

A CONCEPTUAL STUDY ON THE IMPLICATIONS OF FINANCIAL LITERACY RATE ON THE COMPANY PROFITABILITY OF MSMEs

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Abstract: *Due to its significant contribution and potential for the national economy as a whole, micro, small and medium enterprises (MSMEs) are currently perceived as the key to the creation of new economic sources and drivers in Indonesia. However, despite the potential, in reality, there are still several fundamental problems faced by the majority of MSMEs in Indonesia. These problems are identified to be caused by the low levels of financial literacy among Indonesian, especially the entrepreneur groups. The low level of financial literacy has a great potential to disrupt the MSMEs growth and performance, especially in profitability, which ultimately lead to the unfavorable economic conditions in Indonesia. The purpose of this paper is to find the relationship between financial literacy and MSMEs profitability, and what factors determine both variables. The data in this study is collected from existing literature such as journals, books, and research publications that are relevant to the research topics. Based on the literature review, the research was eventually able to generate a simple conceptual framework on the relationship between financial literacy rate and MSMEs profitability. The framework suggested that the demographic and socio-economic characteristics as well as financial education will directly affect the MSMEs financial literacy rate, while as moderating factors, characteristics of a business will indirectly influence the MSMEs profitability.*

Keywords: *Financial Literacy, Profitability, MSMEs, New Economic Sources and Drivers*

Introduction

Micro, small, and medium enterprises (MSMEs) are currently perceived as the key to the creation of new economic sources and drivers in Indonesia. The role of MSMEs in large developing countries is considered very important due to their potential contribution to job creation, poverty reduction, increased income distribution, as well as the development of manufacturing industry, rural economies, and entrepreneurship, particularly women and young educated individuals (Tambunan, 2011). According to data released by *Kementrian Koperasi dan Usaha Kecil dan Menengah Indonesia*, in 2017, 99,9% of business activity in Indonesia is dominated by micro, small, and medium enterprises (MSME), with more than 98% having the status of Micro Enterprises. They also contributed to 57,56% of Indonesia GDP and absorbed 96,9% of local workers. As a result, MSMEs in Indonesia imply great potential and impact for the national economy as a whole.

Although they have great potential to become a new economic source and driver in Indonesia, in reality, there are several problems that are still faced by MSMEs including: bookkeeping issues, thin business margin, limited capital, limited managerial experience, small economies of scale, marketing capabilities, and low ability to obtain sources of funds (Sutrisno and Lestari, 2006). In fact, most of those problems mainly arise from the low level of financial literacy and capability of managing finance (Suryani, 2007). Based on the *Survei Nasional Literasi Keuangan* that was conducted by OJK in 2016, the level of financial literacy of entrepreneurs dominated by MSMEs owners in Indonesia is categorized as low at 27,7 %. Otoritas Jasa Keuangan (2014) defined financial literacy as knowledge, beliefs, and skills that influence attitudes and behaviors to increase the quality of decision making and financial management to achieve prosperities. It is classified into three categories which are low literate, moderate literate, and high literate (Chen and Velope, 1998). The lack of financial literacy has the potential to cause problems that disrupt the performance and growth of MSMEs in Indonesia. Furthermore, poor company performance will also contribute to low levels of company profitability (Suryani, 2007).

In general, profitability is the main determinant of a company's performance. Profitability is closely related but different from profit. While profit is an absolute amount, profitability is a relative one. Profitability is used to measure the company's efficiency and eventually its success or failure. Profitability can be also further defined as the ability of a given investment to earn a return from its use (Tulsian, 2014). The level of the profitability of a company can be measured by using several profitability ratios including: Gross Profit Margin, Net Profit Margin, Return on Equity, and Return on Investment (Hery, 2012).

As already mentioned, the low level of MSMEs financial literacy potentially affects the low levels of company profitability. This finding is also supported by several studies that have been conducted in some developing countries within the years. For instance, Akanno, Emejuru and Khalid (2017) found out that the level of financial literacy significantly affects the SMEs profitability in Kenya. However, the other study actually found out the opposite result. Winarno and Wijijayanti (2018) who conducted a study in Indonesia, specifically Batu region, established that entrepreneurial financial literacy does not influence the overall performance of MSMEs. Hence, there was a gap in the research that is needed further analyzed.

This study will analyze the implications of financial literacy rate on the company profitability of MSMEs. Specifically, this study carries the following objectives: 1) to measure the financial literacy rate of MSMEs; 2) to identify whether there is a correlation between financial literacy rate with the company profitability of MSMEs; and 3) to identify how financial literacy rate affects the profitability of MSMEs. The study is expected to explain the current condition of financial literacy among MSMEs that could be taken as motivation and consideration for related parties to take the necessary action in order to increase financial literacy.

Literature Review

The literature review consists of five main points that are intended to provide a clear explanation of the theories and terms used in the study as well as evaluate the findings of previous related studies to support the research. The literature review in this study was obtained through several academic sources such as journals, textbooks, and research publications relevant to the research topic.

Financial Literacy

In general, there is actually no universal definition of financial literacy even though it has been defined in many ways. According to Chen and Volpe (1998), financial literacy is defined as the ability of individuals to access, understand, and analyze relevant information needed to make decisions with an awareness of the possible financial consequences. Meanwhile, Economy Cooperation and Development (2018) defines financial literacy as a combination of awareness, knowledge, skills, attitudes and behaviors needed to make the right financial decisions and eventually achieve financial welfare.

The term of financial literacy is said to have two main dimensions which include knowledge and awareness of financial instruments as well as its application in business and life (Huston, 2010). Even though an individual has sufficient financial knowledge and ability to act in a certain way, their attitudes will eventually influence their behavior and decision whether or not to act. From all definitions above, it can be summed up that financial literacy in general is a set of financial knowledge, behaviors, and attitudes that are absolutely necessary for someone in acting to avoid financial problems and finally achieve financial prosperity.

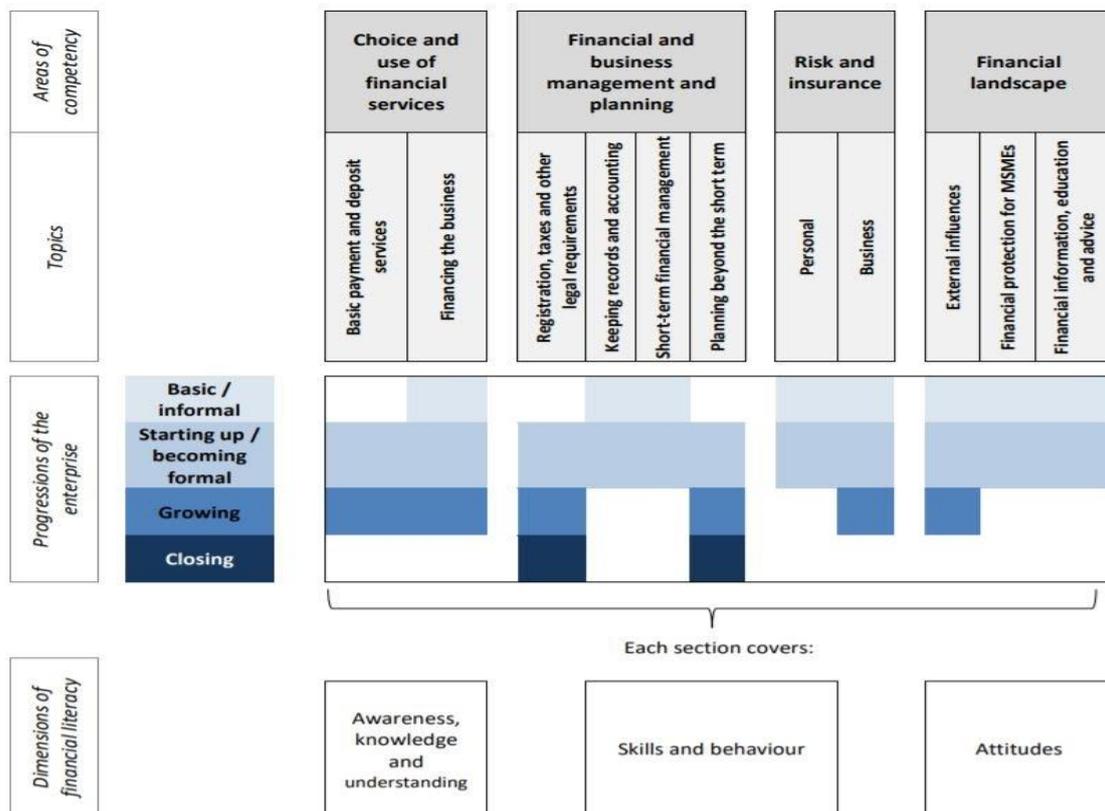
Financial Literacy Framework for MSMEs

In 2018, OECD International Network on Financial Education (OECD INFE) published a general framework on financial literacy specifically for MSMEs. The framework is used as a guideline for measuring the level of MSMEs financial literacy. The framework covers four core areas of financial literacy competencies with the content of each area further splitted into several topics according to progression of enterprises. These core competencies cover three main dimensions:

1. Awareness, knowledge, understanding. This component relates to the basic knowledge of financial concepts and procedures as well as the use of them to make financial decisions.
2. Skills and behavior. This component relates to the ability in understanding the impact of financial decisions and making the appropriate behavior and decision in certain circumstances to achieve financial well-being.
3. Attitudes. This component relates to individual characteristics in the form of a tendency towards financial practice or action that may affect decisions, behavior, and well-being.

All of these components should be possessed by an owner or manager of MSMEs to enable them in making effective financial decisions to start, run, and ultimately ensure the sustainability and growth of their business.

Figure 1: OECD Structure of Framework on Financial Literacy for MSMEs



Source: OECD (2018)

Financial Literacy Rate Measurement for MSMEs

OECD (2019) published a general survey instrument to measure the financial literacy among MSMEs owners. It generally adopts the components and core competencies of the previously published financial literacy framework. The survey instrument is designed to capture the information about financial knowledge, behavior, and attitudes of MSMEs owners in running their business. It is in the form of questionnaire that covers several main questions:

1. Use of financial products for business purposes, ability to manage and plan business finances; and financial knowledge and a range of behaviors and attitudes that are relevant to financial literacy.
2. Characteristics of the business including size, sector, and turnover
3. Demographic as well as socio-economic characteristics of the respondent

From the questionnaire, the score of respondent's financial literacy can be calculated by summing up the total scores of financial knowledge, attitudes and behaviours in each competency. While the level of financial literacy is adjusted according to the standard:

Table 1: Financial Literacy Category

Score	Category
$X < 60\%$	Low Literate
$60\% \leq X < 80\%$	Moderate Literate
$X > 80\%$	High Literate

Source: Chen and Volpe (1998)

Company Profitability

The ultimate goal of all business ventures is maximizing its profitability. Profitability is one of the most important variables in assessing a company's success. Yahaya (2016) defines profitability as the ability of a business entity to generate profit from their business activities that reflect how efficiently the management can create profit by using their available resources. From the definition, profitability is used not only to measure the company's ability to generate profits but also to determine the company's effectiveness in managing its resources. However, it is important to consider that profitability can vary significantly between each business sector. In finance, profitability can be measured through several ratios such as return on asset and return on equity to summarize performance in all areas of business (Sabli et al., 2013). However, according to *Keputusan Menteri Negara Koperasi dan Usaha Kecil Menengah Republik Indonesia Nomor: 6/KEP/M.KUKM/V/2006*, profitability ratios used to assess the financial performance of MSMEs in Indonesia are: 1) Return on Asset (ROA); 2) Return on Equity (ROE); and 3) Net Profit Margin (NPM).

Financial Literacy and MSMEs Profitability

Within the years, several studies about financial literacy and MSMEs profitability have been conducted in some developing countries. In overall, the results of previous study that has been published in several journal showed that financial literacy is positively related and affects profitability as well as MSMEs performance. The following are the results of several previous studies taken from selected journal publications based on the criteria of suitability of research area so as to provide further literature to support this study.

Table 2: Previous study on MSMEs Financial Literacy and Profitability

No	Author	Title	Findings
1	Erick Otieno (2016)	Influence of Financial Literacy on Financial Performance of Small and Medium Enterprises in Ruiru Town, Kenya	There is a significant strong positive relationship between financial literacy (personal savings skills, entrepreneurship skills, access to banking services skills and bookkeeping skills) on financial performance of SMEs (growth in profitability, sales revenue turnover and return on equity). The study concluded that high levels of financial literacy among SME owners lead to higher SME financial performance.

2	Samuel N. Akanno, Nneoma J. Emejuru, Ahmed Khalid (2017)	A Profitability-Focused Assessment of Financial Literacy Level of Southeastern Nigeria SMEs	Majority of South-East Nigeria SME managers who participated as respondents in the study have a high level of financial literacy. In overall, the level of respondent's financial literacy significantly affects the SMEs profitability. Then, SME managers who were found not financially literate turned out to have significant disabilities in cash management and finance.
3	Monicah Chepkemoi, Egondi Patrick, Christopher Njoroge (2017)	The Effects of Financial Literacy Training on Business Profitability in Coastal Region: A Case of Kwale Country SMEs	The study concludes that financial literacy affects profitability of SMEs. All independent variables used in the study (working capital management, savings, bookkeeping skills, and financial accessibility) were found to be statistically significant with profitability. However, the bookkeeping and savings variables were found to have negative relationships with profitability.
4	Khadija M. Usama, Wan Fauziah Wan Yusoff (2018)	The Relationship Between Entrepreneur's Financial Literacy and Business Performance Among Entrepreneurs of Bauchi State Nigeria	A statistically significant relationship was found between different dimensions of financial literacy (financial knowledge, financial behavior, and financial attitudes) and entrepreneurial business performance. Hence, the findings conclude that financial literacy plays a significant role in improving business performance.
5	Winarno, A., Wijijayanti, T. (2018)	Does Entrepreneurial Literacy Correlate to The Small-Medium Enterprises Performance in Batu East Java	The financial literacy between small-medium enterprises in Batu is categorized as high or well literate. However, the study did not find any correlation as well as influence between entrepreneurial financial literacy and performance of small-medium enterprises in Batu. Eventually, it is concluded that entrepreneurial financial literacy does not guarantee the success of SMEs.
6	Martin Mungai Kihara (2019)	The Impact on Financial Literacy on Profitability of Small and Medium Scale Enterprises in	The study revealed that there is a positive relationship between financial literacy and profitability of SMEs that is statistically significant. Financial

		Ruiru Bypass Kamakis Area	planning and risk management are found to have a crucial role for profit maximization of MSMEs. Finally, financial literacy is concluded to be a core component to success in the business progress and financial success of the enterprises.
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Methodology

This research begins with problem identification followed by determining the research questions as well as objectives to be achieved within the scope and limitations that have been determined. Then, a literature review will be conducted to construct the research. The purpose of the literature review is to provide a clear explanation of the theories and terms in the study as well as evaluate the findings of previous related studies to support the research. Previous study in this research is obtained by collecting and reviewing the existing literature through journals, books, and research publications that are relevant to the research topic. After reviewing the existing literature, further analysis will be conducted to get the research results. The results of the research will be the basis for the researcher to make a conclusion followed with recommendations relevant to the research.

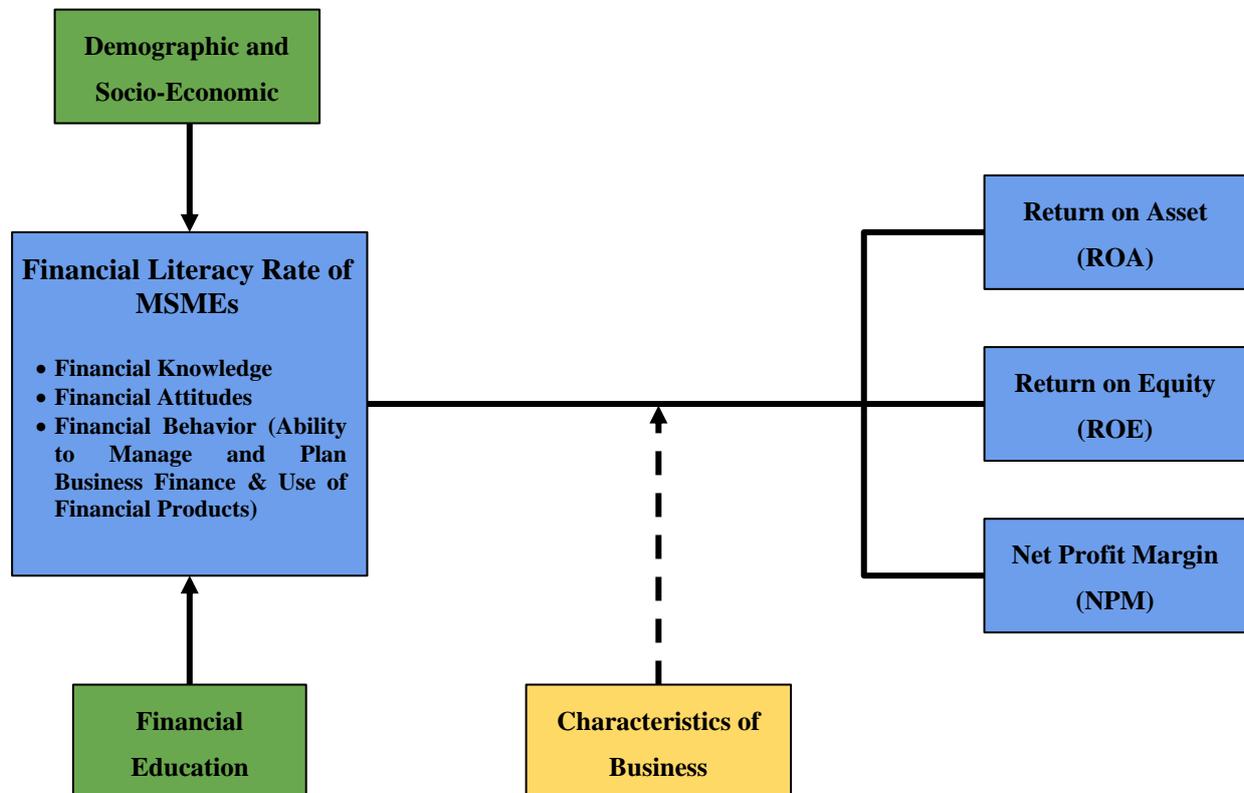
Analysis

Based on the literature review that has been done previously, it can be concluded that financial literacy has a significant relationship with the company profitability of MSMEs.

There are at least several factors that influence the level of MSMEs' financial literacy such as financial knowledge and attitudes, ability to manage and plan business finance, use of financial products in business, demographic and socio-economic characteristics, financial training and education, and business characteristics. All of these factors directly affect the financial literacy level of MSMEs, which indirectly influence the company profitability of MSMEs.

The proposed conceptual framework is attached below to describe the relationship between financial literacy and company profitability of MSMEs:

Figure 2: Conceptual framework in This Study



Source: Author's Interpretation

The figure explains each factor that influences the financial literacy rate of MSMEs as well as their profitability, and how both things are related. Financial literacy rate is determined by the sum of total score in financial knowledge, behavior, and financial attitudes that cover each core competency. In fact, there are 3 factors that directly affect the financial literacy rate of MSMEs which are demographic and socio-economic (i.e. gender, age, education, entrepreneurial experience, and parents); characteristics of business (i.e. size, duration, sector); and financial education. Meanwhile company profitability is further translated into return on asset (ROA), return on equity (ROE), and net profit margin (NPM). Profitability of MSMEs itself is affected by the characteristics of the business. Overall, the financial literacy rate is statistically proven to have a significant positive relationship with the profitability of SMEs (Kihara, 2019).

Conclusion

In conclusion, the researcher was able to gather convincing evidence about the relationship between financial literacy and MSMEs profitability. The study can also determine the factors that influence and determine the level of MSMEs financial literacy. Based on the analysis, it can be concluded that financial literacy is directly affected by the demographic and socio-economic characteristics as well as the experience of respondent's financial education. In addition, financial literacy also has a significant positive relationship with the MSMEs profitability since it directly affects how MSMEs' owners/managers make financial decisions in their business activity.

Hereinafter, the next step of this study is needed to test the conceptual framework using statistical quantitative analysis. The result of the study will be beneficial and favorable for each stakeholder, including the MSMEs owners/managers, financial literacy agents, government, and financial industries in general.

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