

# Financial Literacy as the Foundation for Individual Financial Behavior

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## Abstract

Research that is dealing with financial literacy turns to be such an important thing to be conducted. It is due to the fact that financial literacy level of Indonesian society is still very low. A good financial literacy is necessary for every individual to manage his/her finances to achieve prosperity. To have a good level of financial literacy, individuals need to have a smart financial behavior to make them have the skills and confidence in using knowledge to be able to identify financial products and services. Changes in behavior can be achieved through a process that starts from early habituation. Therefore, an understanding of financial concept needs to be given as early as possible because financial habits will continue to be carried and built by children to their adulthood.

**Keywords:** Financial Literacy, Financial Behavior

## 1. Introduction

Results of financial literacy survey that was conducted by the Financial Services Authority (FSA) in 2013 showed that financial literacy levels of Indonesian society is still very low which only reaches 21.84%. It means that out of 100 people of Indonesia, only about 21 people who understand the meaning, function and financial management. The survey was conducted in 20 provinces with a total number of respondents of 8,000 people from diverse social background, education and economy.

The diversity of community's needs coupled with varying consumption patterns often lead to uncontrolled spending. Therefore, the financial management can not be created properly. Especially if it is associated with the consumption pattern by using credit card based, consumers often can not control their spending. Bills come at the end of the month become swollen because of the application of the system of compound interest of the creditors. If there is high bill and the ability of consumers to pay decrease, it will cause bad credit.

The upward trend in the ratio of non-performing loans (NPL) in commercial banks contributed a little bit by the credit card business. Although there is no exact data contributed to NPLs as a whole, but the ratio of bad loans on these plastic cards per September 2015 has reached nearly 3 percent. Steve Martha, General Manager of the Indonesian Credit Card Association (AKKI) (Kompas, 2015) acknowledges there is an increase in the credit card NPL this year. However, the increase was still within the limits. Yet, in 2009, the credit card NPL has been above 10 percent. But slowly get better by reaching 2.83 percent in 2014.

The above phenomenon is one of the portraits of low levels of financial literacy which is owned by the community. If people have a good financial literacy, then they will be smarter in managing their finance for their prosperity. Lusardi and Mitchell (2007) define financial literacy with financial knowledge and ability to apply it (knowledge and abilities). Slightly different, the Presidents Advisory Council on Financial Literacy (PACFL 2008) in Hung (2009) defined financial literacy as the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.

According to Lusardi (2007) in research by Krishna (2008) financial literacy can be defined as financial knowledge with the aim of achieving prosperity. It can be understood that preparations should be made to meet the globalization, more specifically in the field of financial globalization issues. Meanwhile, according to Houston (2010) in research Widyawati (2012) stated that financial literacy occurs when an individual has a set of skills and abilities that make the person is able to utilize the existing resources to achieve the expected goals.

Relating to financial behavior, some previous studies (Xiao et.al, 2008; Mandell and Klein, 2009) in Nababan and Sadalia (2012) concluded that the best way to improve behavior in adulthood is a way to teach good behavior since childhood, including financial behavior. Meanwhile, in Indonesia alone, personal finance education is still rare both in elementary school and college level.

Financial behavior related to how people treat, manage, and use the available financial resources. Individuals who have a responsible financial behavior tends to be effective in using money, such as making a budget, save money and control spending, investing, and paying their obligations on time (Nababan and Sadalia, 2012).

To demonstrate financial behavior, the individual should feel that the information is important and relevant to them that allows them to make a difference in the results to be achieved. Individuals can not simply rely on the knowledge and financial resources alone, but they also must have a strong conviction, which comes from an external impetus in managing finances in order to be prosperous one (Ida and Dwinta, 2010).

Financial management according to Adri Putra, Sri Handayani and Ari testifying (2014) considered to be very important, given the current growth in private consumption continues to increase along with the increase in household incomes and economic growth are improving. Welfare into one's goals in work, many argued, the higher the person's income the more prosperous the person will be. It seems that the current outlook is not so relevant anymore. High levels of income without being accompanied with good financial management then it will not bring prosperity to someone.

Managing finances in a better way is not just an obligation for the company or business entity. However, individuals in the household also have a requirement to manage finances well to be prospering in the future. With good and correctly financial management, then the individual in the household will be spared from financial difficulties. By regulating the flow of its finances, the people in the household will be able to maintain a balance between revenue and expenditure required.

As said by Suhartini and Renata (2007) that in households, there is the need for financial management that is aimed for managing cash flow and finance are better organized. Financial management is intended to achieve the level of prosperity in the future. Therefore, financial management is always need of skills and knowledge that is relevant.

The level of financial management, the necessary expertise to manage traffic of money received and spent, ranging from financial planning, organizing, implementing and monitoring as well as how to perform feedback of the planning that has been compiled. In the planning activities involving excavation or determination of the source of revenue that comes from nowhere, the numbers how many, is used for what and when receipts will be accepted. On organizing activities, involves determining how activities can be made to obtain a source of revenue that will not be missed, as well as the rules of procedure. In the implementation of the activities through monitoring and feedback, regarding anyone involved in the financial management to be able to control and supervise the expenditures incurred in order to not deviate from the plan.

Furthermore said by Adri Putra, Sri Handayani and Ari testifying (2014), good financial management can prevent someone from financial distress and financial problems. The level of income is not the only source of problems of financial difficulties. But more likely to errors in the financial management of a large city where the society is more concerned than the fulfillment of wish fulfillment, factors such as power prestige can be something that they need to be considered. Power prestige is not the only cause of the financial difficulties, other factors such as attitudes, subjective norms, behavioral control, intention, behavior and prudence (conscientiousness) into the factors that support a person in managing their finance.

As research conducted by Nababan & Sadalia (2012) to manage financial resources effectively in order to achieve the welfare of one's life, individuals need a basic financial knowledge and skills in finance. Individual needs and increasingly complex financial products that requires an individual to have sufficient financial literacy. Have a mastery of knowledge and skills in finance to encourage individuals to understand and engage national issues in the financial sector such as health care costs, taxes, investment and access to the financial system.

Having a financial literacy is vital to obtain a prosperous life. With proper financial management which must be supported by good financial literacy, the standard of living is expected to increase, this applies to every level of income, however, because the high level of income a person, without the proper financial management, financial security would have been difficult to achieve. Some research suggests that insufficient financial literacy will have a positive influence on the financial behavior of someone (Robb and James III, 2009, in Nababan & Sadalia, 2012).

Meanwhile, the financial education remains being a major challenge in Indonesia. Financial education is a long process that spurred individuals to have a financial plan in the future in order to get welfare according to patterns and lifestyle which they live (Nababan and Sadalia, 2013).

## **2. Financial Literacy**

Financial knowledge has close links with financial literacy or financial education. Financial knowledge can be channeled and can be understood through financial education or financial literacy. According to Mason and Wilson (2000), *a financial literacy is a "meaning - making process" in which individuals use a combination of skills, resources, and contextual knowledge to process information and make-decisions with knowledge of the financials consequences of that decision.* From the definition given above, it can be concluded that financial literacy is an individual decision making that uses a combination of several skills, resources, and contextual knowledge to process information and make decisions based on the financial risk of the decision.

As research conducted by Nababan and Sadalia, (2012) in financial literacy that there are some financial aspects. These aspects are Basic Personal Finance, Money Management, Credit and Debt Management, Saving And Investment and Risk Management. The Basic Personal Finance includes various basic understanding of a person in a financial system such as the calculation of simple interest, compound interest, inflation, opportunity cost, time value, asset liquidity, and others. While the money management studies on how an individual manage his/her personal money. The better the understanding of financial literacy, the better the

individuals manage his/her personal money.

The credit and debt management is a series of activities and components that are interconnected with each other systematically in the process of gathering and presenting information of a bank loan. Debt management is the process of repayment by involving a third party to assist debtor. To further facilitate the set up of debt is better if made debt management plan. The saving is a part of people's income that is not used for the consumption, while part of the savings used for economic activities that benefit is called the investment. And the Risk is something that arises due to an uncertainty.

Financial literacy covers broad areas such as spending and credit, insurance, and savings and investment (Rashid, 2012). Financial literacy is about spending and credit is how one can manage the spending. In that sense, there is the need to be proper spending plan and maintain discipline to make expenditures in accordance with the plans made. It can be such as how to buy something that is actually required or necessary rather than only for fulfilling the desire. It is important to avoid a deficit; due to avoid and prevent the deficit is the core of healthy spending. Meanwhile, credit concerns about how the credit position correctly. The point is to position credit as a tool that is healthy and not as excess cash to meet various desires misleading. The use of credit is actually intended to meet the needs and to their use should be tailored to the financial capabilities.

The next thing is insurance (Rashid, 2012). Insurance needs to be owned because of the growing financial uncertainty at the moment. Insurance is not intended to avoid events that are not desirable because in principle the expected events and are not expected to have the same opportunities. Therefore, the principal purpose of insurance is to guarantee compensation for someone not experienced a greater loss than without insurance ownership.

Besides, other areas of financial literacy is saving and investment (Rashid, 2012). The role of financial literacy gives an understanding that saving is an important part because it would provide security in the short-term consumption. For example, when there is need for urgent, then savings can be a tool to satisfy one's consumption. Related to how to save properly, actually it only requires awareness and discipline in financial management. As for investment, through financial literacy someone will be helped by the knowledge / understanding of the ways that can be done to invest in investment instruments available, such as stocks. Concretely, there is disciplined increase for financial literacy will understand how to determine a smart attitude when making stock trading decisions. Not only that, through financial literacy, has it also provided insight on how to avoid yourself from investment fraud.

Financial literacy is a basic need for everyone to avoid financial problems. Financial difficulties not only a function of mere income (low income), financial difficulties may also arise if an error occurs in the financial management (miss-management) such as the misuse of credit, and lack of financial planning. Financial constraints can cause stress, and low self-esteem (Rashid, 2012).

Furthermore, Rashid (2012) said that financial literacy occurs when an individual is capable (literate) has a set of skills and abilities that make the person is able to utilize existing resources to achieve the goal. Skill (literacy) is an important thing to have for achieving its objectives. Financial literacy is defined as a person's ability to acquire, understand and evaluate information relevant to decision making by understanding the financial consequences thereof (Carolynne LJ Mason and Richard MS Wilson: 2000). The important thing to note here is that financial literacy only makes a person capable of making decisions based on relevant information. Financial literacy does not guarantee that the right decisions can be made. This is because someone does not always make decisions based on rational economic (Wilson & Zhang 1997 in Carolynne LJ Mason and Richard MS Wilson: 2000).

From the above explanation, if the individual has a good financial literacy, then with financial literacy will help individuals to provide a thorough understanding of the rules in managing the financial savvy, and the chances of achieving financial prosperity would be even greater. Or in other words, through financial literacy can be used as a tool for individuals to have a passive income that exceed active income.

### **3. The Concept of Financial Literacy Development**

Financial literacy model has been developed by Lindsey (2011) through research which entitled *A Review of Howard University's Financial Literacy Curriculum*. In this study, Lindsey showed that the financial hardship of individuals and families could affect the financial health of local communities and regional economies are radically. (Kingsley, TG, Smith, R., & Price, 2009 & United Way, 2010) stated that how knowledge of the American people about the management of their personal finances (Mandell, 2009; Lusardi, 2008; Volpe, Chen & Liu, 2006; & Chen & Volpe, 1998). Questions are usually focused on the financial concepts such as how to get a credit report, credit score individual to know and distinguish various types of loans.

Jumpstart study (Mandell, 2008) defined financial literacy as the ability to use the knowledge and skills to manage financial resources effectively to improve welfare in the future. This definition includes the knowledge and ability with the expected results (a lifetime of financial security / welfare).

As stated by Angela A. Hung et al (2009) in Working Paper entitled *Defining and Measuring Financial*

*Literacy stated* that the definition of financial literacy lies largely in the ability to use the knowledge and skills to achieve financial well-being, and therefore the required behavior adequate to the underlying. They argue that the financial knowledge, skills, and behaviors, as well as the interrelationships among others should be considered in the overall concept of financial literacy. As seen in the following picture:

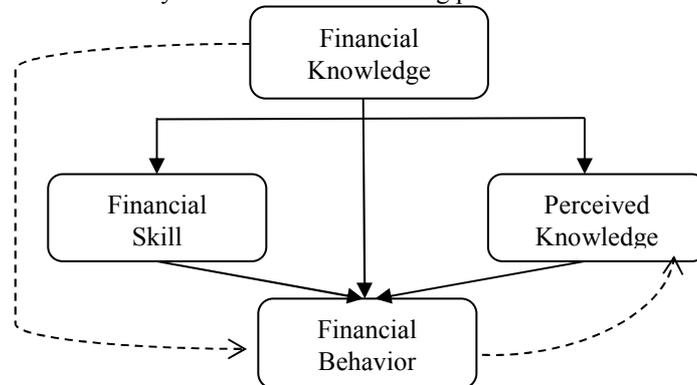


Figure 1. Conceptual Model of Financial Literacy (Angela A. Hung, Andrew M. Parker, Joanne Yoong (2000))

Sandra J. Huston (2009) stated that financial literacy is a measure of how well an individual can understand and use information related to finance. Financial literacy does not only require knowledge dimension, but also requires an additional dimension of the dimension of application that requires a person to have the ability and confidence over its financial knowledge to be used in making financial decisions. Sandra J. Huston (2009) described the concept of financial literacy as shown in the following figure.

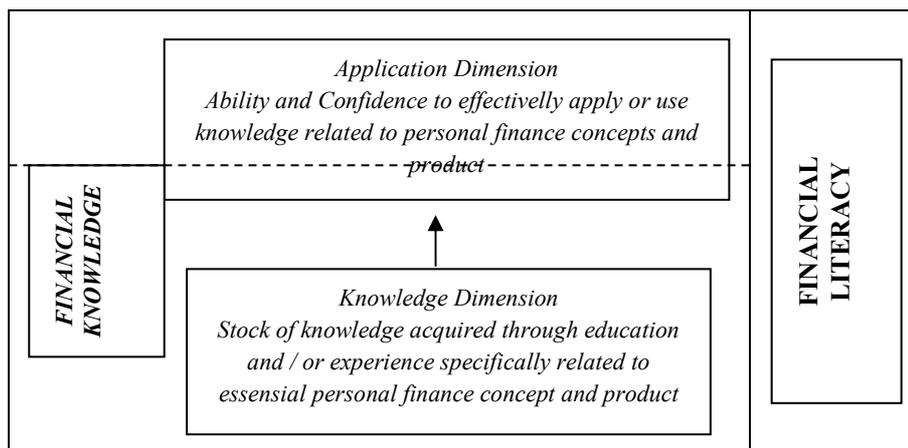


Figure 2. Concept of Financial Literacy (Sandra J. Houston (2010))

#### 4. Financial Behavior

Numerous studies show that financial literacy has a positive correlation with financial behavior (financial behavior). Hilgert, Hogart and Beverly (2003) adds financial behavior and financial literacy into the questionnaire on the National Survey of Consumer Finances. They make Financial Practice Index that is based on the behavior of the four variables: cash flow management, credit management, savings and investment behavior, and then comparing the index with a score of financial literacy and found that people with the level of financial literacy were higher also have a Financial Practice Index is higher which indicates a positive relationship between financial behavior with financial literacy even though the direction of causality is still unclear.

Causality may be different, in the sense that an increase in financial literacy that lead to better or effective financial behavior as well as financial decision making or even vice versa. Financial behavior is related to how people treat, manage, and use financial resources available to him. Individuals who have a responsible financial behavior tends to be effective in its use of money, such as making a budget, save money and control spending, investing, and pay obligations on time (Nababan and Sadalia 2012).

#### 5. The Relationship of Financial Knowledge and Financial Behavior

Research conducted by Nababan and Sadalia (2012) attempted to analyze Personal Financial Literacy and Financial Behavior of undergraduate students at Faculty of Economics. From the research results showed that the

level of Personal Financial Literacy respondents included in the low category.

Financial Literacy relatively high levels are found in the student-sex male with GPA > 3 and lived alone (outhouse). While the characteristics of respondents with relatively low tendency of Financial Literacy happens to female students and living with their parents.

The tendency of respondents to practice behavioral finances does not increase consistently with the concomitant increase in its financial literacy. This is due to the behavior of individuals is not always influenced by their knowledge, but also by other factors, such as psychological factors, emotional and others.

However, generally speaking, the results of his research shows that to manage financial resources effectively in order to achieve the welfare of someone's life, individuals need a basic financial knowledge and skills in finance. Individual needs and increasingly complex financial products that requires an individual to have sufficient financial literacy. Have a mastery of knowledge and skills in finance to encourage individuals to understand and engage national issues in the financial sector such as health care costs, taxes, investment and access to the financial system.

A similar study conducted by Chen and Volpe (1998) conducted a study entitled "An Analysis of Personal Financial Literacy among College Student." The survey was conducted on 924 students from 14 universities in California, Florida, Kentucky, Massachusetts, Ohio, and Pennsylvania. The study aims to look at the picture of personal financial literacy among students, analyzing the relationship characteristics of students with financial literacy, as well as analyze the impact of knowledge on the opinions and decisions of students on financial issues.

Surveys using the 36 multiple-choice questions to measure the level of financial literacy, eight questions to see the opinions and decisions of students on financial issues, as well as eight questions to gather information about the background of the respondents. The dependent variable is financial literacy and independent variable (explanatory) is a program of study, gender, race, nationality, work experience, age and income. The method used is descriptive analysis, logistic regression and ANOVA. The results showed respondents have financial knowledge and can only answer 53% of the questions correctly. Students from non-business courses, women, junior, under 30 years of age, and little work experience associated with personal financial literacy levels are low, and likely to have an opinion and a wrong financial decisions.

Widayati (2012) conducted a study entitled Factors Affecting Students' Financial Literacy for Economics and Business Faculty at University of Brawijaya. The survey was conducted on 220 students majoring in construction economics determined proportionate random sampling. Data was collected using tests and questionnaires. This study seeks to explain: (1) the influence of socio-economic status of parents on education family financial management; (2) the influence of socio-economic status of parents on the cognitive aspects of financial literacy; (3) the influence of socio-economic status of parents on financial literacy aspect of attitude; (4) the effect of family financial management education to the cognitive aspects of financial literacy; (5) the effect of family financial management education on financial literacy aspect of attitude; (6) the effect of learning in higher education on financial literacy of cognitive aspects; (7) the effect of learning in higher education on financial literacy aspect of attitude; (8) the effect of socio-economic status of parents on the cognitive aspects of student financial literacy through education family financial management; (9) effects of socio-economic status of parents on financial literacy aspects of student attitudes through education family financial management.

The results showed that: (1) socio-economic status of parents has a significant positive direct effect on family financial management education; (2) socio-economic status of parents does not directly influence the cognitive aspects of financial literacy; (3) socio-economic status of parents does not directly influence financial literacy aspect of attitude; (4) education family financial management has significant positive direct effect on the cognitive aspects of financial literacy; (5) family financial management education has a significant positive direct effect on the financial literacy aspect of attitude; (6) learning in higher education has a significant positive direct effect on the cognitive aspects of financial literacy; (7) learning in higher education has a significant positive direct effect on the financial literacy of attitude aspect; (8) socio-economic status of parents do not directly significant positive effect on the cognitive aspects of financial literacy mediated by education family financial management; (9) socio-economic status of parents has significantly positive indirect effect on the financial literacy aspect of the attitude that is mediated by a family financial management education.

From some of the above results, it can be concluded that in order to have a proper financial behavior, someone must be based on adequate financial knowledge. Where in financial knowledge is also needed expertise to read and understand the issues related to financial issues, so that individuals can make analysis before making financial decisions to achieve welfare.

## 6. Conclusion

If the individual has a good financial literacy, then he/she will be smarter in managing finances to achieve prosperity. To achieve the individual condition, someone has a good level of literacy (well literate), there is the

need for changes in behavior so that individuals have the skills and confidence in using knowledge to be able to identify financial products and services. Changes in behavior can be achieved through a process that starts from early habituation. Therefore, an understanding of financial concept needs to be given as early as possible because financial habits will continue to be carried and built by children to their adulthood.

In connection with the change in financial behavior for a process of habituation, it is necessary to have financial knowledge as a basis for shaping behavior. To demonstrate financial behavior, the individual should feel that the information is important and relevant to them is information that allows them to make a difference in the results to be achieved. Individuals can not simply rely on the knowledge and financial resources alone, but they also must have a strong conviction, which comes from an external factor in managing finances, to achieve prosperity.

Financial behavior related on how people treat, manage, and use financial resources available to him. Individuals who have a responsibility of their financial behavior tend to be effective in using the money, such as making a budget, saving money and control spending, investing, and pay obligations on time.

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