



Measuring Islamic Financial Literacy

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In the progress of Islamic finance that is increasing rapidly, until the present there is no measuring instrument that can be used to assess a person's level of financial literacy from perspective of Islamic financial products or services. It is different from conventional financial literacy measurements that have several measuring instruments and continue to experience improvements. The need for the measurement tools of Islamic finance is a major issue because the conventional measurement of financial literacy, which currently still using the conventional financial knowledge is not appropriate when it is used to measure Islamic financial literacy. The absence of a measuring tool of Islamic financial literacy is an important issue because of financial literacy proved to be a positive influence on decisions and financial behavior. Thus, the existence of a measuring tool of Islamic financial literacy is important because it can be used to measure a person's level of financial literacy on Islamic financial products or services. On that basis, this paper is written as a conceptual framework to grow and increase the level of financial literacy on Islamic perspective. As is the case with conventional financial literacy index, the results to be obtained are the Islamic financial literacy index would be useful to determine the level of literacy of the Islamic financial products or services.

Keywords: Islamic Financial Literacy, Shariate Financial Literacy, Financial Literacy, Financial Literacy Measurement.

1. INTRODUCTION

Financial crisis and various problems related to inability to manage important financial resources make indicate the urgency of financial literacy mastery. In some countries, financial literacy has even been launched into national programs in order that people become financially literate. In turn, it will increase the prosperity and welfare. According to Cole et al.¹ financial literacy programs can be used to solve various economic diseases related to the financial crisis.

Some positive sides of the people with high level of financial literacy are the ability to manage their finance resources, make financial decisions based on information, and minimize the likelihood of making financial mistakes,² to invest in stock market,³ and to avoid and to solve financial problems which in turn will be beneficial to live in prosperous, healthy, and happy condition.⁴ Conversely, the people that have low level of financial literacy will have less saving,⁵ have no pension plan for the old age period,⁶ tend to owe to high interest rates,⁷ and have a bit of a diversified portfolio.⁸ According to Jappelli,⁹ economic literacy is not important to households only but it is important to economy, too. Jappelli classified the advantage of economic literacy into three points of views; assets, debt, and macro economy. From asset perspective, economic literacy becomes important to the presence of increasingly complex financial products; while, low level of financial literacy can lead to non optimal

risk diversification, inefficiency in portfolio allocation, and less amount of savings. In terms of debt, market mortgages, credit card ownership, and increasing consumer credit may increase financial risk. From macroeconomic perspective, economic literacy may contribute to market and policy; while, low financial literacy can increase financial fraud practices and unfair competition in financial markets which finally can be barrier of effective financial intermediary. For the household with high level of financial literacy, it will be able to make better financial policies.

Some surveys to measure the level of financial literacy by using a set of questions about the level of compound interest rates, inflation, and risk diversification from Lusardi and Mitchell¹⁰ has been done in some high-income, upper-middle-income, and lower-middle-income countries and the conclusion suggested that there is still low level of financial literacy in high-income countries and very low level in upper-middle-income countries and lower-middle-income countries.¹¹ Several studies of financial literacy among students,¹² fishermen,¹³ households¹⁴ and immigrants¹⁵ have been conducted and the results indicate the low level of financial literacy.

Such condition indicates that more efforts must be done to improve the level of financial literacy. One of them, according to Xu and Zia,¹¹ is the development of better methods to measure the level of financial literacy. Marcolin and Abraham¹⁶ suggest the importance of doing research in financial literacy specifically in the measurement itself. Until the present, existing researches have not elaborated much about measurements but put

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more emphasize on the relationship between financial literacy and other variables, such as the decision on saving,⁵ retirement plan,¹⁷ insurance protection,¹⁸ investing in stock market,³ et cetera. In other words, there is still less research on financial literacy measurement.

The less amount of research emphasizing on how financial literacy is measured and the absence of a standard measurement of financial literacy as stated by Hung et al.¹⁹ and Huston²⁰ is not only in conventional finance domain but also in Islamic finance. Until the present, in the rapid development of Islamic finance, there has been no tool to measure the level of Islamic financial literacy.²¹ Yet, according to Ahmad,²² Islamic financial literacy is not only important to consumers to identify the more number of Islamic financial products offered to them, but the more important are that understanding of Islamic finance is a religious mandate for the Moslems. Islamic financial products will not grow when the Moslems are not concerned with *riba*, *masyir*, *gharar* and consuming conventional financial products continuously.

The absence of measurement of Islamic finance is important because the conventional measurement of financial literacy is currently still using the conventional financial knowledge so it is imprecise when used to measure the Islamic financial literacy. From several studies on financial literacy as doing by Huston²⁰ and Hung,¹⁹ it can be obtained a description that measurement of financial literacy which exists on some measuring instruments is not in accordance with Islamic principles so it can't be used to measure the level of Islamic financial literacy.

From such background of the condition, the aim of this paper was to develop a method of Islamic financial literacy indexes. The results expected to be obtained are the Islamic financial literacy index that would be useful to determine the level of Islamic financial literacy.

2. LITERATURE REVIEW

2.1. Financial Literacy

In the financial domain knowledge, financial literacy is a relatively new concept, though the history of financial literacy has begun since 1787 when John Adams wrote a letter to Thomas Jefferson about the urgency of financial literacy. Until the present, there are a lot of financial literacy concepts ranging from awareness and financial knowledge, financial skills, and financial capability which in practice these concepts are often overlaps.¹¹

Hung¹⁹ from several studies in financial literacy suggested that the definition of financial literacy is used variously as

- (a) *“a specific form of knowledge,*
- (b) *the ability or skills to apply that knowledge,*
- (c) *perceived knowledge,*
- (d) *good financial behavior, and even*
- (e) *financial experiences.”*

Additionally, Huston²⁰ from some financial literacy studies also suggested that financial literacy which is used are *knowledge*, *ability* and combination of *knowledge-ability*.

Previous research conducted by Huston²⁰ to 72 literacies studies of 52 groups of researchers using four assessments namely construct, content, structure, and rating indicated that only eight studies provided a definition of financial literacy. From 8 studies that provided the definition, the term of definition of financial literacy is still not standard because 2 studies were focused on the ability, 3 studies were focused on knowledge, 2 studies were

focused on the ability and knowledge with additional terms and 1 study was focused on the ability and knowledge without terms. The term of literacy even was used interchangeably with knowledge by most studies. It indicated that as stated by Hung et al.¹⁹ and Huston,²⁰ there was no standard measurement of financial literacy. It is lasting until the present.

2.2. Financial Literacy Measurement

The absence of a standard definition of financial literacy shows that financial literacy measurement also does not have a standard; so that, the standard instruments used to measure the level of financial literacy are also not existing. From several studies on financial literacy, Huston²⁰ showed that financial literacy could be measured using a basic concept, borrowing concept, saving/investment concept and protection concept. Whereas according to Hung et al.¹⁹ it could be measured by savings, investment and debt. This leads to differences in the measurement of financial literacy do not have a standard measure to determine a person's level of financial literacy.

Islamic finance requires a different measurement of financial literacy with literacy measurement used for conventional financial literacy as a component that is used to assess conventional financial literacy does not use knowledge of Islamic finance. For example, one example of the conventional measurement of financial literacy that is widely used is from Lusardi and Mitchell,²³ which classifies the level of financial literacy into two: basic and advanced. Basic financial literacy includes the knowledge of interest rates (interest rate), the inflationary impact (effect of inflation) and the concept of diversification of risk (risk diversification), while Advanced financial literacy includes knowledge about the relationship of risks and benefits; mechanisms bonds, stocks, options and mutual funds; and assessment of the underlying asset. One of the questions is the basic categories: *“Suppose you had \$ 100 in a savings account and the interest rate was*

Table 1. Some definitions of financial literacy.

Definition
“The <i>ability to make simple decisions</i> regarding debt contracts, in particular how one <i>applies basic knowledge</i> about interest compounding, measured in the context of everyday financial choices” ²⁴
“ <i>Knowledge</i> of basic financial concepts, such as the working of interest compounding, the difference between nominal and real values, and the basics of risk diversification” ²⁵
“The <i>ability</i> to evaluate the new and complex financial instruments and <i>make informed</i> judgments in both choice of instruments and extent of use that would be in their own best long-run interests” ²⁶
“Mathematical ability and the <i>understanding</i> of financial terms” ²⁷
“Individuals are considered financially literate if they are competent and can demonstrate they <i>have used knowledge</i> they have learned. Financial literacy cannot be measured directly so proxies must be used. Literacy is obtained through practical experience and active <i>integration of knowledge</i> . As people become more literate they become increasingly more financially sophisticated and it is conjectured that this may also mean that an individual may be more competent” ²⁸
“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” ²⁹

Notes: ^aBold have been added throughout to emphasize key definitional components.

Table II. Islamic financial literacy items of questionnaire.

No	Items of questionnaire
1	<i>Riba</i> (usury) is <i>haram</i> and it is forbidden.
2	Profit taking in personal loan relationship activity is <i>riba</i> and it is forbidden.
3	Exchange process of similar goods with different dose or level is <i>riba</i> .
4	In <i>salam</i> contract, if a seller delivers the goods with higher quality, then he should not ask for additional price.
5	In <i>salam</i> contract, if a seller delivers the goods with lower quality and the buyer would accept it, seller should not ask for discount or rebate.
6	In <i>salam</i> contract, a seller may deliver the goods sooner than the time limit approved previously. But, seller should not ask for additional price.
7	In <i>salam</i> contract if entire or partial number of goods are not available in delivery time or the quality is worse than promised and the buyer would not accept them, then buyer has two options. Buyer may cancel the contract and ask his money to be return or wait for the goods until available.
8	In <i>murabaha</i> contract, a seller must give the buyer information honestly on the cost of purchase and the profit want to get
9	In <i>murabaha</i> contract, if the buyer has been declared to be bankrupt or insolvent and buyer is failed to complete the debt, then the seller should postpone the debt until buyer becomes able to repay or another agreement can be settled.
10	In <i>istishna'</i> contract, if the goods is defective or not in accordance with agreement, then a buyer has the option right to proceed or to cancel the agreement.
11	Contract of <i>istishna'</i> does not require full payment but it can be done through down payment.
12	In <i>ijara</i> contract, there is no ownership right transfer or there is tenure transfer between lessor and lessee
13	In <i>ijara</i> contract, the obligation of goods and service beneficiary is providing the leased goods or services provided, bearing the goods, maintenance cost, and giving guarantees on the possibility of defective goods.
14	In <i>ijara</i> contract, obligations of lessee of goods or services is to pay rent or wages and is responsible for maintaining the integrity of goods as well as use them as the contract and bearing the cheap or immaterial costs of maintenance.
15	In <i>ijara</i> contract, if the goods leased is broken but the damage is not caused by violation of permitted use or it is not caused by the negligence of beneficiary in keeping it, the lessor is not insisted to take responsibility on it.
16	In <i>mudharaba</i> contract, there is no guarantee or certainty that the capital owner (<i>sahib al mal</i>) will always get profit.
17	In <i>mudharaba</i> contract, a capital owner will bear all loses personally (except if the loses are caused by negligence or moral hazard of his partner)
18	In <i>mudharaba</i> contract, if the business managed by <i>mudharib</i> gets profit, then the partner and capital owner will share the profit based on proportion approved before.
19	The profit in contract of <i>mudharaba</i> is the amount gain from capital excess.
20	In <i>musyaraka</i> contract, the capital given must be cash money, gold, silver, or the other valuable goods with same value. If the capital given is the asset with the form of goods, then it must be assessed as cash money and it must be approved by the partner.
21	In <i>musyaraka</i> contract, the profit gained must be shared proportionally.
22	In <i>musyaraka</i> contract, a partner may propose to get the excess percentage of profit when the profit gained is more than certain number. But if the loses is incurred, the loses must be borne proportionally based on respective contribution.

2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow: more than \$ 102, exactly \$ 102, less than \$ 102 ?.” The question is not in accordance with Islamic principles because Islam does not recognize the existence of the interest due interest is usury.

Based on some definitions above, Islamic financial literacy in this paper is defined as “knowledge of Islamic finance which is used in making financial decisions.”

3. MEASUREMENT CONCEPT

To measure Islamic financial literacy, this paper proposed some measurements based on *tijarah* contract. Different from *tabarru'* contract which is done to just help the others, *tijarah* contract is done to gain financial profit under the sanctuary of shari'ate principles.

Some questionnaire items in Table II on *riba*, *salam*, *murabaha*, *istishna'*, *ijarah*, *mudharabah* and *musyaraka* are going to be used as the determinant of financial literacy level. In the table, all items of questionnaire have the right answer. In the practice, the modification of questions can be done with the answer of “true,” “false,” or “do not know.”

To measure the literacy score, summation is done. The score for the answer of “true” is 1 and the score for the answer of “false” or “do not know” is 0. Later, construct validity for obtained score is analyzed by Confirmatory Factor Analysis (CFA) through Weighted Least Square method. Then, final score is going to be calculated to settle literacy category of “high,” “middle,” and “low.”

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