



## Financial literacy and demographic factors on financial management: A study on MSMEs in Sleman Regency in the new normal era

**Christina Heti Tri Rahmawati**

Department of Management, Faculty of Economics, Sanata Dharma University, Yogyakarta, Indonesia

### INFO ARTIKEL

Diterima 02 November 2022  
Disetujui 20 Desember 2022  
Diterbitkan 30 December 2022

#### **Kata Kunci:**

Literasi keuangan; faktor demografi; pengelolaan keuangan; UMKM.

DOI:10.24036/jkmb.12000000

#### **Keywords:**

Financial literacy; demographic factors; financial management; MSME.

### ABSTRAK

Tujuan penelitian ini untuk mengetahui pengaruh literasi keuangan dan faktor demografi yang meliputi jenis kelamin, lama usaha, dan pendapatan usaha terhadap pengelolaan keuangan UMKM Kabupaten Sleman pada era *new normal*. Penelitian ini menggunakan sampel sebagian dari jumlah seluruh pelaku UMKM di Kabupaten Sleman. Metode yang digunakan dalam penelitian ini adalah metode survei. Penelitian ini menggunakan teknik pengambilan sampel berupa *accidental sampling*. Penelitian ini menggunakan teknik analisis data berupa analisis regresi linear berganda. Hasil penelitian ini memberikan temuan bahwa literasi keuangan, jenis kelamin, dan lama usaha berpengaruh positif dan signifikan terhadap pengelolaan keuangan UMKM; serta pendapatan usaha tidak berpengaruh signifikan terhadap pengelolaan keuangan UMKM. Implikasi hasil penelitian ini diharapkan bisa memberikan kontribusi dan motivasi bagi pelaku UMKM di Kabupaten Sleman dengan memperkenalkan produk layanan jasa keuangan. Dengan demikian pelaku UMKM bisa meningkatkan literasi keuangan serta dapat melakukan pengelolaan keuangan dengan baik dan benar, supaya dapat mempertahankan keberlangsungan usahanya pada era *new normal* ini.

### ABSTRACT

*The purpose of this study was to determine the effect of financial literacy and demographic factors which include gender, length of business, and business income on the financial management of MSMEs in Sleman Regency in the new normal era. This study uses a partial sample of the total number of MSME actors in Sleman Regency. The method used in this research is survey method. This study used a sampling technique in the form of accidental sampling. This study uses data analysis techniques in the form of multiple linear regression analysis. The results of this study provide findings that financial literacy, gender, and length of business have a positive and significant effect on MSME financial management; and business income has no significant effect on MSME financial management. The implications of the results of this study are expected to contribute and motivate MSME actors in Sleman Regency by introducing financial service products. Thus MSME actors can increase financial literacy and be able to carry out financial management properly and correctly, so that they can maintain the continuity of their business in this new normal era.*

**How to cite:** Rahmawati, C. H. T. R. (2022). Financial Literacy and Demographic Factors on Financial Management: A Study on MSMEs in Sleman Regency in the New Normal Era. *Jurnal Kajian Manajemen Bisnis*, 11 (2), 152-167. <https://doi.org/10.24036/jkmb.12000000>



This is an open-access article distributed under a Creative Commons Attribution-NonCommercial 4.0 International License which allows others to remix, tweak, and build upon the work non-commercially as long as the original work is properly cited. © 2022 by the author

## INTRODUCTION

The Covid 19 outbreak that has infected the world to date, where Indonesia has also experienced it, has caused the economic sector to slump. One of the parties who really feel the existence of the Covid-19 pandemic is the perpetrators of Micro, Small and Medium Enterprises (MSMEs). Since this pandemic, many business actors have been affected by the business downturn due to business operations not being able to continue as usual. This is due to the addition of business operational costs such as increased costs for renting a place of business, costs for paying employee salaries and so on. This is different if under normal circumstances, business actors can still carry out operational activities to increase sales turnover. Whereas so far, MSMEs have been the backbone of the national economy. In 1998 and 2008 during the monetary crisis in Indonesia, many large companies experienced difficulties in continuing to run their business, but only MSMEs remained strong and were able to survive in saving the national economy. This is different in 2020, MSMEs are the worst hit during this pandemic.

The existence of covid 19 had an impact on 163,713 MSME sectors and 1,785 cooperative sectors, where there was a decrease in income of 30% from 63.9% of the MSME sector (Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia, 2021). This causes demand to decrease so that the economy of MSME players experiences big problems. In addition, according to the Indonesian Chamber of Commerce and Industry, about 48.6% of MSMEs suffered losses and had to go out of business. This is because MSME actors are unable to survive in the midst of the Large-Scale Social Restrictions) and Enforcement of Community Activity Restrictions regulations in many big cities that hinder operating revenues.

The main key to the revival of the national economic sector due to the effects of the Covid-19 outbreak is to restore the MSME sector as Indonesia's economic power. During the new normal period (Adaptation of New Habits) MSME actors can increase their ability to manage finances so that it will help overcome various economic problems, provide protection against risks that will be faced and make it easier to obtain capital. According to information obtained by the Office of Cooperatives for Small and Medium Enterprises (2021), 74% of actors working in the MSME sector have not gained access in terms of business capital due to low financial literacy. So to overcome financial problems, MSME actors need financial literacy.

Financial management is associated with financial management which is not only based on financial sources and allocations contained in business activities, but also on the involvement of the financial sector which is aimed at company investment decisions, production activities, product marketing and overall company performance (Aribawa, 2016). The big problem that occurred in the MSME sector, especially during the new normal period, was in terms of financial management. This is because if MSMEs do not manage finances properly, it will have an impact on hampering business performance and difficulties accessing financing for venture capital. So that if MSME actors can manage their finances well, business continuity will be guaranteed. This statement is in line with the results of Iswantoro & Njo's research (2013) which shows that MSMEs that can manage their finances and publish their financial reports in a transparent and appropriate manner are more likely to ensure business continuity. One way to improve MSME financial management is by understanding basic knowledge of financial management and specific financial knowledge related to managing loans, savings and investment decisions as well as managing risk management properly.

Financial literacy is a combination of knowledge, capabilities, and beliefs that influence individual actions and personality to improve the quality of making decisions and managing finances so as to improve life's welfare (Financial Services Authority, 2014). Therefore, if MSME actors have better financial literacy, they will be better at planning and managing their business finances which will ultimately be able to overcome problems of economic pressure, especially during the new normal period. According to the

results of an OJK survey in the SNLKI (National Survey of Financial Literacy and Inclusion) in 2019, it illustrates that the financial literacy index of the Indonesian people is low, namely 38.03%, where people do not yet have good knowledge and ability to manage finances and make investment decisions ([www.ojk.go.id](http://www.ojk.go.id)). The implications of the results of the OJK survey are that MSME players should increase financial literacy so that they can improve their business performance and welfare.

The main problem faced by SMEs is the lack of understanding of the system of organizing finances wisely and simply being surplus-oriented. This has just been realized and felt by MSME actors during the Covid 19 pandemic, where understanding how to manage finances is important to overcome economic pressures. So that if the financial literacy of the business actors is good, then they are able to practice their financial knowledge properly to support business operational activities which in turn can improve the performance of MSMEs, especially during the new normal period. As for some good and correct financial decisions made by MSMEs, especially in the new normal era, namely making investment, insurance and loan decisions at financial service institutions that can be trusted and supervised by the OJK.

MSMEs are one of the economic potentials owned by the Special Region of Yogyakarta (DIY) to help realize the national economy. One area that has many MSMEs in DIY is the Sleman Regency area. The position of Sleman Regency is very strategic because of the potential for developing agriculture, trade, creative industries as well as the tourism sector that can increase MSME income, including in the form of tourist villages such as those located in the Merapi Volcano Area (located in Pakem, Cangkringan, and Turi Districts); weaving and handicraft centers (located in Moyudan District) as well as their respective superior commodities such as salak pondoh farming (located in Pakem and Turi sub-districts), mendong handicrafts (located in Minggir District), and bamboo handicrafts (located in Mlati District). Since 2017 the economy of Sleman Regency has shown a positive trend so as to create a more supportive atmosphere for investment and economic activity. So that it contributed to the economic sector which increased by 5.70% compared to the previous year which was 5.45%. This has made the Provincial Government of the Special Region of Yogyakarta more concentrated in expanding the power of MSMEs in the Sleman Regency area.

**Table 1. Data on the Development of MSMEs in Sleman Regency in 2017-2020**

| <b>Year</b> | <b>Micro Business</b> | <b>Small Business</b> | <b>Medium Enterprises</b> | <b>Total</b> |
|-------------|-----------------------|-----------------------|---------------------------|--------------|
| 2017        | 30.028                | 925                   | 267                       | 31.220       |
| 2018        | 35.086                | 931                   | 110                       | 36.127       |
| 2019        | 40.887                | 933                   | 32                        | 41.852       |
| 2020        | 51.668                | 954                   | 49                        | 52.671       |

Source: Office of Cooperatives, Small and Medium Enterprises, Sleman Regency (2021)

Table 1 above shows that every year there is a significant increase in the development of the size of MSMEs in the Sleman Regency area. The picture can be seen from Micro Enterprises which increase every year as the biggest contributor to business entities. The number of MSMEs in Sleman Regency has increased significantly, so that this has made MSMEs the foundation of the economic sector in Sleman Regency and the way MSMEs manage business finances can have an impact on business performance and sustainability. Financial literacy has a positive impact on financial behavior and development of MSMEs. If the financial literacy of MSME actors is getting better, it will have a strong impact on financial behavior so that MSME actors will be better at managing finances and developing the business.

Financial literacy can be influenced by several demographic factors. Demography is a way to explore population transformation by utilizing population information and calculations regarding the transformation of its number, distribution, and configuration (Laily, 2016). Based on OJK data contained in the Indonesian National Strategy for Financial Literacy (2013) states that there are several demographic factors that are used to calculate the level of financial literacy of the Indonesian people, including work, gender, monthly income, age, education level, and geographical distribution. In this study, the

demographic factors used were gender, length of business, and business income. The first demographic factor used in this study is gender, namely the biological distinction since individuals are born between men and women (Narsa, Widodo & Sigit, 2012). According to Rahmah (2014) states that financial literacy in women is higher than men. In this case, women are usually responsible for financial decisions and understand financial concepts better than men. Meanwhile, research conducted by Suchuachi (2013) and Ubaidillah & Nadia (2019) shows that gender has no significant effect on business financial management.

The second demographic factor used in this study is the length of business, namely the duration of time used by MSME actors in carrying out their business activities, where the length of business has an impact on the financial knowledge of business actors (Iswantoro & Njo, 2013). According to Latifiana (2019) and Keown (2011) it is stated that the duration of the business has a positive impact on business financial management. Therefore, the longer the business has been established, the more experience the business actor will have both in terms of managing finances and making business financial decisions. While research conducted by Iswantoro & Njo (2013), Amaliyah & Witiastuti (2015) and Ubaidillah & Nadia (2019) show that business length has no significant effect on business financial management.

The third demographic factor used in this study is business income, which is the amount of money a person receives for their business results and performance (Iswantoro & Njo, 2013). Individuals with higher business income will behave more wisely in managing business finances because profits from business income will be allocated to develop the business (Taft, Zare, Seyyed & Abdoreza, 2013). If the income generated by a business actor is greater, the financial literacy of the business actor will also be higher and the wiser in managing his business finances. This is in line with the results of research by Lusardi, Annamaria & Olivia (2011) and Suryani & Surya (2017) stating that business income has a positive and significant impact on business financial management. However, the results of this study are not in line with the results of research by Amaliyah & Witiastuti (2015) and Ningrum (2018) which show that business income has no significant effect on business financial management.

There have been several previous studies which have provided inconsistent results regarding the impact of financial literacy on business financial management, including the results of research conducted by Saputri (2019), Rumbianingrum & Candra (2018), Siregar (2018), and Anggraeni (2016) showing that financial literacy has a positive and significant impact on business financial management. However, the results of this study are not in line with the results of Siahaan's research (2013) which shows that financial literacy does not have a significant impact on business financial management. Therefore, the researcher's motivation for conducting this research was (1) research on the impact of financial literacy on the financial management of MSME players with demographic characteristics in the new normal era as far as researchers know has not been conducted. This study uses demographic characteristics, including gender, length of business, and business income; (2) there are inconsistencies in the results of several previous studies regarding the impact of financial literacy on business financial management; (3) there has been a significant increase in the number of MSMEs in Sleman Regency from 2017-2020. Because MSMEs can be the spearhead of the economy in Sleman Regency, knowledge about financial literacy and how to manage business finances is needed which will ultimately have an impact on business performance and sustainability for MSME actors. The implications of the results of this research are expected to contribute to the government, especially the Office of Cooperatives, Small and Medium Enterprises of Sleman Regency to improve the welfare of the community, especially SMEs by promoting financial service products including savings, credit, investment and protection in the form of insurance. In addition, by having knowledge of financial literacy, MSME actors can know legal financial products and overcome economic pressures and avoid investing in fraudulent investments, especially in this new normal era.

## LITERATURE REVIEW

### Financial literacy

Financial literacy is a combination of knowledge, capability and trust that can influence a person's behavior and attitudes so that the quality in making decisions and managing business finances increases which in turn improves their welfare. Meanwhile, the definition of financial literacy according to Senda, Rahayu & Rahmawati (2020) is an interpretation of the products and basic concepts of financial services using data support and input as capabilities in recognizing and interpreting risks so that they can make appropriate business financial decisions. In this study the indicators used to calculate the degree of financial literacy in SMEs refer to research from Chen & Volpe (1998) in Iriani, Rahayu & Rahmawati (2021), namely: (1) basic knowledge concepts regarding financial management (this knowledge includes the basic concepts of financial management controlled by someone and used as a reference in managing personal finances, family and business); (2) debt management (a process in which credit customers or debtors arrange their credit ownership so that it can be used as efficiently as possible in sync with the initial target for submitting credit starting from the initial installment until the installment ends and is declared paid off); (3) fund and investment management (a procedure in which to support excess capital placed with the aim of providing flexibility to liquidity, preparation in the financial and security sectors); and (4) governance in the risk sector.

### Micro, Small and Medium Enterprises (MSMEs)

MSMEs are economic business movements that are productive and managed individually or business units independently (Rahayu & Rahmawati, 2022). MSMEs in Indonesia are the backbone of the Indonesian people's economy which can show their presence in the business sector. This can be seen in 1998 and 2008 when the monetary crisis occurred in Indonesia, many large companies experienced difficulties in continuing to run their businesses, but only MSMEs remained strong and were able to survive in saving the national economy. However, in 2020, MSMEs were hit hardest during the Covid 19 pandemic (<http://www.wartaekonomi.co.id/read291109/bangkitnya-umkm-jeli-lihat-peluang-di-era-new-normal/> Accessed on 21 January 2021). In addition, during this pandemic there were around 163,713 MSME sectors and 1,785 cooperative sectors affected by Covid-19 and around 63.9% of MSMEs suffered losses where there was a decrease in sales revenue of greater than 30%.

### MSME financial management

Financial management is a process of regulating financial actions carried out by organizations including the actions of preparation, analysis and financial supervision (Rahayu & Rahmawati, 2022). The financial management function is a fundraising activity aimed at making profitable investment decisions and allocating funds aimed at regulating the use of funds in company activities. The target to be achieved by financial management is to gain efficiency and effectiveness from the financial side. Efficient financial management means that it can be seen from the ability to maximize income and minimize expenses. Effective financial management means how far the organization can achieve the goals to be achieved. MSME financial management consists of sources of business capital, business financial reports, cash management and appraisal (Andreas, 2011). In the new normal era (Adaptation of New Habits), if MSME actors increase their capability in managing business finances, they can overcome economic pressures, risk management and facilitate access to business financing. Meanwhile, data from the Office of Cooperatives, Small and Medium Enterprises, Sleman Regency (2021) shows that around 74% of MSME actors have not received access to business capital due to the uneven financial literacy of MSME actors. So as to avoid financial problems in MSME actors, it is necessary to have financial literacy that business actors should have.

## **Demographic factors**

Demographic factors are used as variables in this study. Demographic factors that can affect financial literacy in this study are: (1) gender: males do not consider many variables related to MSME financial management and investment decisions, where men are more inclined to the type of investor who does not avoid the risk of big losses from investing (Senda, Rahayu & Rahmawati, 2020); (2) length of business: the more knowledge a business actor has in managing finances and making financial decisions to invest, the longer the business has been established (Taft, Zare, Seyyed & Abdoreza, 2013); and (3) business income: business income for MSME actors is the most important thing in financial management, where if MSME actors have high business income, their discipline will increase in paying their bills (Anggraeni, 2016).

## **Hypothesis development**

### **The effect of financial literacy on MSME financial management**

One of the important functions of financial literacy is managing the finances of MSMEs. Financial literacy is associated with individual capabilities to manage their business finances, so that in the end they are able to improve their welfare. The higher the financial literacy of MSME actors, the easier it is to obtain financing from financial institutions. In addition, if the financial literacy of business actors is higher, then in managing and managing business finances they will be wiser so that their business can develop. Research conducted by Saputri (2019), Djuwita & Yusuf (2018), Rumbianingrum & Candra (2018), Siregar (2018), and Anggraeni (2016) shows that financial literacy affects financial management. Based on the exposure described, the first hypothesis is formulated that:

**H1:** Financial literacy has a positive and significant effect on MSME financial management

### **The effect of gender on MSME financial management**

According to Narsa, Widodo & Sigit (2012) defines gender as a biological distinction from birth between males and females. Both men and women have specific conditions that are different physically and psychologically. The existence of this distinction between men and women is the root of the distinction both in terms of the roles and responsibilities performed. According to Rahmah (2014) states that financial literacy in women is higher than men. In this regard, women are usually responsible for financial decisions and understand financial concepts better than men.

Meanwhile, men do not consider many variables related to MSME financial management and investment decisions, while men do not avoid the risk of loss from investing due to the circulation of money that will take over money that has been used with new money. This is different from women who tend to be more careful in managing MSME finances and making financial decisions that tend to avoid the risk of greater losses from investing. These different characteristics cause the level of financial literacy in both men and women to be different. The character of women to make financial decisions that are more vigilant results in women learning many things about financial concepts that can ultimately make financial decisions wisely. This results in a higher level of financial literacy in women, so that they have a deeper understanding of financial concepts. Therefore, women will try to learn more financial concepts so that their level of financial literacy is higher. Thus, women will be better at managing MSME finances than men. Research conducted by Iriani, Rahayu & Rahmawati (2021), Rahmah (2014) and Shaari, Hasan, Mohamed & Sabri (2013) shows that gender has a positive and significant impact on business financial management. Based on the exposure described, the second hypothesis is formulated that:

**H2:** Gender has a positive and significant effect on MSME financial management

**The effect of business length on MSME financial management**

According to Iswantoro & Njo (2013) defines the length of business as the duration of time taken by MSME actors, where the length of business has an impact on the individual's financial capability. According to Latifiana (2019) and Keown (2011) it shows that business length has a positive and significant impact on business financial management. In this case, the longer the business has been established, the more good experience the business actor has in managing and making financial decisions. Based on the exposure described, the third hypothesis is formulated that:

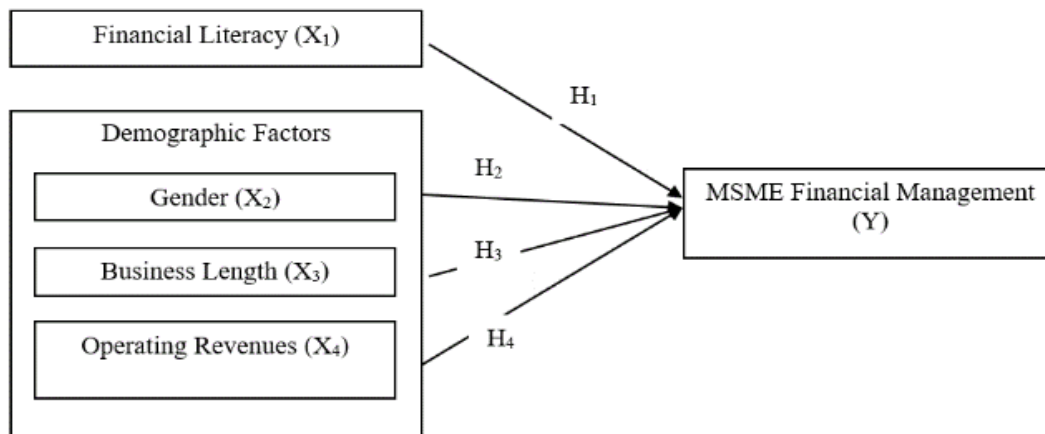
**H3:** Length of business has a positive and significant effect on MSME financial management

**The effect of operating revenues on MSME financial management**

Business income is the amount of money that a person receives for the results of his business and performance (Anggraeni, 2016). Individuals who have a higher income will behave wiser in managing their finances because the source of capital they have will provide the opportunity to behave wiser (Egesta, Rahayu & Rahmawati, 2021). The fundamental thing in managing business finance for MSME actors is on the business income side. If the business income of MSME actors is greater, then in reporting bills of payment they will be more disciplined than MSME actors with low incomes. The greater the income of MSME actors, the higher the level of financial literacy and the wiser the management of business finances. This is in line with the research results of Suryani & Surya (2017) and Lusardi, Annamaria & Olivia (2011) which explain that business income has a positive and significant impact on business financial management. Based on the exposure described, the fourth hypothesis is formulated that:

**H4:** Operating revenues has a positive and significant effect on MSME financial management

The framework of thought used in this study can be explained in the following figure:



**Figure 1. Research Model Conceptual Framework**

Source: research model conceptual framework: Saputri (2019), Latifiana (2019), Suryani & Surya (2017) and Keown (2011)

**METHOD**

**Population and sample**

This study uses the population, namely all MSME actors in Sleman Regency, Special Region of Yogyakarta. The total population in Sleman Regency until 2020 is 52,671 people (Office of Cooperatives, Small and Medium Enterprises, Sleman Regency, 2021). While this study used a sample of some MSME actors in

Sleman Regency, Special Region of Yogyakarta. This research targets to involve around 170 MSME actors in Sleman Regency as respondents. Sleman Regency consists of 17 sub-districts, namely the sub-districts of Moyudan, Gamping, Sleman, Tempel, Turi, Seyegan, Godean, Mlati, Kalasan, Ngemplak, Cangkringan, Minggir, Depok, Berbah, Prambanan, Ngaglik and Pakem. This study uses a sampling technique in the form of accidental sampling, namely selecting samples based on accidental encounters with researchers and suitable as data and can be used as respondents in this study or researchers only choose the people closest to them.

### Data collection

This study used data sources in the form of primary data obtained directly from respondents through filling out online and offline questionnaires. Filling out the questionnaire offline is done by distributing it directly to MSMEs in Sleman Regency and they will also be assisted to answer the questionnaire. Meanwhile, online questionnaires are carried out by asking MSME actors to fill out a link that is distributed using a Google form. This research questionnaire consists of a series of questions or statements that represent research variables. This study also uses primary data in the form of owner profiles, characteristics of MSMEs and data related to financial management.

### Research variable

Referring to the hypotheses that have been formulated, this study uses variables including: independent variables (X) consisting of financial literacy (X1), demographic factors including gender (X2), length of business (X3) and operating revenues (X4). While this study uses the dependent variable (Y) including business financial management. Table 2 below describes the variables, indicators and measurements in this study.

**Table 2. Research variables and indicators**

| Variable                  | Indicator  |
|---------------------------|--|
| Financial Literacy        | Basic knowledge of personal finance concepts and more specific financial knowledge including savings, loans, investments and risk management in the form of insurance. |
| MSME Financial Management | Sources of funds for operational activities, business financial reports, cash management and budgeting.  |

### Data analysis techniques and hypothesis testing

#### 1. Research Instrument Testing Techniques

Testing the research instrument was carried out by testing the validity and reliability (Hartono, 2018: 35). In the validity test, if the value of the Pearson correlation coefficient is greater than 5%, it is said that the measuring instrument is valid. Whereas in the reliability test, if the value of the Cronbach Alpha coefficient is greater than 0.6, it is said that the measuring instrument is reliable (Siregar, 2017).

#### 2. Descriptive Analysis

This study uses descriptive analysis to see that the financial literacy of MSME actors in Sleman Regency is at high, medium or low levels using the following method (Margaretha & Reza, 2015: 81).

$$\text{Literacy level} = \frac{\text{respondent/s answer is correct}}{\text{total number of questions}} \times 100\%$$

According to Chen & Volpe (in Margaretha & Reza, 2015: 81) based on the above formula then compared according to the classification of financial literacy as follows:

- If the correct answers are less than 60%, it means that someone has a low level of financial literacy.
- If the correct answers obtained are in the range of 60% to 79%, it means that a person has a moderate level of financial literacy.
- If the correct answers are greater than 80%, it means that a person has a high level of financial literacy.



### 3. Classical Assumption Test

This study uses the classical assumption test as a requirement for statistical calculations using multiple linear regression analysis techniques.

#### a. Normality test

The correct form of multiple linear regression is a form of multiple linear regression with normal or close to normal distribution, which can be seen in the distribution of data from the graph (Uyanto, 2009: 156). The criteria used in the test using the Kolmogorov-Smirnov test include that the residual will form a normal distribution if the significance is more than 0.05 and vice versa.

#### b. Multicollinearity Test

In a good form of regression there should be no relationship between the independent variables. Multicollinearity testing by observing the tolerance value or the variance inflation factor (VIF) value. If the tolerance value is more than 0.10 or the VIF value is less than 10.0, it means that there are no signs of multicollinearity and vice versa.

#### c. Heteroscedasticity Test

The purpose of carrying out heteroscedasticity testing is to evaluate whether in the form of multiple linear regression found differences in variance in the residuals from an observation to a different observation (Uyanto, 2009: 158). The form of multiple linear regression is good if there is homoscedasticity or there is no heteroscedasticity. There is a way to see whether a form of multiple linear regression has heteroscedasticity or not, namely by observing the graph plots contained in the predicted value of the dependent variable compared to the residual value. The analysis used includes:

- 1) If certain patterns are found on the graph plots, for example dots that make a certain systematic pattern, it can be interpreted that there is heteroscedasticity.
- 2) If no clear pattern is found on the plot graph, it means that heteroscedasticity does not occur.

### Hypothesis testing

This research uses multiple linear regression analysis to evaluate the hypothesis. The regression model equation is described below:

$$Y = \alpha + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Information :

Y = MSME financial management

$\alpha$  = constant value

$x_1$  = financial literacy

$x_2$  = gender

$x_3$  = length of effort

$x_4$  = operating income

$b_1, b_2, b_3, b_4$  = variable regression coefficient  $x_1, x_2, x_3, x_4$

e = random error

## RESULT AND DISCUSSION

### Characteristics of respondent data

This study involved a total of 170 MSME actors who had filled out online and offline questionnaires. The profile of the respondents in this study which includes demographic and financial literacy aspects is shown in Table 3 below.

**Table 3. Respondent profile**

| No. | Based on                            | Group                 | Total | Percentage |
|-----|-------------------------------------|-----------------------|-------|------------|
| 1.  | Gender                              | Man                   | 84    | 49,41%     |
|     |                                     | Woman                 | 86    | 50,59%     |
| 2.  | Age                                 | ≤ 25 years            | 25    | 14,12%     |
|     |                                     | > 25 – 40 years       | 74    | 43,53%     |
|     |                                     | > 40 – 55 years       | 71    | 41,76%     |
| 3.  | Income/<br>Month                    | ≤ IDR 5 million       | 95    | 55,88%     |
|     |                                     | > IDR 5 - 15 million  | 23    | 13,53%     |
|     |                                     | > IDR 15 - 25 million | 25    | 14,71%     |
|     |                                     | > IDR 25 million      | 27    | 15,88%     |
| 4.  | When was<br>the business<br>Founded | <3 years              | 25    | 14,71%     |
|     |                                     | 3 – 5 years           | 37    | 21,76%     |
|     |                                     | >5 -10 years          | 48    | 28,24%     |
|     |                                     | >10 years             | 60    | 35,29%     |
| 5.  | Financial<br>Literacy               | Low Literacy Rate     | 25    | 14,71%     |
|     |                                     | Medium Literacy Rate  | 98    | 57,65%     |
|     |                                     | High Literacy Rate    | 47    | 27,65%     |

Source: Primary data processed (2021)

Table 3 above describes the profiles of 170 respondents where there were 84 male respondents (49.41%) and 86 female respondents (50.59%). As for the profile of respondents based on age, there are 74 people (43.53%) in the range of 25 to 40 years. The majority of MSME actors earn Rp. 5 million per month, namely 95 MSME actors (55.88%). The majority of business length > 10 years, namely 60 MSME actors (35.29%). The financial literacy of MSME actors includes a low level of 25 people (14.71%), there are 98 people (57.65%), and the remaining 47 people (27.65%). Therefore it is concluded that as respondents to this study, most MSME actors have financial literacy at a moderate level.

### Research instrument testing results

Based on Table 4 below, it shows the results of the validity and reliability tests on the research variables, namely Financial Literacy and MSME Financial Management.

**Table 4. Financial literacy aspect validity test results and MSME financial management**

| Questionnaire Statement Items       | Number of Questionnaire<br>Statement Items | Conclusion                    |
|-------------------------------------|--|-------------------------------|
| Aspect of Financial Literacy        | 10   | Valid and Reliable Instrument |
| Aspect of MSME Financial Management | 10   | Testing Results               |

Source: Primary data processed (2021)

### Classical assumption test results

#### *Normality test*

The Kolmogorov Smirnov normality test aims to determine whether the residual value is normally distributed or not. Based on the Kolmogorov Smirnov One Sample test with a significance level of 0.05, it can be seen that if the significance value is more than 0.05 then the data is normally distributed but if the significance value shows a value more than 0.05 then the data is not normally distributed.

**Table 5. Kolmogorov-smirnov test one-sample normality test results**

| Unstandardized Residual | N   | Kolmogorov-Sminrov Z | Asymp. Sig (2-tailed) | Sig. *Critical | Information             |
|-------------------------|-----|----------------------|-----------------------|----------------|-------------------------|
| Model                   | 170 | 0,053                | 0,200                 | 0,05           | Normal Distributed Data |

Source: Primary data processed (2021)

The purpose of carrying out the Kolmogorov Smirnov test is to evaluate whether the multiple linear regression model has residual values that are normally distributed or not. Based on the Kolmogorov Smirnov One Sample test using a significance level of 0.05, the results show a significance number greater than 0.05 so that the data is concluded to have a normal distribution. However, if the significance number is smaller than 0.05, it is concluded that the data does not have a normal distribution.

#### *Multicollinearity test*

Multicollinearity testing is used to evaluate whether the multiple linear regression form has an influence between the independent variables in this study. In the good form of multiple linear regression, the results show that there is no relationship between the various independent variables in the study. In the multicollinearity test, the form of multiple linear regression is good if the tolerance number is greater than 0.10 or the VIF value is less than 10.00.

**Table 6. Multicollinearity test results**

| Independent Variable    | Dependent Variable | Tolerance Value | Tolerance | VIF Value | VIF *Critical | Information                   |
|-------------------------|--------------------|-----------------|-----------|-----------|---------------|-------------------------------|
| Financial Literacy (X1) | MSME               | 0,611           | 0,10      | 1,637     | 10,0          | No signs of multicollinearity |
| Gender (X2)             | Financial          | 0,647           | 0,10      | 1,546     | 10,0          |                               |
| Business Length (X3)    | Management (Y)     | 0,588           | 0,10      | 1,700     | 10,0          |                               |
| Operating Revenues (X4) |                    | 0,624           | 0,10      | 1,582     | 10,0          |                               |

Source: Primary data processed (2021)

Table 6 above illustrates the results of the multicollinearity test, which obtained a tolerance number for the financial literacy variable of 0.611, which was 0.10 greater, and the VIF value 1.637, which is 10.00 smaller, so it was decided that the financial literacy variable had no signs of multicollinearity. Meanwhile, the tolerance score for the sex variable was 0.647, which was 0.10 greater, and the VIF value was 1.546, which was 10.00 less, so that the decision was made that the gender variable had no signs of multicollinearity. Then the tolerance number on the length of work variable is 0.588, greater than 0.10 and the VIF value of 1.700 is less than 10.00 so that a decision is made that there are no signs of multicollinearity. Furthermore, the tolerance figure for the operating profit variable is 0.624, greater than 0.10 and VIF 1.582, less than 10.00 so that a decision is made that there are no signs of multicollinearity.

#### *Heteroscedasticity Test*

In checking heteroscedasticity it can be shown to assess whether the regression model describes the disparity in the value of the residual variance from one monitoring to another. Heteroscedasticity occurs when differences in residual variance values are found from one monitoring to another. The correct form of multiple linear regression is if there is no heteroscedasticity (homoscedasticity). The basis for the analysis in Figure 2 regarding the heteroscedasticity test is shown by the absence of a clear pattern where there are

scatter points located above and below the Y-axis value. Therefore it was decided that there were no signs of heteroscedasticity.

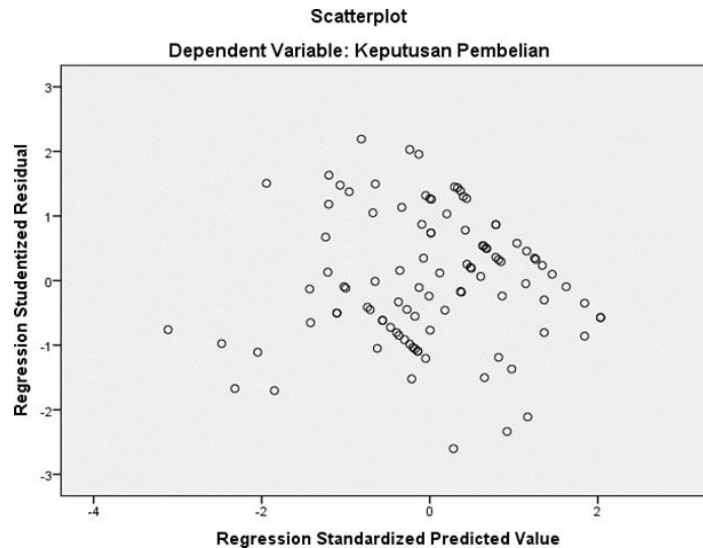


Figure 2. Heteroscedasticity Symptom Test Results

Source: Primary data processed (2021)

**Hypothesis testing results**

Data analysis techniques in this study used multiple linear regression analysis to evaluate the hypotheses as shown in Table 7 below.

Table 7. Multiple linear regression test results

| Independent Variable    | Dependent Variable            | Unstandardized Coefficient |           | t     | Sig.  |
|-------------------------|-------------------------------|----------------------------|-----------|-------|-------|
|                         |                               | B                          | Std.Error |       |       |
| (Constant)              |                               | 6,419                      | 1,795     | 3,577 | 0,001 |
| Financial Literacy (X1) | MSME Financial Management (Y) | 0,520                      | 0,122     | 4,246 | 0,000 |
| Gender (X2)             |                               | 0,356                      | 0,088     | 4,048 | 0,000 |
| Business Length (X3)    |                               | 0,215                      | 0,093     | 2,311 | 0,023 |
| Operating Revenues (X4) |                               | 0,324                      | 0,075     | 4,026 | 0,085 |

Source: Primary data processed (2021)

According to Table 7 the equation obtained is:  $Y = 6.419 + 0.520 X_1 + 0.356 X_2 + 0.215 X_3 + 0.324 X_4$

Information :

- Y = MSME financial management
- X<sub>1</sub> = financial literacy
- X<sub>2</sub> = gender
- X<sub>3</sub> = business length
- X<sub>4</sub> = operating revenues

**The effect of financial literacy on MSME financial management**

Table 7 above shows that from the results of partial checking, the probability number of the financial literacy variable (X1) on business financial management (Y) is obtained, namely the t count > t table, namely  $4.246 > 1.984984$  and a significance figure  $< 0.05$  ( $0.000 < 0,05$ ). Therefore, these results illustrate that the

financial literacy of business actors has a positive and significant impact on financial management. This result is in line with the research results of Saputri (2019), Siregar (2018), Rumbianingrum & Candra (2018) and Anggraeni (2016) which found that financial literacy has a positive and significant effect on business finance management. However, this result is not in line with the results of research from Mendari & Suramaya (2013) dan Siahaan (2013) which shows that the financial literacy of business actors does not have a significant impact on the financial management of business actors. The results of this study can be interpreted that the higher the financial literacy, the behavior of business actors in managing finances will be wiser, so that their welfare can increase. The average value of the financial literacy level of business actors is at a moderate (sufficient) level, namely at the interval of 60% - 79%. Therefore it is concluded that if the financial literacy of business actors is good, it is expected that they can make the right financial decisions by managing finances so that business performance can increase.

### **The effect of gender on MSME financial management**

Table 7 above shows the results for testing hypothesis 2 describes gender as having a positive and significant impact on business financial management. When viewed from the partial test results, the gender variable probability number ( $X_2$ ) for business financial management (Y) is obtained, namely the value of t count > t table of  $4.048 > 1.984984$  and a significance number  $< 0.05$  ( $0.000 < 0.05$ ). Therefore, these results illustrate that gender has a positive and significant impact on business financial management. The results of the research are in line with the results of research by Margaretha & Reza (2015), Rahmah (2014) and Shaari, Hasan, Mohamed & Sabri (2013) which provide findings that gender has a positive and significant effect on business financial management. The results of this study are different from the results of research by Latifiana (2019) and Taft, Zare, Seyyed & Abdoreza (2013) where gender does not have a significant impact on the financial management of business actors. The interpretation of the results of this study is that female characters tend to be wiser in making financial decisions so that women learn more about financial concepts to make the right financial decisions. This causes financial literacy to be at a high level, so that understanding of financial concepts is at a deeper level. Therefore, women will tend to learn more financial concepts which makes women's financial literacy at a high level. Therefore it is concluded that women can manage MSME finance better than men.

### **The Effect of Business Length on MSME Financial Management**

Table 7 above shows the results for testing hypothesis 3 describes the length of business has a positive and significant impact on business financial management. When viewed from the partial test results, it is obtained that the probability number of the length of business variable ( $X_3$ ) for business financial management (Y) is the value of t count > t table of  $2.311 > 1.984984$  and a significance figure  $< 0.05$  ( $0.023 < 0, 05$ ). Therefore, these results illustrate that business length has a positive and significant impact on business financial management. The results of the research are in line with the results of research by Latifiana (2019) and Keown (2011) which provide findings that the length of business has a positive and significant impact on business financial management. The results of this study are different from the results of research by Susanti, Ismunawan & Ardyan (2017) and Wiharno (2015) which shows that the length of business does not have a significant impact on the financial management of business actors. The interpretation of the research results illustrates that the length of time the business has had an impact on individual knowledge of the business sector, especially the financial sector. The longer a business has been established, the more experience a business actor has, both in financial management and in making financial decisions.

### **The effect of operating revenues on MSME financial management**

Table 7 above shows the results of testing hypothesis 4 which explains that business income has no significant impact on business financial management. If it is observed in the results of partial checking, it

is obtained a probability number where the variable business income (X4) to business financial management (Y) is the value of t count  $>$  t table of  $4.026 > 1.984984$  and a significant figure  $> 0.05$  ( $0.085 > 0.05$ ). Therefore, these results illustrate that operating income does not have a significant impact on business financial management. The research results are consistent with the results of Ningrum (2018) and Amaliyah & Witiastuti (2015) research which found that business income has no significant effect on business financial management. The results of this study are different from the results of research by Suryani & Surya (2017) and Lusardi, Annamaria & Olivia (2011) which show that business income has a significant impact on the financial management of business actors. The interpretation of the research results illustrates that if business actors have high income, they do not necessarily have knowledge, attitudes and financial behavior that are wiser in managing business finances. If the business actor's business income is higher, it will have a better impact or not in managing business finances.

## CONCLUSSION

The conclusions obtained: (1) financial literacy, gender and length of business partially have a positive and significant effect on MSME financial management; (2) operating income has no significant effect on MSME financial management. The limitations of this research include (1) this research is limited to SMEs in DIY Sleman; (2) the total sample in this study only used 170 SMEs in DIY Sleman; and (3) demographic factors in this study are limited to only three aspects, namely gender, length of business and business income. Suggestions for further research with similar topics, it is necessary to develop other variables that are not applied in this study so as to get better results.

## REFERENCES

- Amaliyah, R. & Witiastuti. (2015). Analisis Faktor yang Mempengaruhi Tingkat Literasi Keuangan di Kalangan UMKM Kota Tegal. *Management Analysis Journal*, 4(3), 252-257.
- Andreas. (2011). Manajemen Keuangan UMKM. Edisi Pertama. Graha Ilmu. Yogyakarta.
- Anggraeni, B. D. (2016). Pengaruh Tingkat Literasi Keuangan Pemilik Usaha terhadap Pengelolaan Keuangan. Studi Kasus: UMKM Depok. *Jurnal Vokasi Indonesia*, 4(1), 43-50.
- Aribawa, D. (2016). Pengaruh Literasi Keuangan Terhadap Kinerja dan Keberlangsungan UMKM di Jawa Tengah. *Jurnal Siasat Bisnis*, 20(1), 1-13.
- Djuwita, D. & Yusuf, A. A. (2018). Tingkat Literasi Keuangan Syariah di Kalangan UMKM dan Dampaknya terhadap Perkembangan Usaha. *Jurnal Al-Amwal*, 10 (1), 105-127.
- Egesta, E., Rahayu, C. W. E. & Rahmawati, C. H. T. (2021). Factors Affecting Student's Financial Literacy (A Study on The Students of The Faculty of Economics and The Faculty of Science and Technology of Sanata Dharma University Yogyakarta). *Media Ekonomi dan Manajemen*, 36(1), 27-38.
- Financial Services Authority. (2014). Literasi Keuangan. <https://www.ojk.go.id/id/kanal/edukasi-dan-perlindungan-konsumen/Pages/literasi-keuangan.aspx>
- Hartono, J. (2018). *Pedoman Survei Kuesioner*. Yogyakarta: BPFE.
- Iriani, A. R., Rahayu, C. W. E. & Rahmawati, C. H. T. (2021). The Influence of Demographic Factors and Financial Literacy on The Financial Behavior. *Jurnal Kajian Manajemen Bisnis*, 10(1), 33-45.
- Iswantoro, C. & Njo, A. (2013). Hubungan Demografi, Anggota Keluarga dan Situasi dalam Pengambilan Keputusan Pendanaan Pembelian Rumah Tinggal Surabaya". *Jurnal Finesta*, 1 (2), 125-129.
- Indonesian National Strategy for Financial Literacy. (2013). Demographic Factors to Assess the Level of Financial Literacy of the Indonesian Population. [https://sikapiuangmu.ojk.go.id/FrontEnd/images/FileDownload/184\\_OJK\\_NATIONAL%20STRATEGY%20FOR%20FINANCIAL%20LITERACY.pdf](https://sikapiuangmu.ojk.go.id/FrontEnd/images/FileDownload/184_OJK_NATIONAL%20STRATEGY%20FOR%20FINANCIAL%20LITERACY.pdf)

- Keown, A. J. (2011). The Financial Knowledge of Canadians. *Component of Statistics Canada Catalogue*, 11(8), 30–39.
- Laily, N. (2016). Pengaruh Literasi Keuangan terhadap Perilaku Mahasiswa dalam Mengelola Keuangan. *Jurnal Pendidikan Akuntansi*, 1(4), 1-24.
- Latifiana, D. (2019). Studi Literasi Keuangan Pengelola Usaha Kecil Menengah (UKM). *Prosiding Seminar Pendidikan Ekonomi dan Bisnis*, 3(1), 1-7.
- Lusardi, A., Annamaria & Olivia. (2011). Financial Literacy and Retirement Preparedness: Evidence Economic. *Working Paper*. University of Michigan Retirement Research Center.
- Margaretha, F. & Reza, A. P. (2015). Tingkat Literasi Keuangan pada Mahasiswa S-1 Fakultas Ekonomi. *Jurnal Manajemen dan Kewirausahaan*, 17 (1), 76-85.
- Mendari, A. S. & Suramaya, S. K. (2013). Tingkat Literasi Keuangan di Kalangan Mahasiswa STIE Musi. *Jurnal Economia*, 9 (2), 130-140.
- Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia. (2021). Sektor UMKM jadi Kunci Pemulihan Ekonomi di Tengah Pandemi. <https://kemenkopukm.go.id/read/sector-umkm-jadi-kunci-pemulihan-ekonomi-di-tengah-pandemi>
- Narsa, I. M., Widodo, A. & Sigit, K. (2012). Mengungkap Kesiapan UMKM dalam Implementasi Standar Akuntansi Keuangan Entitas Tanpa Akuntabilitas Publik (PSAKETAP) untuk Meningkatkan Akses Modal Perbankan. *Majalah Ekonomi*, XXII(3), 204-214.
- Ningrum, I. A. (2018). Analisis Faktor Pengaruh Literasi Keuangan terhadap Pelaku UMKM Kota Makasar (Studi Kasus Pasar Sentral). *Thesis*. Yogyakarta: Universitas Islam Indonesia.
- Office of Cooperatives, Small and Medium Enterprises, Sleman Regency. (2021). Data on the Development of MSMEs in Sleman Regency in 2017-2020. <https://dataumkm.slemankab.go.id/newportal>
- Rahayu, C. W. E. & Rahmawati, C. H. T. (2022). Financial Management Of Msme In Culinary Industry According To Demographics And Financial Literacy. *JMBE: Journal of Management and Business Environment*, 4(1), 82-99.
- Rahmah, S. (2014). Pola Pengelolaan Keuangan Keluarga pada Ibu Rumah Tangga (Studi pada Ibu Rumah tangga yang Bekerja sebagai *Cleaning Service* di UIN Sultan Syarif Kasim Riau). *Jurnal Perempuan, Agama dan Jender*, 13 (1), 132-152.
- Rumbianingrum, W. & Candra, W. (2018). Pengaruh Literasi Keuangan terhadap Pengelolaan Keuangan UMKM. *Jurnal Manajemen dan Bisnis (ALMANA)*, 2(3), 156-164.
- Saputri, M. A. (2019). Pengaruh Tingkat Literasi Keuangan terhadap Pengelolaan Keuangan pada Pelaku UMKM Kecamatan Mojolaban Kabupaten Sukoharjo. *Thesis*. Surakarta: Institut Agama Islam Negeri Surakarta.
- Senda, D.A., Rahayu, C. W. E. & Rahmawati, C. H. T. (2020). The Effect of Financial Literacy Level and Demographic Factors on Investment Decision. *Media Ekonomi dan Manajemen*, 35(1), 100-111.
- Shaari, N. A., Hasan, N. A., Mohamed, R. K. M. H., & Sabri, M. A. J. M. (2013). Financial Literacy: A Study among the University Student. *Interdisciplinary Journal of Contemporary Research in Business*, 5(2). 279-299.
- Siahaan, M. D. R. (2013). Pengaruh Literasi Keuangan terhadap Perilaku Pengelolaan Keuangan pada Mahasiswa Perguruan Tinggi di Surabaya. *Thesis*. Surabaya: STIE Perbanas Surabaya.
- Siregar, I. R. (2018). Pengaruh Literasi Keuangan terhadap Pengelolaan Keuangan UMKM di Kota Bogor. *Thesis*. Bogor: Institut Pertanian Bogor.
- Siregar, S. (2017). *Statistik Parametrik untuk Penelitian Kuantitatif Dilengkapi dengan Perhitungan Manual dan Aplikasi SPSS Versi 17*. Jakarta: PT. Bumi Aksara.
- Suchuachi, W. T. (2013). Determinants of Financial of Micro Entreprenenurs in Davao City. *International Journal of Accounting Research*, 1(1), 44-51.

- Sugiyono. (2017). *Metode Penelitian dan Pengembangan (Research and Development/ RdanD)*. Bandung: Alfabeta.
- Suryani, S. & Surya, R. (2017). Analisis Literasi Keuangan Pada Pelaku Usaha Mikro di Kota Pekanbaru. *Journal of Economic, Business, and Accounting (COSTING)*, 1(1), 12-22.
- Susanti, A., Ismunawan, P. & Ardyan, E. (2017). Tingkat Pendidikan, Literasi Keuangan, dan Perencanaan Keuangan Terhadap Perilaku Keuangan UMKM di Surakarta. *Telaah Bisnis*, 18(1), 45-56.
- Taft, M. K., Zare, Z. H., Seyyed, M. T. M. & Abdoreza, R. (2013). The Relation between Financial Literacy, Financial Wellbeing and Financial Concerns. *International Journal of Business and Management*, 8 (11), 63-75
- Ubaidillah, H. L. & Nadia, A. (2019). Pengaruh Demografi dan Literasi Keuangan terhadap Perilaku Menabung Masyarakat di Kabupaten Sidoarjo. *Jurnal Ilmu Manajemen*, 7(1), 242-249.
- Uyanto, S. S. (2009). *Pedoman Analisis Data dengan SPSS*. Yogyakarta: Graha Ilmu.
- Wiharno, H. (2015). Karakteristik Sosial Ekonomi yang Mempengaruhi Literasi Keuangan serta Dampaknya terhadap Pengelolaan Keuangan Pribadi. *JRKA*, 1(2), 1-15.
- <http://www.wartaekonomi.co.id/read291109/bangkitnya-umkm-jeli-lihat-peluang-di-era-new-normal>. Accessed dated January 21, 2021.