



# Confirmatory Factor Analysis of Self-efficacy and Financial Attitudes to Improve the Financial Well-Being of MSMEs

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**Abstract.** Micro, Small, and Medium Enterprises (MSMEs) had a significant role to the Indonesian economy. The existence of MSMEs is believed to be able to contribute to efforts to alleviate poverty through job creation. In the financial sector, MSMEs are said to be successful and achieve happiness if they have achieved financial well-being. When MSME actors have self-efficacy and a positive financial attitude, financial well-being is considered high. This study aims to analyze the confirmatory factors of self-efficacy and financial attitudes to improve *financial well-being*. The study examined data using confirmed factor analysis (CFA) techniques with *Structural Equation Modeling* (SEM) software. Considering the findings of the examination of confirmatory factors, it is concluded that confidence in financial planning is the indicator that is believed to have the strongest or largest influence on the formation *financial self-efficacy*. Financial security is the indicator that is determined to have the strongest or largest gift to create a financial attitude, and money saved is the indicator that is considered to have the largest contribution or the strongest form of financial well-being.

**Keywords:** Self efficacy · financial attitude · financial well-being

## 1 Introduction

The role of Micro, Small, and Medium Enterprises (MSMEs) is very prominent throughout the world [1]. Moreover, it has a significant role in the economic development of a country [2] because MSMEs can be established in any region for all types of business activities in urban and rural areas [3]. The existence of MSMEs is believed to be able to contribute to efforts to alleviate poverty through job creation [4]. In the financial sector, MSMEs are said to be successful and achieve happiness if they have achieved financial well-being [5].

[6] explained that *financial well-being* could be measured through a healthy financial condition, comfort in facing the financial situation, confidence in controlling personal finances, being satisfied with the financial situation, and being able to overcome urgent financial circumstances. In the study of MSMEs, [7] *financial well-being indicators* are shown by the trust in the financial condition of their business, a sense of security over the

current financial condition, understanding of the philosophy of debt, and understanding of the value of money in the future. [8] measure the *financial well-being* of the MSME sector with the current financial condition and financial stability.

MSME actors will get high *financial well-being* if they have a sense of self-confidence or confidence implemented in self-abilities to encourage them to do something known as self-efficacy [9]. *Self-efficacy* is a form of an individual's assessment of his ability to plan and perform actions to achieve certain goals. Self-efficacy, especially in finance, is the level of trust in a person's ability to access, use financial products or services, make financial decisions, and face complex financial situations [10].

In the MSME study, financial self-efficacy indicators, according to [11], are measured by confidence in the ability to plan financial expenditures, confidence in the ability to achieve financial goals, and confidence in decision-making ability. [12] measured the indicators of self-efficacy of MSME owners are consist: the confidence in managing finances, ease of spending using less than their income a month, the confidence of being able to save money (saving) for the future, confidence in being able to borrow money in the bank and being able to manage finances in achieving financial goals. [13] explained that the indicators of financial self-efficacy of MSME owners consist of confidence in making financial decisions and solving financial problems. [14] found evidence that financial efficacy is one of the keys to financial success because it will improve correct money management. [6] reinforce that financial efficacy is needed to increase awareness of managing money correctly. The existence of financial efficacy can improve the way of managing money correctly so that it impacts financial [15].

Financial well-being is achieved when a person can fulfill all their needs while still having money to spare, has financial control, and feels secure both now and in the future [16]. [17] stated that *financial well-being* could be high with a positive financial attitude and healthy financial behavior. The study in MSMEs on financial attitude indicators is explained by [18], which is based on orientation towards personal finance, money security, debt philosophy, and assessing personal finance. Meanwhile, [19] measured the indicators of the financial attitude of MSME owners with confidence in taking risks, willingness to take financial training, and social factors. [7] strengthens four indicators for financial attitudes, including financial security, money philosophy, orientation towards personal finance, and respect for personal finance.

Considering the research context, it is interested in conducting a study of the analysis of factors confirming self-efficacy and financial attitudes in order to improve the financial well-being of MSMEs.

## 2 Research Methods

### 2.1 Population and Sample

In this study, with an innumerable population (infinity population), the sample size multiplied the number of indicators of 5 variables by 5–10 [20]. Using these criteria, the size of the sample was  $16 \times 10 = 160$  respondents. After determining the number of samples, as many as 160 MSME Craft owners were respondents in this study.

## 2.2 Operational Definition and Variable Measurement

This study's design called for an empirical approach. The operational variable and proposed hypothesis will be systematically examined in Table 1.

## 2.3 Analysis Methods

The factor analysis technique used is the Confirmatory Factor Analysis (CFA), based on empirical theory and research. The CFA is the measurement model from structural equation modeling (SEM) standpoint. Since it exclusively concentrates on the relationship between the factors and all the measured variables.

**Table 1.** Variables and Indicators

No	Variables	Indicators	Items
1	Financial Self-Efficacy (X1)	Confidence in financial planning	a. MSME owners can do good financial planning for future financial conditions. b. MSME owners stick to an expense plan when unexpected expenses arise
		Confidence in financial decision making	a. MSME owners are confident in making financial decisions. b. MSME owners believe that if faced with various financial alternatives, they can find a way out to find the right solution
		Confidence in being able to solve financial problems	a. MSME owners feel able to solve the financial problems they face. b. MSME owners often think they can do something right in solving financial problems
		Confidence in the ability to manage finances	a. MSME owners are confident that they can successfully manage their money. b. MSME owners are confident that they can overcome challenges in managing money.
2	Financial Behavior (X2)	Orientation Towards Personal Finances	a. MSME owners make important budgets to ensure proper financial management b. MSME owners make financial plans that can help make investment decisions.
		The Philosophy of Debt	a. MSME owners compare credit options before applying for installments. b. MSME owners are obliged to pay their debts regularly.

(continued)

**Table 1.** (continued)

No	Variables	Indicators	Items
		Financial Security	a. MSME owners make regular investments b. MSME owners prepare a regular savings pattern
		Personal Financial Management	a. MSME owners manage finances well b. MSME owners are responsible for their financial well-being.
3	Financial Well-Being (Y)	<i>Current financial situation</i>	a. MSME owners currently have a healthy financial condition b. SME owners feel comfortable facing the current financial situation (income, debt level, and business maintenance)
		Money saved	a. MSME owners have savings that are used for the future b. MSME owners save for unexpected business needs
		Financial management skills	a. MSME owners can earn income from their business to achieve financial goals b. MSME owners can cover their business costs without borrowing c. MSME owners can overcome and control financial shocks
		Financial stability	a. MSME owners have a perception of financial stability and adequacy of their business. b. MSME owners have material and non-material financial resources

### 3 Finding and Discussion

#### 3.1 Confirmatory Factor Analysis Result

The results of measurements of dimensions or indicators of variables that can form latent variables with CFA and the determination of indicators of research variables are based on *the value of the loading factor*. A summary of the results of the CFA test against the indicators that make up the research variables is shown in Table 2.

Table 2 provides an explanation of how the indicators that comprise the financial self-efficacy variables confidence in financial planning, confidence in making financial decisions, confidence in being able to solve financial problems, and confidence in the ability to manage finances have a loading factor value above 0.5. Additionally, confidence in financial planning is the indicator that is thought to have the highest or strongest contribution to building the financial self-efficacy variable when examined from the value of the loading factor of each indicator.

**Table 2.** Loading Factors ( $\lambda$ ) Research Variables

Indicators and Variables			Loading Factors
Confidence in financial planning	→	Financial Self Efficacy	0,832
Confidence in financial decision making	→	Financial Self Efficacy	0,780
Confidence in being able to solve financial problems	→	Financial Self Efficacy	0,740
Confidence in the ability to manage finances	→	Financial Self Efficacy	0,749
Orientation Towards Personal Finances	→	Financial Attitude	0,746
The Philosophy of Debt	→	Financial Attitude	0,762
Financial Security	→	Financial Attitude	0,797
Personal Financial Management	→	Financial Attitude	0,756
<i>Current financial situation</i>	→	Financial Well Being	0,702
Money saved	→	Financial Well Being	0,754
Financial management skills	→	Financial Well Being	0,749
Financial stability	→	Financial Well Being	0,624

Indicators that form the financial attitude variables, namely the concentration of personal finance, debt philosophy, financial security, and personal financial management, have a loading factor above 0.5. According to the loading factor of each indicator, the indicator that is thought to have the largest or strongest contribution to producing the financial attitude variable is the factor's security. The indicators comprising the Financial Well-Being variable, namely current financial situation, money saved, financial management skills, and financial stability, have a loading factor above 0.5. As a result, every one of the evaluated indicators has value in shaping financial well-being. Money saved is also thought to have the highest or strongest contribution to the Financial Well-Being variable when measured from the value of the loading factor of each element.

Based on the description of loading factors above, it can explain the greatest contribution of *financial self-efficacy*, *financial attitude*, and *current financial situation* to variables. [15] explain that *financial well-being* as a state of financial well-being is financially happy and free from worries, which is based on the subject's assessment of the financial situation. [6] explained that *financial well-being could be* measured through a healthy financial condition, comfort in facing the financial situation, confidence in controlling personal finances, being satisfied with the financial situation, and the ability to overcome urgent financial circumstances. In the study of MSMEs, [7] revealed that *financial well-being indicators are* shown by confidence in the financial condition of their business, a sense of security in the current financial condition, understanding the philosophy of debt, and understanding of the value of money in the future.

Money saved is the indicator thought to have the largest or strongest contribution to generating the financial well-being variable based on the confirmatory factor analysis results. It means that craft MSMEs located in Malang City will achieve financial welfare MSMEs' owner has savings that are used for the future, and MSMEs save for unexpected business needs.

Self-confidence related to financial aspects (*financial self-efficacy*) can be explained through an individual's self-assessment of financial knowledge [21]. Self-trust-related to financial aspects is defined as an individual's positive attitude towards knowledge and competencies related to financial aspects. [5] suggests that financial self-efficacy is a positive belief in the ability to succeed in managing finances.

Confidence in financial planning is the indication that is thought to have the largest or strongest impact on forming financial self-efficacy variables based on the findings of the Confirmatory Factor Analysis. This means that MSMEs Craft in Malang City will achieve *financial self-efficacy* if MSMEs' owners can make good financial planning for future financial conditions and MSMEs' owners stick to the expenditure plan when unexpected expenses arise.

Attitude is a view, opinion, and assessment of the financial situation and can be seen from the point of view of self-confidence, self-development, and security [22]. A financial attitude applies financial principles to make decisions and manage resources effectively to produce and retain value [23]. Financial attitudes are improved by procuring adequate information [24].

The security of the financial account is thought to have the largest or strongest contribution to developing a financial scap variable based on the findings of the confirmatory factor analysis. It means that MSME owners will have a good financial attitude employees make regular investments and prepare a regular savings pattern.

Results of this study explained that the MSME owners would achieve financial welfare through ownership of savings used for the future and unexpected business needs if MSME owners have *financial self-efficacy*, which is shown by being able to do good financial planning for future financial conditions and observe your budget when unplanned expenses occur. In addition, the achievement of *financial well-being* for MSME owners because of the role of the financial landscape shown by the owner of MSMEs making regular investments and the owner of MSMEs preparing a regular savings pattern.

## 4 Conclusion

It was explained using the findings of the confirmatory factors analysis that the indicator of confidence in financial planning, confidence in making financial decisions, confidence in being able to solve financial problems, and confidence in the ability to manage finances are important indicators as a form of *financial self-efficacy*. The indicator considered to have the greatest or strongest contribution to forming *the financial self-efficacy* variable is confidence in financial planning. Orientation of personal finance, debt philosophy, financial security, and personal financial management are important indicators as a shaper of *financial attitude*. The indicator considered to have the largest or strongest contribution to forming *financial attitude* variables is financial security. *Current financial situation*,

money saved, financial management skills, and financial stability are important indicators as a shaper of *financial well-being*. The indicator considered to have the largest or strongest contribution to form *financial well-being variables* is money saved.

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