Financial Literacy:
An Exploratory Review of the Literature and Future Research

Mohamad Azmi Abdullah\textsuperscript{a,*,} , Rosita Chong\textsuperscript{b}

\textsuperscript{a}University Malaysia Sabah, W.P Labuan, 87000, Malaysia
\textsuperscript{b}University Malaysia Sabah, W.P Labuan, 87000, Malaysia

Abstract
There are voluminous literatures written on financial literacy or financial knowledge. Since there is a renewed interest in Islamic finance, this article provides an account of reviews on current financial literacy studies in particular studies with respect to Islamic financial products. It was several years ago when the Governor of Central Bank of Malaysia pointed out that in order to make Islamic financial products acceptable to a wider spectrum of investors and businesspeople alike, financial literacy on Islamic financial products need to be enhanced. This is in order to facilitate transactions, with a clear understanding and appreciation of the unique characteristics and features of Islamic finance and its real economic value. Nevertheless, Kayed (2008) in his paper posed a pertinent question enquiring if there are any attempts by the research community to assess levels of Islamic financial literacy in various Muslim communities. In addition, another question was put forth by Ahmad (2010) on the importance of Islamic financial literacy. These two questions have actually motivated the current study to review available literatures on financial literacy main focus on the Islamic financial literacy. The objectives of this study are to determine if there are sufficient studies available on financial literacy with respect to Islamic financial products and services, as well as to examine if there are sufficient studies on the differences in the factors that affect financial literacy of people. The implications and recommendations are then put forward for future research.

Keywords: Financial Literacy; Financial Knowledge; Knowledge on Islamic Financial Products

\textsuperscript{*} Corresponding author. Tel.: 013-6848721; fax: 087-467498.
E-mail address: azmi4386@ums.edu.my/azmi4386@gmail.com
1. Introduction

The recent financial crisis has shifted the attention of the world towards the importance of financial literacy to not only ordinary man but to the sophisticated investor in particular. The crisis has revealed the severity of the consequences that people have made through their lack of knowledge especially when it comes to making decision on investment in the financial markets. The global financial crisis has also accelerated awareness of the need to improve financial literacy among the population (Wolfe-Hayes, 2010). Meanwhile Huston (2010) believed that the financially literate could do the most to boost financial literacy by becoming more informed on the economic issues and more important by demanding that the elected officials to demonstrate a degree of economic literacy. She further exerted that financial mistakes can impact not only individual welfare but create negative externalities that affect all economic participants as well. Hence, financial literacy will enable businessespeople to function efficiently at work because they are able to evaluate the information needed to make decisions that have financial consequences (Brown et al. 2006). If more businessespeople are financial savvy, then we can rest assured that financial blunders such as the subprime crisis could be avoided.

The current global financial crisis that started off in the year 2007 as a subprime crisis has the root of problem in the housing price bubbles and the provision of overextended consumers with access to credit. While financially literate consumers would have been more cautious in taking on credit that they could not afford, the financial illiterate ones may not know what danger they gotten themselves into. These skills of making sound financial decision are as important for consumers in developed-country financial markets as those in developing country financial markets. Financial literacy is an active process, in which communicating information is only the beginning and empowering consumers to take action to improve their financial well-being is the ultimate goal. Financial literacy is critical for promoting access to finance by creating incentives and environments that promote desired financial behaviours such as saving, budgeting, or using credit wisely (Miller et.al. 2009).

Financial literacy is also the combination of consumers’ or investors’ understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (Miller et al., 2009). They further explained the number of reasons why financial literacy is especially important today. First, financial products and services are increasingly complex and accessible from a growing number and type of providers. Second, at the same time as the increase in number and complexity of the financial products and services, individuals are also being asked to take more responsibility for important financial decisions, such as investing for their retirement. Finally, large numbers of consumers are entering financial markets for the first time, both because income is growing in developing countries and because new financial institutions, such as microfinance providers, and new technologies, such as branchless banking, which have made it easier for consumers to participate in financial markets.

The financial crisis has also led to the renewed focus of the world to Islamic Finance. The Islamic financial industry has been bombarded with various different types of financial instruments and assets for not only Muslim investor but also the non-Muslim investors to choose from. Are these Islamic financial instruments and assets an ethical alternative to the conventional financial instruments? If they are, then these Islamic financial instruments and assets can be attractive alternatives for portfolios diversification. This is because, different types of instruments in the portfolio will allow the potential risks faced by investors to spread out in their portfolio of investment. Hence, an understanding of the features and
differences between these instruments and assets are pertinent in order for investors irrespective of whether they are Muslims or Non Muslims to manage their portfolio. With respect to making these Islamic financial products acceptable to a wider spectrum of investors and businesspeople alike, the Governor of Central Bank of Malaysia several years ago has pointed that enhanced financial literacy on Islamic financial products will facilitate transactions, with a clear understanding and appreciation of the unique characteristics and features of Islamic Finance and its real economic value. Yet two years later, Kayed (2008) in his paper enquired if there are any attempts by the research community to assess levels of Islamic financial literacy in various Muslim communities? In addition, two years later, Ahmad (2010) questioned why Islamic financial literacy is important. These two queries have indicated that during those times, there was relatively very little study specifically focusing on the Islamic financial literacy.

According to Ernst & Young, Islamic banking assets are to grow to $1.8 trillion in 2013 and beyond $2 trillion by 2014. The industry in the GCC constitutes about 28.7 per cent of assets at $445 billion as of 2012 and registered a growth of 14 per cent over 2011. It has been noted by Western authority like Senator Bick Sherry that Islamic finance presented new commercial opportunities and could thereby increase to social inclusion among a wider spectrum of Muslim investors and businesspeople. It definitely would enable Muslims access to products consistent with their beliefs while also widening the choice for non-Muslim. The growth of Islamic finance has been phenomenal over the past three decades. In order for Islamic Finance to be accepted by people, Muslim and Non-Muslim alike, people have to be well educated and well versed in it. Then only will they be able to make a wise decision. Financial literacy is especially important among the people as it will have an influence in their later life and future well being.

The objectives of this study are twofold; (i) to identify if there are sufficient studies available on financial literacy with respect to Islamic financial products and services, and (ii) to put forth recommendation for future research.

2. Literature Review: Areas of Emphasis

The terms financial literacy, financial knowledge and financial education often are used interchangeably in the literature and popular media. Few scholars have attempted to define or differentiate these terms (M. van Rooij et al., 2011; Remund, 2010; Huston, 2010; Servon & Kaestner, 2008; Johnson & Sherraden, 2007; Worthington, 2006; Huang et al., 2008).

2.1 Definition

There are voluminous literatures written on financial literacy (Houston, 2010; Remund, 2010; Walstad et al., 2010; Lasuardi et al., 2010; Lusardi, 2008). Nevertheless, studies on financial literacy have not come up with a consensus definition of financial literacy. Even though Remund (2010) has reviewed the research studies on financial literacy ever since 2000, nonetheless he found that no one has come up with one definition of financial literacy that is agreed upon by majority of the researchers (Huston, 2010; Remund, 2010). However, Remund was able to pin point that many conceptual definitions of financial literacy fall into five categories: (i) knowledge of financial concepts, (ii) ability to communicate about financial concepts, (iii) aptitude in managing personal finances, (iv) skill in making appropriate financial decisions and (v) confidence in planning effectively for future financial needs. He came up with a synthesised definition which draws upon the key concepts that were identified in the various studies on financial literacy. According to him, financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances
through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions.

Meanwhile Huston (2010) refers financial literacy to the measurement of how well an individual can understand and use personal finance-related information. However, Huston in her study in 2009, conceptualised financial literacy into two dimensions, understanding (personal finance knowledge) and use (personal finance application). Financial literacy hence, refers to a person’s ability to understand and make use of financial concepts (Servon & Kaestner 2008). However, Worthington (2006) defined financial literacy in term of the mathematical ability and the understanding of financial terms. Alternatively, Lois Vitt and colleagues (2000) define financial literacy as the ability to read, analyze, manage, and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy (Johnson & Sherraden, 2007; van Rooij et al., 2011). Further Huang et al. (2008) also viewed something of similar in which they defined financial literacy as the ability of an individual to make informed judgments and to take effective decisions regarding the use and management of money. On the other hand, the term financial literacy as defined by OECD is the combination of consumers’ or investors’ understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.

Hence, we could summed up that financial literacy related most to financial concept and information, and how one is able to understand those concepts and apply them in the real world when one is making decision on various choices of financial activities such as saving and investment.

### 2.2 Factors Affecting Financial Literacy

There are numerous studies undertaken in order to analyse the factors that affect the financial literacy of an individual. A study by Lusardi et al. (2010) examined financial literacy among the young using a longitudinal data found that financial literacy among the young is not only low but it was also strongly related to socio-demographic characters and family financial sophistication. Meanwhile the findings of the study by Ford and Kent (2010) showed that female college students were more intimidated by, and less interested in, markets compared to their male counterparts. It is also found that women possessed lower levels of financial market awareness as compared to men. This finding is further supported by Worthington (2006). In his study, he found that financial literacy was at the highest for persons aged 50 and 60 years, professionals, business and farm owners, and university/college graduates. Additionally, he also found that literacy was at the lowest for the unemployed, females and those from non-English speaking background with low level of education.

### 2.3 Assessment of Financial Literacy

In term of the assessment of financial literacy, Hill and Perdue (2008) examined the methodology issue in the measurement of financial literacy. While Huston (2010) undertaken a study on a broad range of financial literacy measures that were used in research over the last decades, whereby she provided an overview of the meaning and measurement of financial literacy presented and assists researchers in establishing standardised, commonly accepted financial literacy instruments.
At the same time, Lusardi and Mitchell (2006) devised three questions to measure the basic concepts relating to financial literacy, for example basic concepts related to the working of interest rates, the effects of inflation, and the concept of risk diversification. The questions on the working of interest rates and effects of inflation concepts are aimed to evaluate whether respondents display knowledge of fundamental economic concepts and competence with basic financial numeracy. Question on the concept of stock risk evaluates respondents’ knowledge of risk diversification which forms a crucial element of any informed investment decision. There is little consistency in the questions used to assess financial literacy other than those questions written by Lusardi and Mitchell which have been repeatedly used by other researchers. These questions test consumers’ knowledge about inflation, compound interest, diversification, as well as stock and bond ownership. The questions that have appeared in multiple tests of financial literacy were either adopted exactly as the original or adapted with some modification. They pointed out that in term of the measurement of financial literacy, there are inconsistencies as to whether the measurement should assess a more comprehensive financial knowledge or just focus on a specific financial knowledge.

2.4 Financial Knowledge

According to Huston (2010), financial knowledge is an integral dimension of, but not equivalent to, financial literacy. Financial knowledge is the stock of knowledge acquired through education and/or experience specifically related to essential personal finance concepts and products. Hence, an Islamic financial knowledge would be the stock of knowledge that one acquire specifically related to Islamic finance concepts and products.

2.4.1 Conventional Aspect

In term of providing financial knowledge, Walstad et al. (2010) found that the effectiveness of financial literacy education has been mixed. However, their study offers additional evidence that well-defined and properly implemented financial education programs in high school can increase students’ financial knowledge.

Financial literacy has also important implication on wealth planning and management of individuals. According to Lusardi (2008), financial literacy affects financial decision-making of which ignorance of the basic financial concepts can be linked to lack of retirement planning, lack of participation in stock market and poor borrowing behaviour. This will not only prevent individuals from accumulating wealth but also may witness the diminishing in their wealth due to wrong financial decisions.

Financial skills and competence which are based on financial knowledge and understanding actually are influenced by attitudes towards the use of money, such as spending and saving. In fact, financial skills and competence are know-how that are shown in the practices and habits formed in everyday and long-term financial management (Pellinen et al., 2011).
2.4.2 Islamic Aspect

Most studies on Islamic finance (Ahmad & Haron, 2002; Abdul Hamid & Mohd. Bordin, 2001; Nasser et al., 1999; Metawa & Almossawi, 1998; Gerard & Cunningham, 1997; Haron et al., 1994) was undertaken on bank selection criteria. Few studies have been undertaken people knowledge of Islamic financial products such as Bley & Kuehn, 2004; Hamid & Nordin, 2001).

Meanwhile, Abdul Hamid & Mohd. Bordin (2001) stated that a study conducted in Malaysia in 1994, regarding knowledge on Islamic banking showed that almost 100 percent of the Muslim population was aware of the existence of the Islamic bank. However, out of these, only 27.3 percent completely understood the differences between Islamic bank and conventional banks; and only 38.7 percent patronize the Islamic bank strictly because of religion.

Bley and Kuehn (2004) in their study investigates the relationship between university student knowledge of relevant financial concepts and terms in conventional and Islamic banking, the impact of religion and language, and other individual variables on preferences for financial services. Findings of the study suggest that knowledge of conventional banking terms and concepts was higher among these students than was Islamic banking terminology. Review of the literature suggests that people had little knowledge on Islamic financial product. Several studies have been undertaken on knowledge on conventional financial products. The review of the literature thus suggests that very little work has been done to link knowledge of Islamic financial product to access and choice of financial products. Few studies have been undertaken on Islamic banking products and no such study has been undertaken on the financial literacy on these products.

3. Emerging Issues and Future Research Directions

There is greater homogeny among researchers on the use of responses to financial knowledge questions in order to create a single measure of financial literacy. Generally, the measure is the total number of questions answered correctly (Worthington, 2004; Servon and Kaestner, 2008) but others researchers have asked a limited number of questions and analysed the responses to each question separately (Lusardi and Mitchell, 2008; Lusardi and Tufano, 2009). Some researchers also suggested weighting knowledge data to account for the relative relevance and difficulty of the questions (Nicolini, 2013).

Hence future research should focus on measuring the financial literacy related to Islamic finance concepts and products. Maybe some specific instruments would be designed to assess the Islamic financial literacy.
4. Implications of Financial Literacy Research

Financial literacy is defined here as the ability to make effective decisions regarding the use and management of money and other assets. Beal and Delpachitra (2003) attributed the overuse of credit cards to the point where debts cannot be met, using personal loans for consumption, undertaking overly-optimistic home-loan obligations, foolish commitment to get-rich-quick schemes, making unwise high-risk investments inconsistent with required capital stability, and entering inappropriate vehicle-leasing contracts to poor financial literacy. According to Fogarty and MacCarthy (2006), the consequences of such behaviours are potentially devastating from both a societal and an individual point of view.

5. Conclusion

Much of the current works have been on the literacy on conventional financial knowledge. Since there is a renewed interest in Islamic finance, more studies should be undertaken in order to determine the level of literacy of people on Islamic financial concepts and products. Researchers should also look into the designing instruments to measure the level of Islamic financial literacy.

References


OECD. Improving Financial Literacy: Analysis of Issues and Policies Organisation For Economic Co-Operation And Development OECD 2005


