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Development of the Pentuple Bottom Line Model in Moderating the Influence of Financial Literacy and Financial Inclusion on the Sustainability of Msmes in West Java

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Abstract: Micro, Small, and Medium Enterprises (MSMEs) play an important role in the Indonesian economy, including in West Java Province, especially MSMEs assisted by the West Java Provincial Disduk with more than 7 thousand units in 2022-2023. Micro, Small, and Medium Enterprises (MSMEs) play an important role in the Indonesian economy, including in West Java Province, especially MSMEs assisted by the West Java Provincial Disduk with more than 7 thousand units in 2022-2023. However, the sustainability of MSMEs faces significant challenges, such as low financial literacy, limited access to formal financing, and minimal adoption of digital technologies. This study aims to analyze the influence of financial literacy and financial inclusion on MSME sustainability and examine the moderating role of the Pentuple Bottom Line (PBL) concept. PBL expands the Triple Bottom Line framework by incorporating spirituality and technology as additional dimensions. The research adopts a quantitative approach using primary data collected from 380 MSME respondents in West Java. The findings indicate that financial literacy and financial inclusion positively affect MSME sustainability, and PBL significantly moderates these relationships. This study enriches the discourse on MSME sustainability through a multidimensional approach and offers policy recommendations grounded in spiritual values and technological advancement

Keyword: Financial Literacy, Financial Inclusion, MSME Sustainability, Pentuple Bottom Line, West Java

INTRODUCTION

The sustainability of MSMEs does not only include economic aspects, but also social and environmental dimensions that are relevant to the sustainable development agenda (SDGs). Therefore, there is a need for a comprehensive approach in formulating sustainable MSME empowerment strategies, including through increasing financial literacy, financial inclusion, digital innovation, and institutional synergy. This research is important to explore

the main factors affecting the sustainability of MSMEs in West Java, taking into account the national context and typical regional challenges. It is hoped that the results of this research can be an applicable policy recommendation for local governments, business actors, and other stakeholders in encouraging the transformation of MSMEs towards sustainability.

Data on the number of MSMEs in various districts and cities in West Java during 2022–2023 shows that there are significant dynamics. A total of 7,641 units were recorded, with distribution varying between regions. Bogor, Ciamis, and Karawang districts are the areas with the highest number of MSMEs, while several cities such as Cirebon City and Depok City recorded lower numbers. The fluctuation in the number of MSMEs indicates that there are factors that affect business sustainability, both in terms of economy, social, and policy. Seeing the importance of the role of MSMEs in absorbing labor, encouraging local economic growth, and improving community welfare, research related to the interest of MSMEs is very urgent. This research is needed to understand the challenges faced by MSMEs, such as restrictions on financial access, adaptation to digitalization, and the need for business capacity development, so that a more targeted strategy can be formulated to maintain the existence and growth of MSMEs in West Java in a sustainable manner.

The sustainability of MSMEs refers not only to the ability to survive in the long term, but also to the ability to continue to innovate, utilize digital technology, and adapt to dynamic market changes. In this context, the concept of sustainability includes economic, environmental, and social dimensions, which together determine the durability and growth of MSMEs in the future.

Therefore, this study aims to examine the factors that affect the sustainability of MSMEs in Indonesia, focusing on aspects of digitalization, innovation, and access to capital. This research will also analyze the role of government and financial institution policies in supporting the sustainability of MSMEs in the post-pandemic era, as well as identify the main challenges faced by MSME actors in achieving the sustainability of their businesses.

Micro, Small, and Medium Enterprises (MSMEs) have a strategic role in encouraging national economic growth and creating jobs. In the midst of the challenges of globalization, digitalization, and economic involvement, the sustainability of MSMEs is an important issue that needs to be strengthened from various aspects, including financial literacy and financial inclusion.

Financial literacy refers to an individual's understanding and skills in managing personal or business finances effectively. In the context of MSMEs, financial literacy includes the ability to prepare financial statements, manage cash flow, understand financial products, and make the right investment decisions. MSME actors who are financially literate will be more careful in managing business finances, minimizing the risk of bankruptcy, and creating sustainable business growth.

However, financial literacy cannot stand alone, financial inclusion is also needed, namely easy access to formal financial services and products such as savings, loans, insurance, and digital payment systems (OJK, 2022). Without access to financial institutions, financial understanding cannot be applied to the maximum. Financial inclusion of facilities is important so that MSMEs can obtain working capital, expand business networks, and protect businesses from economic shocks.

The sustainability of MSMEs in the digital economy era is not only determined by the ability to make profits, but also by their adaptability to social, environmental, information technology, and spirituality transformations. The Pentuple Bottom Line (PBL) approach is a comprehensive solution because it includes five main dimensions, namely economic (profit), social (people), environment (planetary), spiritual (prophet), and phenotechnology (information technology). This fifth pillar provides a holistic framework for MSMEs in building business practices that are not only competitive but also sustainable and ethical.

METHOD

This research is categorized as quantitative research, quantitative research methods are research methods with a more complicated level of variation, because they examine more samples, but quantitative research is more systematic in conducting research from beginning to end (Sahir 2022). The quantitative approach uses a scientific approach obtained from interviews through surveys based on questionnaires. This study aims to analyze and test the direct influence of financial literacy (X1) and Financial Inclusion (X2) on Business Sustainability (Y) moderated by Pentuple Bottom Line (Z).

Based on the explanation above, the research conducted in this study is quantitative associative. Associative quantitative research aims to determine whether there is a cause and effect influence between the variable and the object being studied (Parida et al. 2022). Data collection was carried out through questionnaires that were distributed online and offline to MSME owners and managers in West Java. Respondents were asked to answer questions related to financial literacy, financial inclusion, and sustainability of their business. To test validity and reliability, a questionnaire test was conducted on 30 respondents first. In this study, the population to be used is MSMEs in West Java which has been coached by the West Java Provincial Cooperatives and Small Enterprises Office in 2019 – 2023. Data collection for respondents by researchers is only data in 2022 – 2023 due to the previous year's data, economic conditions in unstable conditions due to the covid-19 period in 2020, and post-covid-19 recovery in 2021.

The research variables used consisted of two exogenous latent variables indicating financial literacy (ξ1) and financial inclusion (ξ2), one moderating variable, namely Pentuple Bottom Line (ξ3), and one endogenous latent variable, business sustainability (η). The procedure for data collection and collection in this study is carried out through several systematic stages to ensure the quality and reliability of the data obtained. These stages include instrument preparation, trials, the implementation of the main survey, and initial data processing.

The researcher then determined the research method and compiled a research instrument in the form of a questionnaire and compiled a research instrument in the form of a questionnaire. This instrument is tested through validity and reliability so that it is feasible to use. After that, the population and sample were determined, followed by the distribution of questionnaires, and ended with data collection for further analysis. The above explanation is illustrated in a chart below:

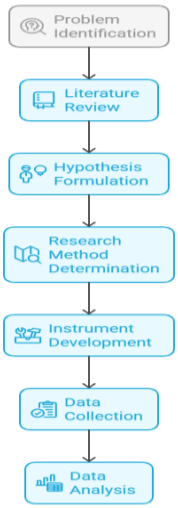

Figure 1 : Research Procedure Framework

This study uses a quantitative method with a Structural Equation Modeling (SEM) approach which is carried out through PLS software. SEM with PLS provides flexibility to model complex relationships, including moderation and mediation models (Garson, 2019: 45). SEM also allows testing of direct and indirect relationships between variables in complex models:

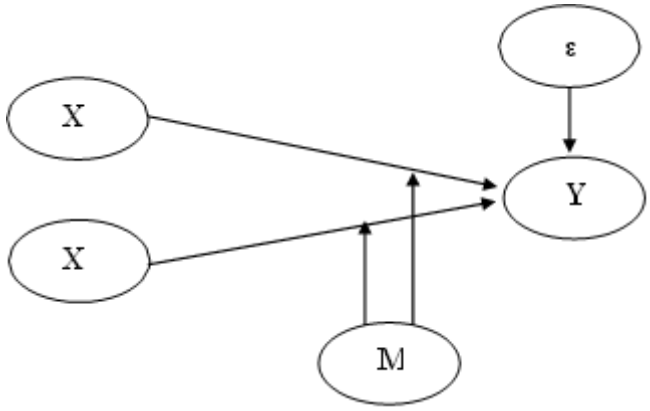

Figure 2 : Structural Model with Variable Moderation Effect (Parida et al. 2022)

Partial Least Square (PLS) PLS is a variation-based structural equation modeling (SEM), where SEM is one of the studies in the field of statistics that can be used to solve research problems, with independent variables even though response variables are non-measurable variables. Observations on latent variables are carried out through the effects of indicator variables, so that the PLS model used in the study is a reflective model (the direction of the causality relationship from latent variables to indicators) (Nisa, Sudarno, & Sugito 2021)

Content validity in this study refers to the guidelines of Polit and Beck (2006) which states that content validity measures the extent to which the instrument represents the domain of the concept being studied. The validation process was carried out through two main stages following the recommendations of (de Melo et al. 2022).

The first stage is an assessment by experts (expert judgment) involving three experts in the field of MSMEs and finance to evaluate the suitability of the indicators with the measured construct. The experts gave an assessment using a Likert scale of 1-4, then calculated the Item-Content Validity Index (I-CVI) and the Scale-Content Validity Index (S-CVI) according to the standards of Polit et al. (2007). An indicator is declared valid if it has an I-CVI value of at least 0.78 (for three assessors), while all instruments must achieve an S-CVI of at least 0.90 (Lynn 1986).

Tahap selanjutnya adalah uji coba kuesioner kepada 30 responden UMKM untuk melihat korelasi item-total dan nilai Cronbach's Alpha awal. Analisis korelasi item-total mengikuti kriteria Pearson Correlation ≥ 0,3 yang dikemukakan oleh (Kyriazos and Poga 2023)

Setelah data utama terkumpul, analisis dilanjutkan menggunakan SmartPLS 3.0 untuk menguji validitas konvergen melalui outer loadings dan Average Variance Extracted (AVE) berdasarkan kriteria (Sarstedt, Ringle,& Hair 2020). Indikator dianggap valid jika memiliki nilai outer loading minimal 0,(Henseler, Ringle, and Sinkovics 2009), meskipun nilai antara 0,5-0,7 masih dapat dipertahankan jika didukung teori yang kuat (Hulland, 1999). Konstruk dinyatakan memenuhi validitas konvergen jika nilai AVE-nya lebih besar dari 0,5 (Fornell et al. 1981). Reliabilitas instrumen diukur melalui Composite Reliability (CR) dan Cronbach's Alpha, dimana nilai CR harus lebih besar dari 0,7 (Bagozzi & Yi, 1988) dan Cronbach's Alpha minimal 0,6 untuk penelitian eksploratif (Nunnally & Bernstein, 1994).

Untuk memastikan diskriminan validitas, penelitian ini menggunakan dua kriteria. Pertama, (Fornell et al. 1981) yang membandingkan akar kuadrat AVE setiap konstruk dengan korelasi antar konstruk. Kedua, Heterotrait-Monotrait Ratio (HTMT) yang harus bernilai kurang dari 0,90 untuk menunjukkan tidak adanya masalah multikolinearitas (Addison 2021)

RESULT AND DISCUSSION

Convergent Validity

Convergent validity testing is tested from each construct indicator. According to Chin (2015), an indicator is said to be valid if the value is greater than 0.70, while a loading factor of 0.50 to 0.60 can be considered sufficient. Based on this criterion, if there is a loading factor below 0.50, it will be dropped from the model.

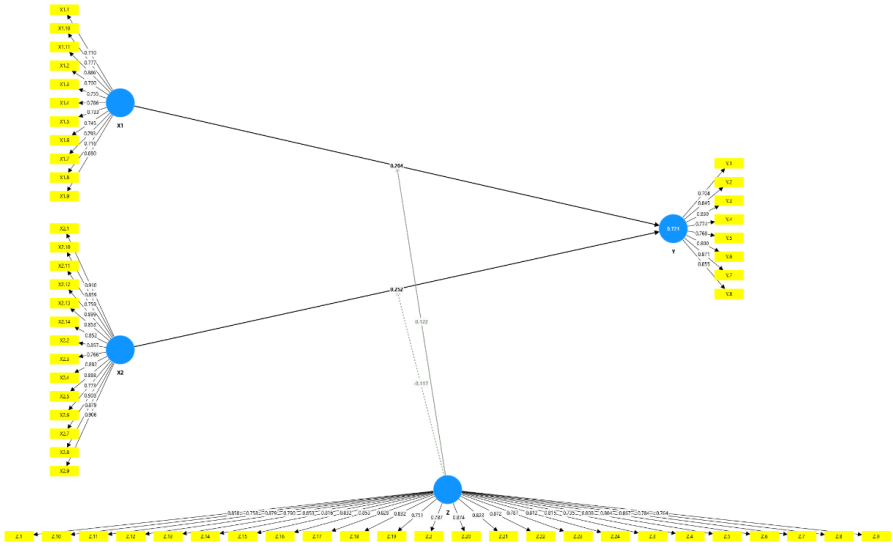

Figure 3 : SmartPLS 4.0 Algorithm Results

That all indicators of the variables of this study are declared valid, because *the value of the Outer Loadings* of each indicator is greater than 0.7. Thus, the questionnaire items can be used in future analyses.

Discriminant Validity

The next check is to compare the correlation between the variables with the root of AVE (. The measurement model has $\sqrt{AVE}$) *a good discriminant validity* if each variable is greater than the correlation between variables. The value can be seen from the $\sqrt{AVE}\sqrt{AVE}$*Fornell Larcker Criterion* Smart-PLS 4.0 Output presented in table 1

Table 1: Hasil Uji Discriminant Validity (Fornell Larcker Criterion)

	X1	X2	Y	Z
X1	0,773			
X2	0,348	0,858		
Y	0,533	0,640	0,808	
Z	0,492	0,580	0,801	0,817

Source: Processing Output with smartPLS 4.0

From table 1 above, it can be concluded that the square root of *the Average Variance Extracted* for each construct is greater than the correlation between one construct and another

construct in the model. Based on the above statement, the construct in the estimated model meets the *discriminant validity* criteria. The following are the results of Cross Loading:

Table 2: Cross Loading Results

	X1	X2	Y	Z	Z x X2	Z x X1
X1.1	0,710	0,336	0,378	0,324	0,098	0,031
X1.10	0,777	0,296	0,424	0,404	0,159	-0,119
X1.11	0,886	0,345	0,514	0,493	0,082	-0,111
X1.2	0,700	0,103	0,259	0,187	0,117	0,086
X1.3	0,755	0,159	0,374	0,313	0,321	0,054
X1.4	0,786	0,239	0,337	0,392	0,230	-0,058
X1.5	0,733	0,167	0,337	0,277	0,265	0,080
X1.6	0,745	0,269	0,429	0,408	0,168	-0,045
X1.7	0,793	0,311	0,444	0,411	0,078	-0,011
X1.8	0,716	0,345	0,380	0,404	0,209	-0,001
X1.9	0,880	0,304	0,539	0,456	0,107	-0,062
X2.1	0,375	0,910	0,571	0,546	0,249	0,121
X2.10	0,229	0,859	0,537	0,510	0,157	0,237
X2.11	0,256	0,759	0,536	0,397	0,166	0,263
X2.12	0,334	0,899	0,536	0,526	0,274	0,155
X2.13	0,367	0,853	0,567	0,518	0,272	0,155
X2.14	0,250	0,852	0,566	0,489	0,169	0,267
X2.2	0,216	0,857	0,501	0,494	0,134	0,206
X2.3	0,264	0,766	0,543	0,401	0,155	0,249
X2.4	0,333	0,882	0,504	0,533	0,218	0,084
X2.5	0,267	0,888	0,570	0,524	0,131	0,205
X2.6	0,300	0,773	0,563	0,418	0,129	0,208
X2.7	0,379	0,908	0,573	0,555	0,256	0,124
X2.8	0,241	0,879	0,545	0,505	0,131	0,216
X2.9	0,355	0,906	0,550	0,533	0,241	0,118
Y.1	0,366	0,448	0,704	0,614	0,216	0,212
Y.2	0,446	0,575	0,845	0,623	0,165	0,187
Y.3	0,464	0,539	0,839	0,640	0,160	0,227
Y.4	0,433	0,436	0,774	0,651	0,238	0,213
Y.5	0,408	0,510	0,760	0,739	0,008	0,233
Y.6	0,388	0,553	0,800	0,665	0,035	0,218
Y.7	0,486	0,557	0,871	0,620	0,166	0,184
Y.8	0,445	0,499	0,855	0,603	0,191	0,291
Z.1	0,375	0,525	0,690	0,858	0,271	0,303
Z.10	0,384	0,518	0,636	0,758	0,095	0,158
Z.11	0,396	0,553	0,719	0,879	0,274	0,306
Z.12	0,430	0,335	0,585	0,790	0,304	0,288
Z.13	0,394	0,509	0,726	0,853	0,286	0,331
Z.14	0,430	0,369	0,569	0,816	0,278	0,240
Z.15	0,435	0,528	0,742	0,832	0,064	0,212
Z.16	0,351	0,504	0,667	0,853	0,289	0,323

	X1	X2	Y	Z	Z x X2	Z x X1
Z.17	0,433	0,376	0,576	0,829	0,299	0,264
Z.18	0,438	0,525	0,742	0,832	0,071	0,214
Z.19	0,408	0,488	0,664	0,751	0,123	0,189
Z.2	0,375	0,364	0,503	0,787	0,265	0,226
Z.20	0,378	0,535	0,703	0,874	0,276	0,308
Z.21	0,425	0,365	0,562	0,823	0,290	0,255
Z.22	0,384	0,531	0,695	0,872	0,270	0,295
Z.23	0,366	0,352	0,489	0,787	0,279	0,239
Z.24	0,386	0,515	0,674	0,812	0,070	0,203
Z.3	0,441	0,532	0,744	0,815	0,060	0,201
Z.4	0,408	0,501	0,663	0,735	0,106	0,176
Z.5	0,406	0,490	0,693	0,808	0,276	0,294
Z.6	0,417	0,350	0,554	0,804	0,308	0,270
Z.7	0,372	0,530	0,699	0,867	0,286	0,323
Z.8	0,432	0,367	0,565	0,784	0,274	0,233
Z.9	0,388	0,522	0,656	0,764	0,041	0,164
Z x X2	0,205	0,224	0,179	0,256	1,000	0,526
Z x X1	-0,030	0,218	0,273	0,307	0,526	1,000

HTMT

Table 3: HTMT Results

	Heterotrait-monotrait ratio (HTMT)
X2 <-> X1	0,354
Y <-> X1	0,560
Y <-> X2	0,673
Z <-> X1	0,502
Z <-> X2	0,585
Z <-> Y	0,831

Meanwhile, the acceptable level of discriminant validity threshold was also obtained judging from a Heterotrait-Monotrait Ratio (HTMT) value that was less than 0.90 as suggested. All HTMT values are lower than 0.9.

Average Variance Extracted (AVE)

The AVE value aims to measure the degree of variation of a construct component gathered from its indicators by adjusting for the error rate. Testing with AVE values is more critical than *composite reliability*. The minimum recommended AVE value is 0.50. The AVE output obtained from Smart PLS 4.0 is presented in table 4

Table 4: Hasil Uji Average Variance Extracted (AVE)

	Average variance extracted (AVE)
X1	0,598
X2	0,736
Y	0,652
Z	0,667

Based on table 4 above, it can be seen that the AVE value has been greater than 0.50 which means that all of these indicators have met the criteria that have been set and have potential reliability for further testing.

Composite Reliability dan Cronbach's Alpha

To ensure that there are no problems related to measurements, the final step in the evaluation of the outer model is to test the reliability test of the model. The reliability test was carried out using *the Composite Reliability* and *Cronbach's Alpha* indicators.

The Composite Reliability *and* Cronbach's Alpha *tests* aim to test the reliability of instruments in a research model. If all the values of the latent variable have a *Composite Reliability* value or *Cronbach's Alpha* ≥ 0.70, it means that the construct has good reliability or the questionnaire used as a tool in this study has been consistent.

Table 5 : Composite Reliability *and* Cronbach's Alpha *Test Results*

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
X1	0,932	0,943	0,942
X2	0,972	0,972	0,975
Y	0,923	0,924	0,937
Z	0,978	0,980	0,980

Source: Processing Output with smartPLS 4.0

Based on table 5 above, it can be seen that the results of *the Composite Reliability* and *Cronbach's Alpha* tests show satisfactory values, i.e. all latent variables are reliable because all latent variable values have *a Composite Reliability* value and *Cronbach's Alpha* ≥ 0.70. So it can be concluded that the questionnaire used as a research tool has been reliable or consistent.

Setelah model yang diestimasi memenuhi kriteria Outer Model, berikutnya dilakukan pengujian model struktural (Inner Model). Pengujian inner model adalah pengembangan model berbasis konsep dari teori dalam rangka menganalisis pengaruh variabel eksogen dan endogen telah dijabarkan dalam kerangka konseptual. Tahapan pengujian terhadap model structural (inner model) dilakukan dengan langkah-langkah berikut ini:

R-Square Value (R2)

Look at the R-Square value which is the *model's Goodness of Fit* test.

Table 6: R-Square Value Test Results (R2)

	R-square	R-square adjusted
Y	0,721	0,707

Source: Processing Output with smartPLS 4.0

The R-Square value (Coefficient of Determination) is used to measure how much proportion of the variance (diversity) of dependent or endogenous variables (in this case, Y) can be explained by the independent or exogenous variables (X1, X2, Z, and their interactions) present in the structural model. This value is one of the important measures to assess the Goodness of Fit or the accuracy of the model in explaining the phenomenon being studied. Based on Table 4.11, the R-Square value for variable Y is 0.721. This means that about 72.1% of the variance of variable Y can be explained by a combination of predictive variables in the model. The R-Square Adjusted value, which is 0.707, provides a slightly more conservative estimate by taking into account the number of predictors in the model. These two values (especially 0.721) are generally considered high or *substantial* (strong) in

the context of social science research, which suggests that the constructed model has excellent explanatory ability of variable Y.

f^2 Effect Size

The value of f-square (f2) indicates the partial influence of each predictor variable on the endogenous variable. The following is the interpretation of the value of f-square (Ghozali, 2014):

1) If the value of f-Square is ≥ 0.35, then it can be interpreted that the predictor of the latent variable has a strong influence.
2) If the value of f-Square is 0.15 ≤ f ≤ 0.35, then it has a medium effect.
3) if the value of f-Square is 0.02 ≤ f ≤ 0.15, then it has a weak influence.

The following are the results of the f2 value of each exogenous variable against the endogenous variable:

Table 7: F2 Effect Size Test Results

	f-square
X1 -> Y	0,101
X2 -> Y	0,148
Z -> Y	0,558
Z x X2 -> Y	0,037
Z x X1 -> Y	0,033

Source: Processing Output with smartPLS 4.0

1. Influence of X1 on Y (X1 -> Y): The f-square value (f^2) for the influence of the variable X1 on the variable Y is 0.101. Based on the interpretation criteria, this value is included in the category of $0.02 \leq f^2 < 0.15$ ($0.02 \leq 0.101 < 0.15$). This means that the variable X1 contributes to or has a relatively *weak influence* on the variance of the endogenous variable Y.
2. Effect of X2 on Y (X2 -> Y): An f-square value (f^2) of 0.148 is obtained for the influence of variable X2 on Y. This value is also in the range of $0.02 \leq f^2 < 0.15$ ($0.02 \leq 0.148 < 0.15$), which indicates that the variable X2 has a *weak influence* on the variable Y, even though the value is close to the lower limit of the medium influence category.
3. Effect of Z on Y (Z -> Y): The value of f-square (f^2) for the influence of the variable Z on Y is 0.558. Since this value is significantly greater than 0.35 ($0.558 \geq 0.35$), it can be interpreted that the Z variable has a *strong* influence on the endogenous Y variable in this structural model.
4. Effect of Z and X2 Interaction on Y (Z x X2 -> Y): The effect of interaction between Z and X2 on Y shows an f-square (f^2) value of 0.037. This value falls into the category of $0.02 \leq f^2 < 0.15$ ($0.02 \leq 0.037 < 0.15$). Therefore, the influence of the interaction between Z and X2 (the effect of Z moderation on the X2->Y relationship) is categorized as *weak*.
5. Effect of Z and X1 Interaction on Y (Z x X1 -> Y): For the effect of the interaction between Z and X1 on Y, the f-square value (f^2) is 0.033. Similar to the previous interaction, this value is also in the range of $0.02 \leq f^2 < 0.15$ ($0.02 \leq 0.033 < 0.15$), which means that the effect of Z*X1 interaction on Y (Z's moderation effect on the X1->Y relationship) is also categorized as *weak*.

Q-Square (Goodness of Fit Model)

Pengujian Goodness of Fit Model 312tructural pada inner model menggunakan nilai *predictive (*Q2). A Q-Square value greater than 0 (zero) indicates that the model has *a predictive relevance* value. The R-Square value of each endogenous variable in this study can be seen in the following calculation:

Table 8: Q-Square Test Results

	SSO	SSE	Q² (=1-SSE/SSO)
Y	856,000	468,078	0,453

Source: Processing Output with smartPLS 4.0

Q-Square (Predictive Relevance) testing aims to assess how well the constructed structural model can predict the observed values of endogenous variables (in this case, the Y variable). Based on Table 4.13, the Q-Square value obtained for the endogenous variable Y is 0.453. According to the guidance provided, a Q-Square value greater than 0 (zero) indicates that the model has predictive relevance. Since the value of 0.453 is clearly greater than 0, it can be concluded that this structural model has adequate predictive ability (good goodness of fit) for the Y variable.

Hypothesis Test Results (Path Coefficient Estimation)

The estimated value for the influence of the path in the structural model must be significant. This significant value can be obtained by bootstrapping procedure. Look at the significance of the hypothesis by looking at the value of the parameter coefficient and the significant value of t-statistics in the bootstrapping report algorithm. To find out significant or insignificant see from the t-table at alpha 0.05 (5%) = 1.96. Then the t-table is compared to the t-count (t-statistic).

Table 9: Hypothesis Testing Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
X1 -> Y	0,204	0,210	0,073	2,784	0,005
X2 -> Y	0,252	0,254	0,083	3,040	0,002
Z -> Y	0,549	0,544	0,088	6,215	0,000
Z x X2 -> Y	-0,117	-0,112	0,055	2,121	0,034
Z x X1 -> Y	0,122	0,120	0,058	2,115	0,034

Here are the results of hypothesis testing on structural models:

1. Effect of X1 on Y (X1 -> Y): The test results showed a path coefficient (Original Sample) of 0.204 with a T-statistic of 2.784 and a P-value of 0.005. Since the statistical T-value (2.784) is greater than the t-table (1.96) and the P-value (0.005) is smaller than the significance level of 0.05, it can be concluded that the X1 variable has a positive and statistically significant effect on the Y variable.
2. Effect of X2 on Y (X2 -> Y): A path coefficient of 0.252 was obtained with a T-statistic of 3.040 and a P-value of 0.002. A statistical T-value (3.040) greater than 1.96 and a P-value (0.002) smaller than 0.05 indicate that the hypothesis is accepted. This means that the variable X2 has a positive and statistically significant influence on the variable Y.
3. Influence of Z on Y (Z -> Y): The path coefficient for the influence of Z on Y is 0.549, with a very high T-statistic of 6.215 and a P-value of 0.000. It is clear that the statistical T-value (6.215) far exceeds 1.96 and the P-value (0.000) is below 0.05. This shows that the Z variable has a positive and very statistically significant effect on the Y variable.
4. Effect of Z and X1 Interactions on Y (Z x X1 -> Y): The results of testing the effect of Z moderation on the X1 to Y relationship showed a positive path coefficient of 0.122, a T-statistic of 2.115, and a P-value of 0.034. With the T-statistic (2.115) > 1.96 and the P-value (0.034) < 0.05, it can be concluded that the effect of this interaction is also significant. A positive sign on the coefficient indicates that the variable Z acts as a moderator that significantly amplifies the positive influence of X1 on Y

5. Effect of Z and X2 Interactions on Y (Z x X2 -> Y): Testing the effect of Z moderation on the X2 to Y relationship yielded a path coefficient of -0.117, a T-statistic of 2.121, and a P-value of 0.034. Since the T-statistic (2.121) > 1.96 and the P-value (0.034) < 0.05, the effect of this interaction was significant. A negative sign on the coefficient indicates that the variable Z acts as a moderator which significantly weakens the positive influence of X2 on Y.

CONCLUSION

This study shows that financial literacy has a positive and significant influence on the sustainability of MSMEs in West Java. The higher the level of understanding of MSME actors on financial management principles, the greater the opportunity for their business to survive and grow. Financial literacy not only helps business actors make wise investment and spending decisions, but also strengthens their relationships with stakeholders such as banks, customers, and business partners. In addition, research also proves that inclusive finance also has a positive and significant effect on the sustainability of MSMEs. Access to formal financial services, such as people's business credit, digital savings, and electronic payment systems, allows MSMEs to expand their business capacity, manage financial risks, and improve operational efficiency.

Interestingly, when moderated by the concept of Pentuple Bottom Line (PBL)—which includes five dimensions: profit, people, planet, Prophet (spiritual value), and phenotechnology (technology) the relationship between financial literacy and MSME sustainability becomes stronger. This shows that PBL values are able to have an impact on financial literacy with the pressure of decision-making that is not only rational and economical, but also ethical, spiritual, and environmentally sound. However, different results were found in the relationship between financial inclusion and MSME desires when moderated by PBL. In this context, PBL actually weakens the influence of financial inclusion. These findings indicate that MSME actors who prioritize the principles of spirituality, social ethics, and community will tend to rely less on the formal financial system in determining their business desires.

Overall, this study presents new findings (novelty) in the form of an asymmetric influence of the Pentuple Bottom Line concept in moderating the relationship between financial variables and the desires of MSMEs. This shows that the desire of MSMEs does not only depend on technical aspects such as literacy and financial access, but is also greatly influenced by local and personal values embraced by business actors. From a scientific perspective, this research makes an important contribution to the development of legitimacy theory and stakeholder theory. Business sustainability is seen not solely as economic success, but as alignment with social norms, community ethics, and personal spirituality. Therefore, the Pentuple Bottom Line approach can be used as an alternative framework in the study of community-based business and the informal sector, which has been less accommodated in conventional economic models that are technocratic and rational.

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