

Conference Paper

Financial Literacy: An Empirical Study from Small–Medium Enterprises in Sidoarjo, East Java

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Abstract

One of the most important factors for the financial decision-making is financial literacy, which is the main topic of this study. The purpose of this research was to measure financial literacy from Small–Medium Enterprises perspective. In addition, this study was conducted to prove the differences in financial literacy based on demographic factors (gender, ages, SME's ages). The subjects of this study were Small–Medium Enterprises (SME's) in Sidoarjo Regency, East Java Indonesia. The financial literacy was measured by basic knowledge of financial literacy, credit management, investment management, and risk management. Independent *T*-test analysis and analysis of variance (ANOVA) were conducted during the research. It was found that there is no difference among financial literacy on education levels, demographic factors (gender, age, SME's ages). There is no difference in the level of financial literacy based on educational level. Gender, age of manager, and business ages are not the distinguishing factors in financial literacy. The results stated that the educational level, gender, age of managers and business ages does not affect financial literacy.

Keywords: demographic factors, financial literacy, small medium enterprises

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1. Introduction

Small and Medium Enterprises (SMEs) are one of the business sectors that have proven to be able to survive in 1998 and 2008 crises. A survey conducted by the Ministry of Cooperatives and SMEs found that competitiveness in the economy was good enough. However, the 2013 National Literacy and Inclusion Survey conducted by Otoritas Jasa Keuangan in 2016 [1] only amounted to 29.66% showing the results of an understanding of financial literacy of the entire population of productive age in Indonesia. Bank Indonesia in 2012 [2] released a report stating that SMEs in Indonesia has limited knowledge of business management capabilities, especially in the financial aspects. In the ASEAN

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Economic Community (AEC) era, now SMEs are required to improve their financial capabilities and strategies comprehensively so that they are able to compete in international competition.

There are many factors that can affect the level of one's financial literacy. Chen and Volpe [3] stated that men have higher financial literacy than women. Furthermore, the study also stated that the education of business actors, entrepreneurs and the length of business is an aspect that influences financial literacy. Research conducted by Sucuachi [4] found that education levels are positively important for financial literacy. Chen and Volpe [3] found that students with eighteen to twenty years of achievement had low financial literacy. The results found by Taft, Hosein, and Mehrizi [5] state that time and financial literacy has a positive relationship. The longer the business is, the better the financial literacy. This includes the main duration that influences experience in managing and making financial decisions. SMEs cannot use or use new technology and develop their businesses in the global market if management and education capabilities are low. This resulted in inhibiting them from gaining business funds [6].

Financial literacy will help businesses related to business management starting from the budget, planning business, and basic knowledge of finance to achieve financial goals. According to the Financial Services Authority [2], financial literacy is the ability to manage funds in order to grow and live more prosperously in the future, the OJK states that the important mission of the financial literacy program is to educate the people of Indonesia in finance in order to manage finances intelligently, so that the low level of knowledge about the financial industry can be overcome and the public is not easily deceived into investment products that offer high profits in the short term without considering risk.

Referring to Chen and Volpe's research [1], financial literacy can be measured using 4 (four) indicators, namely basic knowledge of financial management, credit management, savings and investment management, risk management. Basic knowledge of financial management is knowledge related to the basic principles of financial management that a person has for later use. Credit management is known as credit management. This process is a process whereby the credit owner or debtor regulates the credit held to be used effectively and efficiently in accordance with the initial purpose of credit starting from the time the credit is submitted until the credit is declared paid off. Savings management is a process that helps the placement of surplus funds owned by someone with the aim of facilitating access to liquidity, financial planning and security. While investment management is a process that assists of formulation policies and objectives as well as supervision in investment to obtain profits. Risk is a possibility of an event or event that is

detrimental to the company or business, where the event is unpredictable. The purpose of risk management is to avoid or minimize risks arising from a decision made by the manager.

2. Research Methodolgy

This study uses a type of quantitative research by conducting *t* test and *F* test (ANOVA). The purpose of the study was to examine the differences in the level of financial literacy based on demographic factors. The variables in this study are financial literacy variables and demographic factor variables. The sampling technique is purposive sampling technique. Researchers determined the SMEs that were the sample were SMEs engaged in milkfish processing in Sidoarjo regency with a total sample of 30. Demographic factors in this study included, among others, the sex of SME managers, the age of SME managers, educational history of SME managers, and long-term UKM businesses. While financial literacy consists of basic knowledge of financial management, credit management, savings and investment management, and risk management. Data sources in this study use primary and secondary data sources. Data collection techniques through questionnaires distributed to respondents. The questionnaire consists of 16 questions that will be submitted to the respondent, where each correct answer has a score of 6.25. if the respondent is able to answer correctly the whole question gets a score of 100. Conversely, the wrong question is 0.

3. Results and Discussion

Respondents in this study are 30 SMEs by distinguishing demographic classification, namely gender, education history, age and length of business shown by Table 1. Based on data obtained as many as 33.6% of respondents were male and 66.7% were sex woman. Whereas in the education history category, Junior High School is 20%; Senior High School at 66.7%; Diploma 3.3% and the rest are undergraduate. In the age column there are 66.7% of respondents aged 40–55 years; while 30% are aged 25–40 years, and the rest are over 55 years old. In the business long column there are 26.7% of respondents who run a business for less than three years. At 3–5 years of business, 40%; business duration of 6–10 years is 20%, and the remaining is more than 10 years.

Measurement of financial literacy levels is done by assessing respondents' answers consisting of 16 questions about financial literacy and divided into five main indicators. Each correct answer will be multiplied by 6.25 so if it is true all will get a score of 100. The

TABLE 1: Descriptive Statistics.

Demographic Factor	Description	Percentage
Gender	Man; Woman	33.3%; 66.7%
Education	Junior High School; Senior High School; Diploma; Undergraduate	20% 66.7% 3.33% 10%
Age	25–40 Years old; 40–55 Years old; > 55 Years old	30% 66.7% 3.3%
Business Duration	< 3 year 3–5 year 6–10 year > 10 year	26.7% 40% 20% 13.3%

highest value owned by the respondent is 87.5 and the lowest value is 18.8. The average value of the respondents is 67.3. Of the total respondents, it was found that there were 14 people who answered 12 questions correctly, so that the value was 75. While there were only three respondents who were able to answer 13 questions with values above 81.3. This value is processed based on four indicators that measure financial literacy, namely, basic knowledge of financial management, credit management, savings and investment management, and risk management.

Based on the table, it is known that respondents have a good understanding of the classification of cash receipts and expenditures and basic knowledge of financial management. However, only a small proportion of respondents were able to correctly answer questions related to the definition of assets and cash flows. On credit management indicators, it shows that 70% or as many as 21 respondents understand that the credit card interest rate is higher than the loan interest rate. This information shows that most respondents understand the type of credit offered by banks. Another finding is that not all respondents were able to calculate the deposit interest offered. Analysis of investment management on land states that half of the respondents think that land investment is more profitable than deposits. On the contrary, the level of understanding of respondents regarding mutual funds is still low. Furthermore, through risk management indicators it is known that most respondents have a good understanding of insurance, but only some understand that insurance has a purpose to move risk to other parties. Understanding of the types of insurance, premium payments that are comparable to benefits can be understood well by respondents.

Based on Table 3, it is known that *t*-count between sexes (man and woman) is -0.506 smaller than *t*-table which is 1.960 with a significance level of 0.213 greater than alpha 0.05 (H_0 is accepted), so the conclusion is there is no difference in the level of financial

TABLE 2: Questionnaire Result.

Question's Code	True	False
Financial Basic Knowledge		
Financial knowledge	100%	0%
Financial planning	93%	7%
Asset	50%	50%
Net-asset	53%	47%
Cash inflow	93%	7%
Cash outflow	73%	27%
Credit Management		
Interest rate	70%	30%
Saving and Investment		
Interest rate of deposit	23%	77%
Types of saving	80%	20%
Risks of saving	27%	74%
Investment comparison between land and deposit	80%	20%
Mutual funds	53%	47%
Risk Management		
Insurance	60%	40%
The types of insurance	73%	27%
Insurance payment based on type	70%	30%
Insurance payment based on benefit	63%	37%

literacy based on gender, which also explains gender does not affect the level of financial literacy. These results indicate that men and women have the same level of ability and knowledge. One of the drivers is caused by competition in business competition that causes both man and woman business owners to increase their financial knowledge. The advancement of information technology helps business owner's access information about financial management.

Based on Table 3, the results of *F*-count between education history is 0.347 smaller than *F*-table of 2.980 with a significant value of 0.792 (H_0 is accepted), so the conclusion is that there is no difference between financial literacy and education history. This shows that the educational history does not affect the level of financial literacy. The incessant financial literacy programs carried out by the government through banking institutions and the ease of access to financial information through the use of information technology have become one of the drivers that financial literacy is not only determined by the height or low of one's education.

Based on the analysis that has been done, then the *F*-count results between the ages of managers with financial literacy is 1.185 smaller than the *F*-table which is 2.980 with a

TABLE 3: Statistic Result.

Demographic Factor	N	Min.	Max.	Std. Dev	Mean	t/F	Sig.
Gender							
Man	10	1.00	2.00	0.674	3.70	-0.506	0.213
Woman	20	1.00	2.00	0.410	3.80		
Education							
Junior High School	6	2.00	4.00	0.816	3.66	0.347	0.792
Senior High School	20	3.00	4.00	0.444	3.75		
Diploma	1	4.00	4.00	0.000	4.00		
Under graduate	3	4.00	4.00	0.000	4.00		
Age							
25–40 years old	9	3.00	4.00	0.527	3.55	1.185	0.321
40–55 years old	20	2.00	4.00	0.489	3.85		
> 55 years old	1	4.00	4.00	0.000	4.00		
Business Duration							
< 3 year	8	3.00	4.00	0.353	3.8750	0.970	0.422
3–5 year	12	2.00	4.00	0.621	3.7500		
5–10 year	6	3.00	4.00	0.547	3.5000		
> 10 year	4	4.00	4.00	0.000	4.0000		

significant 0.321 greater than alpha 0.05 so that H0 is accepted. The conclusion of these results is that there is no difference in the level of financial literacy based on the age of the respondents. In addition, the results also state that age does not affect the level of financial literacy. Age differences are not a problem for businesses in conducting financial management. Individual invoices that determine the ability and knowledge improvement in literacy and financial management.

Based on the results of the analysis, it is known that *F*-count between the duration of the business manager and financial literacy is 0.970 smaller than the *F*-table of 2.980 with a significance of 0.422 greater than alpha 0.05 (so that h0 is accepted). This proves that there is no difference in the level of financial literacy based on the length of business. in addition, it can be concluded that the length of business does not affect the level of financial literacy. The variety of business duration that has been carried out by respondents with relatively productive business owners has justified that even though the business is still new with the ability and willingness to improve knowledge related to financial management will be able to survive in an increasingly competitive business competition.

4. Conclusion

The level of financial literacy owned by SME managers in Sidoarjo regency has good knowledge with an average of 67.3% in terms of understanding basic financial capabilities, credit management, investment and savings, and risk management. Based on the results of the analysis there is no influence between gender, education history, age of business people and length of business on financial literacy. The technological and massive development of education from the finance ministry, the Financial Services Authority, banking institutions and educational institutions toward SMEs is one of the reasons for this. The limitation in this study is that the number of respondents is quite small when compared with the total number of SMEs in Sidoarjo regency, it would be better if the respondents' further research is more with several types of SMEs. In addition, it should add other indicators to measure the level of financial literacy, such as cash financial management, accounting, accounts receivable and inventory.

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