be increased, and bonuses can be given. However, what will happen to the economy? At that point, everyone will have a lot of money. When there is too much money in the market, what will happen to the value of money? The value of money will fall. That is what call inflation is. This is because everyone has money. After that, what will traders do? Traders will take advantage by raising prices. This situation causes consumers to compete in the market for goods and services. For those who have a lot of money or surplus money, will have goods or services offered in the market. As a result, the price of goods rose higher in the market and eventually increased inflation in the economy.

One way to control inflation is to raise interest rates. This is because, with the increase in inflation will cause the cost of borrowing to increase. People will start to control their expenses because it is difficult to make a loan due to high interest rates. The community will reduce loans, overspend on savings, and invest to get return that is more profitable. However, if the economic situation is weakening due to the crisis, and the government is facing a high deficit budget, the government will have to lower the interest to encourage the community to spend. Like what is happening now, due to the health crisis, the government has to spend more to control the problem of Covid-19 that hit. Excessive spending causes a deficit in the national budget. The economic cycle does not show a good cycle to help businesses grow and ultimately give returns to the government. Therefore, the government has to take the initiative to lower interest rates to encourage the community or industry, to borrow to encourage demand and supply in the market. This will help revitalize the domestic economy.

Interest is the fee paid by the borrower to the lender as a form of compensation for the use of assets. This is most commonly the price paid for the use of money borrowed, or money earned by funds deposited. When money is borrowed, interest is usually pay to the lender as a percentage of the principal, the amount owed to the lender. The percentage of principal paid as payment over a period of time (usually one month or year) is call the interest rate. The bank deposit will benefit as the bank pays for the use of the deposited funds. Assets that sometimes lent with interest include money, shares, consumer goods through hire purchase, major assets such as aircraft, and even entire factories in financial lease arrangements. Interest is calculated on the value of the asset in the same way as when money.

Interest is compensation to the lender for:

i. Risk of capital loss, known as credit risk.

ii. Release other investments that may have made with the loaned assets.

Interest rates are also an important tool of monetary policy and taken into account when dealing with variables such as investment, inflation, and the unemployment rate. The assumptions and expectations from the Central Bank or Reserve Bank, lowering interest rates will have the effect on investment and consumption. Low interest rates by macro-economic policies also high risk and will lead to the creation of a massive economic bubble, when large amounts of investment have been poured into the real estate market and the stock market. Japan has experienced in the late 1980s, and early 1990s, resulting in a large number of accounts of outstanding debts the Bank of Japan and the bankruptcy of these banks and caused stagflation of Japan's local economy with exports being the last pillar of Japan's economic growth throughout the 1990s, and early

2000s. A similar scenario applies to the U.S. interest rate decline since the late 1990s to present (see 2007-2012 global financial crisis) significantly with the Federal Reserve System decision. For developed economies, the interest rate function rate therefore inevitably argues either to protect the set range of moderate inflation in the economy for the health of economic activity or to restrict interest rates simultaneously with economic growth to protect economic momentum.

1.12.5 Productive Expenditure

1.12.5.1 Government Expenditure on Education

The education sector is a very important sector in this era of globalization. This is because education is one of the main pillars of national development. The development of a country will be affected if education-related matters is neglect. The huge expenditure allocated by Malaysia to this sector every year to help the country's education system, and it clearly shows the importance of this education sector to the economic growth of the country. This action is considered as an investment to ensure continuous progress and to produce first-class human capital in the future.

Malaysia is a country inhabited by a multi-racial and multi-ethnic society. Education in Malaysia plays an important role in enhancing inter-racial unity. Indeed, the education system that exists today has helped to realize the country's ambition to unite the country as well as enhance national integration among the Malaysian community. This racial unity in turn leads to effectiveness in the country's administrative system. It is the smooth running of this administrative system that later leads to the development of the country.

In addition, the field of education is able to produce a professional workforce in various sectors that can help develop the country now and in the future. The mission to make Malaysia a developed country can be realize with the birth of skilled workers in every field required, especially for development programs. With a skilled workforce, there is no need for the government to expect expertise from outside to help develop the country's economy in the future. Of course, Malaysia does not want the planned development to simply present employment opportunities to foreigners who are always looking for opportunities.

In addition, education also gives importance in producing leaders who are competent, dedicated and most importantly, highly knowledgeable. It is unimaginable if a person without knowledge leads the country's leadership. Of course, the country's administrative system will be a mess. As a result, Malaysia's development will be stunted. On the other hand, if the leader of the country has a high level of education, he will be able to contribute energy and thoughtful ideas in developing the country. Therefore, it is clear here that education is very important to the development of the country. Therefore, the education sector should be the main sector that needs to consider by the government in channeling sufficient funds so that this sector continues to thrive in line with the needs of the world today. Quality education can make Malaysia a regional education hub or center. This is because the regional education hub can develop our country standing with other developed countries. For example, several research universities in our country are working hard to conduct research in various aspects to improve the standard of education in the country. As a result of the research, many local sectors can be developed from time to time. Therefore, it proven that quality education is able to make our country a regional education hub and thus be able to develop national education.

Furthermore, the country's economy can be improved as a result of quality education. This is said to be so because students from abroad will choose a local university to continue their studies. This in turn can increase the flow of foreign currency to our country. For example, most private colleges in our country can attract many foreign students to further their studies in our country because of the good quality of education. Therefore, government spending on the education sector is necessary to improve the quality of the education sector in this country, for the purpose of national development. This in turn can improve our country's economy.

Commitment and thrust by the Malaysian government which gives priority to the aspect of education, make the quality of education remain on a good track. The conducive atmosphere as well as the best infrastructure in schools and colleges, supported by the latest curriculum improvements, make the quality of education recognized among the best in the world. These achievements actually reflect the government's determination to ensure that every citizen receives quality education and not excluded from the school system, because Malaysia is confident that through the development of human capital will be able to boost its achievements as a developed country by 2020.

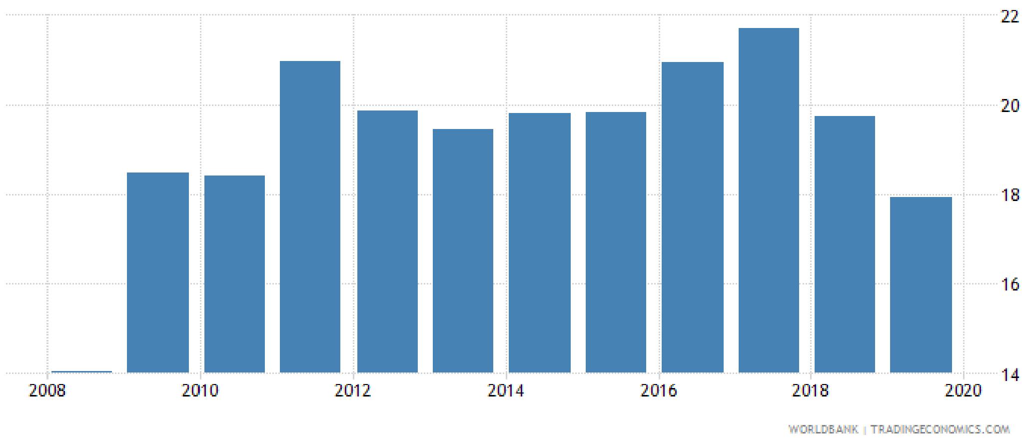

Chart 1.12. Public Spending on Education, Total (% of Government Expenditure)
Source: The World Bank

Government spending for the education sector, the amount (percent of government spending) in Malaysia is report at 17.94% in 2019, according to a collection of World Bank development indicators, compiled from officially recognized sources.

'World Class Education' is a government commitment to provide quality educational access to all Malaysian students. Therefore, every year, the Ministry of Education Malaysia (MOE) receives a large allocation from the government to realize the aspirations of education in order to ensure a better future for the nation. The emphasis on the education sector is in line with the recognition of its potential as a mechanism or ticket for those who want to get out of poverty and help society to move towards vertical socio-economic mobility.

Awareness of the importance of quality education is clear when the competence of Malaysian teachers gets serious attention through the Malaysian Education Development Plan (MEDP) 2013-2025 through Transformation Shift 4: Transforming the teaching profession into a profession of choice. Apart from the emphasis on quality education, the Malaysian education system also remains committed to strengthening the equity aspect in education. Educational equity refers to the access of quality educational opportunities to all students based on the principles of equality and justice. In line with the global educational aspirations targeted by UNESCO Sustainable Development Goals (SDG 4) to ensure quality education and equity, the Malaysian Ministry of Education through Transformation Shift 1 clearly sets goals to achieved in terms of access to quality and inclusive education for all students in Malaysia.

1.12.6 Non-Productive Expenditure

1.12.6.1 Subsidies

Subsidies are a form of financial assistance provided to a business sector or individual through various channels. Many cases of subsidies involve government assistance to producers in an industry to help develop the industry. These subsidies known as input subsidies given to assist in the development of certain industries. In addition, individual subsidies provided, in the form of subsidies, education and so on, intend for lifestyle development and help ease the burden of society. The best examples are petrol subsidies and food subsidies. There are also forms of subsidies to ensure the development of certain sectors such as fertilizer subsidies in the agricultural sector.

The issue of subsidies is also a hotly debated issue in the field of international business. It seen as an act of protection and is therefore a form of restriction on international trade. This is because subsidies make the price of certain domestic products cheaper than the price of imported products and in turn will reduce the competitiveness of imported goods.

In fact, the good and bad subsidies provided by the government depend on the perspective of which group is involved. There is imbalance and injustice in the provision of subsidies channeled by the government. There are subsidies given enjoyed by certain groups only compared to other groups. One way to overcome the effects of the above injustice is for the government to take discriminatory measures in the distribution of subsidies by giving it to those who need it most. This method of `targeted subsidies' has long been practice in several countries including our own country where government assistance is specifically aim at the poor. Examples of forms of assistance to this group are the exemption of water bill payment if the use is small, vouchers or food stamps (food stamps), scholarships, textbook assistance, housing cost assistance, health services and others. However, the cost of administering this discriminatory aid scheme is very high and sometimes impractical to use in certain cases such as petrol subsidies.

By 2021, the government has allocated RM28 billion for subsidies, assistance and incentives to all targeted sectors in the 2021 Budget compared to RM27.5 billion last year which saw an increase of RM400 million. This represents 8.4% of total operating expenses for the 2021 budget.

Among the main issues facing Malaysia at present are the issues of subsidy rationalization, high Government expenditure and debt burden. The problem faced by the Government is how to rationalize subsidies without burdening the low and middle-income groups. Among the measures taken by the Government are to increase petroleum prices, electricity tariffs, sugar prices and toll rates are among the methods of rationalizing subsidies. This action will see an increase in the cost of living, especially for low and middle-income people. However, the Government has come up with additional initiatives to help ease the growing burden of living. *Bantuan Rakyat 1Malaysia* (BR1M) was continued in 2014 and even this assistance was increased from RM500 to RM650 to households earning less than RM3, 000 per month. In 2018 when the government changed hands, the subsidy continued with the *Bantuan Sara Hidup* (BSH) which was also provided to reduce the burden on the people.

Reducing subsidies will benefit the national economy provide that other government expenditures be made prudently taking into account the value for money (value for money). In 2016, subsidy expenditure accounted for about 22 per cent of Government Operating Expenditure. Over the past two decades, the Government has provided various subsidies including LPG, petrol and diesel, sugar, rice, wheat flour and cooking oil. As the market price of these materials increases, the amount of subsidy to be borne by the Government will also increase. If the prices of these materials fall, the amount of subsidy does not necessarily decrease as it also depends on the amount of consumption. In fact, the total subsidy has increased significantly from RM1.1 billion in 1999 to RM44.1 billion in 2016. Subsidies are like marijuana because it is difficult to stop when it is given. Termination of subsidies can also result in political costs to the ruling Government. The subsidy policy has proven to be an ineffective policy to help the poor. For example, in the case of petroleum subsidies, given comprehensively.

Reducing subsidies will reduce Government operating costs and increase operating surplus (total revenue minus Operational Expenditure). This in turn will reduce the fiscal deficit. Government has set a target to reduce the fiscal deficit from 4 per cent in 2013, to 3.5 per cent in 2014 and 2.8 per cent in 2018. Reducing the fiscal deficit means the Government only needs to make small loans to finance development expenditure. As a result, the increase in government debt can slowed down and the country's fiscal position becomes more sustainable.

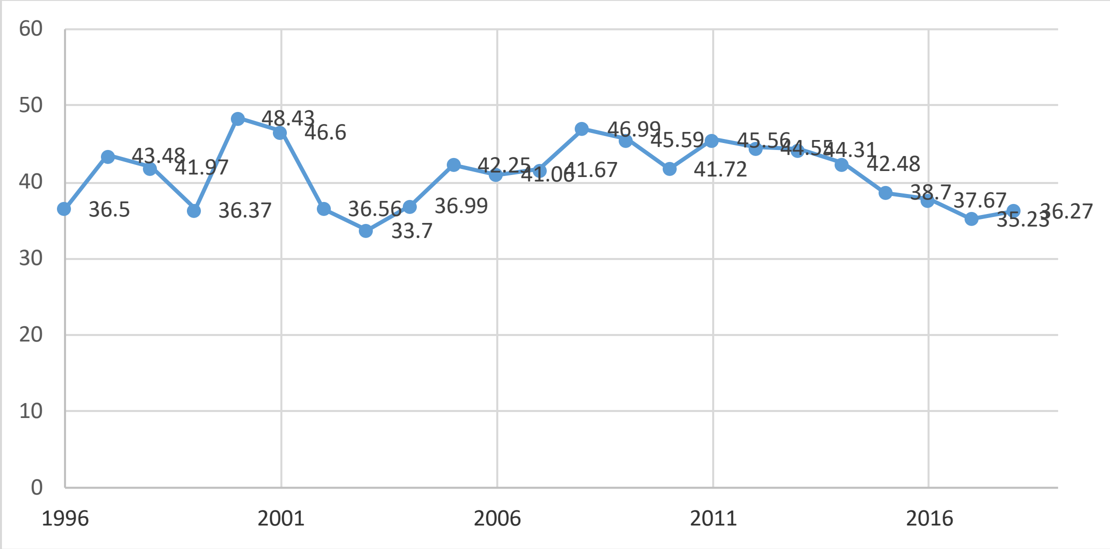

Chart 1.13. Subsidies and Other Transfers (% Of Expense).Source: The World Bank

From the chart above, it can be seen that there is a fluctuation in the percentage of subsidy expenses and others transfers made by the government within 23 years. During this period, two economic crises disrupted the growth of the Malaysian economy. In 1998, it found that the percentage of subsidy expenses incurred by the government was quite high compare to previous years. Similarly, in 2008 when the world crisis began in the United States, the government took steps to increase the percentage of expenditure in subsidies to help its people and local industries. This aims to help the country's economic growth at that time. All subsidy expenditure plans are plan rationally and prudently, so that the country does not continue to face prolonged deficits.

1.13 Limitation of the Study

The focus of this study is to determine the behavior of the relationship between the four selected macroeconomic variables, form by budget deficits formation with economic growth (GDP) in Malaysia. To that effect, the long-term and short-term relationship between the budget deficits formation; namely debt, interest rate, productive expenditure and non-productive expenditure to GDP; are examined. These relationships will be explored using appropriate econometric approaches by using the ARDL approach.

To make a study more focus based on the scope that has been set several limitations of the study had been set up as follows:

1.13.1 Method Used:

This study will use the approach of Auto-Regressive Distributed Lag (ARDL). This model can estimate short run and long run relationship. Auto-regressive (AR) is a regression model in which dependent variable regressed against its own lagged while distributed lagged (DL) is a regression model that not only includes the present value, but also the past value (lag) of the explanatory variable. Auto-regressive distributed lagged is a model consisting of one or more lagged of the dependent variables among the explanatory variables. Thus, the ARDL model is a regression model that includes the present value or lagged variable of the dependent variable as one of the explanatory variables (Asteriou, Hall 2007). The ARDL model is very useful in econometric. This model is able to make a static economics theory be a dynamic by taking into account the role of time explicitly (Gujarati, 2004).

1.13.2 The Data:

Study will consider only 34 years (in monthly frequency) data collection of variables chose that are budget deficit (BD) formation namely Debt, Interest rate, Government Expenditure on Education and Subsidies, and economic growth (GDP) for the years of 1985-2018. The reason limitation of choosing data between these periods is to expend the study by looking at the economic performance at these four regimes; Before Asian Financial Crisis, After Asian Financial Crisis, Before World Crisis and After World Crisis.

1.13.3 Variables Employed:

The variables employed for this study only limited for two variables named Budget Deficit formation, and GDP when in fact there are many other variables, which are also relevant. The Budget deficit formation formed the other four macroeconomic factors that influence the GDP namely, Debt, Interest rate and the Government Productive Expenditure and Non-productive Expenditure. The reason why this studies only chose that four variables because of the focus of this study would look at four significant variables to GDP across the regimes.

1.13.4 The Model:

Limitation of model development of this study is based on Keynes theory. The reasons behind why this study focusing on this theory is due to idea proposed by Keynes is more relevant to the development of today's world. Study also will look into other theory such as Ricardian Proposition for comparison to investigate which theory follow by Malaysia in driving their economic. Base on the result gain, this study will make a conclusion of Malaysia stand whether following Keynes or Ricardian theory in implementing budgetary in order to keep the performance of the economics still stand in a good condition. Limitation of developing this model also will take into account several condition in looking at the best model develop to test the variables employed based on the relationship stated. Due to this, the relationship between Budget Deficit formation and GDP will follow the Keynes theory as a basis.

1.14 Contribution and Significant of the Study

This study is to explore the interaction between government deficit, and it impact on economic performance using data from Malaysia 1985-2018. Although, many research's has been conduct to see the implications of budget deficits on GDP, in other countries (Gyan Pradhan and Kamal P. Upadhyaya (2001) and Willim G. Gale and

Peter R.Orszag (2003 and 2004), for the case of United State), and some study discuss the impact of this factor on national savings, directly (Robert Eisner (1994)), there is still lack of study comparing this relationship across regimes, for Malaysia. From this relationship, study will focus into two main perspectives, which will be gap knowledge of the study to make this study different from others.

The focus will bound into these perspectives: Most of the empirical studies have employed data from large developed countries such as United State or other OECD countries, and some from other developing countries such as Pakistan and South Africa. There is still a lack of or almost no studies done so far to examine the relationship of the variables studied for comparison across regimes in Malaysia, especially. Existing studies have either examined the relationship between budget deficit and economic growth or national saving and economic growth or other factors and economic growth. Thus, from the articles survey, lack or almost none of the previous study focuses their study by looking at the link, between these variables across regimes as comparison for Malaysia. Therefore, this study will concentrate on the analysis of the variation of the variables form by government budgets deficit formation and the impact of its changes on economic growth of Malaysia.

Based on previous studies, most researchers focus their research by looking at the relationship between the variables, using the technique of time series, and comparing the two countries or even review the case for one country only, such as Evan O. (1990), William D.Nadhaus (1996) and William G. Gale and Peter R. Orszag (2003) in the case of the United States, or in the case of OECD countries such as Rafael Doménecha, and Juan David Taguasb Varelab (1997). Some studies look at the relationship of the budget deficits of other macroeconomic variables such as exchange rates, interest rates, money supply and so on. The method of assessment is to use panel data for the Malaysia. However, this study will compare the results gain from the different regimes to identify the differences or the similarities formed. Based on the comparison, the study will suggest the best method for Malaysia or perhaps to the other countries to facilitate it, the economic development of each country.

In the long run, most economist especially Keynesian economies believe that budget deficits will give an impact to the economy by reducing capital stock, increase foreign debt, and place a burden on future generations. While living standards are higher in the present, they will be lower in the future and vice versa. This scenario happens due to the impact of the budget deficit on the economic growth – based on the study from various economists regarding the relationship between budget deficit and national saving and supported by Keynesian theory.

By understanding the policy-factor and non-policy-factor,[4] that affects the savings and yet the economic growth in Malaysia, policy maker might be able to analyze the behavior of these variables in the past and learn how to improve it in the future. In other word, the study expected to be able to contribute to earnings results that can help policy makers to observe the relationship of these variables more fully by using data of Malaysia from 1980 - 2018. With the results of which will be obtained at least can be a bridge to policy makers in assessing the budget deficit and other factors

[4] A. Dayal-Gulati and Christian T. (1997) show the factors affecting saving in their study which are policy-factors are *fiscal policy and government saving, social security system, financial market development and macroeconomic stability*. While non-policy factors are *growth, demographic and external factors*.

relations with GDP in the past in order to assist increment of economic growth in the future - by taking into account the experience of past economic development.

In addition, this study hopefully also can be a catalyst for the continuation of studies in the future. This is because the development of world economic growth varies from year to year. So this study hope in the future may make this study as a basis for reviewing future developments related to the development of the budget. Budget deficit is a scenario of economic development that must be followed by every economy in the world regardless of the developed countries and developing countries. But its impact on macroeconomic variables of a country depends on a policy planning of that country. For this reason, this study can form the basis for future extension of the study to identify the relationship of budget deficit and other factors on economic growth. Perhaps they can test on other ASEAN countries or OECD countries.

In sum, this study can contribute to the body of literature as a reference for future study. With the acquisition of the results, it is hope to extend the literature of this issue in the case of Malaysia, in particular, that serves as a reference for comparative studies of Asian countries. In fact, there are still lacking or perhaps can say no studies that searching the direct relationship between the budget deficits formation in the rate of economic growth in Malaysia, especially. Nurhayati (2012), in her study put her intention in investigating the relationship of budget deficit and other factors with economic growth only from Malaysia's perspective by using ARDL approach. However, the study that has been conduct, does not take into account the problems of the ongoing economic crisis. That study hope that other researcher will enhance this research by including other countries as the sample analyses. Base on this, hence this study takes a challenge to look into advance by focusing on Malaysian case, to compare and to find the decision across regimes, to recommend the best method for other country, perhaps, to applied for the purpose of economic development of their respective countries. Hence, this study will use an appropriate econometric approach, by examining the link between these variables, which is different, from what other researchers have done in their study, for Malaysia.

1.15 Conclusion

When talking about the budget deficit, the public will assume the presence of budget deficits will cause the downfall of the country. Caused by the budget deficit in the country, a country will be seen not develop and the government is considered failed to discharge an obligation perfectly. For economists, the government is responsible for performing three roles: to stabilize the economy, ensure equitable distribution of income, and promote economic growth and efficiency. The government will make the budget balance as a focus and a key issue in developing the economy of a country. Most economists agree with those roles, and so many attempts to study and make decisions on each study on the matter.

What is the real reason behind this focus? Is with a prudent budget, will be able to help to increase economic growth? Is it with the formation of a high deficit budget, resulting in high debt, an increase in interest rates, and lower government spending in the future, to balance economic growth? In addition, is the high deficit will put Malaysia at a competitive disadvantage with other Asian countries? Each of these questions will be answer through this study to be conduct by focusing on the comparison of the effects of budget deficit formation for different regimes. Through this study, it is hope that it will help policy makers and governments act more rationally and plan for the future of the country better.