

Financial Knowledge, Debt Literacy and Over-Indebtedness

Nur Hafidzah Idris*

Faculty of Business Management, UiTM Malaysia

Melissa Faisal Wee

Faculty of Business Management, UiTM Malaysia

Shafinar Ismail

Faculty of Business Management, UiTM Malaysia

Khairunnisa Abd Samad

Faculty of Business Management, UiTM Malaysia

Abstract

Malaysia is a country that aims to become a high-income status nation by 2020. Though, Malaysia currently is facing with over-indebtedness problems, an increasing trend in consumer loan demand, high household debt-GDP ratio, and also with a high number of bankruptcies. With regards to these issues, therefore this study is conducted to investigate the causes of over-indebtedness, specifically among the young generations. This study applied a face to face survey and interviewing eight young workers in one of the public universities in Malacca, Malaysia. The results indicate that low in financial knowledge and debt illiteracy are not the causes of over-indebtedness for the sampling frame. An individual with a good financial knowledge and debt literate, also associate with a high debt and over-indebtedness. Moreover, home and car loan are the dominant contributors for individual over-indebtedness, due to the perception that home and car are the needs in today's life. These findings had brought a new dimension in exploring on the causes of over-indebtedness, where research on over-indebtedness should not only focus on the linking of financial literacy (financial knowledge and debt literacy) with consumer debt, but then should consider other contributing factors that give effect to individual over-indebtedness. It is hoped that this study may perhaps give benefits to regulatory bodies in formulating policies related to consumer debt in realizing the government's intention to become a high-income status nation by the year 2020.

Keywords: Consumer credit; Debt literacy; Financial knowledge; Financial literacy; Over-indebtedness; Young generation.



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1. Introduction

Asians' household debt is rising continuously in recent years, mainly in Thailand and Malaysia. This scenario might lead to several complications in achieving nations dream to become a high-income status in 2020. According to Standard and Poor (S&P), Malaysia has the highest personal debt among 14 Asian countries, with the rate jumping to 88 per cent of gross domestic product from around 60 per cent in 2008. As recorded, 68 individuals have declared bankruptcy per-day, and most of them are 40 years old and below. A report from the Khazanah Research Institute states that Malaysians have a high monthly debt commitment, as households' earnings less than RM 3,000 have borrowings up to seven times of their annual income. An individual who has a debt problem will affect his psychological and behavioral health (Gathergood, 2012), and will lead to the unhealthy economic development and indirectly contribute to social problems in a country.

Debt is a norm behavior and has been practiced by our society since ages ago, and it involves almost everybody in the country. Debt can be defined as a sum of money that someone owes or the situation of owing money especially when ones cannot pay. According to Chawla and Uppal (2012) household debt includes "mortgage debt on all residences and real estate, and consumer debt; which including debt outstanding on credit cards, personal and home equity lines of credit, secured and unsecured loans from banks and other institutions, and unpaid

bills". Managing debt in daily life becomes an important task since it would affect an individual's financial planning. Moreover, the over-use of credit and poor money management skills can lead individuals to face an over-indebtedness problem.

In this challenging environment, where easy access to credit due to excessive supply from financial institutions and the advancement in digital technology, influencing consumer consumption spending behavior, and it gives effect to the higher propensity to indebtedness and this situation will lead to over-indebtedness if it is unmanageable and uncontrollable. The problem is, currently most of the borrowers do not aware that they are in a condition of over-indebtedness (Idris *et al.*, 2016).

Presently, there is no consensus in the literature on the definition of over-indebtedness and how to measure it (Betti *et al.*, 2007; D'Alessio and Iezzi, 2013; Fatoki, 2015; Liv, 2013; Marron, 2012; Schicks, 2014). The growing

knowledge of over-indebtedness mention four general criteria of over-indebtedness, which are: (i) making higher repayments relative to income; also known as high debt ratio (ii) being in arrears in bills or loan repayments, (iii) finding debt as a burden, and (iv) bankruptcy.

Over-indebtedness becomes a critical issue in today’s environment. Moreover, it is proven that high debt or over-indebtedness will affect to negative outcomes, such as effect on mental health, psychology as well as depression (Berger *et al.*, 2016; French and McKillop, 2016) and even some of the over-indebted consumers will have to sacrifice their food intake (basic needs) in order to meet their debt obligation (Goode, 2012; Schicks, 2013). However, despite of its crucial, over-indebtedness remains highly under researched, especially from the context of consumer protection(Marron, 2012; Schicks, 2014).

By looking at current Malaysia’s scenario, Malaysians are currently facing a situation of over-indebtedness. With a high household debt, a high number of non-performing loans and high bankruptcy cases from year to year (see Figure 1, Figure 2, and Table 1). It is becoming a nation’s major concern when the majority of the over-indebtedness are young people aged between 25 to 40 years. Some questions we ponder from this scenario; what are the causes of this scenario to happen? Is lack of financial knowledge and debt illiterate become a cause of over-indebtedness among young generations? Are younger workers or youth has limited knowledge? What are the reasons for this young generation being trapped in over-indebtedness problem? With the questions in mind, therefore this study attempts to find an answer for these questions and aims to achieve the following objectives; (i) to investigate whether low in financial knowledge and debt illiterate become a cause of over-indebtedness, and (ii) to find out the factors influencing over-indebtedness among youth workers in Malaysia. We hope that the results of this study can give benefits to the body of knowledge, as well as to the practical contributions in in solving over-indebtedness problem.

Figure-1. Non – Performing Loan

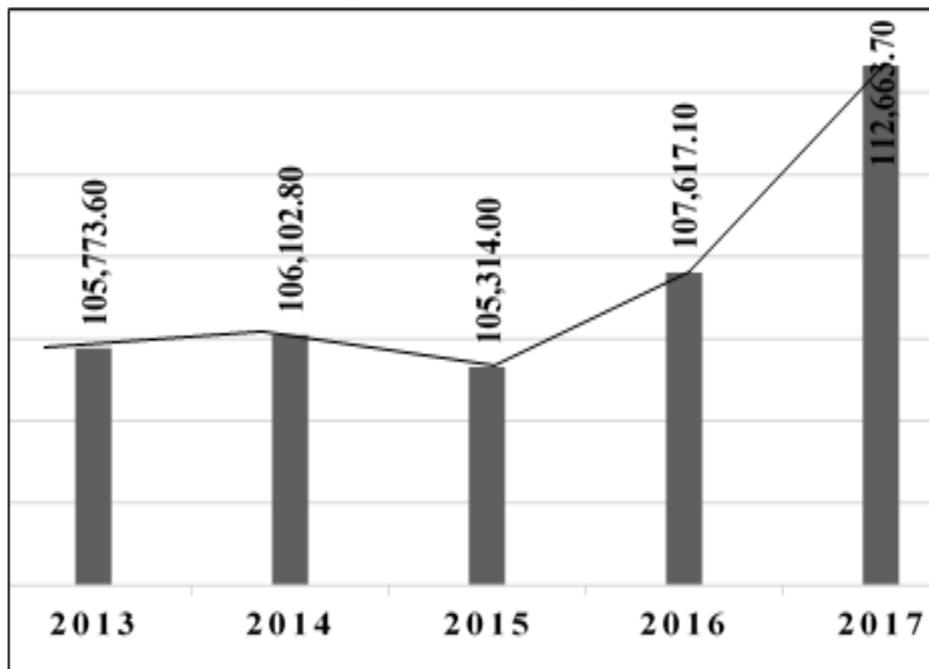


Figure-2. Household debt-to-GDP Ratio

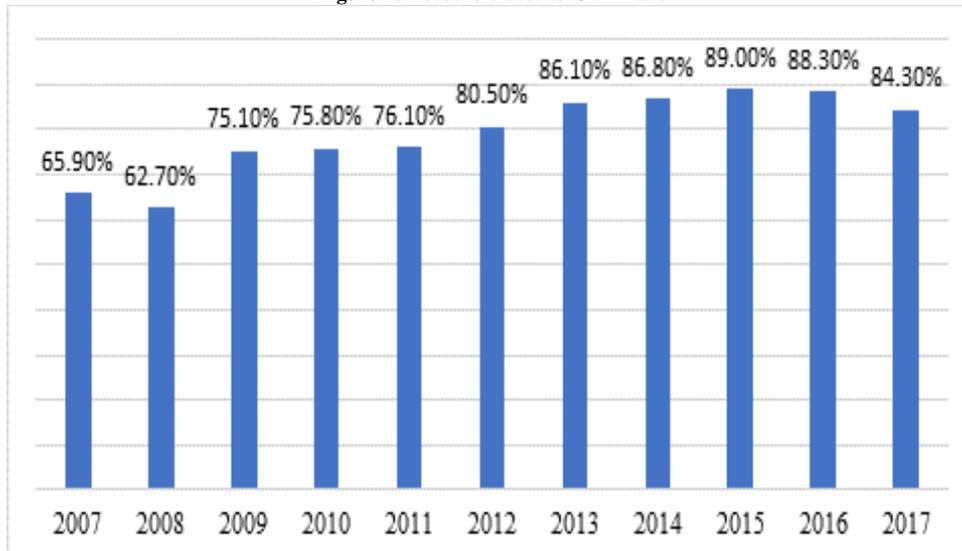


Table-1. Bankruptcies

Number of Bankruptcies	
2007	13,238
2008	13,907
2009	16,228
2010	18,119
2011	19,167
2012	19,575
2013	21,987
2014	22,351
2015	18,457
2016	19,588

Source: Bank Negara Malaysia

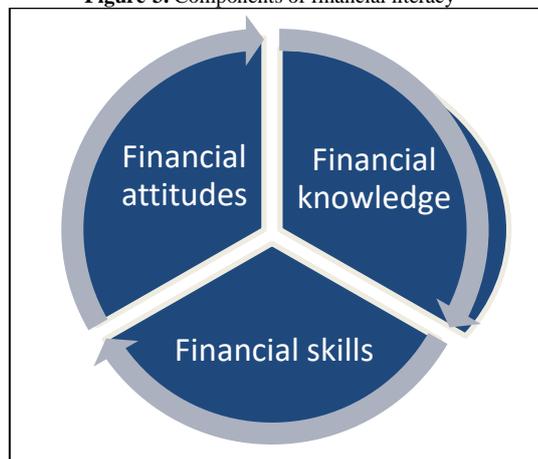
2. Literature Review

2.1. Financial Literacy, Financial Knowledge, Debt Literacy and Over-Indebtedness

Lusardi and Tufano (2009) define debt literacy as a component of financial literacy and refer to the ability to make simple decisions regarding debt contracts and to apply basic mathematical knowledge about interest compounding to everyday financial choices. Bartley (2011) reports that the benefits of being debt literate may include lower fees and charges on credit cards, higher net worth, access to planned savings for emergencies and retirement, and a lower debt-to-income ratio overall. Debt literacy may be defined as the ability to correctly assess debt contracts and compound interest when making financial decisions about loans, credit cards, interest rates, and fees (Loke V. and Hageman, 2013).

Financial literacy is a basic survival skill in facing with today's financial complex. Among the key components of financial literacy are numeracy and money management skills (Lusardi and Mitchell, 2008; Lusardi and Tufano, 2009). Financial literacy is the ability to understand how money works; how someone manages to earn or make it, how that person manages it, how individual invests it (turn it into more) and how that person donates it to help others. More specifically, it refers to the set of skills and knowledge that allows an individual to make informed and effective decisions with all of their financial resources (refer to Figure 3).

Figure-3. Components of financial literacy



According to Kim (2001), financial literacy is a basic knowledge that people need to survive in this modern society. This shows that being financial illiterate can lead to a wrong financial decision such as poor borrowing habit that may cause financial problems, and result in lower financial well-being. Furthermore, a study by Lusardi and Tufano (2009), reveals a great relationship between levels of financial literacy and debt, whereby the less knowledge one has about financial literacy, the higher possibility one involves in over-indebtedness. Financial literacy assesses an individual's level of understanding of the basic concepts of finance, and the individual's capability and confidence to manage his or her personal finances (Remund, 2010). Financial literacy may affect retirement planning, stock market participation, and portfolio choice (French and McKillop, 2016; Van Rooij *et al.*, 2011).

Financial knowledge and debt burden had been well discussed in previous studies. Nkundabanyanga *et al.* (2014) mention that individuals who are not educated or with limited knowledge will not be able to make effective financial choices and this will limit their credit accessibility. Oseifuah (2010) believes that financial literacy is an important component of sound financial decision making and can have important implications for financial behavior.

For example, people with low-financial literacy are more likely to have problems with debt (Lusardi and Mitchell, 2008). Hutson (2010) states that an individual is financially literate if he or she is competent and is able to apply knowledge in personal finance. Norvilitis *et al.* (2006) state that, financial knowledge is one of the strongest predictors of financial behavior among university students.

Sabri *et al.* (2008) also agree with this result. A study on Malaysian college students revealed that financial knowledge is a strong predictor of financial behavior and a preventive factor for financial problems. Moreover, it is proven that debt literacy may associate with a low debt level (Disney and Gathergood, 2011; Lusardi and Tufano, 2015) individuals with poorer levels of debt literacy underestimate the cost of consumer credit repayments and are more likely to use high-cost credit and more likely to over-borrow (and so are more likely to fall into arrears on their debt). To sum up, it is well discussed that low in financial knowledge and debt illiterate can contribute to the high debt, and hence towards over-indebtedness. Thus, the study tries to investigate whether the result could be applied in the youth workers.

3. Methodology and Findings

The permanent income hypothesis by Friedman (1957) argues that a person's consumption at a point in time is determined not only by their current income, but also by their expected income in future years or their permanent income. The life cycle permanent income hypothesis (LC-PI) by Ando and Modigliani (1963) contends that savings and consumption reflect the life cycle stage of the household to consume greater is young people. A younger group will spend more in contrast with an older group due to the conditions of to continue their life survival, where they have a large burden such as children's expenses, buying homes for family and having a vehicle for the necessity. Whereas, for the older generation, most of the requirements (child's education, home and car loan) are already available, as they had already purchased and have everything during young age. These reasons might be a contributing factor for a high bankruptcy case in Malaysia. Refers to the statistic issued by the Malaysian Department of Insolvency (MDI), most of the bankruptcy cases for the year 2008 to 2017 comes from the younger group, age from 25 to 40 years old. This phenomenon is in line with what been discussing in LC-PI theory.

3.1. Financial Knowledge and Debt Literacy Questions

As defined in the 1997 National Youth Development Policy, youth ranges between the ages of 15 – 40. In addition, the Malaysia Department of Insolvency (MDI) reported for the year 2008 to 2017, most of the bankruptcy cases are Malay, ageing from 40 years old and below. With respect with this testament, therefore our respondents in this study are Malay youth workers age 30 to 37. As our first the objective is to identify whether low in financial knowledge and debt illiteracy becomes a cause of over-indebtedness, we had adopted a financial knowledge scale and debt literacy quiz from Lusardi and Tufano (2009). These two questions are widely used in the literature as well as in OECD in measuring individual financial knowledge and debt literacy. This is a subjective measurement of individual financial knowledge, and we consider a respondent has a financial knowledge if he/she rate him/herself at four and above. The questions for financial knowledge are as follows:

“On a scale of 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?”

Meanwhile, a debt literacy's questions cover on three components, which are interest compounding, simple interest and the time value of money. A debt literate respondent refers to

those who can answer at least two questions correctly, while those who only able to answer 1 question correctly (or less than one), will be grouped as debt illiterate. The questions are as follows:

- Interest compound: Suppose you owe RM1, 000 on your credit card and the interest rate you are charged is 20% per year compounded annually. If you did not pay anything off, at this interest rate, how many years would it take for the amount you owe to double? (i) 2 years; (ii) Less than 5 years; (iii) 5 to 10 years; (iv) More than 10 years; (v) Do not know. (vi) Prefer not to answer

- Simple interest: You owe RM3, 000 on your credit card. You pay a minimum payment of RM30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges? (i) Less than 5 years; (ii) Between 5 and 10 years; (iii) Between 10 and 15 years; (iv) Never, you will continue to be in debt; (v) Do not know; (vi) Prefer not to answer

- Time value of money: You purchase an appliance which costs RM1, 000. To pay for this appliance, you are given the following two options: a) Pay 12 monthly instalments of \$100 each; b) Borrow at a 20% annual interest rate and payback RM1, 200 a year from now. Which is the more advantageous offer? (i) Option (a); (ii) Option (b); (iii) They are the same; (iv) Do not know; (v) Prefer not to answer.

Meanwhile, in measuring the individual over-indebtedness, we adapt work done by Loke J. (2015) and adjusting the measurement of the over-indebted borrower based on the objective measurement of over-indebtedness from the previous literature, which is based on the debt service ratio.

A respondent will be classified as an over-indebted if he/she has a total debt ratio of 50% and more. 50% debt ratio means, 50% of the monthly income will go to total debt payment. For example, with a RM5000 income, individuals who has 50% should allocate and pay RM2500 from his income to pay for a debt. The remaining RM2500 will be used for other expenses, such as paying bills, children's education and other expenses. The calculation of debt ratio includes all monthly debt payments (secured and unsecured loan). We exclude any investment link loan, such as Amanah Saham Bumiputera (ASB) in the calculation of debt ratio. The measurements for individual debt status are as follows:

- Low debt: if respondent uses less than 20% of income for

- debt repayments
- Moderate debt (MD): if respondents use between 11%-30% of income for debt repayments
- High debt (HD): if respondent uses more than 31% - 49% of income for debt repayments
- Over-indebted (OID): if respondent uses more than 50% of income for debt repayments

3.2. Data Collection Method

The data were collected from a face to face interview with the respondents. The purpose of using this method in this study was to obtain an in-depth information related to personal financial matters such as income, monthly loan payment, reason/s of having the loan, and any financial difficulties that the respondents may face. The interview meetings were prearranged between the researcher and the interviewees through personal contact. The interviewees were provided with overviews concerning the purpose of the interview. Furthermore, interviewees were reminded of the scheduled meeting via phone calls. An introduction concerning the topic was given to the interviewers prior to the interview. We asked the respondents on what they understand with “financial management” and how do they practice

it on their daily life. The purpose of asking the questions as a warm-up session and to get them acquainted with the following questions. Moreover, we do provide a calculator for our respondents in order to help them in answering the debt literacy questions. After receiving all of the financial information from the respondent, (income and total monthly loan payment), we calculated and explain to them on their debt status, whether they are in a situation of high debt or over-indebtedness.

We offered twenty-four young workers to participate in this study, however, only ten respondents willing to participate in this study. The main reason was that they were very private about their personal financial status, and do not willing to share on their financial matters. Our data collection stopped at the eighth interviewee after we had identified the same patterns of answers from all the interviewees, assuming that the subsequent two respondents would give the same answers as the eight interviewees. The other two respondents were called to cancel the appointment to interview them. The cancellation process was done in a polite and gentle manner. The interview session lasted

Approximately 30 to 45 minutes. The profile of interviewees and details related to the interviews is shown in Table 2.

Table-2. Respondents’ profile

Respondent	Gender	Age	Marital Status	Duration (minutes)
1	Male	37	Married	30
2	Male	30	Married	38
3	Female	33	Married	35
4	Female	33	Married	30
5	Male	35	Single	30
6	Male	33	Single	40
7	Female	32	Single	45
8	Female	32	Single	30

Table-3. Interview Result

Research Objective	Items	Respondents							
		1	2	3	4	5	6	7	8
1 st Objective	Financial Knowledge Score	6	5	5	6	6	5	6	
	Debt Literate	x	x	x	x	x	x	x	
	Debt Status	OID	x	x	x	x	x	x	
		HD						x	
2 nd Objective	Debt Portfolio	Home	x	x	x	x	x	x	x
		Car	x	x	x	x	x	x	x
		Personal		x	x	x	x		
		Education		x				x	x
		Credit card	x		x		x		x

3.3. Findings

Previous studies indicate a strong relationship between financial knowledge, debt literacy and lower individual debt burden, where the higher knowledge and higher individual debt literacy, the lower debt burdens a person might have [Loke V. and Hageman \(2013\)](#). However, our results showed the contradictory direction. From [Table 3](#), it is shown that all the respondents had rated themselves have a good financial knowledge (with a score of 5 and 6), and all of them able to answer the debt literacy questions correctly. Nevertheless, most of our respondents (six out of eight) are faced with an over-indebted, and two respondents are having high debt.

As for our second objective, from the interview result, we had identified that home and car loan are the common debt portfolio possess by all of the respondents, and the highest loan payment for their monthly commitment is a home loan. Noticing that the loan payment for a home loan is the most contributor for having a high debt status (high and over-indebtedness), we did ask our respondents on their decision of buying a home, rather than renting. Most of the respondents explain they are preferring a home loan rather to rent a home, due to the perception of “ownership value”. The statements by the interviewees are as follow:

“Even though rental is cheaper than buying a home, but I’m willing to pay extra on home loan, because it’s satisfied me. I have to pay almost RM 1000 per month for a rental fee, and I just top-up another RM500 for having this home, and later this home belongs to me”

“I know I’m paying much for my home loan. But if do not buy a home now, the housing price will increase. So, it is better for me to buy a home now”

..... “I prefer buying rather than rent... This is my home”

While, for car loans, the average respondent agreed that the motorcar is a necessity item in today’s environment. Further, we’ve got to ask about the selection of car purchase, either they had made a financial planning and budgeting before making a decision to buy a car or not? The answer is, they bought the car based on the car’s brand, its durability, and comfortability of the user. As for personal loan, three out of four of the respondents involved in personal debt, for the reason of helping family members rather than for personal use. The reasons include helping spouse from being bankrupted and paying for parent’s medical bills. As a consequence of over-indebtedness, one of the respondents claimed that she had to cut off her saving and life insurance, in order to meet with her high debt obligation, even though she was well aware saving and insurance are two crucial things in life.

4. Conclusion and Discussion

This study was set out to explore whether low in financial knowledge and debt illiterate becomes a cause of individual over-indebtedness. An in-depth interview had been conducted with eight young workers in one of the public universities in Malacca, Malaysia. Even though previous studies had proved that financial knowledge and debt literacy can prevent individuals from having a financial problem and hence over-indebtedness, however, we had a contended result, where in this study it shows that individual with a good financial knowledge and having a debt literate also prone to be over-indebted. From the result, we had identified that a home loan become a most contributing factor of individual high debt and over-indebtedness. Most of the monthly total loan payment is for paying a home loan. The result and is in line with a study done by [Loke Y. J. \(2014\)](#), where the researcher found those with home ownership will increase the like hood of having moderate and high levels of debt burden. Besides, most of the respondents are not practicing the money management skills in buying decision, and hence it contributes to the over-indebtedness problem. Even though all of the respondents claim to have a good financial knowledge and have a debt literate, but they are not applying the concept of interest compounded (as been asked in the debt literacy questions) in their loan decision. These actions, as what’s been discussed in Mental Accounting Theory ([Thaler, 1985](#)), where it is said that individual financial decision making is not based on the time value of money or interest rates.

Moreover, from this study, we had found a reason on why young workers being trapped with a high debt burden. From the interviews, we can conclude that most of the respondents do not apply a concept of financial management, or money management skills in their financial decision making. Even though they able to identify a basic principle of financial literacy (based on the debt literacy questions), however, without practicing financial management, or having a low in money management skills will become a cause of the individual being trapped in over-indebtedness.

This result will give to a new dimension of determinants of individual over-indebtedness in the future. Future research should consider other determinant factors of over-indebtedness, such as the behavioral or economic factors, rather than focusing on the financial literacy or debt literacy in predicting and determining over-indebtedness.

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