

The Effect of Financial Literacy and Financial Inclusion on Rational Financial Decisions of MSMEs

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Abstract: *The research aim is to analyze the direct and indirect effects of financial literacy and financial inclusion on rational financial decisions. The research design is explanatory. This research is a cross-sectional study in which all research variables are measured and observed during the same period. The instruments used are financial literacy questionnaires, financial inclusion, and rational financial decisions. The research instrument uses 4 Likert scales. The sampling technique used is a stratified purposive sampling technique. The population consisted of three strata: micro, small, and medium enterprises. Research population 27,481 enterprises. The sample consisted of 150 businesses according to the objectives and needs of the research. The analysis technique used is descriptive and inferential analysis with SEM Pls. The study results show that the effect of financial knowledge, financial attitudes, and financial behavior on rational financial decisions is positive and significant. The direct financial inclusion effect on rational financial decisions is positive and significant. The financial knowledge effect on rational financial decisions through inclusion is positive and significant. The financial attitudes and financial behavior effect on rational financial decisions through financial inclusion is positive but not significant.*

Keywords: *Financial decisions, Financial inclusion, Financial literacy.*

I. INTRODUCTION

MSMEs (Micro, Small, and Medium Enterprises) have a crucial role in the Balinese economy. MSMEs in Bali, Indonesia contribute to regional income and employment. Based on data on the diversity of MSMEs in Bali in 2021, MSMEs will total 441,127 spread across eight districts and one city. The majority of SMEs in Bali are informal SMEs, namely 342,560 businesses, and the remaining 98,567 businesses are formal SMEs. Most MSMEs in Bali are micro businesses, namely 386,957 businesses, and the remaining 54,170 are small and medium businesses. Most MSMEs in Bali operate in the trading sector, namely 255,173, and the remaining 185,954 in the agricultural industry, non-agricultural industries, and various service sectors.

Indonesia's financial literacy and financial inclusion need to be improved. Indonesia's financial literacy index is 49.68% in 2022. Indonesia's financial inclusion index is 85.1% in 2022 [1]. Indonesia's financial literacy index is a low category (<60%) [2]. Financial literacy needs to be improved to increase financial inclusion [3] and improve the quality of financial decision-making [4], [5], [6]. Indonesia's financial inclusion index is a good category (> 80%) [2]. Financial inclusion needs to be increased for quality financial decision-making, helping to reduce financial vulnerability [7].

The rationality of financial decisions is crucial for MSMEs to improve performance. Financial decisions consist of three types of interrelated decisions, namely investment, funding, and working capital decisions. Investment decisions are related to the allocation of capital to implement investment opportunities by considering the magnitude of the opportunities and risks of future investment cash flows. Funding decisions concern the specific mix of long-term debt and capital used by the company. Working capital decisions include managing short-term assets and liabilities. Businesses need to seek the optimal combination of the three types of financial decisions [8].

MSME entrepreneurs and policymakers need to know the description of financial literacy, financial inclusion, and rational financial decisions. MSME entrepreneurs and policymakers also need to know the testing results of the effect of financial literacy and financial inclusion on the rational financial decisions of MSME entrepreneurs as a basis for policy-making and MSME empowerment. Research is needed to analyze the direct and indirect effects of financial literacy on financial inclusion and rational financial decisions. This research provides a better description and understanding of financial literacy, financial inclusion, and rational financial decisions for MSME entrepreneurs.

II. LITERATUR REVIEW

2.1 Financial literacy

The conceptual definition of financial literacy introduced by Canada is perhaps the most comprehensive and clearly states that financial literacy means having the knowledge, skills, and confidence to make responsible financial decisions. The conceptual definition of financial literacy talks about abilities, knowledge, and skills but does not attempt to articulate what aspects of money management shape one's financial literacy [9]. Financial literacy is knowledge, skills, and beliefs which influence attitudes and behavior to improve the quality of decision-making and financial management to achieve prosperity [4]. Literacy is a crucial instrument for growing financial awareness, knowledge, skills, attitudes, and behaviors required for individuals to access and use these services effectively [10].

2.2 Financial Inclusion

Financial inclusion is the process of ensuring timely access to adequate financial and credit services. Financial inclusion is the availability of access to various institutions, products, and financial services according to the needs and capabilities of the community to improve people's welfare [4]. Financial inclusion involves providing access and providing formal financial services to underserved populations [11]. Financial inclusion is the availability of access to various formal financial institutions, products, and services to the needs and capabilities of the community to improve people's welfare. Financial inclusion is important and has a beneficial effect on poverty. This effect is more pronounced in poorer economies than in richer ones [12].

2.3 Financial Decision

Decisions are actions that are deliberately chosen from various alternatives to achieve organizational goals [13]. Financial decisions are a process that is responsible for all decisions relating to the obligations and equity of the company's shareholders and the issuance of bonds. The financial strategy consists of three types of interrelated decisions, namely: investment, funding, and working capital decisions [8]. The element of rationality in the decision-making process is an important prerequisite for the managerial functions' performance. Rational decision-making is acting in the best way considering the goals and constraints. The decision becomes rational must be consistent, comparative, conscious, and flexible [8].

2.4 Previous Study

Several studies researched the effect of financial literacy on financial decisions. Research [14] states that the level of financial literacy of rural residents will influence financial decisions and financial well-being. Research [15] clarify the contribution of numeracy and financial literacy to the quality of decision-making in the financial context. The research results show that numeracy and financial literacy affect decision-making differently.

Several studies have researched the effect of financial literacy on financial inclusion. Research [16] show the relationship between financial literacy and financial inclusion. The study results of [17] show that recipients of financial literacy training are more likely to intensify their financial inclusion and have a higher intensity of inclusion. The study results show that financial literacy has a positive and significant effect on financial inclusion. Research [18] show that higher financial literacy has a positive impact on financial inclusion.

Several studies on the effect of financial inclusion on financial decisions are still limited. The study results of [19] show that financial inclusion has a positive effect on financial decisions. Research [20] show that financial inclusion has a positive effect and significant effect on financial decisions. Further research is needed to obtain a better description and better understanding of the effect of financial literacy on financial inclusion and rational financial decisions in MSMEs (Micro, Small, and Medium Enterprises).

2.4 Hypothesis

Based on the maha literature review, the research hypothesis can be formulated as follows:

- H1: Financial knowledge has a positive effect on financial inclusion.
- H2: Financial knowledge has a positive effect on financial decisions.
- H3: Financial attitudes has a positive effect on financial inclusion.
- H4: Financial attitudes has a positive effect on financial decisions.
- H5: Financial behavior has a positive effect on financial inclusion.
- H6: Financial behavior has a positive effect on rational financial decisions.
- H7: Financial inclusion has a positive effect on rational financial decisions.
- H8: Financial knowledge has a positive effect on financial decisions through financial inclusion.
- H9: Financial literacy has a positive effect on decisions rational finance through financial inclusion.

H10: Financial behavior has a positive effect on rational financial decisions through financial inclusion.

III. METHOD

The research design is explanatory. It explains the causal relationship between several variables through hypothesis testing. This research is a cross-sectional study in which all research variables are measured and observed at the same period of time. The instruments used are financial literacy questionnaires, financial inclusion, and rational financial decisions. The type of data used is quantitative data. The quantitative data include financial literacy, financial inclusion, and rational financial decisions. Research data was obtained from primary sources and secondary sources. Data were collected through interviews, questionnaires, and documentation. The instrument uses 4 Likert scales, from 1 (very bad) to 4 (very good). The sampling technique used is a stratified purposive sampling technique. Research population 27,481 enterprises. The population consisted of three strata, namely micro, small, and medium enterprises. A sample of 150 businesses was selected according to the objectives and needs of the research. The analysis technique used is descriptive and inferential. Descriptive analysis is used to explain the characteristics of the respondents and to explain the respondents' responses to the research construct. The measures used in descriptive statistics are the minimum, maximum, average, and standard deviation of the research construct. Inferential analysis in this study uses the variance-based SEM or Partial Least Square SEM (SEM-PLS) approach. Analysis with SEM Pls. The Statistical data analysis using the warpPls 7.0 program.

IV. RESULT AND DISCUSSION

The research sample includes micro-businesses, small businesses, and medium businesses. The research sample is engaged in the trading sector, agricultural industry, non-agricultural industry, and various services. The characteristics of the sample and the characteristics of the respondents in this study can be seen in Tables 4.1 and 4.2.

Tabel 4. 1 Sample Characteristics

Description	Category	Frequency	Percentage
Business Classification	Micro business	93	62.00%
	Small business	43	28.67%
	Medium Business	14	9.33%
Business Sector	Trading	106	70.67%
	Agricultural Industry	1	0.67%
	Non-Agricultural Industry	4	2.67%
	Various Services	39	26.00%

Table 4.2 Demographic Characteristics of Respondents

Information	Category	Frequency	Percentage
Gender	Man	62	41.33%
	Woman	88	58.67%
Age (years)	12-25	33	22.00%
	26 - 45	57	38.00%
	46 - 65	60	40.00%
	>65	0	0.00%
Education	Elementary School	7	4.67%
	Junior High School	12	8.00%
	High School	82	54.67%
	Diploma	17	11.33%
	Bachelor	30	20.00%
	Postgraduate	2	1.33%

Tables 4.1 and 4.2 show that most respondents are micro businesses (62.00%), and the rest are small and medium businesses. Most respondents operate in the trade sector (70.67%), and the remainder operates in the agricultural

industry, non-agricultural industry, and various services sectors. Most respondents are female (58.67%), aged 45-65 years, and have high school education (54.67%).

4.1 Descriptive Analysis

The average of all financial inclusion indicators is 2.77. Based on the percentage score of all financial inclusion indicators, it can be stated that the financial inclusion of MSMEs in Bali Province is good (69.50%). Knowledge of MSME actors regarding financial records and reporting, business risks, and behavior in keeping business financial records is still lacking. This lack of knowledge and attitudes towards financial behavior of financial actors needs to be improved. Data descriptions and percentage scores for MSME financial literacy in Bali Province can be seen in Table 4.3 and 4.4.

Table 4.3 Description of MSME financial literacy in Bali Province

Dimensions	N	Min	Max	Mean	SD
Financial Knowledge					
Inflation and its effect on the time value of money	150	1	4	2.94	0.47
Interest and the influence of loans / investments	150	2	4	3.15	0.43
Financial records and reporting	150	1	4	2.29	0.56
Business Risk	150	1	4	2.18	0.46
Financial Attitude					
Setting financial goals	150	1	4	3.17	0.56
Business funding confidence	150	1	4	2.79	0.56
Detailed financial planning	150	1	4	2.79	0.65
Financial Behavior					
Separation of household and business accounts	150	1	4	2.83	0.67
Selection of financial products	150	1	4	2.96	0.64
Financial record keeping	150	2	4	2.49	0.64
Thinking about retirement	150	1	4	2.87	0.62

Table 4.4 Percentage of MSME financial literacy scores in Bali Province

Dimensions	Real Score	Ideal Score	Percentage
Financial Knowledge			
Inflation and its effect on the time value of money	441	600	73.50%
Interest and the influence of loans / investments	473	600	78.83%
Financial records and reporting	344	600	57.33%
Business Risk	327	600	54.50%
Financial Attitude			
Setting financial goals	475	600	79.17%
Business funding confidence	419	600	69.83%
Detailed financial planning	435	600	72.50%
Financial Behavior			
Separation of household and business accounts	425	600	70.83%
Selection of financial products	444	600	74.00%
Financial record keeping	374	600	62.33%
Thinking about retirement	430	600	71.67%

The average of all financial inclusion indicators is 3.08. Based on the percentage score of all financial inclusion indicators, it can be stated that the financial inclusion of MSMEs in Bali Province is good (77.16%). Data descriptions and percentage scores for MSME financial inclusion in Bali Province can be seen in Table 4.5 and 4.6.

Tabel 4.5 Description of MSME financial inclusion in Bali Province

Indicator	N	Min	Max	Mean	SD
Availability of financial products and services according to the needs of MSMEs	150	2.00	4.00	3.23	0.50
Ownership of financial institution products/services	150	2.00	4.00	3.07	0.40
Use of financial institution products/services	150	1.00	4.00	2.95	0.39

Tabel 4.6 Percentage of MSME financial inclusion scores in Bali Province

Indicator	Real Score	Ideal Score	Percentage
Availability of financial products and services according to the needs of MSMEs	485	600	80.83%
Ownership of financial institution products/services	461	600	76.83%
Use of financial institution products/services	443	600	73.83%

The average of all financial decision indicators is (2.96). Based on the percentage scores of all financial decision indicators, it can be stated that the MSME financial decisions in Bali Province are good (73.89%). Data descriptions and percentage scores for MSME financial decisions in Bali Province can be seen in Table 4.7 and Table 4.8.

Tabel 4.7 Description of MSME financial decisions in Bali Province

Indicator	N	Min	Max	Mean	SD
Examination of sources of information for financial decisions	150	2	4	3.00	0.45
Making financial decisions logically and systematically	150	2	4	2.95	0.49
Financial decisions give satisfactory results	150	1	4	2.92	0.47

Table 4.8 Percentage of MSME financial decision scores in Bali Province

Indicator	Real Score	Ideal Score	Percentage
Examination of sources of information for financial decisions	450	600	75.00%
Making financial decisions logically and systematically	442	600	73.67%
Financial decisions give satisfactory results	438	600	73.00%

4.2 Inferential analysis

4.2.1 Structural Model Specifications

The path model consists of two elements: the structural or inner model and the measurement or outer model. The structural model describes the relationship between constructs. The measurement model describes the relationship between the research construct and its measuring indicators (indicators/items). Financial literacy (LK) has three dimensions, namely: financial knowledge (LKP), financial attitude (LKS), and financial behavior (LKL). The financial inclusion (IK) construct is a reflective construct that is measured using three indicators: availability of financial products/services, ownership of financial products/services, and use of financial products/services. The rational financial decision (KKR) construct is a reflective construct measured by three indicators: sources of information, logical and systematic, and careful thought. The research path model can be seen in Figure 4.1.

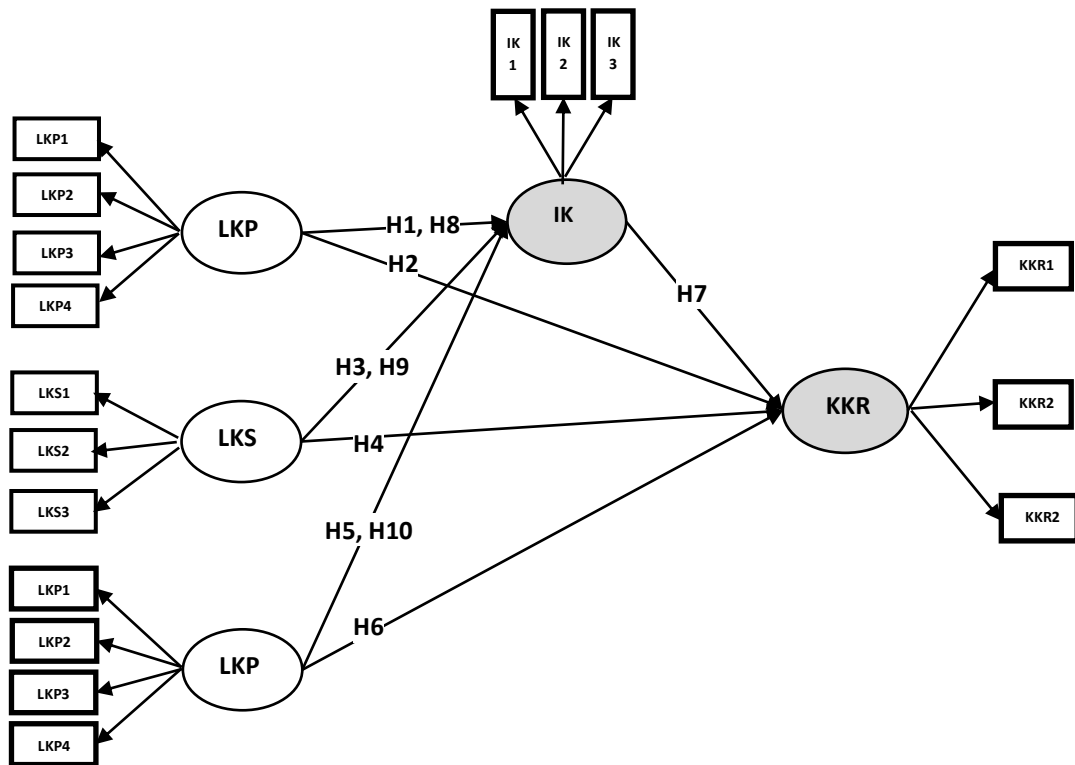


Fig. 4.1 Path Model

4.2.2 Evaluation of the Measurement Model

Tabel 4.9 Combined loadings dan cross loadings-1st order

	LKP	LKS	LKL	IK	KKR	Type (a SE	P value
LKP1	0.745	0.187	-0.117	0.033	-0.105	Reflect 0.069	<0.001
LKP2	0.947	-0.017	0.014	0.013	-0.010	Reflect 0.066	<0.001
LKP3	0.887	-0.024	0.068	-0.067	0.150	Reflect 0.067	<0.001
LKP4	0.942	-0.108	0.015	0.023	-0.047	Reflect 0.066	<0.001
LKS1	0.046	0.797	-0.067	-0.030	0.057	Reflect 0.068	<0.001
LKS2	0.072	0.566	0.013	-0.020	0.041	Reflect 0.072	<0.001
LKS3	-0.100	0.776	0.059	0.045	-0.088	Reflect 0.069	<0.001
LKL1	0.143	-0.039	0.805	-0.222	0.173	Reflect 0.068	<0.001
LKL2	0.155	0.060	0.679	-0.068	-0.204	Reflect 0.070	<0.001
LKL3	-0.070	-0.006	0.750	0.148	-0.043	Reflect 0.069	<0.001
LKL4	-0.290	-0.008	0.579	0.196	0.053	Reflect 0.072	<0.001
IK1	0.077	-0.095	0.185	0.680	-0.109	Reflect 0.070	<0.001
IK2	-0.022	0.080	-0.154	0.769	-0.149	Reflect 0.069	<0.001
IK3	-0.045	0.004	-0.010	0.779	0.242	Reflect 0.069	<0.001
KKR1	0.297	-0.088	-0.092	-0.244	0.731	Reflect 0.069	<0.001
KKR2	0.015	0.075	0.089	-0.105	0.883	Reflect 0.067	<0.001
KKR3	-0.281	-0.002	-0.014	0.331	0.819	Reflect 0.068	<0.001

Tabel 4. 10Latent variable coefficient-1st order

	LKP	LKS	LKL	IK	KKR
Composite reliability	0.934	0.760	0.799	0.788	0.853
Cronbach's alpha	0.904	0.527	0.662	0.595	0.740
Average variances extracted	0.782	0.519	0.502	0.554	0.661

Tabel 4. 11 Correlations among l.vs. with sq. rts. of AVEs-1st order

LKP	LKS	LKL	IK	KKR	
LKP	0.884	0.465	0.488	0.585	0.520
LKS	0.465	0.720	0.235	0.461	0.436
LKL	0.488	0.235	0.708	0.387	0.410
IK	0.585	0.461	0.387	0.744	0.586
KKR	0.520	0.436	0.410	0.586	0.813

Tabel 4. 12Heterotrait-monotrait (HTMT) ratios-1st order

LKP	LKS	LKL	IK	KKR
LKP				
LKS	0.684			
LKL	0.616	0.411		
IK	0.799	0.821	0.626	
KKR	0.636	0.696	0.577	0.877

The instrument validity test showed that the research instrument is valid. The convergent validity test used the outer loading indicator greater than or equal to 0.70 except for the LKP2, LKS2, and IK1 indicators which are smaller than 0.70 but still acceptable. The average variance extracted (AVE) greater than or equal to 0.50. The discriminant validity test using cross-loadings shows that the loading factor for each indicator that measures its latent variable is greater than the cross-loading value (correlation of indicators with other latent variables), the AVE root of each construct on the diagonal elements is higher than the correlation between constructs on non-diagonal elements in the same column, and meet the heterotrait-monotrait ratio (HTMT) limit of 0.90 [21]. The results of the research instrument reliability test showed that the research instrument was reliable because the results of the internal consistency reliability test showed that the value of composite reliability was greater or equal to 0.70, Cronbach alpha was greater or equal to 0.70, except for LKS, LKL, IK which were less than 0.70. but still acceptable [21].

4.2.3 Structural Model Evaluation

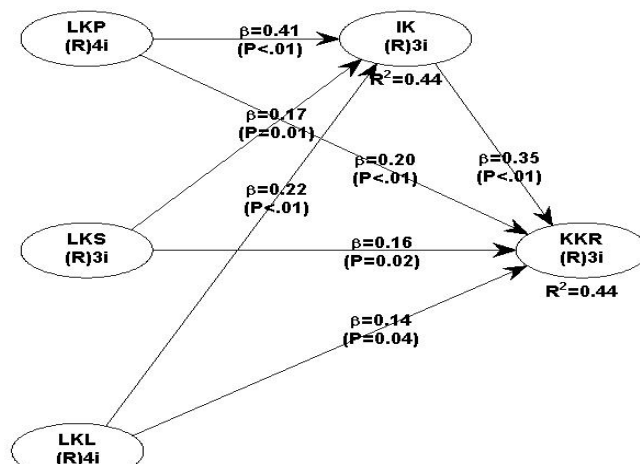


Fig. 4.2 Path coefficient values and p values

Assessment of the significance and relevance of the structural model relationship by using the path coefficient and p-value. The significance assessment was carried out on the direct effect, the two-way indirect effect, and the three-way indirect effect. Path coefficient values and p values for direct effects can be seen in Figure 4.2 or in Table 4.13.

Tabel 4. 13 Path coefficients dan p values

		LKP	LKS	LKL	IK	KKR
Path coefficients	IK	0.409	0.173	0.218		
	KKR	0.197	0.161	0.140	0.351	
P values	IK	<0.001	0.014	0.003		
	KKR	0.006	0.022	0.039	<0.001	

Based on Table 4.13, it can be seen that the significance of the direct effect on the structural model is as follows:

- 1) The path coefficient value of the effect of financial knowledge on financial inclusion is 0.409, and the p-value (p-value) is less than 0.001 indicating that financial knowledge has a positive and significant effect on financial inclusion.
- 2) The path coefficient value of the influence of financial knowledge on rational financial decisions is 0.197, and the p-value (p-value) is 0.006, less than 0.05 indicating that financial knowledge has a positive and significant effect on financial decisions.
- 3) The path coefficient value of the effect of financial attitudes on financial inclusion is 0.173, and the p-value (p-value) is 0.014, less than 0.05 indicating that financial attitudes have a positive and significant effect on financial inclusion.
- 4) The path coefficient (path coefficient) that influences attitudes toward rational financial decisions is 0.161, and the p-value (p-value) is 0.022, less than 0.05 indicating that financial attitudes have a positive and significant effect on financial decisions.
- 5) The path coefficient value of the influence of financial behavior on financial inclusion is 0.218, and the p-value (p-value) is 0.003, less than 0.05 indicating that financial behavior has a positive and significant effect on financial inclusion.
- 6) The path coefficient value of the influence of financial behavior on rational financial decisions is 0.140, and the p-value (p-value) is 0.039, less than 0.05 indicating that financial behavior has a positive and significant effect on rational financial decisions.
- 7) The path coefficient value of the effect of financial inclusion on rational financial decisions is 0.351, and the p-value (p-value) is less than 0.001, indicating that financial inclusion has a positive and significant effect on rational financial decisions.

The path coefficient values and p values for the indirect effects of the two paths are in Table 6.13.

Tabel 4.14 Path coefficients dan p values of indirect effects for path with 2 segments

		LKP	LKS	LKL	IK	KKR
Indirect effects- 2 segments	KKR	0.144	0.061	0.077		
Number of paths with 2 segments	KKR	1	1	1		
P values of indirect effects-2 segments	KKR	0.006	0.143	0.089		

Based on Table 4.14, it can be seen that the significance of the two-lane indirect effect on the structural model is as follows:

- 8) The path coefficient value of financial knowledge on rational financial decisions through financial inclusion is 0.144, and the p-value (p-value) is 0.006, less than 0.05 indicating that financial knowledge has a positive and significant effect on financial decisions through financial inclusion.

- 9) The path coefficient value of the effect of financial attitudes on rational financial decisions through financial inclusion or financial decisions is 0.061, and a p-value (p-value) of 0.143, is greater than 0.05 indicating that financial literacy has a positive but not significant effect on decisions rational finance through financial inclusion or financial decisions.
- 10) The path coefficient value of the influence of financial behavior on rational financial decisions through financial inclusion is 0.077, and the p-value (p-value) is 0.089, greater than 0.05 indicating that financial behavior has a positive but not significant effect on rational financial decisions through financial inclusion.

The assessment of the coefficient of determination (R2) is a measure of the model predictive power. This coefficient indicates the amount of variation of the endogenous latent variables that can be explained by all the exogenous latent variables that have arrows on these variables, as well as the combined effect of the exogenous latent variables on the endogenous latent variables. The coefficient value of determination (R2) can be seen in Figure 4.2 and Table 4.15.

Tabel 4.15 R-squared contribution dan R-squared coefficients

		LKP	LKS	LKL	IK	KKR
R-squared contributions	IK	0.255	0.085	0.095		
	KKR	0.106	0.071	0.060	0.208	
R-squared coefficients					0.435	0.444

Based on Figure 4.2 and Table 4.15, the coefficient of determination (R2) can be assessed as follows:

- 1) The coefficient of determination (R2) of the effect of financial knowledge on financial inclusion is 0.255 indicating that financial literacy can explain variations in financial inclusion of 25.5%.
- 2) The coefficient of determination (R2) of the effect of financial knowledge on financial decisions is 0.106 indicating that financial literacy can explain variations in financial decisions of 10.6%.
- 3) The coefficient of determination (R2) for the effect of financial attitudes on financial inclusion is 0.085 indicating that financial literacy can explain variations in financial resilience of 8.5%.
- 4) The coefficient of determination (R2) for the effect of financial attitudes on financial rational financial decisions is 0.071 indicating that digital literacy can explain variations in financial inclusion of 7.1%.
- 5) The coefficient of determination (R2) for the effect of financial behavior on financial inclusion is 0.095 indicating that financial behavior can explain variations in financial inclusion of 9.5%.
- 6) The coefficient of determination (R2) for the effect of financial behavior on rational financial decisions is 0.060 indicating that financial inclusion can explain variations in financial decisions of 6.0%.
- 7) The coefficient of determination (R2) for the effect of financial inclusion on rational financial decisions is 0.208 indicating that financial inclusion can explain variations in financial resilience of 20.8%.
- 8) The coefficient of determination (R2) of the influence of financial knowledge, attitudes, and behavior on rational financial decisions is 0.435 indicating that financial decisions can explain variations in financial resilience of 43.5%.
- 9) The coefficient of determination (R2) of the effect of knowledge, attitudes, behavior, and financial inclusion on rational financial decisions is 0.444 indicating that financial literacy and digital literacy can explain variations in financial inclusion of 44.4%.

Evaluation of goodness of fit model can be seen in Table 4.16.

Tabel 4.16 Model fit and quality indices

No.	Classic indices	Fit Criteria	Analysis Results	Description
1	Average path coefficient (APC)	P<0.05	0.236. P<0.001	Criteria met
2	Average R-squared (ARS)	P<0.05	0.440. P<0.001	Criteria met
3	Average adjusted R-squared (AARS)	P<0.05	0.426. P<0.001	Criteria met
4	Average block VIF	acceptable if <= 5.	1.657	Ideal

	(AVIF)	ideally ≤ 3.3		
5	Average full collinearity VIF (AFVIF)	acceptable if ≤ 5 . ideally ≤ 3.3	1.669	Ideal

Evaluation of goodness of fit model uses the main fit indicators, namely: average path coefficient (APC), average R-squared (ARS), average adjusted R-squared (AARS), average block VIF (AVIF), average full collinearity VIF (AFVIF). Based on the fit indices and quality indices models in Table 5.16, it stated that the goodness of fit criteria has been fulfilled. The research model as a whole matches the research data in explaining, predicting, or analyzing the relationship between the constructs studied.

Financial literacy (financial knowledge, attitude, and behavior) has a positive and significant effect on financial inclusion. Increased financial knowledge, financial attitudes, and financial behavior will increase financial inclusion. Good financial literacy will encourage MSME entrepreneurs to participate in the formal financial system. The results of this study support the results of previous studies which show that financial literacy has a positive effect on financial inclusion. Research [16] show the relationship between financial literacy and financial inclusion. The study results of [17] show that recipients of financial literacy training are more likely to intensify their financial inclusion and have a higher intensity of inclusion. The study results show that financial literacy has a positive and significant effect on financial inclusion. Research [18] show that higher financial literacy has a positive impact on financial inclusion.

Financial literacy (financial knowledge, attitude, and behavior) has a positive and significant effect on rational-financial decisions. Increased financial knowledge, attitudes, and behavior will increase rational-financial decisions. The study results support the results of previous studies which show that financial literacy has a positive effect on rational-financial decisions. Research [14] state that the level of financial literacy of rural residents will influence financial decisions and financial well-being. Research [15] clarify the contribution of numeracy and financial literacy to the quality of decision-making in the financial context. The research results show that numeracy and financial literacy affect decision-making differently.

Financial inclusion has a positive and significant effect on rational-financial decisions. Increased financial inclusion will increase rational-financial decisions. The study results support the results of previous studies which show that financial inclusion has a positive effect on rational- financial decisions. Research [19] show that financial inclusion has a positive effect on financial decisions. Research [20] show that financial inclusion has a positive effect and significant effect on financial decisions. Further research is needed to obtain a better description and better understanding of the effect of financial literacy on financial inclusion and rational financial decisions in MSMEs (Micro, Small, and Medium Enterprises).

The indirect effect of financial knowledge on rational financial decisions through inclusion is positive and significant. Financial inclusion can mediate the effect of financial knowledge on rational-financial decisions. The indirect effect of financial attitudes and financial behavior on rational financial decisions through financial inclusion is positive but not significant. Financial inclusion can mediate the influence of financial attitudes and knowledge on rational-financial decisions.

V. CONCLUSION

Based on the discussion it can be concluded that: 1) MSME financial literacy in Denpasar City is classified as lacking, MSME financial inclusion is relatively good, and MSME financial decisions are relatively good; 2) The direct effect of financial knowledge, financial attitudes and financial behavior on rational financial decisions is positive and significant. The direct effect of financial inclusion on rational financial decisions is positive and significant. The indirect effect of financial knowledge on rational financial decisions through financial inclusion is positive and significant. The indirect effect of financial attitudes and financial behavior on rational financial decisions through financial inclusion is positive but not significant. Suggestions for future researchers and MSME managers are as follows: 1) Future researchers should expand the scope of research so that the generalization of research results becomes wider; 2) MSMEs entrepreneurs and policymakers should use the results of this research as input in making policies related to financial literacy, financial inclusion and rational financial decisions for MSMEs.

Acknowledgements

The research is financed by DIPA Bali State Polytechnic Number: SP. DIPA-023.18.2.677608/2023 02nd revision 27 March 2023.

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