
The Effect of Financial Literacy on Financial Well-Being Mediated by Financial Behavior

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ABSTRACT

Purpose: The occurrence of a shift in the consumption patterns of people who originally shopped in traditional markets to modern markets. Market traders often experience delays in development that can affect financial well-being (Financial Well Being). This study aims to see the effect of financial literacy on financial well-being mediated by financial behavior

Design/methodology/approach: This research is a quantitative research using the PLS SEM analysis tool. This research was carried out in Kotagede market, which was established since the time of the Mataram Kingdom in Yogyakarta. The research sample was 99 traders in Kotagede market, Yogyakarta.

Findings: The results showed that there was an influence of Financial Literacy variables on Financial Behavior variables and Financial Behavior variables on Financial Well Being. While the influence between Financial Literacy variables on Financial Well Being is stated to be insignificant. But the results show that the difference between the effect of financial literacy on financial well being will be significant if mediated by financial behavior

Paper type: Research paper

Keyword: Financial Behavior, Financial Literacy, Financial Well Being

Received : May 7th

Revised : May 14th

Published : July 31th

I. INTRODUCTION

The informal sector has a big role in developing countries (NSB) including Indonesia. The informal sector is unorganized, unregulated, and mostly legal but unregistered. In NSB, about 30-70% of the urban workforce population works in the informal sector. According to Kurniadi and Tangkilisan (2002) explained that the informal sector is a sector consisting of small-scale business units that produce and distribute goods and services with the main purpose of creating job opportunities and income for themselves and in their business they are faced with various obstacles such as capital factors, both physical, and human (knowledge) and skill factors. Traditional markets are one of the informal sectors that have great benefits in order to improve the Indonesian economy. The existence of the industrial revolution led to the development of the modern market. This has caused a shift in people's consumption patterns, which used to be quite shopping in traditional markets, now not a few have moved to shopping in modern markets (Ambarwati, 2019).

One of the markets that is the center of MSMEs in Yogyakarta is Kotagede Market. Kotagede Market which still exists today according to several historical sources is known to have existed since the time of Mataram. Kotagede Market is part of the concept of Catur Gatra Tunggal, which means four places or rides become a single unit. The four places are separated by a corridor of streets but are a single entity. The four places or vehicles include: the market as the center of the economy, the square as the center of community culture, the mosque as the center of worship, and the palace as the center of power (Wibowo, 2011). Kotagede Market, which is a market that has existed since the Mataram Kingdom, until now is a market for MSME levels. However, Abor and Quartey (2010) stated that MSMEs often experience delays in their development so that these delays can affect the financial welfare of MSME actors.

Financial well-being according to (Gutter and Copur, 2011) is influenced by various socioeconomic factors and financial behavior. In addition, (Gutter and Copur, 2011) also state that budgeting, thrift, risky credit card behavior, and compulsive purchases are significantly related to finance. Based on factors that affect financial well-being, researchers use two factors that are considered to affect financial well-being, including financial literacy and financial behavior. This confirms previous research from (Gutter and Copur, 2011) which states that financial well-being is influenced by one of them financial behavior.

Financial well-being can be achieved when a person has good financial literacy in making sound financial decisions. Financial capability is often referred to as financial literacy. Financial difficulties do not only occur due to issues of economic status. Financial difficulties can also occur if people mismanage finances. The existence of financial literacy can help someone in managing financial planning. A combination of financial knowledge, skills, attitudes and behaviors is necessary to make sound financial decisions, based on individual circumstances, to improve financial well-being (Muir et al., 2017). This explanation is also supported by the results of research from Zulfiqar and Bilal, (2016) which explains that one of the things that can affect financial well-being is Financial Literacy.

In addition to these factors, based on previous research, financial well-being is also influenced by financial behavior (Financial Behavior) where this factor is used as an intervention variable or intermediary variable. Based on the theory of life plan development that the habit of behavior of a person in acting can provide benefits for the well-being of the individual, in this case is financial well-being. This financial behavior influences financial behavior. (Sabri and Falahati, 2012) states that positive financial behavior can increase the level of financial well-being. Research (Starobin et al., 2013) and (Adam, 2017) shows that financial behavior is related to financial well-being. Based on the background and existing phenomena, the researcher took the title *The Effect of Financial Literacy on Financial Welfare through Financial Behavior as a Mediation Variable (Study at SARGEDE Mataram, Kotagede, Yogyakarta)*

A. Literature Review And Hypothesis Development

1. Literature Review

a. Financial Well-Being

According to (Kim, Garman, & Sorhaindo, 2003) states that financial well-being is a function of individual characteristics, financial behavior, and stressful financial events. An individual's financial well-being is related to attitudes, behaviors and feelings toward the financial condition of the individual. A person's well-being is not only seen from his physical or health but also seen from his spiritual. Indicators of his financial well-being. Financial well-being indicators are divided into 2, namely objective and subjective welfare. Objective indicators refer to a person's economic status such as income level and debt level (Bruggen et al, 2017). Each individual has the same level of income but has a different level of financial well-being and values (Tanoto & Evelyn, 2019). It is also stated by (Bruggen et al, 2017) that individuals have the same level of income but the level of welfare obtained differs depending on their personal preferences. In addition, subjective indicators are also influenced by financial satisfaction and financial behavior (Muhammad, 2018). This study used more subjective indicators in measuring financial well-being. This is because subjective models are easier to calculate or measure. According to Tanoto & Evelyn (2019) that subjective models are preferred because they are more comprehensive because they can cover non-financial matters and are more suitable for understanding financial concepts personally.

b. Financial Behavior

Financial behavior can be defined as a person's behavior in terms related to financial management in everyday life (Xiao, 2003). Financial behavior is related to a person's behavior in managing and using financial resources in actual (Nababan & Sadalia, 2012). Financial behavior relates to a person's financial responsibilities related to the way finances are managed. Financial responsibility is the process of managing money and assets that is carried out productively. Money management is the process of mastering and using financial assets (Andrew & Linawati, 2014). According to Suryanto (2017), financial behavior is a way that everyone does to treat, manage, and use their financial resources.

c. Financial Literacy

Financial literacy is the ability to manage finances (Chen & Volpe, 1998), while according to Lusardi and Mitchell (2008), financial literacy can be interpreted as financial knowledge, with the aim of achieving prosperity. This can be interpreted that preparations need to be made to welcome globalization, and more specifically, globalization in the financial sector. Financial literacy is awareness and knowledge of financial products, financial institutions, and concepts regarding skills in managing finances (Xu & Bilal, 2012), while according to the Financial Services Authority (OJK) financial literacy is knowledge, skills, and beliefs that influence attitudes and behaviors to improve the quality of decision making and financial management in order to achieve prosperity.

Financial literacy is divided into four aspects consisting of basic financial knowledge, savings and borrowing, insurance, and investment (Chen & Volpe, 1998).

2. Hypothesis Development

a. Financial Literacy toward Financial Behavior

From various studies that have been conducted to analyze the effect of Financial Literacy on Financial Behavior, where researchers show that Financial Literacy has an influence on Financial Behavior (Ida & Dwinta, 2010; Tang & Baker, 2015; Ismail et al., 2017). Research conducted by Perry and Morris (2005), Mien and Thao (2015), Arifin (2017) and Grable et al. (2009) argues that Financial Literacy has a positive influence on Financial Behavior. Based on the results of the study, individuals have a high knowledge of financial concepts. But there are also studies that have very contrary results. Research conducted by Herdjiono and Damanik (2016) suggests that Financial Literacy has no influence on Financial Behavior. From the results of this study, it can be concluded that individual financial knowledge has no effect on financial behavior in managing their personal finances. Based on the results of previous research, the hypothesis can be concluded that

H1: There is an influence of Financial Literacy on Financial Behavior

b. Financial Behavior toward Financial Well-Being

Qamar et al., (2016) explained that financial behavior is human behavior that is relevant to financial management. Financial behavior is related to how a person treats, manages, and uses the financial resources available to him. Individuals who have responsible financial behaviors tend to be effective in using their money, such as budgeting, saving money and controlling expenses, investing, and paying obligations on time. (Nababan and Sadalia, 2012). Financial behavior is related to financial well-being. Following the theory of life-span development proposed by Baltes in 1987, namely the formation of behavioral habits. Habits in behavior can shape actions that provide benefits and well-being in human life. In this study, the formation of behavioral habits is financial behavior. Good financial behavior will cause the family to manage finances well so that financial prosperity can be achieved. This is supported by research conducted by (Gutter and Copur, 2011) which shows that financial behavior has a positive influence on financial well-being. In addition, research from (Mohamed, 2017) also shows that financial behavior has a positive influence on financial well-being.

Based on the results of previous research, the hypothesis can be concluded that

H2 : There is an influence of Financial Behavior on Financial Well-Being

c. Financial Literacy toward Financial Well Being

Taft et al., (2013) explain that Financial literacy means the ability to understand and analyze financial options, plan for the future, and respond appropriately to events. So, a person with good financial literacy can increase financial security and reduce financial problems in the future. Having financial literacy skills affects living and working conditions and can be very helpful in anticipating the future and increasing income. According to Alwee Salleh (Garg and Singh, 2017), financial literacy is considered as a means to facilitate financial well-being, so having financial literacy will help families with daily financial tasks, handle financial emergencies and can avoid the threat of poverty.

It follows the theory of age development proposed by Baltes in 1987. This theory is closely related to cognitive development with knowledge that can provide benefits and well-being in human life. Knowledge of the cognitive is important in aiding well-being. The better the family's financial literacy level, the better the financial well-being. Conversely, when a family's financial literacy level becomes worse, the level of financial well-being also becomes worse. Families with a good level of financial literacy can make good financial decisions so that their level of financial well-being can be achieved.

Based on the results of previous research, the hypothesis can be concluded that

H3: There is an influence of Financial Literacy on Financial Well-Being

d. Financial Literacy to Financial Well-Being through Financial Behavior

Muir et al., (2017) explain that individuals with higher levels of financial literacy and good financial knowledge, attitudes, decisions, and behaviors tend to have better levels of financial well-being as well. But financial knowledge, attitudes, decisions, and behaviors affect financial well-being in different ways and mean different things to people of different ages. A high level of financial literacy will show good financial behavior so that the level of financial well-being can be felt (Falahati and Paim, 2011). With proper financial management supported by good financial literacy, it is expected that people's living standards will improve because no matter how high one's income is, without proper financial management, financial security will be difficult to achieve. It follows the opinion (Dwiastanti, 2015) by managing finances properly and correctly, individuals in the household will avoid financial difficulties.

This is in line with the behavioral theory planned by Ajzen in 2005 which deals with the background in implementing financial behavior, i.e. information, in this case, is knowledge. Knowledge is included in the category of control beliefs which in this study is financial literacy that influences traders' financial behavior. In addition, this is also in line with the theory of life span development by baltes in 1987 related to cognitive development that can form behavioral habits, which will then provide benefits for well-being

Based on the results of previous research, the hypothesis can be concluded that

H4: The Effect of Financial Literacy on Financial Well-Being Mediated by Financial Behavior

II. METHODS

This study used a quantitative descriptive research design. The population used in this study is Micro, Small and Medium Enterprises in Kotagede Market, Yogyakarta. The sampling method in this study is non-probability sampling with purposive sampling techniques. The determination of the number of samples developed by Roscoe in Sugiyono (2015) is a feasible sample size in the study is between 30 to 500. This study used primary data or direct data. According to Sugiyono (2017) Primary data sources are data obtained directly from the results of interviews, observations and questionnaires distributed to a number of sample respondents who are in accordance with the target target and are considered representative of the entire population. The source of data in this study was obtained from the results of a questionnaire of market traders in Kotagede Market, Yogyakarta. This study used the Structural Equation Modeling (SEM) testing model with Smart-PLS software version 3.2.8. Validation testing in PLS based on convergent validity, Average Variance Extracted (AVE), Loading Factor. Reliability testing based on composite reliability and Cronbach's Alpha results of each variable. The outer model test is used to see indicators of independent variables in research. Determine whether all indicators can be declared valid and realistic based on each variable based on loading factor and AVE. if the loading factor and AVE result >0.5 , then the indicator is declared valid. Next, the model test is carried out by checking the goodness of fit inner model. The examination is based on the total determination value (Q^2) by calculating the R^2 of each variable.

III. RESULTS AND DISCUSSION

A. Validity and Reliability Test

1. Loading Factor

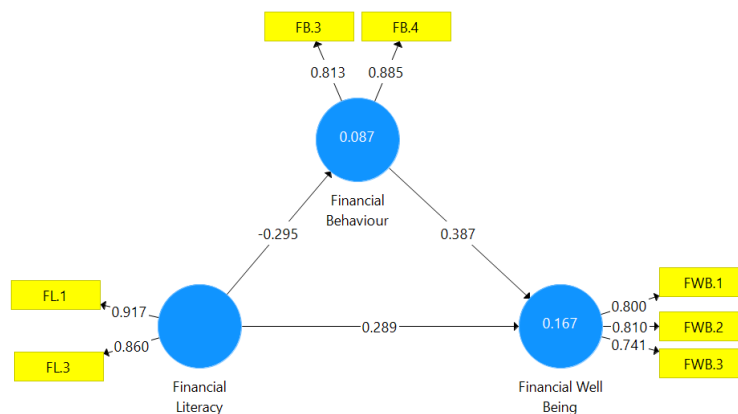


Figure 1. Loading Factor

Convergent validity testing is used outer loading or loading factor values. An indicator is declared to meet convergent validity in the good category if the outer loading value > 0.6 . This study has had an outer loading value of more than 0.6 shown with the outer loading image above. Another method that can be used to assess the validity of discriminants is based on the Fornel Larcker criterion and the value of loading and cross loading indicators. The forn-el-Larcker criterion calculation process is carried out by comparing the AVE root of each construct with the correlation between one other construct in the research hypothesis model (Ghozali, 2008). If the results of the forn-el-Larcker Criterion calculation show that the AVE root value of each construct is greater than the correlation value between one construct and another, then the discriminant validity value is expressed whether the

discriminant validity value based on the Fornell-Lacker Criterion in this research model can be seen in the following table:

Table 1. Cross Loading Fornell Larcker Criterion

	<i>Financial Behaviour</i>	<i>Financial Literacy</i>	<i>Financial Well Being</i>
<i>Financial Behaviour</i>	0,850		
<i>Financial Literacy</i>	0,295	0,889	
<i>Financial Well Being</i>	0,302	0,175	0,784

The next analysis after the validity test is a reliability test. Instrument reliability tests are carried out to determine consistency with the regularity of measurement results of an instrument even though it is carried out at different times, locations, and populations. Construct reliability is measured by two different criteria: composite reliability and Cronbach's Alpha (internal consistency reliability). A construct is considered reliable if the value of composite reliability is more than 0.7 and the value of Cronbach's Alpha is more than 0.6. The results of reliability test calculations on composite reliability and Cronbach's Alpha are shown in table 2

Table 2. Construct reliability

	<i>cronbach's Alpha</i>	<i>Composite Reliability</i>
<i>Financial Behaviour</i>	0,619	0,838
<i>Financial Literacy</i>	0,739	0,883
<i>Financial Well Being</i>	0,686	0,827

The results of measuring Composite Reliability and Cronbach's Alpha in the Table show that all variables for Composite Reliability have values above 0.70 and all variables for Cronbach's Alpha have values above 0.60. Thus, these results can be declared valid and have a fairly high reliability.

2. Inner Model

The inner model can be measured by calculating the R-square for the dependent construct, the t-test as well as the significance of the structural path parameter coefficients. There are three categories in the grouping of R-square values. If the R-square value is 0.75 belongs to the strong category; for R-square values 0.50 belongs to the moderate category and 0.25 belongs to the weak category (Hair et al, 2010). Structural model testing is to look at the R square value as a model goodness-fit test or alignment test. The R-square value of the dependent variable obtained in this research model can be seen in the following table:

Table 3. Inner Model Test

<i>Variable</i>	<i>R Square Adj</i>
<i>Financial Behaviour</i>	0,78
<i>Financial Well Being</i>	0,15

The Financial Behavior (FB) variable has an r-square value of 0.78 or 78% after calculation through SmartPLS, this can be interpreted that the variance ability that can be explained by the variable is 78% through this model. The 22% that influence Financial Behavior is explained through other models. While the R Square value between Financial Literacy variables to Financial Well Being has an R² value of 0.15 or 15%. This shows that the variables in this study are able to explain their effect on indogen variables by 15%. And the remaining 85% is explained outside the existing model.

The next process after the R square value is obtained is to perform a t-test of the significance of the structural path parameter coefficient. The significance value of the parameter coefficient can be calculated using the bootstrapping method. Bootstrapping is a non-parametric procedure that can be applied to test whether coefficients such as outer weight, outer loadings, and path coefficients are significant by estimating the standard error for the estimate. The results of data processing to see the relationship between variables can be seen in the table below by using bootstrapping in PLS, the results of Path Coefficients and T-statistics will be obtained

Table 4. Bootstrapping

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics (O/STDEV)</i>	<i>P Values</i>	
<i>Financial Behaviour -> Financial Well Being</i>	0.387	0.402	0.097	3.974	0.000	Sig
<i>Financial Literacy -> Financial Behaviour</i>	-0.295	-0.295	0.111	2.659	0.008	Sig
<i>Financial Literacy -> Financial Well Being</i>	0.175	0.181	0.106	1.642	0.101	No Sig

Based on the presentation of data in the table above, it can be seen that of the three hypotheses proposed in this study related to the influence between variables, two are acceptable because each influence shown has a P-Values value of < 0.05. That is the influence of the Financial Literacy variable on the Financial Behavior variable with a significance value of 0.008. And the next influence between the variables of Financial Behavior on Financial Well Being with a significance value of 0.000 So that it can be stated that the independent variable to its dependents has a significant influence. While the effect between Financial Literacy variables on Financial Well Being is stated to be insignificant with a value of 0.101.

The next step is to conduct a mediation test between Financial Literacy variables on Financial Well Being with Financial Behavior as mediation variables. Based on the data, the following data is shown in table 5.

Table 5. Test Mediation

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics (O/STDEV)</i>	<i>P Values</i>	<i>Info</i>
<i>Financial Literacy -> Financial Behaviour -> Financial Well Being</i>	-0.114	-0.119	0.055	2.071	0.039	Sig
<i>Financial Literacy -> Financial Well Being</i>	0.175	0.181	0.106	1.642	0.101	No Sig

Based on table 5 data, it was found that the P-Value value in the role of the Financial Behavior variable as a mediation between Financial Literacy and Financial Behavior with a value of 0.039 or below 5%. Referring to

the direct influence between the results obtained that Financial Literacy does not have a significant effect on Financial Well Being. Meanwhile, if the role of mediation with Financial Behavior variables is carried out, it becomes significant. This shows that Financial Behavior is a full mediator.

V. CONCLUSION

The informal sector has a big role in developing countries (NSB) including Indonesia. Traditional markets are one of the informal sectors that have great benefits in order to improve the Indonesian economy. There is a shift in people's consumption patterns, which used to be enough to shop in traditional markets, now not a few have moved to shopping in modern markets. Market traders often experience delays in their development that can affect financial well-being (Financial Well Being). Financial well-being can be achieved when a person has financial literacy. In addition, based on previous research, financial welfare is also influenced by financial behavior (Financial Behavior). This research results that Financial Literacy can affect Financial Behavior. Similarly, Financial Behavior towards Financial Well Being. This research also shows that Financial Literacy does not significantly affect Financial Well Being. But the results show that the difference between the effect of financial literacy on financial well being will be significant if mediated by financial behavior.

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