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**PERSONAL INSOLVENCY AND MACROECONOMIC FACTOR:  
AN EMPIRICAL INVESTIGATION IN MALAYSIA**

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## ABSTRACT

Rising household insolvency can unfavourably influence economic monetary development as it prevents people from participating productively or contributing to the economy of a country. Statistics from the Malaysian Department of Insolvency (MDI), 2018 and reports from Malaysia's Credit Counselling and Debt Management Agency (AKPK), 2019 highlight the number of bankrupt individuals and borrowers under the Debt Management Program (DMP) registered with AKPK are increasing from year to year. Hence, the aim of this research is to investigate the determinants of personal insolvency in Malaysia which focusses on several macroeconomic factors and impaired financing for Islamic and conventional banks that affect personal insolvency in Malaysia. The macroeconomic determinants selected are represented by Industrial Production Index (IPI), House Price Index (HPI), Unemployment (UEMP), and Interest (INT). Meanwhile, secured financing for both Islamic and conventional banking is represented by housing and vehicle. Unsecured financing is measured by personal loan and credit card financing. Finally, this study also seeks to capture impaired financing (previously known as non-performing loan (NPL) as a measurement for quality of loans. By assessing the long run and short run cointegration relationship between personal insolvency and the selected macroeconomic variables, this study employs the Auto-Regressive Distributed Lag (ARDL) Model. By employing Bounds testing approach and Vector Autoregression (VAR) model for quarterly data covering the period from 2007Q1 to 2016Q4, this study documents evidence that there are long and short run dynamics from endogenous independent variables such as macroeconomics, secured and unsecured financing as well as impaired financing to personal insolvency in Malaysia. The result of this study further suggest that HPI has a positive significant impact on Personal Insolvency during the period of analysis. As there is a positive significant relationship between HPI and personal insolvency in the long run horizon, it implies that the government can consider policy ramifications to curb excessive increase in house price and should take an initiative to control the property price in order to mitigate any bubble in asset price that may benefit to the borrowers. Changes in house price have a direct effect on household wealth, present and future income which affects the consumption decision over the life cycle as well as stability of the financial system in Malaysia. Therefore banking industry should being aware of the determinants of personal insolvency in Malaysia and thus help the Banks to develop and introduce the innovative products. In this regard, the existence of AKPK should continue to strategies better awareness programmes to equip the public financial literacy and contributes to a sound and robust financial system by creating a financial savvy in order to help individual borrowers managing their finances.

**Keywords:** Personal insolvency, Macroeconomics, Secured financing, Unsecured financing, Impaired financing, Islamic banking, ARDL, VAR.

## ABSTRAK

Ketakmampuan bayar oleh isi rumah yang semakin meningkat boleh mempengaruhi perkembangan ekonomi monetari secara yang tidak menggalakkan. Hal sebegini berlaku kerana perkembangan tersebut menghalang orang ramai daripada mengambil bahagian atau menyumbang secara produktif kepada kegiatan ekonomi sesebuah negara. Statistik Jabatan Insolvensi Malaysia (Malaysian Insolvency Department, MDI) 2018 dan laporan Agensi Kaunseling dan Pengurusan Kredit (AKPK) Malaysia 2019 menunjukkan bilangan individu dan peminjam muflis yang berdaftar dengan AKPK untuk mengikuti Program Pengurusan Kredit (DMP) bertambah dari setahun ke setahun. Sehubungan dengan itu, kajian ini bertujuan untuk menyiasat penentu ketidakmampuan bayar peribadi di Malaysia dengan menumpukan pada beberapa faktor makroekonomi dan pembiayaan terjejas yang dicatatkan oleh bank-bank Islam dan konvensional yang menyebabkan ketidakmampuan bayar peribadi di Malaysia. Penentu makroekonomi terpilih terdiri daripada indeks pengeluaran perindustrian (IPI), indeks harga rumah (HPI), pengangguran (UEMP) dan kadar faedah (INT). Sementara itu, penanda aras bagi Pembiayaan Terjamin perbankan Islam dan konvensional ialah pembiayaan perumahan dan kenderaan. Pembiayaan tanpa jaminan diukur oleh pinjaman peribadi dan pembiayaan kad kredit. Akhirnya, kajian ini juga berusaha untuk mengambil kira pembiayaan terjejas (dahulunya dikenali sebagai Pinjaman Tidak Berbayar (NPL) sebagai ukuran kualiti pinjaman. Bagi membuat penilaian terhadap hubungan gabungan bersama (co-integration) jangka panjang dan pendek antara ketidakmampuan bayar peribadi dengan pemboleh ubah makroekonomi terpilih, kajian ini menggunakan model *Auto-Regressive Distributed Lag* (ARDL). Dengan menggunakan kaedah *Bounds Testing* dan model *Vector Autoregression* (VAR) terhadap data suku tahunan bagi tempoh Suku Pertama 2007 hingga Suku Keempat 2016, kajian ini mengumpul bukti wujudnya dinamik jangka panjang dan pendek daripada pemboleh ubah bebas luaran seperti makroekonomi, pembiayaan terjamin dan pembiayaan tanpa jaminan serta pembiayaan terjejas kepada ketidakmampuan bayar peribadi di Malaysia. Dapatan kajian ini seterusnya menunjukkan HPI mempunyai impak positif yang signifikan ke atas Ketakmampuan Bayar Peribadi dalam tempoh analisis ini. Memandangkan terdapat hubungan positif yang ketara antara HPI dengan ketidakmampuan bayar peribadi dalam tempoh jangka panjang, pemerhatian ini menyarankan kerajaan perlu mempertimbangkan implikasi dasar bagi membendung kenaikan harga rumah yang berlebihan lantas perlu mengambil inisiatif untuk mengawal harga harta tanah. Langkah ini bertujuan mengurangkan pembentukan kenaikan harga aset yang seterusnya boleh memberi manfaat kepada peminjam. Perubahan harga rumah memberikan kesan langsung ke atas kekayaan isi rumah, pendapatan sekarang dan akan datang yang seterusnya boleh mempengaruhi keputusan berbelanja sepanjang kitaran kehidupan dan juga kestabilan sistem kewangan di Malaysia. Oleh yang demikian, industri perbankan seharusnya peka terhadap penentu ketidakmampuan bayar peribadi di negara ini dan seterusnya membantu bank-bank membangunkan dan memperkenalkan produk-produk yang inovatif. Sehubungan dengan itu, kewujudan AKPK adalah perlu untuk terus strategik dalam menyediakan program kesedaran kewangan yang lebih baik bagi meningkatkan celik kewangan di kalangan orang ramai dan terus menyumbang kepada sistem kewangan yang kukuh dan cergas dengan menyediakan program bijak kewangan yang menarik dalam membantu peminjam mengurus kewangan mereka.

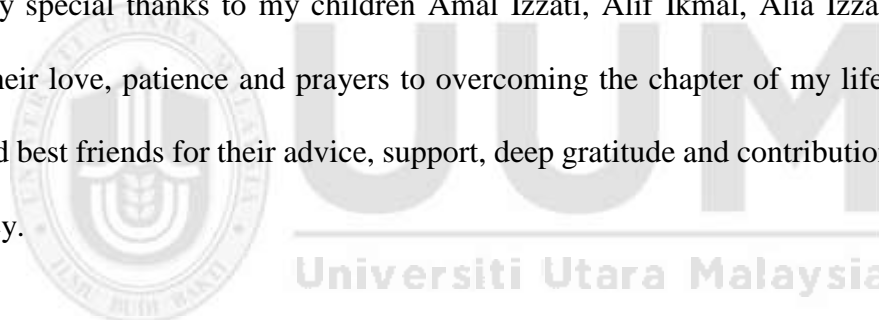
**Kata kunci:** Ketakmampuan bayar peribadi, makroekonomi, pembiayaan terjamin, pembiayaan tanpa jaminan, pembiayaan terjejas, perbankan Islam, ARDL, VAR peribadi, makroekonomi, pembiayaan bercagar dan tidak bercagar, ARDL, VAR.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of Study

With the rise in the cost of living and also the implementation of Sales and Service Tax (SST) which took effect on 1 September 2018, the current spending habit of Malaysians especially among young executives is expected to be heading towards a financial downward spiral where this situation is getting worse very quickly.

Report from the Malaysian Department of Insolvency (MDI, 2018) stated a staggering total number of 101,601 bankrupt borrowers from 2012 to December 2018. This can be shown in Figure 1.1. People aged between 35 to 44 has recorded the highest number of bankrupt individuals every year with 34,606 people, equivalent to 34.4 percent of all bankrupt individuals.

Age Group	Year					Total	percent
	2013	2014	2015	2016	2017		
Below 25	208	635	122	91	80	1,136	1.13
25-34	5,212	4,822	4,648	5,183	4,785	24,650	24.5
35-44	7,616	7,641	6,507	6,601	6,241	34,606	34.4
45-54	5,973	6,223	4,744	4,967	4,628	26,535	26.37
Above 55	2,818	2,867	2,299	2,536	2,354	12,874	12.8
No information	160	163	137	210	139	809	0.8
Total	21,987	22,351	18,457	19,588	18,227	100,610	100

Figure 1.1

*Total Bankruptcy by Age*

Source: Malaysia Department of Insolvency

Among the significant factors leading to bankrupt borrowers is due to personal financing. Default incidents in personal financing warrant continued vigilance as there is a sharp increase since 2010. The growth of personal financing is more to residential properties and motor

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