



FACULTY OF ECONOMICS AND BUSINESS

THE IMPACT OF ADVERTISING EXPENDITURE ON THE
DEMAND FOR MONEY IN MALAYSIA

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**THE IMPACT OF ADVERTISING EXPENDITURE ON THE DEMAND FOR
MONEY IN MALAYSIA**

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Statement of Originality

The work described in this Final Year Project, entitled
**“THE IMPACT OF ADVERTISING EXPENDITURE ON
THE DEMAND FOR MONEY IN MALAYSIA”**
is to the best of the author’s knowledge that of the author except
where due reference is made.

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ABSTRACT

THE IMPACT OF ADVERTISING EXPENDITURE ON THE DEMAND FOR MONEY IN MALAYSIA

By

Lai Kim Lin

The main purpose of this study is to determine the characteristic of money demand function in Malaysia by including advertising expenditure as a new variable using annual data over the period of 1978 to 2008. Developed econometric techniques of unit root tests, cointegration tests, vector error-correction modeling and Granger causality test have been employed. The findings verify that the money demand in term of real M2 of Malaysia is significant. The money demand function is stable in the long-run. All of the independent variables include real GDP, saving deposit rate, exchange rate and advertising expenditure can affect the demand for money in the short-run. In addition, the money demand function is fitted excellently with the theoretical concept of money demand.

ABSTRAK

KESAN DARI PERBELANJAAN PENGIKLANAN TERHADAP PERMINTAAN WANG DI MALAYSIA

Oleh

Lai Kim Lin

Tujuan utama kajian ini adalah untuk menyelidik ciri-ciri fungsi permintaan wang di Malaysia dengan menambahkan perbelanjaan pengiklanan sebagai pembolehubah yang baru dengan menggunakan data tahunan dari 1978 hingga 2008. Teknik-teknik sedia ada dalam ekonometrik iaitu ujian kepegunan, ujian kopengamiran, ujian pembedahan ralat vektor dan ujian penyebab Granger telah digunakan. Dapatan kajian menunjukkan bahawa permintaan wang yang diwakili oleh M2 benar di Malaysia adalah signifikan. Fungsi permintaan wang ini adalah stabil pada jangka masa panjang. Semua pembolehubah tidak bergantung termasuk KDNK benar, kadar faedah simpanan, kadar pertukaran asing dan perbelanjaan pengiklanan mempengaruhi permintaan wang dalam jangka masa pendek. Tambahan pula, fungsi permintaan wang ini adalah memenuhi syarat yang dicadangkan dalam konsep teori permintaan wang.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The government of Malaysia plays a key role in attaining stable and sustainable economic growth by executing effective monetary policies. The main objective of monetary policy is to achieve monetary stability and to stimulate economic growth as well as to attain low inflation in Malaysia. The characteristics of monetary policy influence the trend of demand for money. An accurate money demand analysis is crucial to provide valuable information to the policy makers for their decision making. Money demand is an essential part of the transmission mechanism of monetary policy in an open economy and stable money demand function is an important condition to conduct successful monetary policy (Ionut, 2002). In other words, monetary policy is highly related to the demand for money in a country because outstanding stock of money affects the households' consumption decision (Schabert and Stoltenberg, 2005).

The function of economic policies in Malaysia is to promote fair and equitable distribution and growth to deplete economic imbalance between different groups of people regardless their ethnicity, income and status. This requirement is clearly shown in the New Economic Model (NEM) that has been introduced recently. Economic imbalance usually happens when wealth is dominated by a small group of rich people whereas large portion of people is suffering from poverty, such as Indonesia (Suryadarma et al., 2006). When the citizens live in poverty, it is possible to conclude

that the purchasing power parity of the country will be in low level, which in turn affects the demand for money. Unfair distribution reduces household consumption because they will reduce the number of transaction. Less transaction means that people will demand less money.

Nevertheless, the monetary policy of Malaysia also advocates practice of equity. The monetary policy provides financial aid or lending to bumiputera, small business and the other citizens. Financial aids from the government help to enhance their competitiveness, effectiveness and efficiency, which in turn generate more job opportunities. Increase of employment leads to increase of income, thus, demand for money to purchase goods and services will increase.

The real sectors that include manufacturing, agriculture, services, mining and construction sectors have a great impact on monetary policy. Real sectors especially primary and manufacturing sectors have priority to lend money from banking institutions. This is because the economy of Malaysia depends on export of few primary and manufacturing products, such as petroleum, palm oil, rubber, and electrical and electronic (E&E) goods. Therefore, monetary policy of Malaysia is affected by the exogenous factors, which include the balance of payments and the change of foreign assets that is related to exchange rate. According to Valadkhani (2003), depreciation of the domestic currency can encourage the firms to diversify their portfolio by seeking for real assets or foreign currencies instead of holding the local currency. In other words, when the value of Malaysian Ringgit is depreciated against the foreign currency such as U.S Dollar, people prefer to have real assets instead of holding Ringgit. As a result, demand for Ringgit will decrease.

In order to estimate the money demand in Malaysia, new money demand function is suggested to be formed. Advertising spending is the suggested variable that may be suitable to be included in the money demand function. Advertising is an alternative way that provides information about the products to the public and mass media is an effective medium for advertising. Advertising is a powerful tool of competition. Through advertising, the households aware of the market condition of the products in terms of price and location. Advertising often attempts to persuade potential customers to purchase the products. Consumer behavior in the market is important to the economy growth. It can bring multiplier effects towards the economy growth. The demands of the consumers create profitable returns to the firms that produce goods and services. An increase in market demand implies an increase in transactions and thereby, increases money holdings. Besides that, advertising helps to facilitate new entry of firms and products into high competitive market. The new firms can promote their products and services in an efficient and cost-effective manner.

According to Solomon, et al. (2009), in developed countries such as U.S and Canada, advertising spending is taken into account as an important variable that affects the demand for money. The U.S government allocates about 2.5 percent from the gross domestic production (GDP) every year as advertising expenditure. The importance of advertising in U.S was proven by the Wharton Econometric Forecasting Associates (WEFA) Group (or known as Global Insight), an economic modeling firm and Dr. Lawrence R. Klein, the Nobel Laureate in economics. They found that advertising helps to generate 18.2 million of the 126.7 million employment in the year of 1999. Furthermore, according to Newspaper Association of America

(2007), 5.2 trillion dollars were generated in the economy of U.S through advertising which was 20 percent of the total economic activity in 2005. At the same time, advertising created more than 21 million job opportunities which was 15.2 percent of the employment of U.S. Increase of employment implies increase of income and purchasing power parity. Thereby, people will demand more money to satisfy their needs.

In this study, apart from the money demand theory that founded by Fisher and Keynes, consumer demand theory is discussed. Consumer demand theory is taken into consideration because the target of advertisement is the consumers. This theory provides insight on the understanding of market demand and it is used to analyze consumer behavior, which is based on satisfaction from the consumption of a good. In addition, there are various types of advertisement such as print advertising, outdoor advertising, broadcast advertising, convert advertising, parallel advertising and sponsorship advertising in Malaysia. This phenomenon indicates that advertising spending also contributes to economic income. In other words, advertisement helps to increase demand for money in the economy.

1.1 Background of the Study

1.1.1 Monetary Policy in Malaysia

Monetary policy is an important mechanism to improve and boost the economy performance in Malaysia. The central bank, which is also known as Bank Negara Malaysia (BNM) puts efforts in discovering the effective and stable monetary policy in order to maintain stability of price and value of currency.

Implementation of monetary policy usually faces with three dilemmas, which are also known as policy trilemma (Williamson, 2009, pp. 1-2). According to policy trilemma, freely mobile capital, fixed exchange rates, and monetary autonomy cannot be implemented at the same time. This situation implies that, the central bank is supposed to choose two or sacrifice one of the three variables in order to carry out an effective monetary policy. For instance, if a country has capital mobility and fixed exchange rate, two of these variables will determine the money supply. In another case, if a country has capital mobility and the government intends to control money supply, then the exchange rate is supposed to be floated. However, it is possible to sacrifice partially two or more variables. Malaysia is the case in point that had controlled the capital flow and fixed the exchange rate simultaneously in 1998.

Due to policy trilemma, BNM's responsibility is to monitor and review the relevancy of monetary policy structure in fluctuate and unpredictable financial system. Basically, the problems or weaknesses of monetary policy in Malaysia are interest rate restrictions, domestic credit controls, high reserve requirements, segmented

financial markets, underdeveloped money and capital markets, and controls on international capital flows. (Tseng and Corker, 1991).

In 1970s, financial system had been changed and the monetary policy was reformed to be flexible and capable in responding to the dynamic economic change (Tseng and Corker, 1991, pp. 9-10). The value of Ringgit was floated in 1973 and capital account was liberalized by the government (Soekarni, 1995, p. 22). However, to achieve national objective, some restrictions were increased. In the mid-1970s, monetary policy was quite interventionist to deal with double digit inflation. In order to reduce inflationary pressures, the money supply became squeeze and had caused increment of interest rates (Azali, 2000, p. 54). Rigid regulations upon banking system in terms of interest rate and credit controls bring deleterious effects towards money demand in Malaysia. Moreover, regulations and restriction on certain important capital account had led to the financial crisis in 1997.

During 1980s, unstable macroeconomic trends with greater competition led to failure of financial institutions (Tseng and Corker, 1991, p. 10). Monetary policy remained restrictive in order to control inflation and additional deterioration of current account. During the economic downturn in the mid-1980s, Malaysia had liberalized its financial systems by relaxing the capital controls and shifting to more flexible exchange rate arrangements. BNM had imposed controls on capital outflows and restriction on exchange market to support the currency. As a result, the reborn financial structures had contributed to wide spread implications for money demand and the conduct of monetary policy.

BNM had removed the control on the base lending rate (BLR) in 1991 (Soekarni, 1995, p. 22). All the banks in Malaysia regardless commercial banks or financial institutions are freed to adjust their BLR. Different banks might have different BLR based on their cost structure and business strategies. BLR is flexible to the market situation. During the downturn of global market, BLR will be in lower rate and vice versa. Flexibility of BLR has potential to promote more property ownerships and mortgage loans.

During the financial crisis, BNM had implemented the limitation of 2 million U.S Dollar per foreign customer on non-commercial Ringgit offer-side transaction on 4 August 1997. Kuala Lumpur Stock Exchange (KLSE) also announced 100 Kuala Lumpur Composite Index (KLCI) as the designated securities. However, these policies failed to overcome the inefficiency. The KLSE Composite Index had lost 800 points or 63 percent from 1271 points on 25th February 1997 to 477 points on 12th January 1998 (Economic Planning Unit, 1998, pp. 16-17). Finally, the monetary policy of Malaysia was tightened, the Ringgit was pegged to RM 3.80 against 1 U.S Dollar on 2nd September 1998 in order to shrink credit growth and control the level of inflation.

BNM had executed a new interest rate framework, which is known as overnight policy rate (OPR) in 2004. The functions of OPR are - as a signaling device to point out the monetary policy stance and as a target rate for the day to day liquidity operations of BNM (BNM, 2004). In other words, OPR is a reference for the banking institutions to do BLR adjustments. The purpose of this framework is to foster well-

organized pricing by banking institutions without changing the general level of domestic interest rates.

Next, BNM had replaced the fixed exchange rate system to the managed float system on 21st July 2005, where the value of Ringgit is determined by the economic fundamentals (BNM, 2005). BNM also monitors the value of Ringgit against a trade weighted basket of currencies to maintain the stable fluctuation of exchange rate. As a result, the ringgit was appreciated against most major currencies at the end of the third quarter of 2005.

In 2006, the monetary policy concentrated on preserving price sustainability and attaining stable economic growth. Since 2006, Malaysia has been the large producer of petroleum that faces inflationary pressure due to the international crude oil price hike. Monetary policy aimed to make interest rates as an useful tool in responding to the rising inflation and to maintain domestic demand as well. Hence, BNM had increased the OPR by 25 basis for two times in February and April respectively (BNM, 2006).

Monetary policy was operated in a complex environment with rapidly changing inflation, economic and financial conditions in 2008 (BNM, 2008, pp. 79-81). During that period, Malaysia was facing inflation that caused by supply-driven factors, which could affect the domestic demand. Adjustment of petrol prices had been made by the government due to the drastically increase of fuel price in international level. The domestic petrol prices increased to 40.4 percent on 4th June 2008, which was the largest adjustment since 1991. Increases of petrol price had

reduced the purchasing power of consumers and thereby directed to reduction in discretionary spending, which in turn caused low demand for money and slower the economic growth.

1.2 Real Gross Domestic Product

According to Investopedia (2011), real gross domestic product (real GDP) is the value of all goods and services produced in a given year without including inflation. Real GDP is expressed in a base year price and it is known as constant price. Basically real GDP reflects the real income of the country.

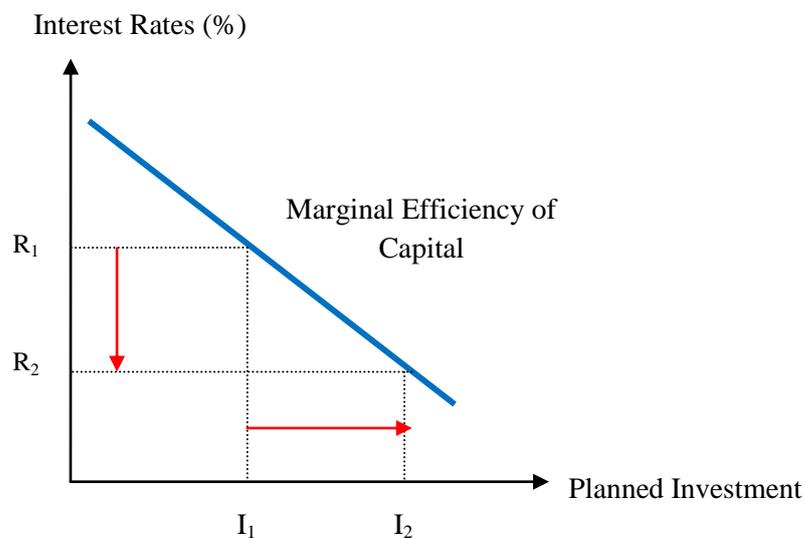
Demand for money is closely related with wealth. Wealth effect means changes in aggregate demand caused by changes in value of assets, such as property and stocks. When the owners gain more profits from their assets and they are getting richer, they tend to increase spending by using money. Based on the income elasticity of demand, as consumers' income increases, more normal goods are demanded at each price level.

1.3 Saving Deposit Rate

Saving deposit rate is the amount of money in terms of interest paid out by the financial institution or bank on the cash deposits from the money holders. Saving deposit rates are paid to the depositors through their saving or investment accounts. The banks use the saving deposits for generating more income and investment, and saving can contribute to economic growth.

In the long-run, high saving deposit rate is not a bad thing for the economy because it helps to yield more investments, increase production and reduce unemployment in the countries. According to Keynesian theory of investment, changes in interest rates influence the level of planned investment undertaken by private sector businesses in the economy. Low interest rates reduce the cost of investment and vice versa. Figure 1 shows the negative relationship between interest rates and the level of planned investment.

Figure 1: Keynesian Theory of Investment



However, Yamaron (as cited in Isidore, 2009) states that saving will worsen the economy performance while the market activities are underwater or in the critical situation. Theoretically, the relationship between interest rate and demand for money is negative. When the saving deposit rate is high, the money holders prefer to save money and decrease the demand for money in spending. During the economy downturn, this theory is prevailed because high savings reduce growth of aggregate demand. Once the aggregate demand shifts to left side, it indicates a slowdown of

velocity of market activities, which is caused by decreased demand for money in spending.

In addition, saving is categorized as the leakage in economy especially when large number of population saves money at the same time (Isidore, 2009). Besides, Yamarone also argues that “the usual economic benefits tied with a higher savings right are not evident now because consumers’ savings are not being put to use the way they normally would be” (as cited in Isidore, 2009). This situation reduces the willingness of the banks to make new loans by using the deposits, which in turn leads to the situation as discussed in Figure 1 (see p. 10).

1.4 Exchange Rate

Exchange rate is an important component to influence the demand for broad money M2 in Malaysia, which means there is an existence of currency substitution between Ringgit Malaysia (RM) and US Dollar (USD) (Azali, Baharumshah and Habibullah, 2000). When the value of RM is depreciated, people do not prefer to hold RM which in turn reduces the demand for local currency.

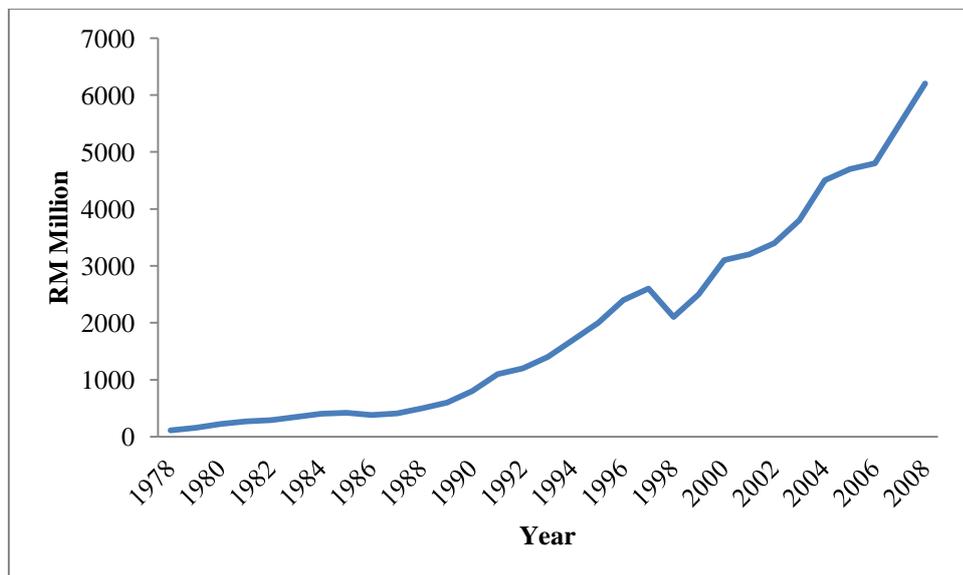
According to Mundell (1963), under fixed exchange rate regime, monetary policy has no impact on employment whereas under floating exchange rate system, monetary policy has a strong effect on employment. Increase of employment creates income for the nation and enables them to hold more money. Bahmani-Oskoei and Pourheydarian (1990) also support that the demand for money will be more robust under floating exchange rate system. Therefore, BNM changed the exchange rate

regime to fixed system during the economy downturn whereas free floating system is promoted when the economy performs well.

The effectiveness of monetary policy depends on the sensitivity of demand for money to the level of the exchange rate in the flexible exchange rate regime (Mundell, 1963). This idea is supported by Arango and Nadiri (1981) and Akiba (1996). They state that fluctuations in exchange rate expectation and the level of the exchange rate affect the demand for money in the country.

1.5 Advertising Expenditure

Figure 2: Advertising Expenditure (RM Million) in Malaysia, 1978-2008



Source: Nielsen Media Research Service, Malaysian Communication and Multimedia Commission (MCMC).

Figure 2 shows the advertising spending trend in Malaysia which is started from 1978 to 2008. Revenue from the sale of advertising is the main source of advertising expenditure. It is usually derived from the mass media, such as TV, radio,

newspapers, magazines, direct mail, public transport vehicles, outdoor displays and the internet (MCMC, 2006).

Advertising expenditure is an important economic indicator that will boost the economy growth of Malaysia as well as demand for money among the nation. As shown in Figure 2, advertising expenditure was growing steadily during that period. However, advertising expenditure is sensitive to the economic shock. The financial crisis during 1997 to 1998 had reduced the amount of advertising expenditure significantly. This increasing trend indicates that the industry players preferred to spend more money in advertising during the brilliant economy condition.

Advertising is an useful instrument to connect the suppliers and the customers by creating both side benefits. Advertising has potential in generating wealth to the private sector as an engine of growth as well as to the nation (MCMC, 2006). Advertising is an essential medium to introduce the products and services provided by the private companies to the consumers. By using this medium, they are able to increase sales effectively and efficiently. Expansion of the companies will create more job opportunities that in turn create more income for the nation. Income has significant positive effect on the demand for money (Achsani, 2010), which means when income increase, demand for money will increase.

1.6 Problem Statement

Malaysia is an export-led economy that relies on export earnings from primary and manufacturing products. Thus, the monetary policy is affected by the external factors that are unpredictable and uncontrollable. In addition, Malaysia is a small open economy that is easily influenced by external economy shocks and crises. Due to the financial crisis in 1997, the economy of Malaysia was seriously affected. The value of Ringgit depreciated drastically from 2.50 above to 4.88 to the U.S Dollar on 7th January 1998. At the same time, the KLSE Composite Index dropped continuously from 1271 points on 25th February 1997 to 477 points on 12th January 1998. In order to control this destructive shock, the ex-prime minister, Tun Dr. Mahathir imposed strict capital controls and pegged Ringgit to 3.80 against the U.S Dollar. According to Azali, Baharumshah and Habibullah (2000), exchange rate is vital in M2 money demand function. They suggest that positive sign of exchange rate in the normalized M2 vector perhaps indicate that the U.S Dollar is one of the substitutes for monetary assets. Hence, the possibility of currency substitution between Ringgit and the dollar should be taken into account because fluctuation of exchange rate influences the demand for money in a country (Akiba, 1996).

Furthermore, the monetary authorities of Malaysia promote the establishment of new financial institutions. Increase of financial institutions supplies more money and credit in the economy, but at the same time it induces institutional change. Mismanagement of these financial institutions will lead to inflation (Mehran et al. 1998). According to the quantity theory of money, price level is determined by money supply. By definition, rising price levels are inflation and inflation affects the