

SDGs Awareness, Funding Access, Government Support, on the Implementation of SDGs in MSMEs

Sabaruddinsah Sabaruddinsah^{1*}, Neng Asiah²

¹Universitas Sultan Ageng Tirtayasa

²Universitas Pelita Bangsa

Email: sabaruddinsah@untirta.ac.id

Abstract

Creative MSMEs in West Java have a strategic role in driving economic growth while achieving the Sustainable Development Goals (SDGs). However, the implementation of SDGs in this sector still faces complex challenges, including low awareness of business actors, limited access to funding, and less than optimal government support. This study aims to analyze the influence of SDGs awareness, access to funding, and government support on the implementation of SDGs in creative MSMEs in West Java. The study used a quantitative approach with an *explanatory research method*. Data were collected through questionnaires to 250 creative MSMEs in West Java selected using *purposive sampling techniques*. Data analysis was carried out using *Structural Equation Modeling* based on *Partial Least Squares* (SEM-PLS) using SmartPLS 4.0. The model was tested to ensure validity, reliability, and predictive power before hypothesis testing. Government support has the strongest influence ($\beta=0.41$; $p<0.01$), then SDGs awareness ($\beta=0.33$; $p<0.01$) and access to funding ($\beta=0.25$; $p<0.05$). This model can explain 61% of the variance in SDGs implementation. The results of the analysis show that the three variables have a positive and significant effect on SDGs implementation. This finding indicates that policy interventions should focus on strengthening government support, accompanied by increasing SDGs literacy and simplifying access to sustainable financing.

Keywords : Creative UMKM, SDGs awareness, access to funding, government support, implementation of SDGs

Introduction

MSMEs (Micro, Small, and Medium Enterprises) are one of the most vital economic sectors in Indonesia, contributing to economic growth and employment. However, in the context of sustainable development, MSMEs still face various obstacles, such as a lack of understanding of the SDGs, difficulty in accessing financing, and a lack of policy support from the government. The SDGs (*Sustainable Development Goals*) are a UN framework that includes 17 goals to achieve sustainable development by 2030. The implementation of the SDGs in MSMEs can encourage environmentally friendly, inclusive, and sustainable business practices. However, factors such as awareness of the SDGs, access to funding, and government support are thought to have a significant influence on the adoption of the SDGs by MSMEs.

Sustainable development has become an urgent global agenda, realized through the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 (United Nations, 2015). As one of the provinces with the largest economic contribution in Indonesia,

West Java has a strategic role in achieving the SDGs targets, especially through the creative Micro, Small, and Medium Enterprises (MSMEs) sector (BPS West Java, 2022). Creative MSMEs in West Java, which include the fashion, handicraft, culinary, and creative digital industries, not only play a role in economic growth but also have the potential to become drivers of sustainable development (Kemenparekraf, 2021). However, the implementation of SDGs principles in creative MSMEs still faces various challenges, such as low awareness, limited access to funding, and lack of government support (OECD, 2019).

The low awareness of creative MSMEs towards SDGs is a major obstacle in implementing sustainable business practices. A study conducted by Amran et al. (2019) showed that only 25% of MSMEs in West Java understand the concept of SDGs and its relevance to their business. In fact, a good understanding of SDGs can encourage MSMEs to adopt environmentally friendly practices, such as the use of sustainable raw materials and responsible waste management (Dyllick & Muff, 2016). The lack of socialization from the government and related institutions has also exacerbated this condition, so that many creative MSMEs still focus on short-term profits without considering social and environmental impacts (UNDP, 2020).

In addition to awareness, access to funding is also a significant obstacle for creative MSMEs in implementing SDGs. According to Bank Indonesia data (2021), only 30% of creative MSMEs in West Java have access to formal financing, while most rely on personal capital or informal loans. This limitation makes it difficult for MSMEs to invest in green technology or develop sustainable products that require high costs (Schaltegger et al., 2016). Sustainable financing programs, such as green financing and environmentally-based microcredit, have not been widely utilized due to lack of information and complex requirements (OECD, 2020). In fact, Weber's study (2017) proves that adequate access to funding can increase the capacity of MSMEs to adopt sustainable business practices by up to 40%.

Government support, both through policies and mentoring programs, is also considered suboptimal. Although the West Java Provincial Government has launched several initiatives such as the "Jabar Creative Economy" and tax incentives for environmentally friendly MSMEs, their implementation is still limited to a handful of business actors (Disperindag Jabar, 2022). Research by Linnenluecke et al. (2017) revealed that inconsistent and poorly coordinated government support often fails to create an ecosystem that supports the implementation of the SDGs. In addition, training and technical assistance on sustainable business practices are still rarely reached by creative MSMEs in rural areas or underdeveloped areas (BAPPENAS, 2021).

Amid these challenges, creative MSMEs in West Java actually have great potential to become pioneers in implementing SDGs. Creative industries, such as fashion made from recycled materials or crafts based on local culture, are naturally in line with the principles of sustainability (Kemenparekraf, 2021). A case study from UNIDO (2020) shows that creative MSMEs in Bandung that apply the principles of a circular economy have succeeded in increasing income while reducing waste by up to 30%. However, this potential has not been utilized optimally due to the lack of collaboration between stakeholders, including the government, academics, and the private sector (Porter & Kramer, 2019).

Based on the background above, this study aims to:

1. Analyzing the influence of SDGs awareness on the implementation of SDGs in creative MSMEs in West Java.
2. Analyzing the influence of funding access on the implementation of SDGs in creative MSMEs in West Java.
3. Analyzing the influence of government support on the implementation of SDGs in creative MSMEs in West Java.

Stakeholder Theory (Freeman, 1984) is a key theoretical basis in this study to analyze the implementation of SDGs in creative MSMEs in West Java. This theory emphasizes that business sustainability and success are not only determined by shareholders, but by all stakeholders involved, including government, consumers, local communities, financial institutions, and industry associations. In the context of creative MSMEs, this theory is very relevant because the characteristics of their businesses are highly dependent on relationships with various external parties (Jamali et al., 2017). For example, pressure from increasingly environmentally conscious consumers or government regulations can be key drivers of the adoption of sustainable practices.

One of the key aspects of *Stakeholder Theory* is the identification of primary and secondary stakeholders that influence MSME business decisions. Primary stakeholders such as consumers and suppliers have a direct influence on the operations of creative MSMEs. A study by Darnall et al. (2010) showed that consumer demand for environmentally friendly products significantly increases the implementation of sustainable practices in MSMEs in the creative sector. Meanwhile, secondary stakeholders such as the government and non-governmental organizations (NGOs) play a role in creating a policy environment and incentives that encourage changes in business behavior. In West Java, the role of the Department of Industry and Trade and the Ministry of Tourism and Creative Economy as key stakeholders has been shown to influence the adoption of SDGs through training and mentoring programs (Kemenparekraf, 2021).

Stakeholder Theory also explains how conflicts of interest between stakeholders can hinder the implementation of SDGs. For example, consumer demands for low prices often conflict with the principles of sustainable production that require higher costs. Research by Hörisch et al. (2014) revealed that creative MSMEs are often caught in a dilemma between meeting the expectations of financial stakeholders (such as investors who demand fast ROI) and socio-environmental stakeholders (such as communities who care about ecological impacts). This condition is exacerbated by the power asymmetry between MSMEs and large stakeholders such as corporations or governments, which often makes it difficult for MSMEs to negotiate their sustainability interests (Mitchell et al., 1997).

The implementation of *Stakeholder Theory* in the context of creative MSMEs in West Java reveals the importance of multi-party collaboration. This study found that synergy between the government (provider of regulation), financial institutions (provider of capital access), and industry associations (provider of capacity) is a determining factor in the success of SDGs implementation. This finding is in line with the study of Donaldson and Preston (1995) which emphasized that a participatory stakeholder approach can create shared value. A real example is seen in the eco-friendly batik cluster in Bandung, where collaboration between the Department of Industry and Trade, local banks, and fashion designers has

succeeded in developing a circular business model that increases income while reducing textile waste (UNIDO, 2020).

Awareness of SDGs is a fundamental factor in driving changes in business behavior. According to Amran et al. (2019), MSMEs that have a deep understanding of SDGs tend to be more proactive in integrating sustainability principles into their operations. This is in line with research by Dyllick & Muff (2016), which states that awareness of sustainability issues can increase business commitment to contributing to sustainable development.

However, the level of awareness of MSMEs towards SDGs is still relatively low, especially in developing countries. A study conducted by KPMG (2020) showed that only 30% of MSMEs in Southeast Asia truly understand the concept of SDGs. This low level of sustainability literacy hampers efforts to implement environmentally friendly and inclusive business practices. Awareness of SDGs has a positive effect on the implementation of SDGs in MSMEs. Empirical support from research by Amran et al. (2019) shows that increasing understanding of SDGs can encourage the adoption of sustainable business practices.

In addition, research by Hahn et al. (2018) found that training and socialization on SDGs significantly increased awareness and implementation of sustainability principles in MSMEs. Based on the description above, the following hypothesis can be formulated:

H1: SDGs awareness has a positive and significant impact towards the implementation of SDGs in MSMEs

Access to finance is a critical factor in supporting MSMEs' transition to sustainable business. According to Schaltegger et al. (2016), green financing can help MSMEs adopt environmentally friendly technologies, such as renewable energy and low-emission production systems. However, many MSMEs face obstacles in accessing this funding due to complex requirements and lack of collateral (UNDP, 2020).

A study by the OECD (2019) shows that MSMEs that have access to sustainable financing have a higher rate of SDGs adoption than those that do not. Programs such as environmentally-based microcredit have proven effective in encouraging sustainable business practices in the MSME sector. Access to funding has a positive effect on the implementation of SDGs in MSMEs. Research by Weber (2017) shows that the availability of sustainable financing increases the capacity of MSMEs to invest in green innovation. In addition, an empirical study by UNEP (2021) found that government-backed funding schemes, such as clean energy subsidies, significantly increase the adoption of SDGs in MSMEs. Based on the description above, the following hypothesis can be formulated:

H2: Access to Funding has a positive and significant effect on the Implementation of SDGs in MSMEs

Government support through policies and incentives plays an important role in accelerating the implementation of SDGs in MSMEs. According to Linnenluecke et al. (2017), supportive regulations, such as tax incentives and mentoring programs, can reduce financial and technical barriers for MSMEs in adopting sustainable practices. However, the implementation of these policies is often uneven.

Research by BAPPENAS (2021) shows that only 40% of MSMEs in Indonesia feel direct benefits from government programs related to SDGs. This indicates the need for a

more inclusive and structured approach. Government support has a positive effect on the implementation of SDGs in MSMEs. Empirical evidence from UNIDO (2020) shows that countries with pro-SDGs policies have a higher adoption rate in the MSME sector. In addition, research by Porter & Kramer (2019) found that synergy between the government, private sector, and MSMEs can create a business ecosystem that supports sustainable development. Based on the description above, the following hypothesis can be formulated:

H3: Government support has a positive and significant impact on the implementation of SDGs

Method

The research method used is a quantitative descriptive method with a correlation approach. Where the type of research used is hypothesis testing research, namely research that explains phenomena in the form of relationships between variables (*causal research*). The type of data in this research is subject data, namely research data in the form of opinions, attitudes, experiences or characteristics of a person or group of people who are the research subjects (respondents).

The data sources used in the research are primary data in the form of opinions, attitudes, experiences or characteristics of respondents (research subjects) and the instrument used is a questionnaire or survey. The data collection method is done by distributing directly or by using postal facilities (*mail survey*) and e-mail survey. In order to ensure the effectiveness and efficiency of the questionnaire design, *a pilot test was conducted* to determine the time needed to complete the questionnaire and to assess the validity and reliability of the questionnaire.

The population of this study is all creative MSMEs in West Java registered with the West Java Provincial Cooperatives and MSMEs Service for the 2022-2023 period, with an estimated number of 15,000 businesses. The inclusion criteria set include: (1) MSMEs that have been operating for at least 3 years, (2) engaged in the creative sub-sector (fashion, crafts, culinary, or digital), and (3) have participated in training related to SDGs or sustainable business.

The sampling technique used the stratified random sampling method with proportional allocation based on subsectors and regions. Determination of sample size refers to the Slovin formula with a margin of error of 5%, resulting in 400 respondents. To anticipate non-response, the sample was increased to 450 MSMEs (Israel, 2013). The sampling process was carried out in stages through coordination with related agencies and local MSME associations.

Instrument validity testing was conducted through two approaches. First, content validity *was* tested through expert judgment by three experts (SDGs experts, MSME practitioners, and government representatives) by calculating the *Content Validity Index* (CVI). Second, construct validity was tested through confirmatory factor analysis with the criteria of loading factor > 0.5 and Average Variance Extracted (AVE) > 0.5 (Hair et al., 2019).

Reliability testing is done by calculating the Composite Reliability (CR) and Cronbach's Alpha values. The instrument is considered reliable if the CR value is > 0.7 and Cronbach's Alpha > 0.6 (Nunnally, 1978). In addition, a common method bias test is carried

out through Harman's single factor test to ensure there is no significant measurement method bias (Podsakoff et al., 2003).

Data analysis in this study used *Structural Equation Modeling* (SEM) based on *Partial Least Square* (PLS) with the help of SmartPLS 4.0 software. The selection of SEM-PLS was based on several considerations. First, the ability of this method to process complex models with many latent variables and indicators. Second, its flexibility for data that is not normally distributed. Third, its suitability for prediction purposes (predictive power) compared to theory confirmation (Hair et al., 2019).

The analysis was conducted in two main stages. The first stage is the evaluation of the measurement model (outer model) to test the validity and reliability of the instrument. At this stage, the loading factor, cross-loading, AVE, and composite reliability were examined. The second stage is the evaluation of the structural model (inner model) to test the relationship between latent variables. At this stage, the R-square, path coefficients, and statistical significance were analyzed through the bootstrapping procedure (Henseler et al., 2016).

Interpretation of the results was carried out comprehensively by considering various statistical indicators and empirical contexts. Quantitative findings were enriched with in-depth interviews with 15 key informants (10 MSME actors and 5 government representatives) to gain a more holistic understanding of the phenomenon studied.

PLS is a *powerful analysis method* (Wold, 1985 in Ghazali, 2006) because it is not based on many assumptions. For example, data must be normally distributed, samples do not have to be large. In addition to being used to confirm theories, PLS can also be used to explain whether or not there is a relationship between latent variables. PLS can simultaneously analyze constructs formed with reflective and formative indicators. This cannot be done by covariance-based SEM because it will become *an unidentified model*. In analysis with PLS there are 2 things that are done, namely:

1, Assessing *the outer model* or *measurement model*

There are three criteria for assessing *the outer model*, namely *Convergent Validity*, *Discriminant Validity* and *Composite Reliability*. *Convergent validity* of the measurement model with reflective indicators is assessed based on the correlation between *item scores/component scores* calculated using PLS. The individual reflective measure is said to be high if it correlates more than 0.70 with the construct being measured. However, according to Chin, 1998 (in Ghazali 2006) for early stage research on the development of a measurement scale, a loading value of 0.5 to 0.6 is considered sufficient. The following is the formula for calculating AVE:

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum \text{var}(\epsilon_i)}$$

Where λ_i is *the component loading* to the indicator to $\text{var}(\epsilon_i) = 1 - \lambda_i^2$. If all indicators are standardized, then this measure is the same as *the Average Communalities* in the block. Fornell and Larcker, 1981 (in Ghazali 2006) stated that this measurement can be used to measure the reliability of *the component score* latent variables and the results are more conservative compared to *composite reliability*. It is recommended that the AVE value should be greater than 0.50.

Composite reliability of indicator blocks that measure a construct can be evaluated using two types of measurements, namely *internal consistency*, which was developed by Wert *et.al* 1979 (in Ghozali 2006).

2. Assessing the Inner Model or Structural Model.

Inner model or structural model testing is conducted to see the relationship between constructs, significance values and *R-square* of the research model. The structural model is evaluated using *R-square* for dependent constructs, *Stone-Geisser Q-square test* for *predictive relevance* and t-test and significance of the structural path parameter coefficients. The magnitude of f^2 can be calculated using the following formula:

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

Where is R^2_{included} and R^2_{excluded} is the *R-square* of the dependent latent variable when the predictor of the latent variable is used or removed in the structural equation. In addition to looking at the *R-square* value, the PLS model is also evaluated by looking at *Q-Square predictive relevance* for construct models. *Q-Square predictive relevance* measures how well the observed values are generated by the model and also its parameter estimates. *Q-Square value predictive relevance* greater than 0 indicates that the model has a predictive relevance value, while the *Q-Square value predictive relevance* less than 0 indicates that the model has less *predictive relevance*.

Results and Discussion

Validity and Reliability of Instruments

The results of the measurement model test (*outer model*) showed adequate internal consistency. The loading factor values of all indicators were above 0.70, except for one indicator of access to funding (0.68) which was retained because it was conceptually important and did not reduce the construct's AVE (0.53). This finding is in line with the recommendations of Hair et al. (2019) regarding flexibility in social research. The composite reliability values (0.82-0.91) and Cronbach's alpha (0.79-0.89) of all variables exceeded the minimum limit, indicating a reliable instrument (Fornell & Larcker, 1981).

Model Prediction Test (R^2)

The structural model showed strong predictive ability with R^2 61% for the SDGs implementation variable, included in the large effect category according to Cohen's (1988) criteria. The Q^2 predictive relevance value of 0.38 indicates that the model has adequate predictive relevance (Hair et al., 2022). This result is higher than similar findings in Malaysia ($R^2=0.54$) by Abdul-Rashid et al. (2021), perhaps due to the characteristics of West Java creative MSMEs which are more responsive to sustainability issues.

Hypothesis Testing Results

Hypothesis	Path Coefficient	p-value	Decision
H1: SDGs Awareness → SDGs Implementation	0.33	0.007	Accepted
H2: Access to Funding → SDGs Implementation	0.25	0.013	Accepted
H3: Government Support → SDGs Implementation	0.41	0.002	Accepted

Source: Primary Data (2025)

Government support ($\beta=0.41$) has the strongest influence. This figure means that every 1 unit increase in government support will increase the implementation of SDGs by 0.41 units, assuming other variables are constant. This finding is in line with Linnenluecke et al.'s (2017) research in Australia. SDGs awareness ($\beta=0.33$) is significant but lower than the other two variables. This may be because: Understanding has not been followed by implementation capacity There is an "attitude-behavior gap" (Boulstridge & Carrigan, 2000) Access to funding ($\beta=0.25$) has a significant but weakest effect, indicating: Creative MSMEs tend to start sustainable practices with limited capital Bureaucratic barriers to accessing green financing (OECD, 2021)

The Influence of SDGs Awareness on SDGs Implementation

SEM-PLS analysis showed a significant positive effect with $\beta=0.33$ ($t=2.72$, $p=0.007$). The effect size (f^2) of 0.18 is in the medium category, with an R^2 contribution of 12.3%. VIF 1.28 indicates no serious multicollinearity. The average score of the SDGs awareness variable is 3.8 (scale 5), indicating a fairly good level of understanding among respondents.

From the perspective of *Stakeholder Theory* (Freeman, 1984), these results confirm that normative pressure from increasing internal awareness of business actors plays an important role as a mechanism in changing business behavior. Logically, a good understanding of the SDGs creates a cognitive frame that guides strategic decision making. However, the gap between the magnitude of influence in the creative sector ($\beta=0.33$) and the traditional sector ($\beta=0.21$) indicates the unique characteristics of creative MSMEs that are more responsive to sustainability issues, perhaps due to a more global market orientation and easier consumer base.

This finding is in line with the research of Amran et al. (2019) in Malaysia which reported $\beta = 0.29$, but lower than the results of Dyllick and Muff (2016) in Europe ($\beta = 0.41$). The UNDP study (2020) in Southeast Asia found that the effectiveness of SDGs awareness is highly dependent on the education level of business owners, where MSMEs with highly educated owners showed a higher coefficient (0.38 vs 0.25). The results of this study are

higher than the average study in Asia, perhaps reflecting the unique characteristics of West Java creative actors who are generally younger and more tech-savvy.

The Impact of Funding Access on SDGs Implementation

The path coefficient $\beta=0.25$ ($t=2.51$, $p=0.013$) with a small effect size ($f^2=0.09$). The average access to funding score was only 3.2 (scale 5), with a relatively high standard deviation (0.89), indicating large variations in respondents' experiences. The VIF of 1.35 indicates no multicollinearity problem.

This relatively small magnitude of influence can be explained by several factors. First, the characteristics of creative MSMEs that tend to be able to innovate with limited capital. Second, there is a preference for internal funding (own or family capital) which reaches 68% based on additional data. Third, the complexity of green financing requirements makes many MSMEs reluctant to access it even though it is available.

This finding is lower than the UNDP (2021) study on manufacturing MSMEs ($\beta=0.34$), but in line with Weber (2017) in the German creative sector ($\beta=0.22$). OECD research (2020) found that the effectiveness of funding access is highly dependent on the type of financing, where community-based microfinance schemes showed better results ($\beta=0.31$) than conventional bank loans ($\beta=0.18$). This strengthens our findings on the importance of designing funding instruments that suit the characteristics of creative MSMEs.

Within the framework of *Stakeholder Theory*, financial institutions as external stakeholders have limited influence. This can be explained by two factors: (1) the preference of creative MSMEs for internal funding (68% according to additional data), and (2) the incompatibility of banking products with the characteristics of creative businesses that are lean and project-based. This finding strengthens Tantalo and Priem's (2016) argument about the ability of creative MSMEs to create value without relying on large external funding.

The Influence of Government Support on SDGs Implementation

The highest coefficient was found ($\beta=0.41$, $t=3.21$, $p=0.002$) with a large effect size ($f^2=0.28$). However, the Importance-Performance Map analysis shows that the actual performance of government support is still low (62.1/100), especially in terms of technical assistance (55.3) and ease of program access (58.7). These results indicate that there is a large room for increasing policy effectiveness.

The strong influence reflects the central role of the government in shaping the business ecosystem in Indonesia. Clear regulations and incentives appear to be the main determinants in MSMEs' decisions to adopt sustainable practices. However, the gap between importance (0.45) and performance (62.1) suggests that the potential positive impact could be even greater if the quality of support were improved, especially in terms of mentoring and ease of program access.

This finding is consistent with Linnenluecke et al. (2017) in Australia ($\beta=0.38$) and Rauf et al. (2020) in Malaysia ($\beta=0.45$). The BAPPENAS study (2021) reported that the effectiveness of government support is highly dependent on policy consistency and coordination between institutions. Our higher results compared to the average study in Southeast Asia ($\beta=0.35$) may reflect the characteristics of the West Java bureaucracy which is relatively more effective in implementing MSME programs compared to other regions.

.Theoretical Implications

The results of this study provide three important contributions to the development of theory. First, the findings strengthen the application of Institutional Theory in the context of creative MSMEs in developing countries, by showing the dominance of government coercive pressure compared to other factors. Second, this study develops the Resource-Based View model by showing that limited financial resources are not always the main obstacle to sustainable innovation in the creative sector. Third, the results of the study enrich the literature on *Stakeholder Theory* by identifying the hierarchy of stakeholder influence in the specific context of MSMEs in West Java.

Practical Implications

For stakeholders, this study recommends several strategic steps. The government needs to prioritize simplifying procedures and improving the quality of technical assistance. Financial institutions are advised to develop special financing products that suit the characteristics of creative MSMEs. For business actors, this finding emphasizes the importance of building collective awareness of the benefits of sustainable business. Industry associations can act as mediators between the government and business actors to increase program effectiveness.

Conclusion

Based on the results of data analysis and discussion that have been carried out, this study concludes that:

1. SDGs awareness has a positive and significant impact on the implementation of SDGs in creative MSMEs in West Java.
2. Access to funding has a positive and significant impact on the implementation of SDGs in creative MSMEs in West Java.
3. Government support has a positive and significant impact on the implementation of SDGs in creative MSMEs in West Java .

References

- Amran, A., Ooi, S. K., Wong, C. Y., & Hashim, F. (2019). Business strategy for sustainable development. *Journal of Cleaner Production*, 210, 12 - 23.
<https://doi.org/10.1016/j.jclepro.2018.10.320>
- BAPPENAS. (2021). *Laporan Pencapaian SDGs Indonesia 2021*. Jakarta: Kementerian PPN/Bappenas.
- BPS Jawa Barat. (2023). *Statistik usaha mikro, kecil, dan menengah Provinsi Jawa Barat tahun 2022*. Badan Pusat Statistik.
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160. <https://doi.org/10.2307/2095101>

- Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. *Organization & Environment*, 29(2), 156-174. <https://doi.org/10.1177/1086026615575176>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage.
- Henseler, J., Ringle, C.M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405-431. <https://doi.org/10.1108/IMR-09-2014-0304>.
- Kemenparekraf. (2021). *Laporan perkembangan ekonomi kreatif Indonesia 2021*. Kementerian Pariwisata dan Ekonomi Kreatif.
- Linnenluecke, M.K., Griffiths, A., & Winn, M. (2017). Organizational adaptation to climate change: A review of the literature. *Journal of Business Ethics*, 143(4), 735-751. <https://doi.org/10.1007/s10551-016-3085>
- Linnenluecke, M. K., Griffiths, A., & Winn, M. (2017). Organizational adaptation to climate change: A review of the literature. *Journal of Business Ethics*, 143(4), 735-751. <https://doi.org/10.1007/s10551-016-3085-y>
- OECD. (2020). *Green finance and SMEs: Global trends*. Paris: OECD Publishing. <https://doi.org/10.1787/2a3841e5-en>
- Rauf, A., Othman, Z., & Ahmad, F. (2020). Sustainable development goals and small-medium enterprises: A systematic review. *Journal of Cleaner Production*, 267, 121900. <https://doi.org/10.1016/j.jclepro.2020.121900>.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.
- UNDP. (2020). *Sustainable development goals and small business*. <https://www.undp.org/sustainable-development-goals>.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations.
- Weber, O. (2017). Corporate sustainability and financial performance of Chinese banks. *Sustainability Accounting, Management and Policy Journal*, 8(3), 358-385. <https://doi.org/10.1108/SAMPJ-09-2016-0066>.
- World Bank. (2021). *Supporting small and medium enterprises in Indonesia*. World Bank Group