

# The Effect of Motivation on Financial Literation

## (Study on UKM in Malang City)

Ilham Azmi Zarkasi\*, Kusdi Rahardjo  
Faculty of Administrative Sciences  
Brawijaya University  
Malang, Indonesia  
\*ilhamazmi@student.ub.ac.id

**Abstract**—Small and Medium Enterprises (SMEs) have a big role in the economy, especially in developing countries. However, in its role, Indonesia still has a level of access to finance below several ASEAN countries such as Singapore, Malaysia and Thailand. Thus it can be said that the literacy of SMEs in Indonesia is low. This study considers one of the factors that influence financial literacy, namely motivation. The method we use for this research is direct interviews and using a questionnaire as a data collection tool. We have successfully interviewed one hundred and ninety-one UKM located in Malang. The results showed that the motivation of small business actors had a significant effect on financial literacy. Based on this, the government together with financial institutions need to formulate the right program. Apart from the education provided by educators, the program can also take the form of socialization and consultation services, either directly or indirectly. Development of supporting infrastructure and public access to financial institutions, products or services according to their needs and capacities also need attention for immediate optimization.

**Keywords**—*motivation, financial literacy, UKM*

### I. INTRODUCTION

Small and Medium Enterprises (SMEs) have a big role in the economy, especially in developing countries. However, in its role, Indonesia still has a level of access to finance below several ASEAN countries such as Singapore, Malaysia and Thailand [1]. Thus it can be said that the literacy of SMEs in Indonesia is low. Whereas Financial Literacy is needed to become the basis for entrepreneurs to decide on the responsibility of financial matters. The implementation of education in increasing understanding of finance in the community is needed. With the rapid development and economic growth, financial institutions have an important role in the life of the wider community. With the existence of a variety of varied financial institutions, each institution seeks to distribute various financial products and services to the public as a whole. In order for the wider community to determine financial products and services according to their needs, the community must properly understand the benefits and risks, know their rights and obligations, and believe that the selected financial products and services can improve people's welfare.

The existence of financial knowledge and financial literacy will assist individuals in managing their personal and business financial planning, so that these individuals can maximize the time value of money and the benefits obtained by the business will be even greater. However, all efforts to increase literacy will be useless if the business owner does not have the motivation to become entrepreneurial.

Mehrabian and Russell were the creators of the "S-O-R framework" [2], which was later modified by Jacoby [3]. This framework suggests that some aspects of the environment drive the emotional and cognitive state of an individual and then produce certain behavioral outcomes [4]. The S-O-R theory explains how a stimulus gets a response. Motivation will encourage someone to do something in accordance with their wants, needs, and shortcomings. The difference in motivation can be an obstacle to the successful application of the S-O-R theory. When the motivation contained in the stimulus provided by the communicator is in accordance with the communicator's motivation, the stimulus will be received. If it does not match, the communicator will ignore it. The more appropriate the stimulus is given to the motivation of the communicator, the higher the success rate of implementing the S-O-R theory.

Saeed et al. [5] Intrinsic motivation is the extent to which an individual experiences enjoyment and interest when performing a work task, without being controlled by external contingencies, such as rewards and punishments. Motivation is an impulse that exists within a person to do something, including encouragement in entrepreneurship. This is not just a sense of self-confidence in running a business, but the ability to access information can help run an entrepreneurial opportunity. Entrepreneurial motivation involves motivation that is directed at entrepreneurial goals (goals that involve business opportunities). This is the strength possessed by individuals that encourage a person in his entrepreneurial growth.

George and Jones [6] state that the elements of work motivation consist of the direction of behavior, the level of effort, and the level of persistence. The direction of behavior is the behavior chosen at work, measured from someone to complete the job and adherence to the rules. The level of effort regarding how hard a person tries to work according to the

behavior that has been chosen, is measured by seriousness in working and the desire to be better than before. The level of persistence is how hard the employee will continue to try to carry out the chosen behavior, measured by the desire to develop skills and advance the company as well as work persistence even though the environment is less supportive.

Financial knowledge (financial literacy) emphasizes the ability to understand basic concepts from economics and finance, to how to apply them appropriately. The ability of individuals to assess and make effective decisions regarding business finance is one of the economic behaviors. According to Lusardi and Mitchell [7], financial literacy is defined as financial knowledge and the ability to apply it (knowledge and ability). According to Lusardi and Mitchell [7], financial literacy is defined as financial knowledge and the ability to apply it (knowledge and ability). Irin Widayati [8] explains that financial literacy occurs when individuals have a set of skills and abilities that enable them to use existing resources to achieve goals.

Motivation is an important factor that distinguishes new entrepreneurs who have "progress" compared to new entrepreneurs who do not grow in their business [9]. Increasing Financial Literacy needs a motivational boost for entrepreneurial actors. Motivation is the main driver of individual behavior. In line with Tolman [10] and Lewin [11], expectancy theory binds perception with behavior. Entrepreneurial motivation can be strengthened through strengthening the intention to succeed, the ability and courage to take risks, and increasing the confidence of business actors.

## II. METHODS

Research is a systematic investigation of the study of sources and materials to find facts and get new conclusions. There are three main steps in the research process: developing questions, gathering data to answer questions, and completing answers to questions.

The researcher uses an explanatory research type with a quantitative approach because it tries to explain the relationship between the variables through hypothesis testing, while the data used in general are numbers calculated through statistical tests. We have successfully interviewed one hundred and ninety-one UKM located in Malang.

### A. Hypothesis Test

Hypothesis testing formulated in this study uses Smart PLS (Partial Least Square) software for inferential statistical testing. In this study, researchers used the measurement model testing on the reflective constructs at the first order construct (FOC) level.

1) *Evaluate the outer model or measurement model:* The outer model in a study is a measurement model used to assess the validity and reliability of the model [12]. The validity test is a test carried out to find out how far a test or a set of

operations measures what should be measured [13]. The validity test in this PLS consists of (table 1):

TABLE I. VALIDITY TEST PARAMETERS IN THE PLS MEASUREMENT MODEL

Validity test	Parameter	Rule of Thumbs
Convergent	Loading Factor	More than 0,7
	Average Variance Extracted (AVE)	More than 0,5
	Communality	More than 0,5
Discriminant	Average Variance Extracted (AVE) Root and Latent Variable Correlation	AVE Root > Latent Variable Correlation
Cross Loading		> 0.7 in 1 variable

Good research should have measurement instruments that are not only valid but also reliable. In PLS this test can be done using two methods:

- Cronbach's alpha, is used to measure the lower limit of the reliability value of a research construct and it is said that this is said to be reliable when the value obtained must be > 0.6.
- Composite reliability, used to measure the real value of the reliability of a construct in research so that it can be said to be reliable if the value obtained must be > 0.7

### 2) Inner model evaluation (Structural Model)

- Using R<sup>2</sup> to measure the degree of variation in changes from the independent variable to the dependent variable. The higher the R<sup>2</sup> value, whether the better it is to use a predictive model than by using the research model that has been proposed [12].
- Using the path coefficient or t-values of each path to test the significance between constructs in the structural model.

### 3) Hypothesis testing model

- Determine the level of significance or critical value ( $\alpha$ ), which is 5%.
- Comparing the t-statistics value on the bootstrapping output display of the smartPLS program with the t-table value. If the t-statistics is higher than the t-table value, it means that the hypothesis is supported.
- The test uses a significance level of 5%, has a t-table value of 1.96 for the hypothesis of 2 tails, and 1.64 for the hypothesis of one tail.

**III. RESULTS**

**A. Evaluation of Measurement Model**

1) *Validity test:* Outer Model or measurement model defines how each indicator block relates to its latent variable. Designing a Measurement Model by drawing latent variables and filling them with indicators of each latent variable, whether reflexive or formative, based on the operational definition of the variable. Assessing the Outer Model uses three methods, namely Convergent validity, Discriminant Validity, and composite reliability. The results of the Outer Model are the results of validity and reliability tests for each variable. The requirements for meeting the convergent validity are that the loading value of the indicator for each construct is > 0.70 and the AVE value is > 0.5 (table 2).

TABLE II. LOADING FACTOR AND CROSS LOADING

	X	Y
LK2.1	0.396	<b>0.925</b>
LK2.2	0.191	<b>0.805</b>
LK2.3	0.340	<b>0.932</b>
LK2.4	0.225	<b>0.909</b>
MO1.1	<b>0.702</b>	0.283
MO1.4	<b>0.713</b>	0.132
MO2.1	<b>0.772</b>	0.221
MO2.2	<b>0.779</b>	0.330
MO2.3	<b>0.732</b>	0.254
MO3.1	<b>0.731</b>	0.216
MO3.2	<b>0.782</b>	0.298
MO3.3	<b>0.806</b>	0.259
MO3.4	<b>0.783</b>	0.261

TABLE III. CRONBACH'S ALPHA, COMPOSITE RELIABILITY, AVERAGE VARIANCE EXTRACTED (AVE)

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X	0.907	0.914	0.923	0.572
Y	0.918	0.988	0.941	0.799

Discriminant Validity in the reflective construct can be seen in the cross loadings. The requirement for cross loading in order to meet Discriminant Validity is that cross loading to other constructs must be lower than the loadings of the construct. Next is the Fornell Larcker Criterion on HTMT, which assesses the correlation of variables to the variables themselves, and variables to other variables. The requirement to judge from the Fornell Larcker Criterion on HTMT is that the value of the variable for the variable itself must be higher than the value of the variable for other variables (Table 4).

TABLE IV. FORNELL LARCKER CRITERION ON HTMT

	X	Y
X	0.756	
Y	0.345	0.894

2) *Reliability test:* The reliability test for the variables in this study was shown by the composite reliability and Cronbach's alpha values. The parameter used to show the variable is reliable is the composite reliability value and Cronbach's alpha must be more than 0.70 [14].

**B. Evaluation of Structural Model**

R-Square is a value that shows how much the dependent variable is affected by the dependent variable. The following table 5 shows that X has an influence on Y of 11.9%.

TABLE V. R-SQUARE

	R Square	R Square Adjusted
Y	0.119	0.114

Coefficient Path is a value to indicate the direction of the variable relationship. Where if the Coefficient Path value is below 0 to -1, it is negative. And if the Coefficient Path value is above 0 to 1, it is positive (table 6).

TABLE VI. COEFFICIENT PATH AND MODEL FIT

	X	Y	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
X		0.345	1719.000	1719.000	
Y			764.000	701.664	0.082

TABLE VII. T-STATISTIC

	T Statistics ( O/STDEV )
X -> Y	7.025

TABLE VIII. PREDICTIVE RELEVANCE

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
X	1.719.000	1.719.000	
Y	764.000	701.664	0.082

TABLE IX. MODEL FIT

	Saturated Model	Estimated Model
SRMR	0.076	0.076
d_ ULS	0.526	0.526
d_ G	0.269	0.269
Chi-Square	287.702	287.702
NFI	0.827	0.827

**IV. DISCUSSION**

In the SME sector, motivation is very important and can differentiate between new entrepreneurs who have progress compared to new entrepreneurs who have no progress in their business [15]. Motivation has been recognized as the prime driver of individual behavior. With Tolman [10] and Lewin [11], expectancy theory binds perception with behavior. Since then, extensive research has focused on developing an understanding of the definition of motivation.

The findings show that motivation is very important to improve financial literacy. For SME owners, motivation is a key factor in financial literacy. Motivation has an effect on financial literacy. The results of statistical tests show that motivation significantly affects financial literacy seen in the t-statistical table in table 7 which has a value of 7,025 which has met the requirements (greater than 1.96). So that the hypothesis which says "Motivation of SMEs in Malang City affects Financial Literacy" can be accepted.

It can be concluded that this study is in accordance with Mendel and Klein's [15] statement that the more motivated a person is in carrying out a business, the more financial literacy will be.

#### V. CONCLUSION

It has been discussed earlier that in developing countries the SME sector plays an important role for economic growth. The results showed that motivation has a significant effect on financial literacy. This paper examines whether the equally low financial literacy score of those who have or have not taken the relevant courses can be explained in part by the fact that many entrepreneurs do not care about their personal finances. Such apathy can be due to an all-encompassing focus on consumption or it can be caused by a lack of knowledge about the importance of Financial Literacy in this era. Our research shows that motivation is an important driver of financial literacy. After controlling for other important determinants of financial literacy, we found that questions related to motivation significantly increased the explanations for students' financial literacy scores.

There is no one sure way that can solve the problem of financial blindness. For SME entrepreneurs, motivation is the biggest factor for financial literacy as well as training with trained instructors who manage finances interactively through effective activities in the learning process.

Based on this, the government together with financial institutions need to formulate the right program. Apart from the education provided by educators, the program can also take the form of socialization and consultation services, either directly or indirectly. Development of supporting infrastructure and

public access to financial institutions, products or services according to their needs and capacities also need attention for immediate optimization.

#### REFERENCES

- [1] (Organisation for Economic Co-operation and Development), (Organisation for Economic Co-operation and Development). 2018.
- [2] A. Mehrabian and J.A. Russell, *An approach to environmental psychology*. the MIT Press, 1974.
- [3] J. Jacoby, "Stimulus-organism-response reconsidered: an evolutionary step in modeling (consumer) behavior," *J. Consum. Psychol.*, vol. 12, no. 1, pp. 51–57, 2002.
- [4] D. Robert and R. John, "Store atmosphere: an environmental psychology approach," *J. Retail.*, vol. 58, no. 1, pp. 34–57, 1982.
- [5] B. Bin Saeed, B. Afsar, A. Shahjeha, and S. Imad Shah, "Does transformational leadership foster innovative work behavior? The roles of psychological empowerment, intrinsic motivation, and creative process engagement," *Econ. Res. istraživanja*, vol. 32, no. 1, pp. 254–281, 2019.
- [6] J.M. George, G.R. Jones, and W.C. Sharbrough, *Understanding and managing organizational behavior*. Pearson Prentice Hall Upper Saddle River, NJ, 2005.
- [7] A. Lusardi, O.S. Mitchell, and V. Curto, "Financial literacy among the young," *J. Consum. Aff.*, vol. 44, no. 2, pp. 358–380, 2010.
- [8] I. Widayati, "Pengaruh Status Sosial Ekonomi Orang Tua, Pendidikan Pengelolaan Keuangan Keluarga, dan Pembelajaran di Perguruan Tinggi Terhadap Literasi Finansial Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Brawijaya.(Tesis)," *DISERTASI dan TESIS Progr. Pascasarj. UM*, 2012.
- [9] M. Renko, K.G. Kroeck, and A. Bullough, "Expectancy theory and nascent entrepreneurship," *Small Bus. Econ.*, vol. 39, no. 3, pp. 667–684, 2012.
- [10] E.C. Tolman, *Purposive behavior in animals and men*. New York: The Century Company., 1932.
- [11] K. Lewin, *The conceptual representation and the measurement of psychological forces*. Durham, NG: Duke University Press, 1938.
- [12] J. Hartono and W. Abdillah., *Konsep dan Aplikasi PLS (Partial Least Square) Untuk Penelitian Empiris*. Yogyakarta: BPFE, 2009.
- [13] Hartono, *Statistik untuk Penelitian*. Yogyakarta: Pustaka Pelajar, 2004.
- [14] I. Ghozali, *Structural equation modeling: Metode alternatif dengan partial least square (pls)*. Badan Penerbit Universitas Diponegoro, 2008.
- [15] L. Mandell and L. S. Klein, "Motivation and financial literacy.," *Financ. Serv. Rev.*, vol. 16, no. 2, 2007.