

Impact of Capital, Innovation, Financial Literacy, and Government Support on MSME Sustainability Post-COVID-19

Rudy Suryanto^{1*} and Khadiva Salwa Anggraeni¹

¹Program Study of Accounting, Faculty of Economic and Business, University of Muhammadiyah Yogyakarta, Indonesia

Abstract. This study aims to empirically analyze the effect of business capital, innovation, financial literacy, and government support on the sustainability of MSMEs post the COVID-19 pandemic. The sample in this study was 104 respondents, namely MSME players spread across Cilacap Regency. The method used in this research is purposive sampling. This study uses Contingency Theory by deriving four hypotheses which are tested using the SEM-PLS analysis tool through the SmartPLS v.4.0 application. The results of this study indicate that business capital has a positive effect on the sustainability of MSMEs, innovation has a positive effect on the sustainability of MSMEs, financial literacy has no positive effect on the sustainability of MSMEs, and government support has a positive effect on the sustainability of MSMEs.

1 Introduction

There has been a history of the Covid-19 pandemic affecting the entire planet. The data showed that an estimated 25 million people lost their jobs globally. The findings of an online survey administered from April 24 to May 2, 2020, by the Manpower Research and Development Agency of the Ministry of Manpower, the Demographic Institute of the Faculty of Economics and Business, University of Indonesia, and the Indonesian Institute of Sciences the Covid-19 pandemic has resulted in a halt to company operations and a decreased likelihood of survival for businesses. According to survey data, 57.1 percent of firms saw a drop in productivity, and 39.4 percent of businesses closed. Merely 3.5% remained unaffected. The following two to three months would see a 25 million increase in the number of unemployed persons, made up of 15 million free workers and 10 million self-employed individuals.

Cilacap, a regency in Central Java Province, boasts a vast expanse of 2,385 km² and a populace of 2 million as of 2023 [1]. Considering the possibilities of this sizable region, Cilacap Regency has a strong chance of developing in the fields of agriculture, plantations, fishing, and tourism. Cilacap's economic structure is dominated by five business field types: construction, wholesale and retail trade, car and motorcycle repair, mining and quarrying, and the processing sector (agricultural, forestry, and fisheries). These categories are based

* Corresponding author: rudysuryanto@umy.ac.id

on data from the Central Bureau of Statistics. According to the data, Cilacap's economy is dominated by the processing sector, which also includes the micro, small, and medium-sized enterprise (MSME) sector.

Since every industry has had to put forth a lot of effort to recover and adjust to the changes, the post-pandemic period has also been difficult. The industries that have recovered the quickest are MSMEs. The five business sectors of MSMEs, which account for 65% of Indonesia's GDP, provide evidence of this. A contributing factor in the MSME sector's recovery—which had earlier collapsed under the pandemic—is the fact that most of them rely solely on their capital without bank help. Thus, the performance of MSMEs is unaffected when there is a banking crisis and bank interest rates increase.

According to the phenomena that took place, specifically the COVID-19 pandemic, which led to a halt in company operations and a low ability for entrepreneurs to survive, many MSME players were forced to close their doors. Therefore, Drazin and Van de Ven's idea of contingency theory is used in this research. Three key methods for doing contingency research are suggested by this theory: selection, interaction, and system. According to contingency theory, an organization's ability to function effectively depends on how well its operating environment's systems work together. The earliest and best-known theory to explain differences in organizational structure is contingency theory.

The study of [2], which looks at "The Effect of Financial Literacy, Innovation, and The Role of Government on the Development of Small Medium Enterprises," is replicated in this work. The study looks at financial literacy, innovation, and the role that the government plays in helping small and medium-sized businesses grow. Data for this study came from questionnaires that were given out to small and medium-sized businesses in East Jakarta's Cipayung District. The dependent variables in this study are MSME Sustainability and Business Capital, which were introduced as independent factors. Data was gathered through the distribution of questionnaires to MSME actors in Cilacap City, Central Java. This research is crucial because, as is widely known, MSMEs constitute the fastest-growing sector of the Indonesian economy and its most significant pillar.

2 Literature review

2.1 Contingency theory

[3] claims that contingency theory is an open system in a business that is intimately tied to interactions for environment adjustment and control to preserve business continuity. A behavioral theory called contingency theory maintains that there is no one ideal method to create an organization. Nonetheless, a company's internal and external circumstances should determine the optimal organizational structure [4].

This study's contingency approach can be examined regarding the interplay among government support, financial literacy, innovation, and business capital. Contingency theory supports the analysis of the impact of capital, innovation, financial literacy, and government support on the sustainability of MSMEs by emphasizing that the effectiveness of these factors depends on the specific context of each company. MSMEs have varying needs and challenges based on their sector, size, and stage of development, meaning there is no one-size-fits-all approach. Contingency theory highlights the importance of flexibility and adaptation to external conditions, such as government support and policy changes, as well as the interaction between internal factors. Thus, this theory provides a framework for understanding how these factors dynamically operate within changing contexts, specifically influencing MSME sustainability. From what is produced in existing research, sometimes consistent or inconsistent results are shown from one study to another. Therefore, efforts

are needed in reconciling the inconsistency of results through the identification of factors among conditions, and existing variables with the contingency approach [5].

2.2 Micro, Small and Medium Enterprises (MSMEs)

The Law of the Republic of Indonesia Number 20 of 2008 concerning Micro, Small, and Medium Enterprises (MSMEs) defines MSMEs as productive businesses owned by individuals or groups of individuals, as well as individual business entities. On the other hand, small businesses are independent, productive economic enterprises operated by individuals who are neither owned by companies' subsidiaries nor branches nor do they directly or indirectly participate in medium-sized or large businesses. In contrast, medium-sized firms are profitable ventures that operate independently, are run by individuals, and are neither directly nor indirectly affiliated with small or large corporations. Nor are they owned subsidiaries or branches of corporations.

2.3 MSME sustainability

The goal of business sustainability is to prevent adverse effects on society and the environment so that the next generation will have enough resources to meet their requirements. Business sustainability for the environment will be ensured by success in a high-quality global market. According to the perspective presented above, a firm that sustains itself throughout time and through successive generations under the same leadership is considered sustainable in the long run to preserve the quality of the products it produces.

2.4 Business capital

Capital is a business factor that must be available before carrying out activities and is needed by business actors in fulfilling business operational financing starting from the establishment of the business to the running of the business. Capital is not only limited in the form of money but also includes other assets that can support the company's operations. Insufficient funding will have an impact on the company's ability to survive in the long run as well as its revenue.

Research conducted by [6] entitled *The Influence of Capital and Marketing Strategies on the Development of Micro Businesses in Kabil Bone Bolangan District* provided research results that the presence of capital would affect the development of business actors or MSMEs. Then, research from [7] with the title of *The Influence of Business Capital, Human Resource Quality and Marketing Strategy on MSME Development in Kualasimpang City District, Aceh Tamiang Regency* provided research results that Business Capital had a positive and significant effect on the development of MSMEs.

Business capital has a very important role in maintaining the sustainability of Micro, Small, and Medium Enterprises (MSMEs). The sustainability of MSMEs is highly dependent on the effectiveness of business capital management, which includes the use of financial resources for daily operations, business development, facing challenges, and taking advantage of opportunities. The researcher uses contingency theory where in the context of business capital and MSME sustainability, contingency theory highlights the importance of adjusting capital management strategies to changes in external and internal conditions that may occur. First of all, the selection of working capital, both in terms of number and structure, is key in determining the ability of MSMEs to survive and develop after the pandemic. Adequate capital provides the flexibility needed to face new challenges and exploit market opportunities. Second, the interaction between business capital and other

elements such as innovation and human resources plays an important role in determining the sustainability of MSMEs. Sufficient capital facilitates innovation activities, fostering human capital, and strengthening the foundation for long-term growth. Finally, an effective financial management system and government policy support are crucial determinants in ensuring that business capital is used wisely and MSME sustainability strategies are realized. Therefore, based on the theoretical framework above, the research hypothesis can be formulated as follows:

H₁: Business Capital Has a Positive Effect on the Sustainability of MSMEs Post Covid-19 Pandemic

2.5 Innovation

Innovation should be understood as an organizational transformation. Using creativity to develop novel goods, services, concepts, or procedures is referred to as innovation. Innovation can be defined as the process of modifying ideas, concepts, procedures, or products that are developed externally and those that already exist within an organization. Innovation is generally understood to be the process of developing a new product as well as the process of anyone accepting a new "something" [8].

Based on research conducted by [9] with the title "The Influence of Product Innovation and Information Technology on Business Development (A Study on MSMEs in the Culinary Sector in Tabalong Regency)" provides research results that innovation plays an important role that determines the high and low improvement of business performance. The higher the innovation or creativity, the more encourage the development of MSMEs. Then, research conducted by [10] with the title of "Innovation Capacity and Performance of Malaysia SMEs" provides research results that product innovation must be done by creating a new product or service to meet market needs and improve quality. That way, it will increase profits and can develop a business.

Innovation will drive MSMEs to transition to digital technology, especially in response to the COVID-19 pandemic. The pandemic has accelerated the development of digital technology, which has become crucial in addressing emerging challenges [11]. Through digital technology, MSMEs can enhance operational efficiency, access new markets, and improve customer interactions. This digital transformation not only helps MSMEs survive during times of crisis but also provides opportunities for sustained growth and ongoing innovation in the future. The researcher uses contingency theory in which the influence of innovation on MSME sustainability strategies post-COVID-19. First of all, in innovation selection, MSMEs need to choose the type of innovation that is most relevant to market needs that have changed after the pandemic. The ability to respond quickly and effectively to changes in the business environment will affect the selection of innovations made by MSMEs. Furthermore, in interaction, the involvement of human resources in the implementation of innovation is key. Training and development of employees in the field of innovation will improve the ability of MSMEs to adopt innovations successfully. Collaboration with external parties such as research institutions or other companies can also expand MSME resources and access to innovation. Finally, a structured innovation culture and innovation management system will create an environment that supports and encourages innovation as part of the MSME sustainability strategy. pandemic. Therefore, based on the theoretical framework above, the research hypothesis can be formulated as follows:

H₂: Innovation Has a Positive Effect on the Sustainability of MSMEs Post Covid-19 Pandemic

2.6 Financial literacy

Every person must have a fundamental understanding of finance, or a high level of financial literacy. The advantages of knowledge include improved financial planning and the avoidance of financial issues. Financial literacy affects business growth. Adequate financial capabilities will help managers make critical business decisions and improve the company's ability to survive in times of crisis so that the business develops and is sustainable in the long term [2].

Research by [12] entitled "Financial Literacy on MSME sustainability with intervening financial inclusion in MSMEs Gianyar" stated that Financial Literacy has a contributing effect on business sustainability or the business continuity of MSMEs. Subsequently, a study titled "The Influence of Financial Literacy, Financial Inclusion, and Fintech on MSME Business Sustainability" [13] offers findings that validate the impact of financial literacy on MSMEs' performance and long-term viability. This means that MSMEs should be able to make wise financial and managerial decisions if they have a strong understanding of finance.

Financial literacy has a significant impact on the sustainability of Micro, Small, and Medium Enterprises (MSMEs). Capital management, understanding of financial risk, and the ability to make smart financial decisions are keys to facing challenges and seizing opportunities. From the perspective of contingency theory, the influence of financial literacy on MSME sustainability strategies post-COVID-19. First of all, the level of financial literacy of MSMEs is a key determinant in managing the financial aspects of post-crisis business. A high level of literacy can help MSMEs make wiser financial decisions, reduce risk, and maximize growth potential. Furthermore, the interaction between financial literacy and business decision-making will affect MSME sustainability strategies. MSMEs with good financial literacy tend to make more informed investment decisions, while collaboration with financial professionals can improve their understanding and ability to plan effective financial strategies. On the system side, financial education and training, together with adequate financial infrastructure, will support the improvement of MSME financial literacy. Therefore, based on the theoretical framework above, the research hypothesis can be formulated as follows:

H₃: Financial Literacy Has a Positive Effect on the Sustainability of MSMEs Post Covid-19 Pandemic

2.7 Government support

According to [2] the government is the foundation that encourages the development of entrepreneurship in a country. Government policies related to entrepreneurial practices are aimed at encouraging entrepreneurship by creating a favorable environment for entrepreneurs. The role of the government is divided into 2, namely the role of the government as a facilitator is to facilitate efforts to achieve the goals of business development owned by the business. The second role of the government as a regulator is to make policies related to business development where the policy is intended to facilitate business, to grow and develop easily.

Research by [2] demonstrates that the growth of small and medium-sized businesses is significantly impacted by innovation, the role of the government, and financial literacy. Then, research conducted by [5] with the title "The Effect of Capital, Government Support, HR Competence, and Work Productivity on the Performance of Micro, Small and Medium Enterprises" results in the hypothesis test stating that capital affects the performance of MSMEs, government support affects the performance of MSMEs, HR competence affects

the performance of MSMEs, and work productivity does not affect the performance of MSMEs.

Government support has a substantial impact on the sustainability of Micro, Small and Medium Enterprises (MSMEs). Through various forms of support, such as fiscal policy, training, access to financing, and infrastructure assistance, the government can make a positive contribution to the growth and sustainability of MSMEs. Within the framework of contingency theory, the influence of government support on MSME sustainability strategies during the COVID-19 pandemic. First, MSMEs need to choose the most relevant type of government support to support their business continuity. This includes policies such as financial aid, tax incentives, or training. Furthermore, interactions between MSMEs, and governments, as well as partnerships, play an important role in ensuring that the support provided is in line with the needs and has the expected impact. Finally, the system of regulation and implementation of government policies must be transparent, efficient, and continuously evaluated to ensure their relevance to market conditions and the needs of MSMEs. Therefore, based on the theoretical framework above, the research hypothesis can be formulated as follows:

H₄: Government Support Has a Positive Effect on the Sustainability of MSMEs Post Covid-19 Pandemic

2.8 Research model

The sustainability of MSMEs is the dependent variable employed in this study. The study's independent variables include government backing, financial literacy, creativity, and business capital. The following is the research model used in this study:

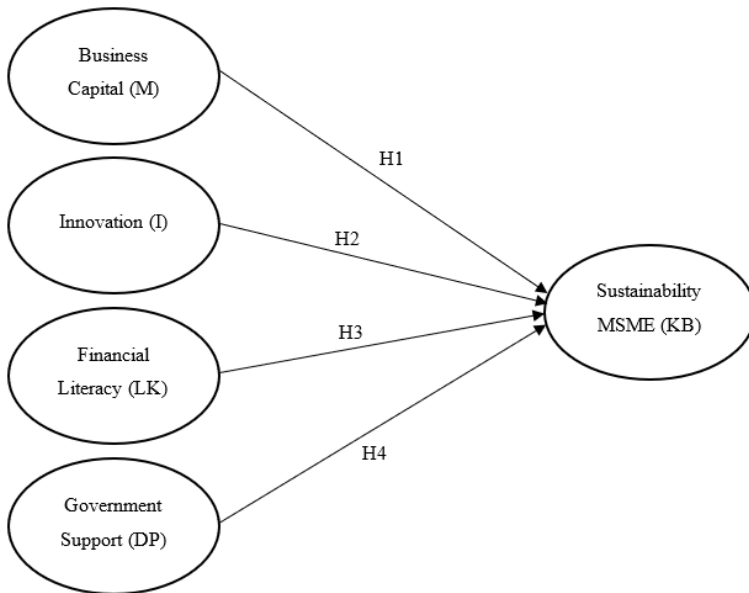


Fig. 1. Research model

3 Research method

Respondents in this research are MSMEs who live in Cilacap, Central Java. The type of data used in this research is primary data collected from several questionnaires distributed to MSMEs in Cilacap, Central Java. This questionnaire contains statements regarding business capital, innovation, financial literacy, and government support for the sustainability of MSMEs.

The technique used in sampling in this research was purposive sampling with the criteria of MSMEs that have been running their business for at least 3 years. This research was conducted by distributing 120 questionnaires to MSMEs in Cilacap, Central Java and only 104 participants met the criteria. The method used in this research uses survey techniques by distributing several questionnaires that have a Likert Scale of 1 (Strongly Disagree) to a Likert Scale of 5 (Strongly Agree) and a Likert Scale of 1 (Never) to a Likert Scale. out of 5 (Always).

4 Research results and discussion

Based on Table 1 above, it can be seen that the mean value of all variable constructs is greater than the standard deviation value of all variables. So it can be concluded that the data deviation that occurs is low, so the distribution of values is evenly distributed. The actual average value is greater than the theoretical average. It can be concluded that the average influence of all variables on MSME business actors is high.

Table 1. Descriptive statistical test results.

Indicator	N	Actual Range			Theoretical Range			Std. Deviation
		Min	Max	Mean	Min	Max	Mean	
MSME Sustainability (KB)	104	26	35	31.35	7	35	24.5	2.639
Business Capital (M)	104	33	45	38.78	9	45	31.5	3.535
Innovation (In)	104	29	45	39.03	9	45	31.5	3.815
Financial Literacy (LK)	104	26	40	34.25	8	40	24	3.238
Government Support (DP)	104	26	45	38.43	9	45	31.5	3.568

4.1 Hypothesis test

Hypothesis testing is carried out based on the results of the causal relationship between constructs. The output generated in hypothesis testing is as follows:

Table 2. Hypothesis testing results.

Hypothesis	Code	Original sample (O)	T-statistic (O/STDEV)	P-values	Information
Business Capital → Sustainability MSME	H ₁	0.260	2.122	0.017	Supported
Innovation → Sustainability MSME	H ₂	0.362	2.531	0.006	Supported
Financial Literacy →	H ₃	0.165	1.219	0.111	Not

Sustainability MSME					Supported
Government Support→ Sustainability MSME	H ₄	0.226	2.291	0.011	Supported

The results of the first hypothesis (H₁) show that the original sample value for business capital on MSME sustainability is positive at 0.260 so the direction of testing is by the hypothesis proposed. Then, the table shows that the statistical t-value is 2.122 > 1.66 and the p-value is 0.017 < 0.05. Thus, the statistical t-value and p-value are qualified for the hypothesis to be accepted. So, **H₁ is supported**, meaning that business capital has a significant positive effect on the sustainability of MSMEs.

The results of the second hypothesis (H₂) show that the original sample value for innovation on MSME sustainability is positive at 0.362 so the direction of testing is by the hypothesis proposed. Then, the table shows that the value of the t-statistic is 2.531 > 1.66 and the p-value is 0.006 < 0.05. Thus, the value t-statistic and p-value already qualified for the hypothesis to be accepted. So, **H₂ is supported**, meaning that innovation has a significant positive effect on the sustainability of MSMEs.

The results of the third hypothesis (H₃) show that the original sample value in financial literacy on MSME sustainability is positive at 0.165 so the direction test is by the hypothesis that has been proposed. Then, the table shows that the value of the t-statistic is 1.219 < 1.66 and the p-value is 0.111 > 0.05. Thus, the t-statistic value and p-value do not qualify for the hypothesis to be accepted. So, **H₃ isn't supported**, meaning that financial literacy does not have a positive effect on the sustainability of MSMEs.

The results of the fourth hypothesis (H₄) show that the original sample value for government support for MSME sustainability is positive at 0.226 so the direction of testing has been by the hypothesis proposed. Then, the table shows that the value of the t-statistic is 2.291 > 1.66 and the p-value is 0.011 < 0.05. Thus, the t-statistic value and p-value are already qualified for the hypothesis to be accepted. So, **H₄ is supported**, meaning that government support has a significant positive effect on the sustainability of MSMEs.

4.2 Discussion

4.2.1 Business capital towards the sustainability of MSMEs post covid-19 pandemic

The results of testing the first hypothesis, namely business capital, show that business capital has a significant positive effect on the sustainability of MSMEs. Thus, H₁ is supported, meaning that business capital has a significant positive effect on the sustainability of MSMEs. This shows that the greater the business capital obtained by MSME actors, the greater the opportunity for MSME sustainability. This research is in line with research conducted by [6], where in this study the researcher concludes that helping business expansion by providing business capital can help the sustainability of MSMEs. The results of this study are consistent with the findings of [7] concluding that business capital has a significant effect on the development of MSMEs in Kuala Simpang City District, Aceh Tamiang Regency. Thus, the higher the business capital, the higher the potential for the development of MSMEs. Conversely, the possibility for MSMEs to develop is inversely correlated with their company capital.

In contingency theory, business capital contingency, or the ability of MSMEs to manage their financial resources, is very important in facing the challenges after the Covid-19 pandemic. This pandemic has made MSMEs have to adapt quickly to survive. Sufficient business capital allows MSMEs to better adjust their strategies in the face of rapid market

changes. By having access to adequate capital, MSMEs can implement sustainability strategies, such as developing new products, expanding market share through digital marketing, and improving operational efficiency. This helps MSMEs to remain relevant and competitive in the market, while still paying attention to social and environmental responsibility. Thus, sufficient business capital plays a role in supporting the sustainability of MSMEs after the Covid-19 pandemic.

4.2.2 Innovation towards the sustainability of MSMEs post covid-19 pandemic

The results of testing the second hypothesis, namely innovation, show that innovation has a significant positive effect on the sustainability of MSMEs. Thus, H_2 is supported, meaning that innovation has a significant positive effect on the sustainability of MSMEs. This shows that the higher the innovation carried out by MSME players, the higher the influence on the sustainability of MSMEs. This research is in line with research conducted by [9], where in this study the researcher concludes that product innovation can increase the sales volume of MSME products so that the higher the product innovation in MSMEs, the higher the level of business development. This research is in line with research conducted by [10] which concludes that innovation in general contributes positively to the performance of MSMEs.

Innovation contingency theory highlights the importance of MSMEs' ability to adapt their innovations to changes in the external environment, including the Covid-19 pandemic. In the post-pandemic context, MSMEs that can adopt innovations that are to market needs and regulatory changes can improve their competitiveness and sustainability. Innovation can include the development of new products or services that meet changing consumer needs, the implementation of digital technologies to improve operational efficiency, or improvements in supply chain management to strengthen business resilience.

4.2.3 Financial literacy towards the sustainability of MSMEs post covid-19 pandemic

The results of testing the third hypothesis, namely financial literacy, show that financial literacy does not have a significant effect on the sustainability of MSMEs. This research is in line with research conducted by [2] which states that financial literacy does not have a significant effect on the development of MSMEs in Cipayung District, East Jakarta. [4] also reveals that financial literacy has no effect on MSMEs' performance, which is evident from a variety of angles and other significant performance variables. The standard of human resources, the owner's aptitude for staff management, and work discipline are further elements that impact the growth of MSME performance. The results of this study are inversely proportional to the research conducted by [12] stating that financial literacy has a significant impact on the sustainability of MSMEs.

In this case, the indicators contained in financial literacy do not contribute greatly in their role to influencing business development. Based on the data presented, it shows that the education level of most business owners is senior high school. This level of education makes MSME actors not yet understand complex financial literacy, they only know simple financial literacy. In addition, the scale of the business of MSME actors also affects most of the existing MSMEs that are still micro and small scale. If it is related to contingency theory in the context of the relationship between finance and MSME sustainability strategies after the COVID-19 pandemic, it shows that the influence of finance on MSME sustainability strategies can vary depending on changing environmental conditions. In some cases, MSMEs that have limited access to financial resources can remain sustainable by adjusting operational strategies and making optimal use of available resources.

4.2.4 Government supports the sustainability of MSMEs post covid-19 pandemic

The results of testing the fourth hypothesis, namely innovation, show that innovation has a significant positive effect on the sustainability of MSMEs. Thus, H4 is accepted, meaning that government support has a significant positive effect on the sustainability of MSMEs. This shows that the higher the support from the government such as capital assistance and training and can implementation of a business training system, the higher the influence on the sustainability of MSMEs. This research is in line with research conducted by [2] which states that the role of the government affects the development of small and medium enterprises. The results of this study are consistent with the findings of [5] which state that government support has a positive and significant effect on the performance of MSMEs which means that the higher the level of government support, the higher the level of MSME performance.

5 Conclusions, limitations, suggestions, and implications

The purpose of this study was to ascertain how government support, financial literacy, business capital, and innovation affected MSMEs' ability to survive the COVID-19 pandemic. The object of this study is MSME actors in Cilacap, Central Java. In this study, there was a sample of 104 respondents. Based on the results of testing research data, the conclusions are business capital, innovation, and government have a positive and significant influence on the sustainability of MSMEs post-COVID-19 pandemic in Cilacap, Central Java. Nevertheless, this study showed that financial literacy does not have a significant influence on the sustainability of MSMEs post-COVID-19 pandemic in Cilacap, Central Java.

This research has several limitations including the research sample is limited because the coverage area of the research sample is only in Cilacap, Central Java, and lack of control when filling out questionnaires which ultimately affects the quality of the information provided, for example, the possibility of respondents who do not understand the statements made, or dishonesty in filling out questionnaires, in financial literacy, the research questionnaire is not by MSME business actors so that business actors do not understand the questions asked by researchers, and in the MSME sustainability variable, the data test results state that the AVE value of the sustainability variable is lower than the other variables.

Future researchers are to better and deepen studies on business capital, innovation, financial literacy, and government support. Future researchers can also test other potential factors affecting the sustainability of MSMEs. Researchers are further advised to try to obtain research data with interview methods to strengthen the data. Besides, future researchers can expand the scope of the sample so that not only MSME actors are located in Cilacap, it also include MSME actors in other cities.

The study's findings can be utilized to inform initiatives aimed at promoting MSMEs' sustainability about factors like government support, business capital, and innovation. It may also serve as a literature reference and offer a concept for related future research. Furthermore, considering the significance of MSMEs in regional economic development, the study's findings are meant to offer guidance to the government. It is hoped that this will enable them to play a greater role in promoting the growth of MSMEs. The growth of MSMEs has the potential to increase employment and lower the unemployment rate. In addition, the government will be able to assist MSME actors with existing policies such as capital assistance and training and can implement a business training system so that the training provided is to the needs of each type of business. Furthermore, the government may support MSME players through current policies like capital assistance and training,

and it can set up a system of business training that would tailor the training to the specific requirements of each kind of firm.

References

1. Badan Pusat Statistik Cilacap (2024). <https://cilacapkab.bps.go.id/id/>
2. Y. Iqnatia, N. Tias, and D. C. Pangestuti. Pengaruh Literasi Keuangan, Inovasi, dan Peran Pemerintah Terhadap Pengembangan Usaha Kecil dan Menengah. *J. Apresiasi Ekon.*, vol. **9**, no. 2, pp. 213–228 (2021). doi: 10.31846/jae.v9i2.380
3. I. W. Suartana, Akuntansi keperilakuan : teori dan implementasi. (2011).
4. M. I. Naufal and E. Purwanto. Dampak Literasi Keuangan terhadap Kinerja dan Keberlanjutan UMKM (Studi Kasus Industri F&B Kecamatan Sumbersari Jember). *J. Adm. Bisnis*. vol. **16**, no. 2, pp. 209–215 (2022).
5. J. Kurnianty and R. R. Sitorus. Pengaruh Modal, Dukungan Pemerintah, Kompetensi SDM, dan Produktivitas Kerja terhadap Kinerja UMKM. *JIMF (Jurnal Ilm. Manaj. Forkamma)*. vol. **6**, no. 3, p. 260 (2023). doi: 10.32493/frkm.v6i3.29009
6. A. Lasoma, S. Sofhian, and Y. Zainuddin. Pengaruh Modal Usaha Dan Strategi Pemasaran Terhadap Pengembangan Usaha Mikro Di Kecamatan Kabila Kabupaten Bone Bolango. *Finans. J. Sharia Financ. Manag.* vol. **2**, no. 2, pp. 45–60 (2021). doi: 10.15575/fjsfm.v2i2.13923
7. Siti Fatimah, M. Yahya, and Khairatun Hisan. Pengaruh Modal Usaha, Kualitas Sumber Daya Manusia, dan Strategi Pemasaran Terhadap Pengembangan UMKM di Kecamatan Kota Kualasimpang Kabupaten Aceh Tamiang. *JIM J. Ilm. Mhs.* vol. **3**, no. 2, pp. 151–172 (2021). doi: 10.32505/jim.v3i2.3481
8. N. Muljani and L. Ellitan. Developing Competitiveness in Industrial Revolution 4.0. *Int. J. Trend Res. Dev.* vol. **6**, no. 1, pp. 1–3, (2019). [Online]. Available: <http://www.ijtrd.com>
9. S. Avriyanti. Pengaruh Inovasi Produk dan Teknologi Informasi Terhadap Perkembangan Usaha (Studi Pada UMKM Bidang Kuliner Di Kabupaten Tabalong) (2022). doi: DOI 10.35722/pubbis.v6i1.582
10. D. S. M. Singh and N. B. Hanafi. Innovation Capacity and Performance of Malaysian SMES. *Int. J. Acad. Res. Bus. Soc. Sci.* vol. **10**, no. 2, pp. 665–679 (2020) doi: 10.6007/ijarbss/v10-i2/6956
11. A. Di Vaio, B. Latif, N. Gunarathne, M. Gupta, and I. D’Adamo. Digitalization and artificial knowledge for accountability in SCM: a systematic literature review. *J. Enterp. Inf. Manag.* vol. **37**, no. 2, pp. 606–672 (2024). doi: 10.1108/JEIM-08-2022-0275
12. Y. Yuliyawati and M. Mardiana. Analisis Literasi Keuangan Terhadap Keberlangsungan Umkm Dengan Inklusi Keuangan Pada Umkm Gianyar. *J. Proaksi*. vol. **10**, no. 2, pp. 246–262 (2023). doi: 10.32534/jpk.v10i2.3981
13. R. Maulana, R. Murniningsih, and W. A. Prasetya. Pengaruh Literasi Keuangan, Inklusi Keuangan, Dan Fintech Terhadap Keberlangsungan Bisnis Umkm. *Procur. J. Ilm. Manaj.* vol. **10**, no. 4, pp. 440–452 (2022). doi: 10.35145/procuratio.v10i4.2700