UNIVERSITI PUTRA MALAYSIA

The Macroeconomic Effects of Corporate Income Tax Rate Reductions

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Thesis Submitted to the Graduate School of Management, University Putra Malaysia, in Partial Fulfilment of the Requirement for the Degree of Master of Science

December 2008

DEDICATION

With love to Allah s.w.t.

My family and parents

For their continuous love, support and understanding

ABSTRACT

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in partial fulfilment of the requirement for the degree of Master of Science.

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December 2008

Chairman : Professor Shamsher Mohamed Ramadili, Ph.D

Faculty : Graduate School of Management

This study examines the impact of the corporate income tax rate reduction on the Malaysian macro economy and its relationship with economic growth. The reduction in the tax rate coincides with the Keynesian theory that suggests a government should intervene to halt sluggishness in the economy by lowering the corporate income tax rate or escalating public spending, or both as it has a relationship with economic growth. The government could correct the sluggishness by raising their spending or lowering tax rate to transfer funds from public to private sector in terms of this tax incentive or increase public spending to stimulate aggregate demand for the goods and services in the country. Advocates claim that the country's economic growth during the 1990s was evidence on how this theory works. The multiplying effect of this short–term economic

stimulus is that when companies increase their investments: more jobs are created, increase in productivity, boost exports, generate more profits and paying more tax to the Government that will improve budget position and gross domestic product and the economy starts growing again. When the economy starts grow again, more foreign investments both through direct investment and portfolio capital will be attracted to do business in this country as they seek opportunity for profits and growth. Advocates claim that the country's economic growth during the 1990s was evidence on how the theory works. There are many findings published in the developed economies discuss the macroeconomic effect of the corporate income tax rate on the economy and its relationship with the economic growth. However, there is no documented evidence avail so far to address this topic in the Malaysian context and research in this area is still lacking as well. Data collected from published reports by the Treasury Department, the Statistics Department, the Central Bank of Malaysia and cross-checked against the International Monetary Fund publications. A time series econometric analysis was used to study the macroeconomic effect of the reduction in the corporate income tax rate and the relationship with the country's economic growth. This method normally employed by researchers to ascertain the macroeconomic effect of changes in the government policy. The findings indicate that lowered corporate income tax rate had minimal effect on the country's macro economy. All selected macroeconomic variables had insignificant effect with the reduction in the tax rate except for the foreign exchange rate and gross domestic product (GDP). The significant level for both variables is 0.01. The significant increased in the exchange rate might not directly due to the reduction in the tax rate but instead from the changes in the Government monetary policy. The significant increased in the GDP confirms with the Keynesian theory that claim lower tax rate has relationship with the country's economic growth. This study, however, do not supports the application of the Keynesian theory in the Malaysian context especially when the whole world is currently facing with the economic uncertainty. Malaysia currently has not incurred any budget surplus or intention to increase its public debt to finance this tax incentive. Thus the Government has no avail means to finance the short-term reduced in their real income whenever they reduced the corporate income tax rate. This short-term stimulus incentive needs to be backed up either by budget surplus or borrowing money otherwise the nation savings are likely affected which will aggravate the country's future economic growth. Surprisingly, lowered tax rate is found not effective in attracting long-term foreign investments to do business in this country. Whilst the transformation done on the tax assessment system in 2000 was found not significantly improving the country's macro economy but it has significant relationship with the Government Financial Position group. The significant level is at 0.10. The findings are inconclusive for the period under study.

ABSTRAK

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian keperluan untuk ijazah Master Sains

KESAN PENURUNAN CUKAI PENDAPATAN KORPORAT KE ATAS MAKRO EKONOMI MALAYSIA

Oleh

SHAHARUDIN BIN MOHAMAD ALI

Disember 2008

Pengerusi : Professor Shamsher Mohamed Ramadili, Ph.D

Fakulti : Graduate School of Management

Kajian ini dijalankan untuk mengkaji kesan penurunan cukai pendapatan korporat ke atas makro ekonomi Malaysia dan hubungannya dengan pertumbuhan ekonomi. Penurunan kadar cukai ini selaras dengan teori Keynes yang mencadangkan campurtangan kerajaan menyekat kelembapan ekonomi negara melalui penurunan kadar cukai atau meningkatkan lagi perbelanjaan awam atau kedua-duanya sekali kerana mempuyai kaitan dengan pertumbuhan ekonomi. Kerajaan mampu memulihkan kelembapan ekonomi melalui pemindahan dana dari pihak kerajaan kepada pihak swasta di dalam bentuk pemberian insentif cukai dan peningkatan perbelanjaan awam kerajaan untuk merangsang aggregat permintaan terhadap barangan dan perkhidmatan yang dikeluarkan dalam negeri. Kesan berganda dari rangsangan ekonomi jangka pendek ini ialah sektor korporat dijangka akan meningkatkan pelaburan mereka di dalam negara ini dan menawarkan lebih banyak peluang pekerjaan,

peningkatan produktiviti barangan dan perkhidmatan, pertambahan dagangan ekspot, merekodkan lebih banyak keuntungan dan melunaskan cukai kepada pihak kerajaan yang akan membantu memperbaiki kedudukan belanjawan negara dan akhirnya membangunkan semula ekonomi. Bila situasi ini berlaku, lebih ramai pelabur asing akan tertarik untuk melabur di dalam negara ini sama ada melalui pelaburan langsung atau secara portfolio. Malah ada pihak yang mengaitkan pertumbuhan ekonomi negara yang berlaku pada era 90an adalah bukti bagaimana teori Keynes ini boleh diadaptasikan. Kajian terhadap kesan penurunan kadar cukai korporat dan kaitannya dengan pertumbuhan ekonomi banyak dilakukan di negara-negara maju tetapi tiada bukti yang menunjukan terdapatnya kajian yang telah dijalankan merujuk kepada perspektif negara ini. Maklumat ekonomi kajian ini dikumpulkan dari pelbagai laporan kewangan yang dikeluarkan oleh Kementerian Kewangan Malaysia, Jabatan Perangkaan Malaysia, Bank Negara Malaysia dan dirujuk kepada maklumat kewangan yang dikeluarkan oleh International Monetary Fund (IMF). Kaedah analisa ekonometrik digunakan di dalam kajian ini untuk mengkaji kesan penurunan cukai terhadap makro ekonomi Malaysia dan kaitannya dengan pertumbuhan ekonomi negara kerana ia merupakan kaedah yang biasa digunakan untuk mengkaji kesan ekonomi yang berlaku apabila berlakunya perubahan terhadap sesuatu dasar kerajaan. Didapati penurunan kadar cukai memberikan impak yang minima kepada ekonomi negara ini. Semua faktor ekonomi tidak menunjukkan impak yang besar dengan penurunan kadar cukai korporat ini kecuali kadar pertukaran asing dan keluaran negara kasar. Kedua-dua faktor ini mempunyai kesan yang besar pada kadar 0.01. Walau bagaimana pun kenaikan besar pada kadar pertukaran asing mungkin disebabkan perubahan dasar kewangan kerajaan dan bukannya mempunyai kaitan dengan penurunan kadar cukai korporat. Manakala kenaikan besar pada Keluaran Negara Kasar selaras dengan teori Keynes yang mengatakan bahawa penurunan kadar cukai mempunyai kaitan dengan pertumbuhan ekonomi negara. Kajian ini tidak menyokong aplikasi teori Keynes di dalam ekonomi Malaysia terutama sekali bilamana berlaku keadaan ekonomi dunia sendiri yang serba tidak menentu. Ini kerana Malaysia tidak mempunyai lebihan belanjawan atau rancangan untuk menambahkan lagi hutang negara untuk membiayai cukai insentif ini. Oleh itu, Kerajaan tidak berkemampuan untuk menampung kekurangan di dalam kutipan sebenar hasil negara apabila kadar cukai korporat ini dikurangkan. Insentif cukai jangka pendek ini perlu ditampung sama ada melalui lebihan cukai atau pinjaman wang untuk mengelakkan penggunaan simpanan negara yang pasti akan merencatkan pertumbuhan masa depan ekonomi negara. Penurunan kadar cukai korporat didapati tidak berkesan untuk menarik dana jangka panjang dari pelabur asing ke dalam negara. Revolusi sistem pelaporan cukai yang diperkenalkan pada tahun 2000 juga didapati tidak memberikan impak besar kepada keseluruhan ekonomi negara. Perubahan tersebut bagaimana pun didapati mempunyai kaitan rapat dengan kedudukan kewangan kerajaan pada kadar 0.10. Kesimpulan ini didasarkan kepada tempoh dan skop kajian ini dijalankan.

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Last but not least to everybody whom I not mentioned his or her names that contribute in one way or another to this study. Thank you very much!

APPROVAL

I certify that an Examination Committee met on **December 10, 2008** to conduct final examination of **Shaharudin bin Mohamad Ali** on his **Master of Science** thesis entitled **"The Macroeconomic Effects of Corporate Income Tax Rate Reductions"** in accordance with the Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination committee are as follows:

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This thesis submitted to the Senate of Universiti Putra Malaysia has been accepted as partial fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee are as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or any other institutions.

SHAHARUDIN BIN MOHAMAD ALI

Date: 10/7/2009

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Chapter 1

INTRODUCTION

1.1 Background

Tax is an instrument of fiscal policy that the government deliberately uses to control and move the economy in the desired direction. The purpose of a tax system is to raise the income that is necessary to run government and to do so in the most efficient way that could minimise any possibility of distortion to the economy. The policies are formulated and laws are regulated in the process to ensure that economic growth is achievable with relatively low unemployment rate, price stability, and strong external balances. Taxation together with other fiscal and monetary policies are employed to achieve certain economic objectives such as full employment, control of inflation, balance of payments and stimulation of economic growth. Countries' economic growths are heavily dependent on foreign funds (Asiaweek, 2000). Foreign investments bring along a bundle of intangible assets to the host country such as boosting the average productivity in the country, both through a composition effect and through spillovers to national firms besides job creation, improved skills in labour force, transfer of technology and income generation from corporate income tax. Numerous incentives are introduced and promoted to attract foreign investments to the country, both direct investment and portfolio capital and one of them is by lowering the corporate income tax rate. Lower tax rate is considered as tax incentive that could attract foreign direct investment (FDI) to the host country (Morisset, 2003) and investors naturally prefer lower-tax jurisdictions (Mitchell, 2007) as the tax rate is one of the factors that determine the rate of return of FDI income (Kwang-Yeol Yoo, 2003).

To achieve the target to be a developed nation by the year 2020, Malaysia is committed to providing a conducive and business-friendly environment that is conducive for corporate sector to grow and provide opportunities for profits and maintain internationally competitiveness as well. The government is willing to retrain its workforce as per the needs of a company, setting up one-stop centre to cut bureaucracy, liberalising private sector policies, introducing private finance initiatives and offering incentives. One of the enticements is reducing the corporate income tax rate. The reduction in the tax rate offers the potential to raise economic growth by improving incentives to work, save, and invest. Many countries are currently competing to reduce their corporate income tax rates for the same reasons. KPMG (2007) reported that competition between countries to attract and keep foreign investment is continuing to drive down corporate tax rates across the world as low tax rates could help to give a country a significant competitive advantage over economic rivals and are connected with higher than average economic growth.

The reduction in the corporate income tax rate coincides with the Keynesian theory that suggests governments intervention to halt sluggish economy by lowering the corporate income tax rate or escalate public spending, or both as it has a significant relationship with economic growth. By doing this, the government could correct the sluggish economy by transferring funds from the public to the private sector to stimulate demand and increase private consumption and spending. Subsequently new jobs are created, incomes would rise, and people would spend more that eventually the economy would start growing again. Conversely, if an economy is overheated, the government should raise taxes and people would have less money to spend that would soften the demand for consumer and investment goods. Growth varies because of changes in aggregate demand, causing firms to produce fewer goods for sale and hence altering the size of the economy.

Economists, however, have little agreement on the real effect of corporate income tax rate reduction on macro economy and its relationship with economic growth. Advocates claim that the reduction in the tax rate will boost economic growth and prosperity. Opponents argue that most of the tax benefits will go to the rich as they are the ones that contribute the most. If this tax incentive fails to produce the expected results: tax revenue would decline, putting upward pressure on the deficit, worsening levels of national saving, and leading to lagged economic growth. A reduction in the corporate income tax rate is not the only factor that affects the country's macro economy and investors' decision making. An economy is also affected by the level and type of government spending, trade policy, monetary policy, regulatory policy, political stability and many other government actions as well. Investors also seek for a favourable investment climate such as a stable political regime, good prospects for economic growth, liberal and predictable government regulation, and easy convertibility of the national currency. Hence it is hard to ascertain the effects of the tax cuts have had on the economy as there is no way to compare actual events to the counterfactual case where the tax cuts were not enacted (Labonte, 2004).

1.2 Problem Statement

This study examines the macroeconomic effect of the corporate income tax rate reduction and the relationship with economic growth. The reduction in the tax rate coincides with the Keynesian theory that suggests government's intervention to halt sluggishness in the economy by lowering the tax rate or escalate public spending or both as it has relationship with economic growth. There are many studies published in the developed countries that discuss about this topic but the results are mixed and inconclusive. Deich et al (1991) study the economic effect of the government spending for infrastructure and other public investments. Mitchell (1996) studies the effect of lowering the tax rates on the US economy. Kogan (1996) study the effectiveness of cutting the tax rates to increase economic growth. Saxton (1999) study the relationship between the tax reduction and the US economy. Auerbach and Gale (1999) study the justification to use budget surplus in financing the reduction in the tax rate. Woodward and Sturrock (2002) evaluate the proposed changes in tax policy to stimulate the economy. Gravelle (2003) study the usage of business tax cuts to stimulate the economy and in other study, she also writes (2003) about the effectiveness in cutting tax to stimulate the U.S. economy. Kogan and Aron-Dine (2006) examines the claim that the tax cuts "pay for themselves. Labonte (2003) examines which alternatives might add more stimuli to the economy between escalating the government spending and reduce the tax rate. Moore (2003) comments on the President Bush's economic growth tax cut. Gale and Orszag (2004) study the Bush's administration policy regarding the effects of reducing the tax rate on the long-term economic growth. Labonte (2004) examines the effect of cutting down the tax on the economy. Page (2005) analysed the economic and budgetary effects of a 10 percent cut in income tax rates. Bagchi (2005) examines the claim that "low taxes mean more taxes". KPMG (2006) concludes that lower tax rate helps to give a country a significant competitive advantage over economic rivals and it relates with higher than average economic growth.

Based on literature, the reduction in the corporate income tax rate in Malaysia has three major problems that need to be clearly addressed:

- The immediate effect of corporate income tax rate reduction is that the Government's real income is likely decreased and simultaneously increased in the real income of the corporate taxpayers. The reduction in the tax rate does not pay for themselves as there is no credible evidence according to Mankiw (1988) that prove tax revenues rise in the face of lower tax rates (Kagon and Aron-Dine, 2006). The Malaysian government has no budget surplus or intention to borrow money (Abdullah, 2007) to back up the reduced income due to this reduction in the tax rate. The longer the financing is postponed, the larger the decline in the national saving will be (Gale and Orszag, 2004). Persistent budget deficits, according to Krugman (2005) can cause problems for both the government and the economy as it has a potential to increase the public debt that inevitably would negatively affect the country's long-run economic growth. Thus the reduction in the corporate income tax rate might have affected the Government Financial Position as it is expected to drive down revenue collection, put up pressure on deficit (budget) as the Government continues with its expansionary policy to increase public expenditure to continuously stimulating business activity and increase more investment in the country.

- The Government's effort to increase investment in this country, however, might not be attainable if the corporate sector is not attracted to do so especially during this globe facing economic uncertainty. Instead of increasing the investment, the corporate sector might opt to distribute this unanticipated income (from tax savings) to the shareholders as additional dividends which might not use to enlarge their stakes in business but instead are spent on non-productive activities such as going for overseas holiday trips which aggravate this economy. Thus to attract investors invest in this economy, the Government should revise its monetary policy to curb inflation by reducing its interest rate. When the interest rate reduces, investors are expected to increase their investments both through direct investment and portfolio capital that simultaneously increase demand for the local currency (increase foreign exchange rate and interbank overnight money rate) and increase business activity.

- In economics, the lag effect occurs whenever the Government changes its fiscal policy. There are three types of lag, namely, the recognition lag, the decision lag, and the effect lag. The recognition lag is the time taken by the authorities to discover the need to make a change in its policy. While the decisions lag is the period between the time when the need for action is recognized and the time when the action is taken. Whilst the effect lag is the time taken between the time actions is taken and an effect is realized. The problem with the lag effect is that it takes a long period of time before the true effect is realised and by then, the economic situation might not be the same. The lag effect might affect the people's motivation to work (increase the unemployment rate) and become unproductive (reduce the PPI rate) to produce quality products (decrease trade balance) and aggravates investors' opportunity for profits and growth (reduce FDI) that eventually would adversely affect the gross domestic product.

Albeit inconclusive findings published in the developed countries and advocates claim that the 1990s economic growth evidence on how the theory works in this country, there is no documented evidence available regarding this topic in the Malaysian context. Research on this area is still scarce even though the Government had several times reduced the corporate income tax rate since the first announcement made in 1988 (effective for the Year of Assessment in 1989). Thus the reduction in the