THE IMPACT OF MACROECONOMIC FACTORS TO HOUSEHOLD DEBT IN MALAYSIA

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SUPERVISOR DECLARATION

"We hereby declared that we had read through this research study and in our opinion that this report is adequate in terms of scope and quality which fulfill the requirements for the award of Bachelor of Technology Management (Innovation) with Honour"

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DECLARATION OF STUDENT

I declared that this research entitles **"The Impact of Macroeconomic Factors to Household Debt in Malaysia"** is the result of my own research except as cited in the references. The research has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree.

Signature   :   …………………………………….

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DEDICATION

This research paper is lovingly dedicated to my parents, Sarwe Bin Ramli and Miskiah Binti Salleh, who has been my constant source of inspiration, they gave unconditional support with my studies. I am honored to have theirs as my parents. Thank you for giving me a chance to prove and improve myself through all my walk of life. Secondly**, I would like to express my sincere gratitude to my supervisor, Dr. Siti Norbaya Binti Yahaya, who guided and supported me throughout my final year project.** Without her advice and motivation, this project paper would not be completed successfully. To all my family thank you for believing me allowing me to further my studies. Thank you, my friends, Nur Sharlin Arina Binti Md Sufian, Nurul Ajmal Binti Mohd Shukri, Nur Hafiza Binti Che Ismail and Nurnazatul Shasha Binti Mazlan for your knowledge sharing and support. Lastly, to my loved one, Mohamad Faiz Fikry Bin Asran for your understanding and unconditional support me.

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ABSTRACT

The increase in household debts in Malaysia which has escalated to about 89% of total GDP is deemed to be worrying stage as it may in turn trigger another financial crisis. The aim of the study is to identify the impact of the macroeconomic factor on household debt in Malaysia. In these macroeconomic indicators or the independent variables consist of as gross domestic product (GDP), interest rate (IR), house price index (HPI), Unemployment Rate (UNEM), and consumer price index (CPI). Firstly, the researcher will determine which indicator will be detected as the most significant impact on household debt. Secondly, the study will investigate the relationship between each factor to study the impact of household debt. Thirdly, the scope is to identify comparison data covered a 10 years period, beginning from 2008 to 2017. This study is conducted in Malaysia where all of statistics, past data, facts and annual report from Central Bank of Malaysia, Department of Statistic of Malaysia, and The World Bank of Data. The research method used to conduct the study is by a quantitative approach where definitely use secondary data. This study employed all independent variables will be analyzed using Pearson Correlation and Simple Linear Regressions (SLR). Additionally, the results show that the consumer price index is the most significant factor that gives the impact toward household debt, followed by interest rate, gross domestic product, house price index and the unemployment rate. Thus, the future researcher can use a qualitative method to measure the different angle of this study. For instance, social factor such as lifestyle, family earn, wealth, education and occupation. Then, technology factor such as mobile technology. From that, the researcher can find and analyzed the impact of various factor and not focusing on macroeconomic indicators only.

Keywords: macroeconomic indicators, household debt

ABSTRAK

Peningkatan hutang isi rumah di Malaysia yang meningkat kepada kira-kira 89% daripada jumlah KDNK dan dianggap sebagai peringkat yang membimbangkan kerana ia juga boleh mencetuskan krisis kewangan yang lain. Tujuan kajian ini adalah untuk mengenal pasti kesan faktor makroekonomi terhadap hutang isi rumah di Malaysia. Dalam indikator makroekonomi ini atau pembolehubah bebas terdiri daripada Keluaran Dalam Negara Kasar (KDNK), kadar faedah (IR), indeks harga rumah (HPI), Kadar Pengangguran (UNEM), dan indeks harga pengguna (CPI). Pertama, penyelidik akan menentukan penunjuk mana yang akan dikesan sebagai kesan yang paling ketara terhadap hutang isi rumah. Kedua, kajian akan mengkaji hubungan antara setiap faktor untuk mengkaji kesan hutang isi rumah. Ketiga, skop adalah untuk mengenal pasti data perbandingan yang meliputi tempoh 10 tahun bermula dari 2008 hingga 2017. Kajian ini dijalankan di Malaysia di mana semua statistik, data lepas, fakta dan laporan tahunan dari Bank Negara Malaysia, Jabatan Statistik Malaysia , dan Data Bank Dunia. Kaedah penyelidikan yang digunakan untuk menjalankan kajian ini adalah dengan pendekatan kuantitatif yang pasti menggunakan data sekunder. Kajian ini menggunakan semua pembolehubah bebas akan dianalisis dengan menggunakan Korelasi Pearson dan Regresi Linear Mudah (SLR). Di samping itu, keputusan menunjukkan bahawa indeks harga pengguna adalah faktor yang paling penting yang memberi impak kepada hutang isi rumah, diikuti dengan kadar faedah, keluaran dalam negara kasar, indeks harga rumah dan kadar pengangguran. Oleh itu, penyelidik masa depan boleh menggunakan kaedah kualitatif untuk mengukur sudut yang berlainan dalam kajian ini. Sebagai contoh, faktor sosial seperti gaya hidup, keluarga, kekayaan, pendidikan dan pekerjaan. Kemudian, faktor teknologi seperti teknologi mudah alih. Daripada itu, penyelidik dapat mencari dan menganalisis kesan pelbagai faktor dan tidak memberi tumpuan kepada petunjuk makroekonomi sahaja.

Kata kunci: petunjuk makroekonomi, hutang isi rumah

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LIST OF ABBREVIATIONS

ABBREVIATION		MEANING
%	=	Percentage
HD	=	Household Debt
GDP	=	Gross Domestic Product
IR	=	Interest Rate
HPI	=	House Price Index
UNEM	=	Unemployment Rate
CPI	=	Consumer Price Index
OECD	=	Organization for Economic Cooperation and Development
CEIC	=	The Global Economic Data, Indicators, Chart and Forecast
DOSM	=	Department of Statistics Malaysia
BNM	=	Bank Negara Malaysia
SPSS	=	Statistical Package for Social Science
SLR	=	Simple Linear Regression

CHAPTER 1

INTRODUCTION

1.1   Background of the Study

Household debt is one of the critical parts of the country economic development. The relationship between macroeconomic factors and household debt performance has been widely studied by researchers in developed and developing countries. Household debt is growing extremely in both developed and developing countries, raising concerns as to the risk of financial instability from both the economist (World Bank, 2014). Some fundamental macroeconomic factors such as gross domestic product (GDP), interest rate (IR), house price index (HPI), unemployment rate (UNEM) and consumer price index (CPI) are being argued to be a determinant of household debt (Nurhuda, 2015).

According to Central Bank of Malaysia, (2013) Household debt is the amount of money owed to borrowers for property transactions such as purchase the personal use, assets, motor vehicles, and credit cards. While, the Organization for Economic Cooperation and Development, OECD, (2015) defines household debt as the amount of liability to be paid or the payment of interest or principal made by the household to the creditor including for the future dates.

Although some of the research stated strong macroeconomic performance in recent years, there is little concern that shows the high GDP growth will not improve Malaysian well-being, (Rahuman, et al., 2017). Because of that, there have some factors that can be

highlighted to household income rule that can change to have a major impact on the real economy and financial stability. Factors that have contributed to this household debt performance are unsteady income distribution, increasing cost of living, heavy debt bonds, deteriorating quality and affordable of housing, and conceptions of corruption. However, in the filing of Annual Report, Central Bank of Malaysia (2013) stated it does not affect the household ability to spend a certain amount of time as well as for all its ability to repay debt.

In December 2017, Malaysia's household debt consider for 84.2% of the nominal GDP of the country compared to the previous year's adequacy ratio of 88.2% (CEIC data of Malaysia, 2017). Basically, household debt annual can be calculated with GDP nominal annual. Because of GDP is related to calculating the economic growth performance in Malaysia.
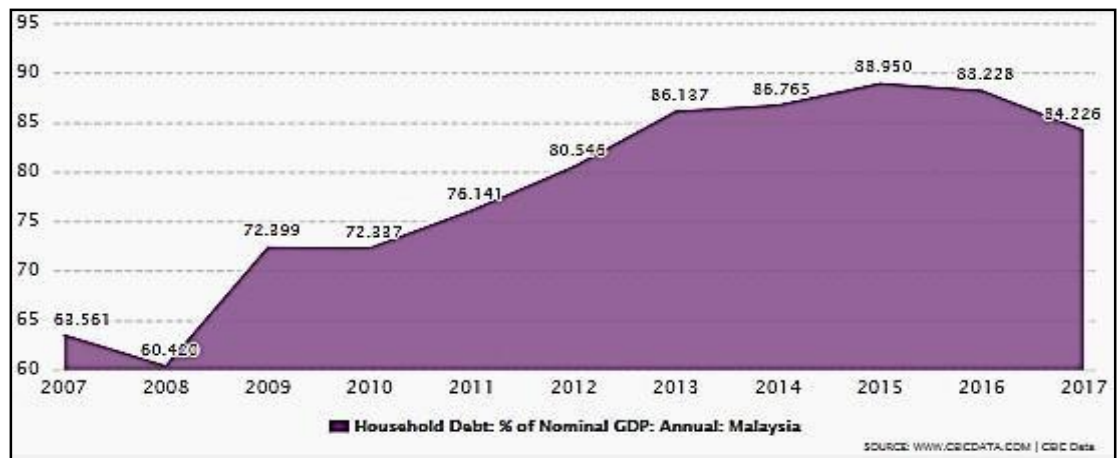
Figure 1.1: Household Debt % of Nominal GDP Annual

The data reached a total high point of 89.0% in December 2015 and have a low record of 60.4% in December 2008. The CEIC compute household debt as a percentage of GDP per annum from household debt and annual GDP. Central Bank of Malaysia, (2018), said despite positive developments in the statistics. However, Malaysia is still cautious of the risks that will arise from household debt. Moreover, changes in household income can now have a major impact on the real economy and financial stability.

It not only affects households with the ability to spend in a certain time even their ability to pay off debts. In the future, global growth continues to grow and supported by advanced economies and emerging economies. Besides GDP, there have some macroeconomic factors that contributed to household debt in Malaysia.

Maynard Keynes is a well-known English economist who suggests that macro views will be taken into account to solve the country's economic problems. For example, GDP, inflation and consumer price index. Particularly debt problems are households. This is because it will affect the country from time to time and also be able to measure stability in economic activity. Hence, the existence of this debt problem will help open up more space for growing macroeconomics. From the figure 1.1, the graph also influenced household expenditure in the market value and service, a durable product such as cars (washing machines and computer), purchased by families. By that, Consumption expenditure excludes housing purchases but includes the imputed rent for occupied residential real estate (Financial Stability and Payment Systems Report, 2016).

Although household debt levels are still high, there is no need to tighten existing measures as household debt increases while moderating. This is also driven by household debt ratios with lower GDP and the degree of a rigorous debt servicing ratio in stable economic growth conditions. It is important to avoid excessive adjustments which can eventually lead to a serious overflow of economic and financial stability. Measures to increase resilience in households also need to address more structural issues, such as income, housing, and public transport, in order to enhance capacity and reduce excessive household debt (Hendut & Hua, 2007). Importantly, efforts to reduce debt are made without prejudice to private consumption and economic growth.

This chapter enables the reader or another researcher to get a brief understanding of the overview of the research topic which is the relationship between macroeconomic factors and household debt in this country. The objective of the study is to identify the impact of household debt and the factors such as gross domestic product (GDP), interest rate (IR), house price index (HPI), unemployment rate (UNEM), and consumer price index (CPI) while also explains the research problem of this research topic. This chapter focused on the combination of several content part which included the research

background, problem statement, research objective, research questions, scope, limitation, and important of the study.

1.2   Problem Statement

Essentially, this research is directed at answering all the previous research questions. The problem of this research is to study the impact of these factors between the macroeconomic perspectives towards household debt. Evidence-based on the statistics from (Financial Stability and Payment Report, 2017) issued by Malaysia Central Bank, 2017. In the report, the growth in household debt in Malaysia moderated the seventh consecutive year to 4.9% by the end of 2017 compared the highest level of 14.2% in 2010. Recently, in June 2018, the annual growth of household debt increased to 5.2%. The statistical data shows that the annual growth of household debt has fluctuated and is not in line with what the country wants.

In 2017, the ratio of household debt to Gross Domestic Product (GDP) was lower at 84.3%. This rate is lower than in 2015 of 89%. In 2016, household debt was at 88.3%. Notwithstanding, the Central Bank of Malaysia report remains vigilant with the probable risks arising from the problem as the ratio of debt to GDP ratio is still above 80%. Thus, the risks that may arise from household debt. Research studies have shown that if the ration of household debt to GDP exceeds a certain threshold, the negative long-term impact on economic development is going to be much worse (Lombardi, et al., 2017). Household debt needs to be analyzed in more detail to gain a deeper understanding of resources that would lead to weaknesses in actually helping to better formulate policies.

Therefore, the household plays an important role in sustainable economic development. For sure, an economy cannot be developed without household debt. By that, some macroeconomic variable that affects household debt such as GDP, house price index

(HPI), interest rate (IR), and unemployment rate (UNEM) (Ma'in, et al., 2016). The government should try to reduce the percentages of household debt and enjoy the benefits of economic growth. The researcher considers for future research such as consumer price index (CPI). It can explain more with the addition of other factors for the study. So, this study will continue the past research and put the CPI as factors independent for the study.

1.3   Research Question

The research question is then constructed as below:

I.   What are the impact of macroeconomic factors (GDP, IR, HPI, UNEM, and CPI) towards Household debt?
II.   What is the most significant impact of macroeconomic factors in household debt?

1.4   Research Objective

This research tends to study the relationship between specific macroeconomic factors on household debt in Malaysia:

I.   To identify the impact of macroeconomic factors (GDP, IR, HPI, UNEM, and CPI) towards Household debt.
II.   To determine the most significant impact of macroeconomic factors in household debt.

1.5 Scope and Limitation of the Study

The scope of this project is to investigate the impact of macroeconomic factors on household debt. Besides, this study will identify the most significant impact as a factor that can help to decrease household debt rate in Malaysia. This study is conducted in Malaysia where all of statistics, past data, facts and report from Central Bank of Malaysia, Department of Statistic Malaysia, and The World Bank of Data. Hence, the study covered a 10 years period, beginning from 2008 to 2017.

During this research, there are some limitations that researchers have done. The limitations of this research be may take longitudinal studies. This study must ensure that the data located and recorded using the method is comparable. Such as the data contained in the Central Bank of Malaysia and above, not all databases are related to macroeconomic factors will be provided by them. Therefore, the researcher should look for another alternative to obtains reliable and relevant data such The Statistic Portal (Statista), (Knoema), The Global Economic Data, Indicators, Chart and Forecast (CEIC) and The Organizational for Economic Cooperation and Development (OECD).

1.6 Important of the Study

The finding of this research wants to find an impact of macroeconomic factors that linked to household debt in Malaysia. The level of household debt is considered worrying since it could trigger a further financial meltdown also may be affected to globalization economic. With these factors, more extensive relationships between household debt and macroeconomic factors can be explained.

This research seeks to add the body of academic knowledge by identifying how household debts in Malaysia shares are impacted by macroeconomic factors. The conceptual framework will illustrate this impact. Thus, this research will provide a huge advantage to households about how they manage the risks that may arise from the household debt, despite the positive developments of the Central Bank of Malaysia, (2017) as saying that household debt concern has decreased by 89.1% from 2016 to 88.4% of 2017. Hence, the government also can take a few alternative ways to reduce household debt growth. This research helps the futures research, government, and economists for knowing better insight into the impact of macroeconomic factors towards household in Malaysia. It also can provide the current knowledge of household debt performance.

Moreover, this research wants to help on investigating the impact between the different macroeconomic factors with the household debt and also present that which factors have a significant impact on the household debt in Malaysia. Similarly, economists will capabilities to enhance which helps in improving decision making by knowing the effects of macroeconomic factors on household debt in Malaysia.

1.7   Summary

This chapter discusses the introduction of research that investigates the impact of macroeconomic factors on household debt in Malaysia. This is because Malaysia will maintain the stability of economic growth. Then, a problem statement on the research has been included in this chapter to find the causes of debt increasing among households. Hence, the scope and limitations of the research in this chapter will find the impact that influenced household debt and can support the findings of this study.

CHAPTER 2

LITERATURE REVIEW

2.1   Introduction

This chapter discussed the relevant literature review in order to identify the method that can be release household debt growth. These chapters also present the conceptual framework, review of empirical studies and impact of macroeconomics factor to household debt. The conceptual framework focuses on the organization of a concept that explains the relationship between the factors considered important to the study. Therefore, the discussion of other related literature will focus on the main macroeconomic implications of increased household indebtedness in Malaysia

2.2   Concept of Household Debt

According to the Central Bank of Malaysia (2013), household debts are liabilities to be repaid in the future and comprise loans to buy real estate and securities, and finance the used. Household debt is growing unreasonably in both developed and developing

countries. Raising the economist's concerns about the risk of financial instability (World Bank, 2014). Indeed, both in terms and respective to household income, the concerns raised regarding the sustainability of household debt must exist and the implications for the financial system stability if it is not sustainable. The rapid increase of household debt has created a problem for the household and government industries.

According to Rahman & Masih (2014), revealed the relationship between household debt and GDP, interest rates and prices of housing were examined. Thus, household debt and independent factors have a significant long - term relationship. Besides that, Endut & Hua (2009) investigated household debt trends, probably contributing the issue, the organization and consequences of policy on monetary and financial stability. This clearly shows that the areas and challenges in macroeconomics are so complicated and interconnected. In fact, the Malaysian Ministry of Finance (2017), monitors household debt worries that the level has fallen from (89.1%) in 2016 to (88.4%) in 2017. According to The Financial Stability Review (RBA) (2018), the household debt sector grew by (RM billion) in 2014 was 960.1b whilst, in 2017 was 1,139.9b. In other words, a key factor of financial strength in the country will be evidence that household debt grows up.

Moreover, Mokhtar & Ismail (2013) introduced maqasid Al - Shariah, which can solve financial imbalances is a priority in stabilizing an economy before excessive GDP growth targets are taken into account. The researcher proves that Islamic financial management industry has a great emphasis on the aspect of the growth and maintenance of the property. Another study on Malaysia is Zakaria, et al., (2012), identify the issues of the principle of household debt and finance according to the Islamic economic perspective and finding are the principle of debt and finance according to Islam for households and financial institutions.

2.3   Concept of Macroeconomic

According to Shahimi, et al., (2012), the macroeconomics study group focuses on several aspects, such as the study of economics from a general perspective, focusing on the overall performance of the economy and the links between the different sectors of the economy. As usual, In other words, macroeconomics is a study of collections of individuals and companies and how their market interaction assesses the overall economic performance. According to Debelle (2004), the macroeconomic impact of greater debt is mainly attributable to the distribution of debt across the household sector and to the economic shocks. Meanwhile, the researcher said that the increase in household debt was closely related to macroeconomic effects.

As we can see, the deepening and rising debt will lead to an improvement economic well- being and without debt, economic growth will not be possible and macroeconomic growth would be greater than desirable. According to Cecchetti, et al., (2011), stated that debt is either trivial or intractable for a macroeconomist who works to build a theoretical structure for understanding the economy as a whole. All borrowers ' liabilities always match the assets of all lenders exactly. Researched is done by Mongale, et al., (2014) stated that both long and short-term relationships between household debt with seven factors between the years 1985 and 2012 should be examined. Such as house price index, consumer price index, real income, real gross domestic product, real prime rate, real household consumption expenditures, and real savings.

However, more studies need to be carried out in other to investigate the impact of selected macroeconomic factors was evaluated through a multivariate panel regression analysis that resolves the linear relationship between savings and disposable income, gross domestic product, unemployment, and inflation. Hence, the findings are only inflation rate and unemployment rate have a strong positive impact on the volume of household savings in the vise grad four countries (Buleca, et al., 2017).

However, Kim (2011) investigated the effect of household debt on overall US performance using vector error correction models (VECM) in order to study the long -