



Contents lists available at [Journal IICET](#)

**JPPI (Jurnal Penelitian Pendidikan Indonesia)**

ISSN: 2502-8103 (Print) ISSN: 2477-8524 (Electronic)

Journal homepage: <https://jurnal.iicet.org/index.php/jppi>



## Incorporating the five pillars of pancasila for enhancing anti-fragility in sustainable umkm development

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### Article Info

#### Article history:

Received Jul 19<sup>th</sup>, 2024

Revised Aug 25<sup>th</sup>, 2024

Accepted Sept 30<sup>th</sup>, 2024

#### Keywords:

Pancasila

UMKM

Resilience

Sustainability

antifragility

### ABSTRACT

Micro, Small, and Medium Enterprises (UMKM) play a vital role in the global economy, including in Indonesia, where their functions and definitions may vary across different countries. This research explores the integration of Pancasila values in fostering the sustainable development of UMKM in Indonesia, emphasizing ethical business practices and inclusivity. Conducted in East Java, the study involved 220 UMKM actors and focused on analyzing the influence of Pancasila-based performance factors on UMKM resilience. Using factor analysis, the study examines the effects of Pancasila values on UMKM resilience, demonstrating the high validity and reliability of the instruments used. The findings highlight that the adoption of Pancasila values significantly enhances the resilience of UMKM, particularly in terms of their ability to adapt and thrive in challenging conditions. The results also underscore the importance of integrating ethical, social, and cultural values into business practices to ensure long-term economic sustainability. These insights can inform practical strategies for managing UMKM and shaping policies that foster their growth and resilience.



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## Introduction

Micro, Small, and Secondary Ventures (UMKM) plays an important role in the global economy. These organizations exhibit distinct characteristics regarding their scale, which are often determined by parameters such as headcount and annual revenue. UMKM drive job opportunities, encourage innovation, and facilitate broader economic expansion in many countries (Surya et al., 2021). What's more, when it comes to accessing finance and navigating regulatory frameworks, it poses a recurring hurdle for individuals or entities (Asian Development Bank (ADB), 2022). Therefore, the government has implemented support programs and regulations to overcome these difficulties (Agustina et al., 2020; Soetjipto et al., 2023). UMKM perform diverse functions depending on the specific industry and region in which they operate. In addition, these companies have the potential to engage in international trade activities and implement technological advances.

UMKMs in Indonesia make a major contribution to the national economy (Janah & Tampubolon, 2024; Khairunnisa & Nofrianto, 2023). Based on data from the Ministry of Cooperatives and UKM (2022), UMKMs contribute around 60% of the Gross Domestic Product (GDP) and provide more than 97% of employment (Astuti et al., 2024; Lestari et al., 2024). Despite this, many UMKMs face challenges in terms of antifragility or

the ability to survive and thrive amidst uncertainty (Corvello et al., 2023; Fauji et al., 2022). These challenges include limited access to finance, market competitiveness, technology adoption capabilities, and regulatory compliance (Arjang et al., 2023; Rajamani et al., 2022; Shaikh et al., 2021). On the other hand, an approach that integrates local cultural values such as Pancasila can be a strategic solution to strengthen the antifragility and sustainability of UMKM. However, it still faces various challenges that hinder its sustainability. One of the main problems is the lack of adoption of local cultural values in the management of UMKMs, which can be a reinforcement of identity and competitive advantage. The values of Pancasila as the foundation of Indonesia offer a unique framework that includes ethics, inclusiveness, social justice and sustainability. However, the integration of these values into UMKM management practices has not been studied in depth.

This research focuses on UMKMs in East Java, one of the provinces with the largest economic contribution in Indonesia (Mutrofin & Muhammad, 2021; Putra, 2022). East Java has unique characteristics of cultural diversity, a high number of UMKMs, and a strategic position as a center of trade and industry (Etty Indriani et al., 2020; Imama et al., 2024; Rinurwati et al., 2021). Data from the East Java Central Bureau of Statistics (2023) shows that UMKMs in the region account for 38.76% of the province's economic activity (Achmad et al., 2023). In addition, UMKMs in East Java are engaged in the trade, food, and beverage sector, which shows great potential in meeting the needs of domestic and international markets (Mutrofin & Muhammad, 2021). However, according to a report by the East Java Cooperative and UMKM Agency (2023), more than 40% of UMKMs in the province still experience difficulties in accessing financing and modern technology to support their business development (Nafiyah, 2022; Rofiq et al., 2023).

Previous studies have extensively discussed the importance of local values in supporting the sustainability of UMKMs, but most have focused on technical aspects and less on the integration of cultural values in business management (Kusumastuti et al., 2024; Noerhalifah et al., 2023; Rahman & Zainuddin, 2024). The uniqueness of this study lies in the introduction of Pancasila as a cultural and moral framework for UMKM management, which has not been widely integrated in previous studies. By highlighting the importance of ethics, social justice, and diversity, this research not only contributes to the development of local culture-based management theory but also offers practical guidance for UMKM actors and policy makers. In addition, the selection of East Java as the research location provides a relevant empirical context for understanding how Pancasila values can be effectively applied in a diverse and dynamic business environment.

This study aims to integrate the five pillars of Pancasila into the development strategies of the UMKM in East Java to enhance their sustainability and antifragility. This research offers a new perspective by linking Pancasila values as the foundation of inclusive, innovative and sustainability-oriented business ethics and practices. Specifically, this research will examine the effect of implementing Pancasila values on the performance and resilience of UMKM amidst modern economic challenges. This research is expected to make significant contributions in two aspects. First, theoretically, this research enriches the literature on local cultural value-based management with a focus on sustainability and antifragility of UMKM. Second, practically, this research provides strategic recommendations for the government and UMKM actors in adopting Pancasila values to improve competitiveness and business sustainability. Thus, this research is not only academically relevant but also has a real impact on the development of UMKM in Indonesia.

## Literatur Review

### Performance measurement

The literature on management performance measurement emerged from dissatisfaction with the traditional financial accounting system, leading to the development of various frameworks and models (Alsaid & Ambilichu, 2021; Taşkan et al., 2020). Some academics have specifically explored the implementation of performance appraisal systems, with a three-phase model gaining widespread acceptance in the literature (Dash et al., 2021; de Souza et al., 2022; Gruenbichler et al., 2021). The first phase involves designing performance measures that align with the organization's strategic goals. The second phase focuses on implementing these measures by establishing appropriate systems and procedures to collect and process the necessary data. The third phase emphasizes using these measures as part of the decision-making process while regularly challenging the validity of actions. Since the introduction of this model, numerous researchers from different disciplines have contributed to identifying best practices for each phase across diverse contexts. This body of work has been synthesized into two broad perspectives: the social control perspective (art) and the technical perspective (science) (Bibri, 2021).

### Collaboration of Pancasila values in making UMK Antirapuh

Collaboration between Pancasila values in an effort to make UMK antirapuh can make a strong approach in Indonesia (Tjahjadi et al., 2023) Indonesia as a country has Pancasila as a moral-spiritual guide in all national policies and developments related to law, economy, politics, and culture (Dimiyati et al., 2021).

## Method

This study uses an explorative approach to examine how Pancasila values can be integrated into the performance framework of UMKM in East Java and how it affects the antifragility of UMKM. The explorative approach was chosen because the values of Pancasila are complex, multidimensional, and contextual, thus requiring in-depth exploration to understand how these values can be applied in UMKM business practices.

### Research Sample

This study involved a total of 220 UMKMs located in East Java. The sample was selected using a non-probability sampling method with a purposive sampling approach. Inclusion criteria for participants are UMKMs that have been operating for at least 3 years, have at least 5 employees, and are committed to following the data collection process. Exclusion criteria included UMKMs that did not have simple financial reports or were in the process of closing down. This sample sought to represent the diversity of business sectors, business scales, and geographic locations of UMKMs in East Java.

### Data Collection

Data were collected using a structured questionnaire organized based on the five pillars of Pancasila values. The questionnaire used a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) to measure the extent to which participants applied Pancasila values in their business activities. In addition, in-depth interviews were also conducted to enrich the understanding of the context in which these values are applied. The questionnaire included 30 items designed based on literature review and validation by academic experts and UMKM practitioners.

### Data Analysis

This study used exploratory factor analysis (EFA) to identify performance dimensions based on Pancasila values. EFA was chosen because this approach allows researchers to explore the data structure and find hidden patterns that are consistent with the essence of Pancasila. Data feasibility tests were conducted using factorability matrix, Kaizer-Meyer-Olkin (KMO) test, and Bartlett's Test of Sphericity. The KMO value is expected to be greater than 0.5, while the significance of Bartlett's Test indicates that the data can be further analyzed using factor analysis.

After conducting factor analysis, indicators that have an outer loading below 0.5 are removed to ensure the reliability of the results. The factors formed were named based on the representation of the dimensions of Pancasila values. This naming is done by considering the suitability with the basic values of Pancasila, so that it can describe the dimensions of Pancasila value-based performance clearly and easily understood.

Next, hypothesis testing was conducted to analyze the influence of Pancasila-based performance dimensions on UMKM antifragility. Statistical tests were conducted using regression analysis to test the relationship between EFA results and antifragility variables. This test refers to previous research methodologies (Bibri, 2021; Thekkoot, 2024).

This approach is designed to answer the research objectives by exploring how Pancasila values are applied in the performance of UMKM, then measuring their influence on UMKM antifragility. Through this process, it is hoped that this research can provide deeper insights into the importance of integrating Pancasila values in the management of UMKMs to support business sustainability and resilience.

## Results and Discussions

### Results of Pancasila-based UMKM Performance Dimension Testing on Anti-Fragile

In this sub-chapter, researchers will explain the results of testing the Pancasila-based UMKM Performance Dimensions against Anti-Fragile. As the purpose of this study is to be able to analyze the extent of confirmation of the performance dimensions of Pancasila-based MSEs and their effects on Antifragile. The following is a presentation of the findings in the quantitative phase of this study:

### Description of Research Variables

In this sub-chapter, researchers will describe the frequency description of research variables. The description of research variables has a central role that will present data and findings so as to form a coherent and easy-to-understand narrative.

### The Divine Base of the Almighty

Almighty Godhead is a principle of values owned by business actors that is applied in running daily business. The basis of the Supreme God is measured using 6 instrument indicators taken from qualitative findings in the first stage of this research. The results of descriptive analysis on this variable can be seen in the following table 20:

Table 1 <Description of Godhead-based Performance Variables>

	N	Minimum	Maximum	Mean	Std. Deviation
Intentions and actions based on good values of religion,	220	1	5	3.98	.951
Work for worship	220	1	5	3.91	1.010
Good and lawful living	220	1	5	3.95	.930
Confident in the riches of True Source	220	1	5	3.91	.998
God's involvement in business evaluation.	220	1	5	3.90	1.011
Trust God as the regulator of success	220	1	5	3.97	.960
Valid N (listwise)	220				

Source: Primary Data processed by researchers (2023)

The descriptive results show that the averages of all variables are in the range of 3.90 to 3.98, indicating that respondents have a positive view of the importance of Godly values in business. The variable with the highest mean, "intentions and actions based on religious values" (3.98), indicates religious morality as the main basis for business decisions. The low standard deviation (below 1.1) indicates consistency in responses, with little variation in "God's involvement in business evaluation" (1.011). This result reflects the influence of a strong religious culture, such as the belief that business is part of spiritual devotion. Godly values become important guidelines in respondents' business practices, potentially creating more ethical and sustainable business practices.

### Humanitarian-based Performance Variables

Just and Civilized Humanity is one of the fundamental principles that reflects the values in humanizing humans. Humanitarian variables that are fair and civilized emphasize the attitude of treating each individual (in this study means customers, fellow entrepreneurs) by prioritizing moral and ethical principles in every action and social interaction that has an impact on business sustainability. The following is presented in table 21 regarding the results of the description of the Just and Civilized Base of Humanity:

Table 2 <Description of Humanitarian-based Performance Variables>

	N	Minimum	Maximum	Mean	Std. Deviation
Customer Happiness	220	1	5	4.10	.854
Product Benefits for Customers	220	1	5	4.07	.878
The spirit of joint effort is familial	220	2	5	4.09	.848
Empowerment focus	220	1	5	4.03	.883
Partner upgrades	220	1	5	4.09	.844
Increase in sales	220	1	5	4.07	.865
Increased product innovation	220	1	5	4.05	.908
CSR enhancement	220	1	5	4.05	.887
Increased afterlife investment	220	1	5	4.09	.844
Valid N (listwise)	220				

Source: data processed by researchers (2023)

The descriptive results show that the average of all humanity-based variables is above 4.00, with the highest scores on the variables "Customer Happiness," "Spirit of cooperation," "Partner enhancement," and "Investment in the afterlife" (4.09). This indicates that respondents have a very positive view of human values in business, especially in relation to customer satisfaction, collaboration, and long-term benefits for partners and spiritual life.

The relatively low standard deviation (below 0.9) indicates consistency of responses, with similar perceptions across respondents. This indicates an understanding that aspects such as product benefits, innovation, empowerment and corporate social responsibility (CSR) are important elements in business success. The

findings reflect a strong application of human values in respondents' business strategies and practices, potentially supporting ethical and collective business sustainability.

### Unity-based Performance Variables

The Indonesian Unity variable is interpreted as unity values that manifest in daily actions and social interactions between entrepreneurs. This variable has 4 indicators obtained from the themes of the interview results in stage 1 (one) of this study. The description of the variables of the Indonesian Union is presented in the following Table 3.

Table 3 <Description of Unity-based Performance Variables>

	N	Minimum	Maximum	Mean	Std. Deviation
Business Cooperation	220	1	5	4.07	.893
Mutual aid for success	220	1	5	4.09	.864
Help Sales	220	1	5	4.07	.888
Outlet management collaboration	220	1	5	4.10	.847
Valid N (listwise)	220				

Source: data processed by researchers (2023)

The descriptive results show that the average of the unity-based variables is above 4.00, with the highest value on the variable "Collaboration in outlet management" (4.10). This reflects the respondents' strong level of agreement regarding the importance of cooperation and mutual help among the business actors in their business group. Variables such as "Business cooperation," "Working together for success," and "Helping sales" also received high scores, indicating a positive view of collaboration practices in supporting collective business success.

The low standard deviation (below 0.9) shows the consistency of respondents' answers, reflecting a shared understanding of the importance of a culture of collaboration. These findings illustrate that a culture of collaboration is not only accepted, but also implemented by businesses, which can strengthen the competitiveness of their business groups while creating closer supportive relationships.

### Deliberation based Performance Variables

The variables of the Representative Consultative Base in this study reflect the values and principles of democracy applied in the business decision-making process by various parties who have an interest in business operations. This can mean involving various parties who have an interest in business operations, including owners, managers, employees, business associates and even consumers. For a description of the Consultative Base Variables in this study are presented in table 4.

Table 4 <Description of Deliberation based Performance Variables>

	N	Minimum	Maximum	Mean	Std. Deviation
Peer involvement in business evaluation	220	1	5	4.09	.887
Involvement of peers in business processes	220	1	5	4.06	.919
Sharing tips and solutions	220	1	5	4.09	.848
Deliberation for business development	220	1	5	4.10	.884
Distribution of joint work based on deliberation	220	1	5	4.10	.846
Valid N (listwise)	220				

Source: data processed by researchers (2023)

The descriptive results show that the average of deliberation-based variables is above 4.00, with the highest values in the variables "Deliberation for business development" and "Distribution of joint work based on deliberation" (4.10 each). This indicates a high level of agreement from respondents on the importance of deliberation, member involvement, and cooperation in business decision-making. Variables such as "Peer involvement in business evaluation" and "Sharing tips and solutions" also received high mean scores, reflecting the practice of mutual support and experience sharing among members of the business community.

The relatively low standard deviation (below 0.9) indicates the consistency of respondents' answers, reflecting a shared understanding of the importance of deliberative values in business management. These results indicate that the practices of deliberation and collective participation are not only well accepted, but also considered important elements in enhancing business development, efficiency and solidarity within the business group. This illustrates the existence of a strong dialogue- and collaboration-based work culture among respondents.

#### **Fairness-based Performance Variables**

The variable of Social Justice Base in this study is the practice of applying the principles of justice, equality and non-discrimination in business. So all individuals should be treated with fairness and equality. There are 6 (six) indicators for social justice based variables in this study. This indicator is obtained from the findings at stage 1 (one) of this study. In table 24 below, a description of the variables of social justice is presented.

Table 5 <Description of Fairness-based Performance Variables>

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Fair business relationships	220	1	5	3.97	.988
Fair product usability	220	1	5	3.97	.995
Fair product quality usability	220	1	5	4.00	.894
Feeling of sufficiency over income for entrepreneurs	220	1	5	4.00	.914
Sufficient feeling of product benefits for customers	220	1	5	3.99	.951
Equitable prosperity	220	1	5	3.99	.960
Valid N (listwise)	220				

Source: data processed by researchers (2023)

The results of the descriptive analysis showed that the mean of the fairness-based variables ranged from 3.97 to 4.00, indicating a high level of agreement with the principles of fairness in business relationships, product quality, customer satisfaction, and business sustainability. Respondents generally had a positive view of the importance of fair business practices, both in terms of partner relationships and customer benefits. The variables "Fair product quality" and "Enough income for entrepreneurs" have the highest mean scores (4.00), reflecting that fairness in benefit distribution and business sustainability are considered important by respondents.

Standard deviations ranging from 0.894 to 0.995 indicate variation in responses, but respondents generally showed consistency in supporting the statements. These results indicate that the principle of fairness is not only widely accepted, but is also seen as an important element in creating ethical, customer-oriented businesses that are able to support equitable welfare among businesses.

#### **Anti-Fragile Variable**

The anti-fragility variable in this study is the ability of individuals or organizations to grow and develop in uncertainty. In this variable there are 4 (four) indicators presented in table 6.

Table 6 <Description of Anti-Fragile Variables>

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
The Power of Networking	220	2	5	4.12	.796
Business sustainability	220	1	5	4.09	.874
Asset Upgrade	220	1	5	4.09	.834
Increased Efficiency	220	1	5	4.12	.819
Valid N (listwise)	220				

Source: data processed by researchers (2023)

The results of the analysis show that the anti-fragility-based variables have high mean values, ranging from 4.09 to 4.12. These values reflect that respondents generally have a positive view of the importance of network strength, business sustainability, asset enhancement and efficiency in the business context. The variables "Network Strength" and "Efficiency Improvement" have the highest mean values (4.12), indicating that these aspects are considered very important by respondents in supporting the sustainability and resilience of their businesses.

The relatively low standard deviations, ranging from 0.796 to 0.874, indicate a good level of consistency in respondents' responses. This indicates that there is agreement among respondents on the importance of these elements in creating a business that is resilient and able to adapt to challenges. Overall, these results underscore the strategic role of networks, operational efficiency, and asset management in building anti-fragile and sustainable businesses.

### Model Testing

In this sub-chapter will be presented the results of the evaluation of the validity and performance of models that have been developed in the context of structural analysis. Testing the model is important to ensure that the estimated model reflects the data well and provides reliable results. In addition, this sub-chapter will also describe the test results that will be used as a basis for analyzing further research findings.

Table 7 <Model Fit>

	Saturated model	Estimated model
SRMR	0.023	0.023
d_ULS	0.306	0.306
d_G	0.495	0.495
Chi-square	637.23	637.23
NFI	0.96	0.96

Source: Data processing results (2023)

Based on Table 7, the model shows a good level of fit. The SRMR value of 0.023, which is smaller than the limit of 0.100, indicates that the difference between the observed covariance matrix and that predicted by the model is very small, so the model can be considered fit. In addition, the d\_ULS and d\_G values of 0.306 and 0.495 respectively indicate that the model has adequate structural fit.

The Chi-square value of 637.23 indicates a measure of overall model fit, although its interpretation must be considered in the context of the sample size. With an NFI value of 0.96, which is close to 1, it can be concluded that the model has a very good ability to explain the observed data compared to the base model. Overall, these results confirm that the model is a good fit for the data analyzed and is reliable for further interpretation. The following are presented the results of the construct validity and reliability:

Table 8 <Construct Reliability>

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
AR	0.981	0.981	0.986	0.945
GP	0.984	0.985	0.987	0.926
HP	0.992	0.992	0.993	0.937
UP	0.984	0.985	0.988	0.955
DP	0.99	0.99	0.992	0.96
JP	0.99	0.991	0.992	0.952

Source: Data Processing Results (2023)

Based on table 8 above, it is known that Cronbach's Alpha value ranges from 0 to 1, where higher values indicate a higher level of reliability. Cronbach's Alpha is a reliability measure used to measure the extent to which items in a construct or measurement instrument are consistent or reliable. In this case, all constructs (AR, GP, HP, UP, DP, JP) have very high Cronbach's Alpha values (above 0.98), indicating that the items used to measure these constructs are very consistent in their measurements.

Composite Reliability values range from 0 to 1, and higher values indicate better reliability. Composite Reliability (rho\_a) is also a similar measure of reliability to Cronbach's Alpha. It is used to measure the consistency of items in a construct. In this case, all constructs have very high Composite Reliability values (above 0.98), confirming high consistency in the measurement of these constructs.

Composite Reliability values range from 0 to 1, and higher values indicate better reliability. Composite Reliability (Rho\_c): Composite Reliability (rho\_c) is another reliability measure similar to rho\_a. This value is also used to measure the consistency of items in a construct. In this case, all constructs have very high Composite Reliability values (above 0.986), confirming high measurement consistency.

AVE values range from 0 to 1, and higher values indicate better validity. Average Variance Extracted (AVE) is a measure of construct validity that measures how well items in a construct measure variability within that construct. In this case, all constructs have very high AVE values (above 0.926), indicating that the items in these constructs do measure variability within those constructs well.

Overall, these data show that the measurement instruments used in the study have a very high level of reliability (Cronbach's Alpha, Composite Reliability) and good validity (Average Variance Extracted), so that the analysis results obtained from these instruments are reliable and valid in the context of research. Next, the outer loading results are presented to show the value of the loading factor on Table 9.

Based on Table 9 showing the Outer Loading values, it can be observed that all factor values for each variable (AR, GP, HP, UP, DP, JP) exceed 0.7. A loading value greater than 0.7 indicates that the indicators measured are highly relevant and strongly associated with the respective construct or factor. Therefore, it can be concluded that all variables in this study are statistically valid, as each indicator contributes significantly to its respective factor. This suggests that the measurement model used in this study has a high level of consistency and is suitable for further analysis.

Table 9 &lt;Outer Loading&gt;

	AR	GP	HP	UP	DP	UP
AR1	0.972					
AR2	0.971					
AR3	0.968					
AR4	0.977					
GP1		0.975				
GP2		0.96				
GP3		0.96				
GP4		0.954				
GP5		0.956				
GP6		0.969				
HP1			0.98			
HP2			0.972			
HP3			0.968			
HP4			0.951			
HP5			0.972			
HP6			0.968			
HP7			0.966			
HP8			0.959			
HP9			0.976			
UP1				0.975		
UP2				0.979		
UP3				0.974		
UP4				0.98		
DP1					0.981	
DP2					0.974	
DP3					0.976	
DP4					0.984	
DP5					0.984	
JP1						0.977
JP2						0.974
JP3						0.972
JP4						0.977
JP5						0.976
JP6						0.977

Source: Data processing results (2023)

### Uji Hypoplant

In this study, hypothesis testing was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM), a sophisticated and flexible analytical method in quantitative research. PLS-SEM makes it possible to evaluate complex relationships between latent variables in the conceptual model in this study. Using PLS-SEM, this study can simultaneously assess both measurements and structural models, and gain a deeper understanding of the dynamics of relationships between variables. The results of the PLS-SEM analysis, shown through statistical T values and P values are presented in Tables 10.

Table 10 &lt;Path Coefficient&gt;

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
GP -> AR	0.104	0.092	0.046	2.251	0.024
HP -> AR	0.283	0.286	0.114	2.479	0.013



UP -> AR	0.282	0.283	0.112	2.525	0.012
DP -> AR	0.271	0.274	0.108	2.513	0.012
JP -> AR	0.102	0.09	0.05	2.043	0.041

Source: Data processing results (2023)

Table 10 reflects the test results of the direct influence of the independent variable on the dependent variable, so it can be concluded as follows: (1) God-based performance positively affects Anti-fragile with a statistical T of 2.251 (pvalue  $0.024 < 0.05$ ). This means that the null hypothesis is rejected, so from the results of this study it can be concluded that there is a positive influence of 0.104 from the God-based performance variable on Anti-Fragile; (2) Humanitarian-based performance positively affects Anti-fragility with a statistical T of 2.479 (pvalue  $0.013 < 0.05$ ). This means that the null hypothesis is rejected, so from the results of this study it can be concluded that there is a positive influence of 0.283 of the Humanitarian-based performance variables on Anti-Fragile; (3) Unity-based performance positively affects Anti-fragility with a statistical T of 2.525 (pvalue  $0.012 < 0.05$ ). This means that the null hypothesis is rejected, so from the results of this study it can be concluded that there is a positive influence of 0.282 of the Union-based performance variables on Anti-Fragile; (4) Deliberation based performance positively affects Anti-fragile with a statistical T of 2.513 (pvalue  $0.012 < 0.05$ ). This means that the null hypothesis is rejected, so from the results of this study it can be concluded that there is a positive influence of 0.271 of the Consultative-based performance variables on Anti-Fragile; (5) Justice-based performance positively affects Anti-fragility with a statistical T of 2.043 (pvalue  $0.041 < 0.05$ ). This means that the null hypothesis is rejected, so from the results of this study it can be concluded that there is a positive effect of 0.102 from the Justice-based performance variable on Anti-Fragile.

Graphically, an overview of the influence of the independent variable on the dependent variable can be seen in Figure 1.

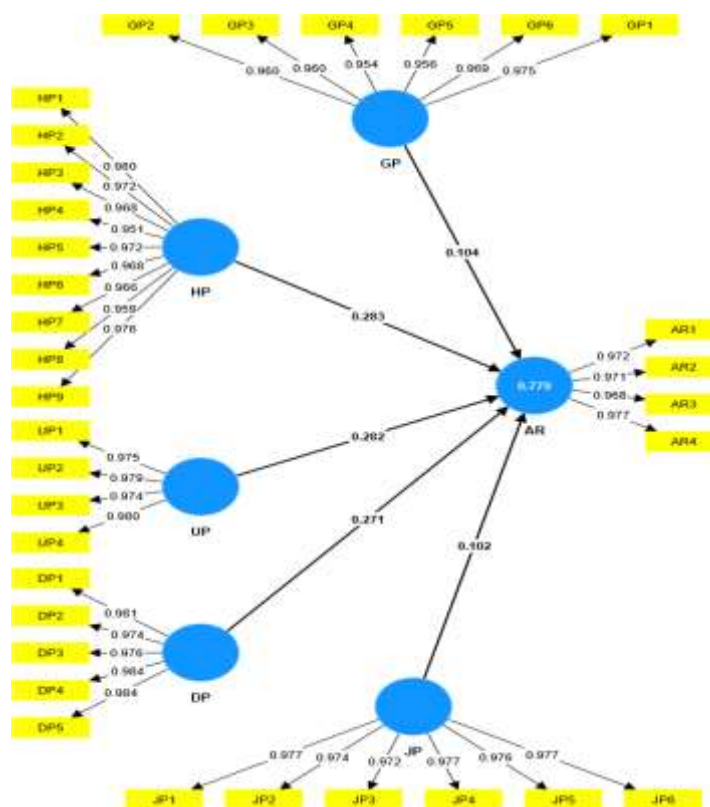


Figure 1 <The Relationship of the Independent Variable to the Dependent Variable>

#### Test coefficient of determination

In this sub-chapter, the researcher will present the results of the Coefficient Determination test. In the context of *Partial Least Squares Structural Equation Modeling* (PLS-SEM), Efficient Determination has an important role in assessing the effectiveness and strength of the model. The results of the determination coefficient test are as Table 11.

Table 11 <Koeffisin Determination>

R-square	R-square adjusted

AR	0.779	0.774
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Source: Data processing results (2023)

The R-square value is 0.779 for the AR variable, which means that 77.9% of the variance in the AR variable can be explained by the independent variable in the model. R-square is a measure often used in statistical analysis to show how well data fits into regression models. Higher scores indicate better fit. In this context, a value of 0.779 indicates a fairly good fit between the model and the data.

The adjusted R-square value is 0.774. R-square adjusted is a modification of R-square that adjusts the number of independent variables in the model. While the R-square tends to increase with the addition of predictor variables regardless of whether those variables actually improve the model, the adjusted R-square corrects this by penalizing the addition of variables that do not make a significant contribution. Adjusted R-square values close to R-square values, as in this case (0.774 compared to 0.779), indicate that the variables included in the model do provide relevant information and not just artificially increase the R-square.

In conclusion, the high and close R-square and R-square adjusted values for the AR variable indicate that the regression model used has a good fit with the data and that the independent variables included in the model make a significant contribution in explaining the variance of the AR dependent variable.

### **Exploration of Pancasila-based Performance Factors**

Based on the findings, it was obtained that the results of variable extraction had been declared feasible and formed 5 (five) main factors that became the forming factors of Pancasila-based performance. These factors include:

#### ***Divine-based performance***

This factor highlights the importance of religious values in business practices. Variables such as working for worship, maintaining a good and halal life, and trusting God as the regulator of success are at the core of this factor. Examples of the implementation of Pancasila values in UMKM businesses can be seen in businesses that prioritize the principle of working according to religious teachings, such as those carried out by small entrepreneurs in the halal food sector. UMKMs that produce halal food and always ensure that the raw materials used have gone through halal certification, prioritize the principle of honesty in business transactions. The link between belief in God and improved performance is well supported by the literature, with studies (Novitasari et al., 2020) showing that belief in God positively affects performance. This is in accordance with the teachings of Pancasila which encourages every individual to believe and fear God Almighty in every aspect of life, including in the business world.

#### ***Humanity-based performance***

This factor focuses on creating value for customers, such as ensuring their happiness, providing useful products, and fostering a sense of family and empowerment within the company. The focus on social responsibility aligns with Corporate Social Responsibility (CSR) theory in the study (Ashrafi et al., 2020). Humanity-based performance suggests that business success is not only measured by profits, but also by the social and environmental contributions the company makes. For example, an UMKM engaged in education or skills training that provides training for the underprivileged and provides products or services at affordable prices. This perspective highlights the importance of a business's positive impact on society, which is a cornerstone of the humanist values of Pancasila.

#### ***Unity-based performance***

This factor emphasizes the importance of cooperation, mutual aid and collaboration among business partners. This factor is related to Business Network Theory and Social Capital Theory found in research (Liu et al., 2020), which highlight that strong business relationships and partnerships lead to competitive advantage and operational efficiency. Unit-based performance fosters a culture of resource sharing, innovation and strategic partnerships. The implementation of unity-based performance in UMKMs can be seen in businesses that prioritize cooperation and collaboration with various parties, both with fellow business actors and with local communities such as, UMKM that utilize local raw materials from local farmers or craftsmen, thus helping to improve the regional economy and creating mutually beneficial relationships. In addition, the business may also work with non-governmental organizations (NGOs) to support social activities such as education or infrastructure development.

#### ***Consultative-based performance***

This factor involves collaboration and knowledge sharing, where business decisions are made through deliberation, involving various stakeholders such as partners and colleagues. This is in line with study by (Castañer & Oliveira, 2020), which emphasizes collaboration to improve performance. Participative Management Theory further supports the idea of employee involvement in decision-making, suggesting that

such involvement increases commitment and productivity. For instance, an UMKM engaged in small manufacturing holds regular meetings to discuss existing problems in the production or marketing of products. Any major decisions, such as changes to the production process or the launch of a new product, always involve input from various parties, be it from employees working directly in the field or from distribution partners. In this way, decisions are more inclusive and have the support of all relevant parties, which supports better business performance. This is in accordance with the principles of Pancasila, which emphasizes deliberation and consensus as a way to reach fair and wise decisions.

#### ***Fairness-based performance***

This factor underscores the importance of fairness in business relationships, product quality and income distribution. Fairness, both in business relationships and product benefits, is related to Organizational Justice Theory, which focuses on the fair distribution of outcomes and decision-making processes. The concept of fairness in entrepreneurship leads to improved relationships, customer satisfaction and employee motivation, thereby improving overall business performance. Psychological Justice Theory supports this, suggesting that perceptions of fairness directly influence satisfaction and behavior in a business context. The application of the principle of fairness in UMKMs can be seen in the fair distribution of results between business owners and employees, or in providing quality products at reasonable prices to customers. UMKMs that produce handicrafts ensure that their workers receive decent wages and there is transparency in the profit-sharing system. In addition, the products sold always ensure the quality and price are as promised to customers, without any deception or price gouging. This practice of fairness supports the creation of harmonious relationships and increases customer loyalty, as well as providing a sense of security and comfort for working employees. The principle of fairness in business is very much in line with the value of social justice in Pancasila.

#### **The effect of Pancasila-based MSE performance on Anti-Fragile**

##### ***The Effect of God-based Performance on Anti-Fragility.***

The findings show that Divine-Based Performance has a positive effect on Anti-Fragility, with a statistical T-value of 2.251 and a p-value of 0.024 which is lower than the standard limit of 0.05. However, this effect is relatively weaker than the other factors. This can be explained by the fact that the influence of spiritual or religious beliefs on business resilience is more internal and psychological, thus affecting the individual rather than directly on the resilience of the organization as a whole. Research in positive psychology suggests that spiritual beliefs help individuals build mental resilience (Chang et al., 2021), but in the context of UMKMs, this resilience may be limited to the individual level and not directly impact collective resilience or the capacity of the organization to withstand crises.

Values associated with religious beliefs can provide psychological support for UMKM actors in the face of challenges and uncertainty. In the face of adversity or difficult times, these beliefs can help individuals to remain calm, confident and maintain high morale. However, to enhance organizational anti-fragility, UMKMs need to combine spiritual beliefs with more holistic strategic approaches, such as increased innovation, risk management and adaptive human resource development. UMKM players can integrate spiritual values in their business practices by providing space for employees to develop self-confidence and mental resilience. In addition, it is important to combine these values with crisis management and risk mitigation strategies to strengthen their overall business resilience.

##### ***The Effect of Human-based Performance on Anti-Fragility.***

The findings show that Human-Based Performance has a significant positive influence on Anti-Fragility, with a statistical T-value of 2.479 and a p-value below 0.05. This positive influence is reflected in the relationship between human-based performance, such as concern for employees, community empowerment, and social responsibility, with increased organizational resilience. Study by (Wulandhari et al., 2022) supports these findings by emphasizing that strong social relationships and networks of cooperation can provide access to resources and information that help organizations to be more adaptive and resilient.

Human values, such as concern for the well-being of employees and communities, provide a strong foundation for UMKMs to build mutually beneficial relationships with customers and business partners. When these values are implemented, they increase customer satisfaction and loyalty, and build trust in the communities that support UMKMs. This contributes to the resilience of organizations, allowing them to not only survive but also thrive despite challenges. UMKMs can strengthen their social capital by prioritizing long-term relationships with employees, customers and business partners. They also need to encourage sustainability-based policies that take into account the well-being of the surrounding community, and involve employees in decision-making to increase a sense of ownership and responsibility.

##### ***The Effect of Unity-based Performance on Anti-Fragile***

Unity-Based Performance has a positive effect on Anti-Fragility, with a statistical T-value of 2.525 and a p-value below 0.05. This suggests that strong social relationships within the organization, as well as the ability to cooperate and collaborate with business partners, contribute to organizational resilience. Study by (Jia et al., 2020) asserts that close social relationships and norms of cooperation can increase an organization's adaptability to change. In the context of UMKMs, solid relationships between business owners, employees and business partners serve as reinforcements in the face of uncertainty.

When UMKMs build strong and mutually beneficial relationships with various parties, they create a network that can provide support during difficult times. Successfully maintaining harmonious relationships and collaborating with others will help UMKMs to survive and grow in the face of crisis. UMKMs need to prioritize collaboration in all aspects of their operations, including in the face of external challenges such as the economic crisis. Investing in building mutually supportive business networks and strengthening positive internal relationships is critical to increasing business resilience and robustness.

#### ***The Effect of Deliberation Based Performance on Anti-Fragility***

The research shows that Deliberation-Based Performance, which involves participatory and consensus-based decision-making, has a positive influence on Anti-Fragility, with a statistical T-value of 2.513 and a p-value below 0.05. This approach can strengthen organizational resilience through increased collaboration, open communication, and better understanding between organizational members. With more inclusive decisions, organizations will be more flexible and able to adapt to uncertain situations. Previous study, (Ashrafi et al., 2020) in Social Capital Theory, support these findings by showing that participation-based decision-making can increase social ties and mutual understanding within organizations.

The implementation of deliberation in decision-making allows UMKMs to gain multiple perspectives and innovative solutions. This increases the organization's capacity to adapt and thrive in the face of change or crisis. Deliberation processes can also strengthen the sense of responsibility and ownership among team members, which in turn supports organizational resilience. UMKMs should encourage consultation and deliberation processes in decision-making, especially when facing complex issues. Engaging various parties in discussions and seeking solutions together can help UMKMs develop more adaptive and resilient strategies in the face of challenges.

#### ***The Effect of Justice-based Performance on Anti-Fragility.***

The findings show that Justice-Based Performance has a positive influence on Anti-Fragility, with a statistical T-value of 2.043 and a p-value of 0.041. Although this finding shows a positive influence, the influence is relatively weaker compared to the other factors. This could be due to the fact that while fairness in the distribution of resources and organizational decisions is important for improving employee motivation and commitment, its effect on overall organizational resilience is not immediately apparent in the short term. Previous research by (Silva et al., 2023) also indicated that perceptions of fairness in organizations can increase employee commitment and job satisfaction, which in turn contribute to organizational performance.

Fairness practices in UMKMs, such as fair profit sharing, transparency in decision-making, and fair treatment of all parties, can help increase employee satisfaction and commitment. Employees who feel they are treated fairly tend to be more loyal and motivated to contribute more to the success of the organization. This improves UMKM's ability to adapt to external challenges and maintain stability within the organization. UMKMs must ensure that they apply the principles of fairness in every aspect of their operations, be it in terms of profit sharing, employee promotions, or decision-making. Fairness not only increases employee motivation and satisfaction, but also strengthens the company's reputation in the community and market.

## **Conclusions**

Based on the results of the study, five Pancasila-based performance factors were identified, including God-based Performance (GP), Humanity-based Performance (HP), Unity-based Performance (UP), Consultative-based Performance (DP), and Justice-based Performance (JP). These factors suggest that the implementation of Pancasila values in business can influence organizational resilience, particularly in the context of Anti-Fragility. The Humanity, Unity, and Consultative-Based Performance factors were found to have a significant impact on the Anti-Fragility of SMEs, with statistical analysis showing higher T-statistic values, indicating a strong influence. Humanity-based Performance, which emphasizes customer well-being and product benefits, contributes to SMEs' ability to adapt in the face of change and pressure, leading to better resilience. Unity-based Performance, which promotes cooperation and mutual assistance among business actors, also shows a positive contribution to organizational resilience. Meanwhile, Consultative-based Performance, which involves colleagues' participation in business evaluations, strengthens communication and collaboration within the organization, playing an important role in increasing resilience to uncertainty.

On the other hand, Divine-based Performance and Justice-based Performance show a lower influence on Anti-Fragility. Although both are important, their influence is more internal and subtle in shaping organizational resilience. Divine-based Performance, which emphasizes religious values in business, and Justice-based Performance, which focuses on fairness in business relationships and product benefits, contribute more to strengthening the ethical and moral foundations within the organization, although their direct effects on SME resilience tend to materialize more slowly. This study's findings expand the theoretical dimensions of business performance measurement by integrating aspects of spirituality and humanism. By incorporating the values of divinity in Pancasila as an important factor, the theory of business performance measurement is no longer limited to financial, operational, and strategic aspects, but also recognizes the important role of non-material factors such as belief, ethics, and morals in business success. The findings related to humanist performance enhancement further broaden the scope of performance measurement theory by adding a dimension of corporate social responsibility and social influence on performance.

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