Financial Literacy Among Malaysian: Level of Financial Knowledge Score

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Abstract
This study aims to provide empirical evidence on the current level of financial knowledge score among households in Malaysia. A survey approach was employed to gather research data. The survey was carried out between February to May 2017 in several states in Peninsular Malaysia. The selection of respondents was based on random sampling technique with a total of 451 respondents. Data collected was descriptively analysed. The study finds that overall less than 50% of the respondents achieved high score of financial knowledge. The study also observes that female respondents have much lower level of financial knowledge than male respondents. The study concludes that the current level of financial knowledge among Malaysian is still low to moderate with less than half of the respondents achieved high score. Hence, it is crucial for the relevant and responsible Malaysian authorities and agencies to formulate and implement appropriate strategies in improving Malaysian financial literacy.

Keywords: Financial literacy; Knowledge score; Survey; Malaysia.

1. Introduction
Interested groups, including policymakers, are concerned that consumers lack a working knowledge of financial concepts and do not have the tools they need to make decisions most advantageous to their economic well-being (Braunstein and Welch, 2002). It has been argued that the most concerning issues regarding the low levels of financial literacy among consumers is the possible negative effects for economic behavior (Hogarth et al., 2005) including lack of saving (Lusardi and Mitchell, 2007). Furthermore, recent trends show that employees and retirees have to take on greater responsibility and be more independent for their retirement and other savings. As a result, consumers are experiencing an array of complex and though financial decisions and a variety of financial products (Lusardi and Mitchell, 2007). Meanwhile, in the context of Malaysia, statistics issued by Malaysian Insolvency Department (MDL) show that number of individual person declared bankrupt is keep increasing from year to year. These bankruptcy cases have been argued as, to some extent, reflect poor money management skills amongst Malaysian (Anwar, 2011).

This situation suggests that it is becoming very crucial for everyone to acquire at least essential financial knowledge and skills. However, in reality, there is widespread financial illiteracy whereby a significant portion of the general public lack of even the most basic financial concepts needed to make informed saving and investment decisions. This highlights a role for relevant parties such as government, employers, and non-governmental agencies to improve financial literacy in the population (Lusardi and Mitchell, 2007).

Insights on the current level of financial literacy amongst Malaysian is therefore crucial to be determined as this insights may be useful in assisting the relevant and responsible Malaysia authorities and agencies to formulate and implement appropriate strategies in equipping Malaysian with relevant financial knowledge and skills. Hence, this study focuses on providing empirical evidence on the current level of financial literacy amongst Malaysian.

2. Financial Literacy
Financial literacy has been defined as “sufficient knowledge about facts on personal finance and is the key to personal financial management” (Garman and Forgue, 1997 as cited in Idris et al. (2013)). It is argued that an individual is financially literate if he or she is competent and is able to apply this knowledge Huston (2010) that is acquired through practical experience and active integration of knowledge (Moore, 2003 as cited in (Idris et al., 2013).
As the main goal of investor education is to change ‘norms’ of saving and investing of ordinary people Fanto (1998), Oehler and Werner (2008) argue that this mechanism perhaps is the overall solution to enhance financial literacy. As concern about financial literacy has increased, so too have the number and variety of financial literacy training programs and program providers—some offering comprehensive information on savings, credit, and similar topics for a broad audience and others tailored to a specific group, such as youth or military personnel, or focused on a specific goal, such as home ownership or savings (Braunstein and Welch, 2002).

On the other hand, as the global economic world is booming, the word literacy also underwent some growth in which it becomes closely related to the skill and permanent way to use in a social arrangement (Starcek et al., 2013). It includes the process of receiving, understanding, creating and using texts for the uses of daily life. Based upon aforementioned studies and various definitions of financial literacy, the researchers summarized that financial literacy is an ability of someone to understand key financial concepts and possesses the ability to manage personal finances.

Lusardi and Tufano (2009), analyzed the concept of debt literacy and the consideration of taking debt among individuals. Debt literacy was measured by testing the knowledge of fundamental concepts related to debt and financial education among a sample of Americans. Overall, Lusardi and Tufano (2009) found that there was a significant relationship between debt literacy and both financial experiences and debt loads. Specifically, individuals with lower levels of debt literacy tend to transact in high-cost manners, incurring higher fees and using high cost of borrowing. Meanwhile, a multiple countries studies conducted by Atkinson and Messy (2012) found that the financial literacy level in some of the sample countries including Malaysia is higher in term of behavior rather than knowledge that is exceptionally low. They also observed that women have much lower level of financial knowledge than men (Atkinson and Messy, 2012).

A number of prior studies had also been carried out on the issue of financial literacy in Malaysia. These studies focus on the level of financial literacy or impacts of financial literacy for example on financial planning, saving, or financial distress (Atkinson and Messy, 2012; Mahdzan and Tabiani, 2013; Md Nawi et al., 2017). Md Nawi et al. (2017), observed a low level of financial literacy of school teachers in term of personal finance, savings, loans, insurance and investments. However, they found that the school teachers indicate a good personal financial behaviour. Meanwhile, Idris et al. (2013) found that the levels of respondents’ financial distress and financial literacy were moderate. They believe that employers’ investment in reducing the employees’ financial distress by way of enhancing their financial literacy would increase the employees’ productivity as previous studies indicate that financial distress was one of the factors leading to reduced productivity at the workplace.

On the other hand, Mahdzan and Tabiani (2013) found that the level of financial literacy had a significant, positive impact on individual saving. Meanwhile, the findings of Boon et al. (2011) suggest that in contrast to their non-financially literate counterparts, the readiness of the financially literate individuals is reflected in their involvement in the multiple aspects of personal financial planning. Whilst prior studies in Malaysian context had documented, for example, an association between financial knowledge and financial behaviour, little empirical studies (except, for example, (Md Nawi et al., 2017) have been carried out to assess the current level of financial literacy amongst Malaysian. However, very little prior studies in Malaysian context including Md Nawi et al. (2017) were conducted at national level as had been undertaken by this study.

3. Methods

This study employed a survey method in gathering the research data. The survey was carried out between February to May 2017 in several states in Peninsular Malaysia representing northern, southern, middle and east area. The selection of respondents was based on random sampling technique. The respondents consist of households aged 16 years old and above. To ensure a high response rate, the distribution the questionnaire was carried out by numerators which involved a face-to-face session with the respondents. In total there were 451 respondents participated in the survey.

The instrument of the survey, a questionnaire, was adapted from OECD (2015) and Atkinson and Messy (2012) survey instrument. The relevant questions and sections of the questionnaire were amended for the purpose of the study. In addition, additional or new questions were added to address the research questions of the study. The questionnaire developed for the study consists of both structured and unstructured questions. Prior to the actual survey, a pilot study involving 30 respondents was conducted. The questionnaire was also reviewed by an expert of survey approach. Feedback, insights and results from both of the pilot study as well as from the expert were used to improve the questionnaire for the actual fieldwork. The final instrument consists of 47 questions in six sections including section on financial planning, financial knowledge, financial behaviour, and debt management. Data collected was analysed using descriptive analysis.

4. Results and Discussion

4.1. Demographic Profile

Table 1 presents the demography of the respondents. More than 60% of the respondents are from urban area. Out of 451 respondent, 56.8% of them are female while 43.2 % are male. Majority of them are Malay/Bumiputera (75.2%) while the rest are Chinese (13.1%), Indian (10%) and others (1.8%). Almost 50% of the respondents are 36 year old and above. More than 30% of them are working either in public or private sector. In term of education level, majority of the respondents received formal education at least at primary school, with the highest percentage of them...
have SPM/SPMV/MCE and Equivalent (37.6%) academic background followed by those who are university graduated (26.2%).

| Demography | Variable                    | Percentage |
|------------|-----------------------------|------------|
| Strata     | Urban                       | 64.3       |
|            | Rural                       | 35.7       |
| Gender     | Male                        | 43.2       |
|            | Female                      | 56.8       |
| Ethnicity  | Malay/Bumiputera            | 75.2       |
|            | Chinese                     | 13.1       |
|            | Indian                      | 10.0       |
|            | Others                      | 1.8        |
| Age        | 16 – 20 year old            | 4.3        |
|            | 21 – 35 year old            | 46.5       |
|            | 36 year old and above       | 49.2       |
| Type of Job| Employer                    | 4.1        |
|            | Public Sector               | 31.0       |
|            | Private Sector              | 30.5       |
|            | Self-employed               | 13.5       |
|            | Unpaid Family-employed      | 0.2        |
|            | Unemployed                  | 3.4        |
|            | Students                    | 5.7        |
|            | Retiree                     | 5.7        |
|            | Others                      | 5.7        |
| Education Level | No formal education | 1.1 |
|            | Primary school/UPSR         | 3.2        |
|            | PMR/SPR/LCE & Equivalent    | 5.5        |
|            | SPM/SPMV/MCE & Equivalent   | 37.6       |
|            | STPM/STAM/DIPLOMA & Equivalent | 20.0 |
|            | Certificate of vocational/technical | 4.3 |
|            | University Graduated        | 26.2       |
|            | Others                      | 2.1        |

4.2. Knowledge Score

The knowledge score is determined based on the score over the financial knowledge questions. There are eight (8) financial knowledge questions that were asked in the questionnaire. These questions are on division, time value of money, interest on loan, calculation on interest plus principle, compound interest rate, risk and return, definition of inflation, and diversification. As can be seen from Table 2 more than 80% of the respondents provided correct response to division and definition of inflation questions. Meanwhile, less than 50% respondents provided correct response to question about time value of money and compound interest rate.

| Question                   | Percentage |
|----------------------------|------------|
| Division                   | 86.0%      |
| Time-value of money        | 49.0%      |
| Interest paid on loan      | 70.1%      |
| Calculation of interest plus principle | 54.4% |
| Compound interest rate     | 35.7%      |
| Risk and return            | 79.6%      |
| Definition of Inflation    | 84.6%      |
| Diversification            | 69.5%      |

As can be seen from Table 3 there are three ranks of knowledge score that are low, medium, and high score. These scores were computed based on the score over eight financial knowledge questions asked in the questionnaire. Respondents with six or more correct response will be categorized as high score, while those with 4 to 5 correct response will be categorized as medium score. Low score is when the respondents scored between 1 to 3 correct responses. As shown in Table 3, overall, there are 49.4% of respondents achieved high score, 30.4% achieved medium score, and 20.2% achieved low score. The result of the high score category, is slightly lower that the result documented by Atkinson and Messy (2012) that is 51%. This may indicate that the level of financial literacy in terms of financial knowledge among Malaysian is arguably low (Atkinson and Messy, 2012) to moderate (Md Nawi et al., 2017).
Table 3 presents the knowledge score by ethnicity. There are more than 50% Chinese respondents and respondents from other ethnicity who scored 6 or more correct responses (high score category). Meanwhile, Malay/Bumiputera and Indian respondents closely followed their Chinese fellow as 49.3% and 42.2% of them achieved high score. For the medium score, more than 30% Malay and Indian respondents attained this category as they scored 4 to 5 correct responses. The lowest percentage for the low score category is Malay/Bumiputera with 19.8% of the respondents score between 1 to 3 correct responses.

The result of knowledge score by strata (i.e. urban and rural area) is presented in Table 6 with more than 50% of those from urban area achieved high score compared to those from rural area (46%). In contrast, for the low score category, the percentage of those from urban area is higher than those from rural area.

Finally, the result of knowledge score by age is shown in Table 7. Age group with the highest percentage of the high score is the 36 year-old and above group (54.1%), followed by those aged between 21 to 35 year-old (47.1%) and those aged between 16 to 20 year old (31.6%). For the medium score category, the group with the youngest respondents has the highest percentage (47.4%). The same result is observed for the low score category as the highest percentage is those aged between 16 to 20 year old, while those aged between 36 year-old and above have the lowest percentage (19.3%).

5. Conclusion

The findings of the study indicates that the current level of financial knowledge among Malaysian is low to moderate as less than half of the respondents achieved high score. However, more comprehensive and robust analysis may be needed to assess the current level of financial literacy among Malaysian. Nevertheless, the findings of this study, to some extent, indicate the importance of action or initiate by the relevant and responsible Malaysian authorities and agencies including (Sawandi, 2016), for example, the Central Bank of Malaysia, to formulate and implement appropriate strategies in improving Malaysian financial literacy. Equipping Malaysian with relevant, adequate financial knowledge and understanding has serious implications for saving, retirement planning, retirement, mortgage, and other financial-related decisions of them both for short and long term. Meanwhile, mainly due to financial and time constraints, there are a few limitations of this study including the coverage of the survey which only covered peninsular Malaysia as well as the relatively small number of respondents involved. Future studies
therefore may be undertaken to cover both Sabah and Sarawak states and involve a higher number of respondents to get a better although not a complete insights of the level of financial literacy of Malaysian.

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