The Financial Literacy of Students and Investment Decisions in the Indonesia Stock Exchange

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Abstract

This study aims to analyze how the role of student financial literacy is in influencing the investment decision in the Indonesia Stock Exchange. The populations are the students of Economic and Business Faculty in University of Muhammadiyah Sumatera Utara. This is an explanatory research using descriptive analysis and causality test with SPSS tool. The samples of this research are 198 students who had ever got series of subjects related to financial management, investment and capital market. The results have shown that there are differences in the level of financial literacy in students. The results of this study also indicate that the financial literacy of students do not significantly influence their investment decision in the Indonesia Stock Exchange. The high level of financial literacy on the students is not the only factor in investment decision making. There are other factors that also influence the student investment decision making when investing in The Indonesia Stock Exchange.

Keywords: financial literacy, investment decision making, capital market.

Introduction

Financial literacy has become more and more complex and developing in recent years. Official survey has been done in Indonesia by Financial Services Authority (Otoritas Jasa Keuangan / OJK) showing that increment in Indonesian financial literacy index from 21,84 % in 2013 to 29,66 % in 2016. The increment in financial literacy is important for Indonesia that is in development. This increment can drive economy participation and social inclusion so could contribute in development and economy in a country (OJK, 2016).

Nidar and Bestari (2012) explain that national economy will not affected by global economy crisis if the citizens have good knowledge about their national financial system. National financial system consists of information about investment included capital market. Capital market has important role in bringing investor with emitten. Capital market gives access and information which ease investors to choose type of investment depending on risk tolerant and their funds.

Lusardi, Michaud, & Mitchell (2013) said that many today policy debates, financial knowledge is critically important. Financial literacy knowledge has been taught since early stage in developed countries such as America and Europe. Moreover, National Financial Educator Council (NEC), profit organization which specializes in financial
literacy education has curriculum for pre-kindergarten till college and adult (NEC, 2014).

Policy to increase financial literacy has been in Indonesia, especially by Financial Services Authority (OJK) and Indonesia Stock Exchange (Bursa Efek Indonesia / BEI). One of the strategies used is by giving education to society, such as by cooperation with many universities in Indonesia (OJK, 2016). In university, financial literacy has commonly been taught in Economic. Though financial literacy is not only needed by Economic student but also by all students, with any field.

Widayati (2012) in her research found that financial literacy helps student to know, rate and act upon their financial problem. Chen and Volpe (1998) state that financial literacy will affect their financial decision making. Student with low financial literacy will make bad financial decision making more. This finding is supported by the research done by Mitchell & Lusardi (2015) which conclude that financial knowledge can help a person to do better work by allocating his resource. Person’s mistake in taking decision can cause financial problem. This problem can even spread to family and environment.

According to this phenomenon, this research wants to see how financial literacy in university is, especially to the students who take compulsory lesson related to financial literacy. This research will also see whether the rate of financial literacy will affect their decision making in investing in Indonesian capital market.

**Literature Review**

**Financial literacy**

Financial literacy is correlated to a person’s competency in managing money. Mason & Wilson (2000) describes, financial literacy occurs when someone who is well-literate, has a lot of knowledge, skill and capability to utilize the resources they have in order to achieve the goal. This knowledge, skill and capability are used to understand the relevant information to make financial decisions which is a fundamental to financial literacy. Further Mason & Wilson (2000) explained that the important of financial literacy is just helping to make financial decision using the relevant information, but it is not guaranteed the right decision. This is because someone does not always make decisions based on the rationales of economic information only. However, in more recent study, Chinen et al (2012) explains that financial literacy will reflect on someone financial behavioral, how someone acts when faced with financial decisions making. The ability to make decisions about finances and have a healthy financial behavior and be able to determine the priority needs not wants.

M. van Rooij et al (2011) research found that the majority of the respondents have a basic financial knowledge and very few go beyond this basic financial concept. Many respondents are difficult to differ some capital market products and the basics of risk diversification. The research found that financial literacy affects the financial decision making. Those with low literacy are much less likely to invest in stocks. In more specific, Margaretha & Pambudhi (2015) who measured the financial literacy level of student of economic faculty of Trisakti University found that most students have low financial literacy level. This level influenced by some factors.

Financial literacy is a model needed in financial educational world. Making a measuring accurate financial literacy level importance to give clear information related to effective financial learning obstacle and challenge (Houston, 2010). Remund (2010) explained that there are five categories of financial literacy which are knowledge of financial concepts, ability to communicate about financial concept, ability in managing personal finance, skill in financial decision making, and
confidence in planning effectively for future financial needs. Furthermore, Chen and Volpe (1998) mentioned that financial literacy dimension includes general knowledge of finance, savings and loans, insurance, and investments.

**Investment and capital market**
Investment is commitment related to present amount of fund or other resources with aim to get some profit in the future. Capital market facilitates investor to meet the emitten to exchange the securities more than a year. Capital market product not only stocks but also mutual funds, obligation and others (Tandelilin, 2010).

**Hypothesis**
The Hypothesis in this research as follow:
H1. Financial literacy effect on financial decision making
H2. There are differences in financial decision making based on financial literacy.

**Research Method**

**Type of Research**
This research is an explanatory research studies to test hypotheses about how the influences of financial literacy to investment decision making and how the differences of financial decision making based on the level of financial literacy of the respondents.

**Samples**
The samples were chosen using purposive sampling method. The samples of this research are 198 students that ever got series of subjects related to financial management, investment and capital market.

**Variable and Measurement**
Students’ financial literacy in this research is defined as individual’s ability in choosing, rating, and making effective decision making in using and managing finance. This variable is measured by using questionnaire based on the application of personal finance management including (Chen & Volpe, 1998; Remund, 2010; Keown, 2011; Madura 2011):

1. General financial knowledge: time value of money, annuity, portfolio, diversification, risk and return
2. Investment: investment product and mechanism, investment product choosing based on need, investment risk and return
3. Funding source management: interest rate, funding source and product, funding risk.
4. Insurance: insurance benefit, insurance product and mechanism, and insurance product choosing based on need.

The average percentage of correct answer is categorized in 3 levels which are:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>&lt; 60%</td>
</tr>
<tr>
<td>Medium</td>
<td>60% - &lt; 80%</td>
</tr>
<tr>
<td>High</td>
<td>≥ 80%</td>
</tr>
</tbody>
</table>

Financial decision making is marked by at least by having done administration, and/or having account in at least one of the products sold in Indonesia Stock Exchange. The Indonesia Stock Exchange product means stock, obligation, mutual funds (reksadana), and derivative (produk turunan).
Results and Discussion

Characteristics of Respondents

Respondents’ characteristics shown in Table 1. There were 46.46% male and 53.54% female. Table 1 also shown the category of subjects parent’s yearly income. 40.78% of respondents with parents income under Rp. 75,000,000/year, 45.18% of respondents with parents income between Rp. 75,000,000/year to Rp. 150,000,000/year, and respondents with parent’s income more than Rp. 150,000,000/year were 14.04%.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>92</td>
<td>46.46%</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>53.54%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parent’s Income/year</th>
<th>Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Rp. 75,000,000/year</td>
<td>81</td>
<td>40.78%</td>
</tr>
<tr>
<td>Rp. 75,000,000/year to Rp. 150,000,000/year</td>
<td>89</td>
<td>45.18%</td>
</tr>
<tr>
<td>Above Rp. 150,000,000/year</td>
<td>28</td>
<td>14.04%</td>
</tr>
</tbody>
</table>

Based on the characteristics of respondents, it shows that there are 106 females and 92 males as respondents. Female respondents are more than male respondents. The majority of the characteristic respondent from Parent’s income is in incomes Between Rp. 75,000,000/year to Rp. 150,000,000/year. It means mostly of respondents were in middle level of family income.

Finding

The result of students financial literacy level shown in Table 2:

<table>
<thead>
<tr>
<th>Category</th>
<th>Nos.</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>43</td>
<td>21.72%</td>
</tr>
<tr>
<td>Medium</td>
<td>90</td>
<td>45.45%</td>
</tr>
<tr>
<td>High</td>
<td>65</td>
<td>32.83%</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3 from the questioner test result shows that students in Economy and Business faculty of Universitas Muhammadiyah Sumatera Utara have variety level of financial literacy. Majority of the students are in medium level, which are 90 from 198 respondents (45.45%). Students who are in high level were 32.83%, and 21.72% were in low level of financial literacy.

<table>
<thead>
<tr>
<th>Financial Literacy</th>
<th>Investment Decision Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>32</td>
</tr>
<tr>
<td>Medium</td>
<td>53</td>
</tr>
<tr>
<td>High</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
</tr>
</tbody>
</table>

In table 4, it shows that from 198 students, only 104 students decided to invest in capital market. The students with medium level of financial literacy are the most to decide to invest in Indonesia capital market.

The most interesting finding is that the percentage of students with low financial literacy in investing is more than that with high level financial literacy.
Hypothesis Test Results
Hypothesis of this research is analyze using SPSS tools. The formula of this analyze is \( Y = p_1x_1 + e_1 \). The result is as below:

**Table 5. Output of financial literacy and investment decision making.**

<table>
<thead>
<tr>
<th>Observation</th>
<th>198</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.341</td>
</tr>
<tr>
<td>F</td>
<td>25.801</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 5 shown that F (25.801) is higher than F Ratio (6.767) with p < 0.001. This result mean that \( H_0 \) rejected and can be interpreted that financial literacy have low significant correlation with capital market investment decision (\( R = 0.341 \)). Financial literation only provides 11.6% in capital market investment decision. There are some other factors which influences 88.4% of the decision making of investment in capital market. This regression model is good of fit with p (0.001) < 0.01.

Discussion
This research finds that financial literacy rate has correlation with the decision making in investing in Indonesia capital market but with low significance. In this research, it shows that the financial literacy rate of student in University of Muhammadiyah Sumatera Utara is in medium level. However, students with low financial literacy are more likely to invest in Indonesia capital market than that with high financial literacy.

This research result is contradicted with previous research done by M. van Rooij et al (2011). The research concludes that financial literacy affects financial decision-making. Those with low literacy are much unlikely to invest in stocks. But, the research is done with the sample of working adults.

This research also finds that high level of financial literacy is not the only factor affecting the decision making to invest in capital market. There are also other factors playing role in the decision making.

This finding is in line with some previous researches showing that there are internal and external factors affecting financial literacy. Internal factors explain personal characteristics and external factors explain environment. Both factors are grouped into personal demographic characteristics (Chen & Volve, 1998), social and economic characteristics and economic conditions (Worthington, 2006), financial education, financial experiences, aspirations, geographic location (Mandell, 2001; Beal & Delpachitra, 2003), and family characteristics (Lusardi, et al., 2001).

The other factors affecting investment decision making is religiosity. Rahim et al (2016) did a research to test the validity of Islamic financial literacy (IFL) and the determinant. The variables are hopelessness, religiosity and financial satisfaction. They found that religiosity to exhibit the highest variance followed by hopelessness and financial satisfaction. Al Tamimi & Kalli (2009) who researched local individual investor in UEA also got same result. They mentioned that religious reasons are the most influencing factor that affects the investment decision.

In this research, almost all of the respondents in University of Muhammadiyah Sumatera Utara are Moslems. For subsequent research, the factor of religiosity can be proposed to be researched, considering the respondent was in the Moslem institution.
Besides that, based on the observation to the respondents, product knowledge was the closest factor in investment decision making. There are a lot of interesting kinds of investment product with different advantages and deficiencies. These varieties confused the respondent to make their decision and calculate the risk. There are many respondents feel that investing in capital market need a lot of knowledge and spend a lot of time in observation calculations. Mostly, they want to invest immediately, but they need to avoid risk because they have limited funds and knowledge.

Conclusions
In this research, it shows that overall of the financial literacy of students studying in University of Muhammadiyah Sumatera Utara is medium level. In partial, student with medium financial literacy is the most likely to invest in Indonesia capital market. But, if comparing between low and high level, students with low financial literacy is the most likely to invest in Indonesian capital market than those with high level. So, in other words, financial literacy rate has correlation with decision making in investing in Indonesia Stock Exchange but not significant.

This research also finds that high level of financial literacy is not the only factor affecting the decision making to invest in capital market. There are also other factors playing role in the decision making.

As note of this research limitation is that this research object is only involving one faculty in one university. Wider research comparing various universities and involving various faculties needed to be done to complete this research.

References


