

Determinants of income for Micro, Small and Medium Enterprises in Sleman Regency

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Abstract

This study aims to determine the effect of own capital, people's business credit, entrepreneurial attitude, business location, length of business and information technology on the income of Micro, Small and Medium Enterprises (MSMEs) in Sleman Regency. The population of this study is MSME players in 17 Kapanewon in Sleman Regency in 2021 as many as 90,118 business units. Using *the convenience sampling technique*, 110 respondents were selected as research samples. Based on multiple linear regression analysis, it is concluded that own capital, people's business credit, entrepreneurial attitude, length of business, and information technology have proven to have a significant positive effect on the income of MSMEs in Sleman Regency. Meanwhile, the location of the business does not have a significant positive effect on the income of MSMEs in Sleman Regency. The results of this study have implications for MSME actors to be able to increase their income, it is hoped that they can increase the number and ability to manage business capital both from their own capital and from borrowed capital, especially people's business credit. In addition, MSME actors are also expected to always improve entrepreneurial attitudes, experience and skills in running a business and increase their understanding and ability to use information technology to support the operation and sale of products or services produced.

Keywords: own capital, people's business credit, entrepreneurial attitude, information technology, MSME income.

INTRODUCTION

According to Sari et al. (2006), Micro, Small and Medium Enterprises (MSMEs) in Indonesia are able to reduce the problem of inequality between groups related to people's income. MSMEs are also able to eradicate poverty and unemployment because they can provide jobs for the community. MSMEs have an important role in economic growth in Indonesia because many MSMEs can be done to increase income, including trading, farming, and other businesses.

Recently, the number of MSMEs in Indonesia has increased quite rapidly. In 2019 there was an increase in the number of business units from the previous year, which was 1.98% with a total of 65.4 million units of MSME actors in Indonesia, while the number of MSME workers also increased where in 2019 there were 119.5 million workers. This number increased by 2.21% from the previous year, namely in 2018 as many as 116.9 million workers. When compared to previous years to date, MSMEs continue to experience an increase in the number of business units and workers (Ministry of Cooperatives and SMEs, 2021).

The number of MSMEs in Sleman Regency has also experienced very rapid development. Based on data from the Office of Cooperatives, Small and Medium Enterprises of the Sleman Regency Government, in 2019 there were 48 thousand business units, then until December 2020 it increased to 68 thousand business units. The number of MSME players also continues to increase. In 2021, the number of MSMEs in Sleman Regency reached 90,118 business units with details of the number of micro enterprises as many as 89,433 business units, the number of small businesses as many as 661 business units, and the number of medium enterprises as many as 24 business units (Kriesdinar, 2021). In detail, data on the number of MSMEs in Sleman Regency from 17 Kapanewon in 2021 are presented in table 1 below:

Table 1. Number of MSMEs in Sleman Regency in 2021

No	District	Micro Enterprises	Small Enterprises	Medium Enterprises
1.	Gamping	5,405	44	2
2.	Godean	7,044	14	0
3.	Moyudan	3,854	56	3
4.	Minggir	4,058	5	0
5.	Seyegan	5,249	41	1
6.	Mlati	6,302	37	0
7.	Depok	9,044	121	0
8.	Berbah	4,216	16	0
9.	Prambanan	2,765	17	1
10.	Kalasan	7,130	54	0
11.	Ngemplak	5,230	28	0
12.	Ngaglik	4,767	48	4
13.	Sleman	8,163	37	4
14.	Tempel	6,536	40	4
15.	Turi	3,726	18	0
16.	Pakem	3,476	38	4
17.	Cangkringan	2,204	36	1
Total		89,433	661	24

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

Although MSMEs have a very important role in the Indonesian economy, there are still many obstacles faced in increasing their income. Some of the problems include limited capital owned, limited human resources in pursuing their work, lack of entrepreneurial attitude, business that does not last long, less strategic location selection, and poor understanding of information technology (Hasanah et al., 2020).

Business capital is very important for MSMEs, because without capital, MSMEs cannot run well. Large business capital can increase the number of sales units so that the income obtained will be even greater. Vice versa, if you use small capital, then the income obtained may also be small. The Cobb-douglas theory states that input affects output (Amalia, 2014). This means that the higher the working capital used by MSMEs will encourage an increase in production results, which in turn will increase income. Business capital can come from own capital or loans from other parties.

Capital itself comes from capital issued by the business owner himself. Own capital does not burden the owner, because by using own capital, the owner has no obligation to pay the principal and interest on the loan. In addition, with their own capital, business actors will also avoid risks or losses because there are no credit and interest costs that are the responsibility of the company (Monica, 2021). In addition to own capital, business capital can come from loans from other parties, for example loans from banks. One of the loans obtained from banks is the People's Business Credit.

Devi (2021) stated that entrepreneurial attitude is a factor that can affect the income of MSMEs. Entrepreneurial attitude is a readiness possessed by an entrepreneur to do something new, the ability to look for opportunities, confidence, courage and the ability to bear risks as well as the ability to develop ideas and resources. With a good entrepreneurial attitude, business actors can show their ability to manage their business. This attitude is the basic thing that must be owned by entrepreneurs because with a good entrepreneurial attitude, entrepreneurs will be able to carry out their business activities well so that they can increase their income.

Another factor that can affect the income of MSMEs is the length of business. A businessman who pursues his business field for a long time will have increased professional abilities, so that he can get large profits by reducing smaller production costs (Monica, 2021). The longer a business person takes in running his business, the more experience he gains. With better experience, the ability of business people to produce products or services, and market their products is getting better so that the income obtained by MSME players is increasing.

The selection of MSME locations is also very important and useful for business continuity. Aji & Listyaningrum (2021) stated that the selection of strategic locations, for example those close to vehicle traffic, business locations that are not far from community activities can affect the increasing income of MSMEs. In addition, information technology can also affect the income of MSMEs. Information technology includes knowledge of internet-based applications to market and sell products or services to earn revenue. Hasanah et al. (2020) stated that information technology used by MSME actors can be in the form of marketing and sales carried out online or called *E-Commerce*. Lack of understanding and ability to use information technology can result in businesses not developing properly which in turn will have an impact on income that also does not develop.

Research by Aji & Listyaningrum (2021) found that business capital, business location, and information technology have a significant positive effect on business income. The greater the business capital used can increase MSME income because with the increase in business capital, MSME players can add the equipment needed, also add products to be sold so that income will increase. In addition, a strategic business location can increase revenue, because of the ease of access to marketing and sales to consumers. Broad insight into information technology owned by MSME actors encourages business actors to have the ability to promote or sell their products through social media which will have an impact on the increasing income of MSMEs. By marketing or promoting products or services through digital platforms, it can also increase MSME sales so that income increases. Research conducted by Riawan & Kusnawan (2018) found that own capital and People's Business Credit have a significant effect on MSME income.

This research is a development of Aji & Listyaningrum's (2021) research which examines the influence of business capital, business location, and information technology on MSME income. The difference between this study and Aji & Listyaningrum's (2021) research is that this study develops business capital into two variables, namely own capital and people's business credit and adds 2 independent variables, namely length of business and entrepreneurial attitude. Therefore, the purpose of this study is to determine whether own capital, people's business credit entrepreneurial attitude, length of business, business location, and information technology affect the income of MSMEs in Sleman Regency.

LITERATUR REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review

Neo Classical Economic Theory

Sjafrizal (2008) said that according to Neo-Classical Economic Theory pioneered by Bort (1960) states that the economic growth of a region will be largely determined by the ability of regions to increase their production activities. The production activities of a region are not only determined by the potential of the region concerned, but are determined by labor mobility and capital mobility between regions. According to this theory, there are several factors that affect production activities, namely economic growth, capital, technological development, and labor. According to Neo-Classical theory, if you want to increase income, labor and capital are also added. Utilizing information technology is also very necessary in order to provide positive benefits to economic growth related to increasing income.

Micro, Small and Medium Enterprises

Law Number 20 of 2008 concerning Micro, Small and Medium Enterprises (Government of the Republic of Indonesia, 2008), states that: (1) Micro enterprises are individual-owned enterprises and/or individual business entities that meet the criteria stipulated in the Law; (2) Small business is a productive economic enterprise owned by an individual or business entity that is not a subsidiary and stands alone. Small businesses are not part of a branch of a company owned, controlled, or become part either directly or indirectly of Medium Enterprises or Large Enterprises that meet the criteria for Small Enterprises stipulated in this Law; (3) Medium enterprises shall be productive economic enterprises owned by individuals or business entities that are not subsidiaries and stand alone, not being part either directly or indirectly with Small Enterprises or Large Enterprises with the amount of net worth and annual sales proceeds stipulated in this Law. According to Law Number 20 of 2008, the classification of MSMEs is based on several criteria based on annual turnover, namely micro businesses have a maximum annual

turnover criterion of 300 million, small businesses have annual turnover criteria between 300 million to 2.5 billion, medium enterprises have turnover criteria exceeding 2.5 billion to 50 billion.

Hypothesis Development

The Effect of Own Capital on MSME Income

Capital is one of the most important things for business actors to start their business, one of which is their own capital. According to Mayasari & Puspita (2015), capital itself is capital that comes from the business owner himself to be used in the company for an unlimited time. Riawan & Kusnawan (2018) concluded that own capital has a significant positive effect on MSME income. This means that the greater the amount of own capital invested in a business to fund its business, the income obtained will increase. Therefore the following hypothesis was formulated:

H1: Own capital has a positive effect on MSME income

The Effect of People's Business Credit (KUR) on MSME Income

Riawan & Kusnawan (2018) stated that the People's Business Credit is a source of capital that will be used for the production process that can benefit Micro, Small and Medium Enterprises. In a business, the greater the KUR used to increase business capital and develop its business, there will be an increase in business income. Results of research conducted by Riawan & Kusnawan (2018); Marfuah & Hartiyah (2019) prove that People's Business Credit has a positive effect on MSME income. Likewise, Meilinda & Mahmud (2020) found that People's Business Credit affects MSME income. Therefore the following hypothesis was formulated:

H2: People's Business Credit has a positive effect on MSME income

The Influence of Entrepreneurial Attitudes on MSME Income

According to Winardi (2007), entrepreneurial attitude is an attitude where someone who has a business behaves directly or indirectly. Entrepreneurial attitude is an important factor and can affect the income of MSMEs. An entrepreneurial attitude is a basic thing that must be owned by entrepreneurs because with a good entrepreneurial attitude, business actors will be able to carry out their business activities well so that they can increase the income they get. The results of research conducted by Devi (2021) and Nurfitriya (2018), prove that entrepreneurial attitudes have a significant positive effect on business income. The research is also in line with research conducted by Rakib (2010) which concluded that entrepreneurial attitudes affect business performance. The performance of the business will be good if revenue also increases. Therefore the following hypothesis was formulated:

H3: Entrepreneurial attitude has a positive effect on MSME income

The Effect of Business Location on MSME Income

Aji & Listyaningrum (2021) stated that a business location is a place used by business actors to run their business by considering ease of access to obtain maximum income. Business location is very influential on income, because if the business location is remote or far from community activities, it can affect business income. The results of research conducted by Sari (2006), Marfuah & Hartiyah (2019), and Aji & Listyaningrum (2021)(Aji & Listyaningrum, 2021) prove that business location has a significant positive effect on business income. The better the business location, the more revenue obtained from the business. Therefore the following hypothesis was formulated:

H4: Business location has a positive effect on MSME income

The Effect of Business Duration on MSME Income

According to Monica (2021), the length of business is the length of time business actors run and maintain their business. The length of the business will affect income because the longer someone runs their business, the more expertise and experience will increase in managing their business. The results of research conducted by Sari (2006) and (Marfuah & Hartiyah, 2019) found that the length of business has a positive effect on business income. Therefore the following hypothesis was formulated:

H5: Length of business has a positive effect on MSME income

The Effect of Information Technology on MSME Income

Marfuah & Hartiyah (2019) stated that technology is a concept related to the type of use and knowledge of a tool and expertise in using the tool, and can have an influence on controlling everything around it. With the existence of information technology, such as computers and *mobile phones* for communication through social media, it will be able to increase revenue and optimize the performance of MSMEs because information technology can facilitate company transactions. With information technology that is increasingly developing, it can help MSME players to market and sell their products through social media. Marfuah & Hartiyah (2019) and Aji & Listyaningrum (2021) concluded that information technology has a positive effect on MSME income. Therefore the following hypothesis was formulated:

H6: Information technology has a positive effect on MSME income

RESEARCH METHODS

Population and Sample

The population of this study is Micro, Small and Medium Enterprises (MSMEs) in Sleman Regency. Based on data from the Cooperatives, Small and Medium Enterprises Office of Sleman Regency, the number of MSMEs in 2021 was 90,118 spread across 17 Kapanewon in Sleman Regency. The minimum sample amount is calculated using the slovin formula as follows:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{90,118}{1 + 90,118 (0.1)^2}$$

$$n = \frac{90,118}{1 + 901.18}$$

$$n = \frac{90,118}{902.18}$$

$$n = 99.88$$

Notes:

n : number of samples

N : population size

E : tolerable error rate (10%)

Based on the Slovin formula, a minimum number of samples of 100 samples is calculated. With a questionnaire distribution time of approximately 2 months, 110 respondents were obtained who filled out the questionnaire.

Data Collection Techniques

This research data is in the form of primary data obtained directly from MSME actors who are research respondents. The data collection technique is to distribute questionnaires through google form to MSME actors in Sleman Regency as respondents. Researchers distributed questionnaires through *personal chat* from various groups on *telegram, Instagram, Facebook* and social media accounts of each MSME actor. The distribution of questionnaires was carried out within approximately 2 months. The questionnaire measurement uses a *Likert* scale with four alternative answer choices as follows, namely Strongly Disagree (STS) scored 1, Disagree (TS) scored 2, Agree (S) scored 3, and Strongly Agree (SS) scored 4.

Research Variables

The variables of the study consist of dependent and independent variables. The dependent variable in this study is MSME income (Y). While independent variables include: Own capital (X1), People's

Business Credit (X2), Entrepreneurial attitude (X3), Business location (X4), length of business (X5), and Information Technology (X6).

MSME Income

Hemalia & Afrinawati (2018) stated that income is receipt either in the form of money or goods or remuneration from production factors. The purpose of business actors in running their business is to obtain profits from the income obtained from their business. With the profit on the income obtained from his business, it can be used to meet the needs of life and the sustainability of the business. MSME income variables were measured using a questionnaire consisting of 4 question items with 4 likert scales adopted from the research of Kolanus et al. (2020). Variable indicators of MSME income include: (1) adequacy in financing needs, (2) increasing yields, and (3) experiencing development.

Own Capital

According to Mayasari et al. (2015), own capital is capital derived from the business owner himself to be used in the company for an unlimited time. The modal variable itself was measured using a questionnaire consisting of 5 question items with 4 *likert* scales adopted from the questionnaire in the Marfuah & Hartiyah (2019) study. The indicators that form the variables of own capital include: (1) sources of own capital, (2) useful for business development, and (3) smoothness in business.

People's Business Credit

People's Business Credit can facilitate business, improve the quality of credit and other financial institutions, and can minimize the poverty level in Indonesia by lending capital and developing jobs (Monica, 2021). The People's Business Credit variable was measured using a questionnaire consisting of 7 question items with 4 *likert* scales developed by Marfuah & Hartiyah (2019) and modified. The People's Business variable indicators include: (1) aspects of accuracy of use, (2) aspects of accuracy of credit charged, and (3) aspects of accuracy of credit amount.

Entrepreneurial Attitude

According to Winardi (2007), entrepreneurial attitude is an attitude where someone who has a business behaves directly or indirectly. This entrepreneurial attitude must be possessed by entrepreneurs to behave creatively, innovatively, confidently, have a leadership attitude, be responsible and results-oriented. The entrepreneurial attitude variable was measured using a questionnaire which included 5 question items with 4 Likert scales based on Devi's (2021) research. Variable indicators of entrepreneurial attitude include: (1) confidence with confidence and optimism, (2) task- and results-oriented, and (3) courage in taking risks.

Business Location

According to Karnando et al. (2019), a business location is a place used by business actors to carry out business activities or operational activities. If someone plans a business, proper business location planning is needed. The business location variable was measured using a questionnaire consisting of 5 question items with 4 Likert scales developed by Setiaji & Fatuniah (2018). Variable indicators of business location include: (1) easy access, (2) selection with consideration, (3) close to crowds, and (4) a comfortable and supportive environment.

Length of Business

Ernawati et al. (2019) stated that the length of business is the time run by business actors. The longer a person runs his business activities, the more experience he has. An entrepreneur who has been in business for a long time in his field, will affect his productivity or ability to be entrepreneurial, so that he can minimize production costs and have many relationships with customers and other parties (Sari et al., 2006). The length of effort variable was measured using a questionnaire consisting of 6 question items with 4 Likert scales based on research from Ernawati et al. (2019) which was modified. Variable indicators of length of business include: (1) length of establishment of a business, (2) level of knowledge and skills, (3) understanding of competitor criteria, and (4) mastery of work.

Information Technology

Marfuah & Hartiyah (2019) stated that technology is a concept related to the type of use and knowledge of a tool and expertise in using the tool, and can have an influence on controlling everything around it. Information technology variables were measured using a questionnaire consisting of 5 question items with 4 Likert scales developed by Marfuah & Hartiyah (2019). Variable indicators of information technology include: (1) the use of technology, (2) the role of technology, and (3) ease of business.

Data Analysis Methods

The data analysis method used to test this research hypothesis is multiple linear regression analysis with the following formula:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + e$$

Notes:

Y: MSME Revenue

X1: Own Capital

X2: People's Business Credit

X3: Entrepreneurial Attitude

X4: Business Location

X5: Length of Business

X6: Information Technology

α : Constant

β_1 - β_6 : Regression coefficient

e : error term

RESULTS AND DISCUSSION

Characteristics of respondents

The description of respondents to this study was conducted based on several characteristics, namely, characteristics based on business location or Kapanewon origin, gender, age, last education, length of business run and income per month. Table 2 below presents respondent data based on business location or origin of Kapanewon in Sleman Regency.

Table 2. Respondent Data Based on District

District	Number of Respondents	Percentage (%)
Depok	10	9,1
Gamping	5	4,5
Godean	18	16,4
Minggir	10	9,1
Mlati	7	6,4
Moyudan	45	40,9
Ngaglik	5	4,5
Pakem	1	0,9
Prambanan	1	0,9
Seyegan	2	1,8
Sleman	3	2,7
Tempel	3	2,7
Number of Respondents	110	100

Source : Primary Data Processed

Table 2 above shows that the highest number of respondents came from Kapanewon Moyudan, which was 45 respondents (40.9%), then the second place was from Kapanewon Godean as many as 18

respondents (16.4%). The number 3 respondent was occupied by 2 Kapanewon with the same number of respondents, namely Kapanewon Depok and Minggir with 10 respondents (9.1%).

Data on respondents by gender presented in table 3 shows that the number of respondents with male gender is 44 respondents (40%), while female respondents are 66 respondents (60%). This shows that there are more female respondents than men.

Table 3. Gender Data

Gender	Number of Respondents	Percentage (%)
Men	44	40%
Women	66	60%
Total	110	100%

Source : Primary Data Processed

Data on respondents by age are presented in table 4. Based on the table, it shows that the highest number of respondents is in the age range of 17-30 years, which is 59 respondents (53.6%). Then followed by 41-50 years old as many as 22 respondents (20%), then 31-40 years old as many as 17 respondents (15.5%). The number of respondents with the most fingerprint is respondents with the age category over 50 years, which is 12 respondents (10.9%).

Table 4. Age of Respondents

Age of Respondents	Number of Respondents	Percentage (%)
17-30 Years	59	53,6%
31-40 Years	17	15,5%
41-50 Years	22	20,0%
Over 50 years old	12	10,9%
Total	110	100%

Source: Primary Data Processed

The characteristics of respondents based on the last education are presented in table 5. Based on the latest education classification of MSME actors in Sleman Regency in table 5, the majority of respondents were high school graduates / equivalent, namely 71 respondents (64.5%). Then the second most are MSME actors with the last education in Higher Education, which is as many as 33 respondents (30%).

Table 5. Recent Education Data

Recent Education	Number of Respondents	Percentage (%)
Primary school	3	2,7%
Junior High School/Equivalent	3	2,7%
High School/Equivalent	71	64,5%
College	33	30%
Total	110	100%

Source : Primary Data Processed

The characteristics of respondents based on the type of business are presented in table 6. Based on table 6, the characteristics of respondents based on the category of business type show that the largest number of respondents are MSMEs with culinary business types, which are 43 respondents (39.1%). While the lowest percentage is respondents with the type of automotive business, which is as many as 3 respondents (2.7%).

Table 6. Business Type Data

Business Type	Number of Respondents	Percentage (%)
Culinary	43	39,1%
Fashion	21	19,1%
Agribusiness	13	11,8%
Wholesale/retail trade	23	20,9%
Automotive	3	2,7%
Service	7	6,4%
Total	110	100%

Source : Primary Data Processed

The characteristics of respondents based on length of effort are presented in table 7. Based on table 7 shows that of the 110 respondents or MSME actors in Sleman Regency, the most business length is between 1 – 5 years, which is 54 respondents (49.1%). While the fewest respondents are MSME actors who have been running for more than 10 years, namely as many as 18 respondents (16.4%).

Table 7. Business Length Data

Length of Business	Number of Respondents	Percentage (%)
< 1 Year	23	20,9%
1 - 5 Years	54	49,1%
5 - 10 Years	15	13,6%
Over 10 years old	18	16,4%
Total	110	100%

Source: Primary Data Processed

The characteristics of respondents based on income per month are presented in table 8. Based on table 8, it shows that of the 110 respondents or MSME actors in Sleman Regency, most MSME actors earn income per month below Rp. 10 million, which is as many as 90 respondents (81.8%). The remaining 20 respondents (18.2%) earned between Rp 10 million – 80 million per month.

Table 8. Monthly Income Data

Income Per Month	Number of Respondents	Percentage (%)
Below IDR 10 Million	90	81,8%
IDR 10 Million - 80 Million	20	18,2%
Total	110	100,0%

Source: Primary Data Processed

Statistik Deskriptif

Statistik deskriptif yang diuraikan dalam penelitian ini mencakup nilai *mean*, minimum, maksimum, dan *standar deviasi* disajikan pada tabel 9. Kemudian semua variabel dikelompokkan menjadi 3 kategori, yaitu rendah, sedang dan tinggi. Kategori skor variabel disajikan pada tabel 10.

All variables are grouped into 3 (three) categories, namely low, medium, and high based on the interval class. Once the length of the interval class is known, then the range of categories per variable is calculated by adding the minimum value with the result of the length of the interval class and the final result is the maximum value. The results of calculating the category range are presented in the following table:

Table 9. Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation	Category
Own Capital (X1)	110	1.2	4.0	3.478	0.4855	High
People's Business Credit (X2)	110	2.0	4.0	3.432	0.4665	High
Entrepreneurial Attitude (X3)	110	2.4	4.0	3.596	0.4410	High
Business Location (X4)	110	2.6	4.0	3.589	0.3962	High
Length of Business (X5)	110	2.0	4.0	3.663	0.4063	High
Information Technology (X6)	110	2.8	4.0	3.573	0.4059	Medium
MSME Income (Y)	110	2.4	4.0	3.362	0.4649	Medium

Source : Primary Data Processed

Table 10. Variable Category Range

Variable	Interval Class Length	Category Range		
		Low	Medium	High
Own Capital (X1)	(4.0 – 1.2) : 3 = 0.93	1.20 – 2.13	2.13 – 3.06	3.06 – 4.00
People's Business Credit (X2)	(4.0 – 2.0) : 3 = 0.67	2.00 – 2.67	2.67 – 3.33	3.33 – 4.00
Entrepreneurial Attitude (X3)	(4.0 – 2.4) : 3 = 0.53	2.40 – 2.93	2.93 – 3.46	3.46 – 4.00
Business Location (X4)	(4.0 – 2.6) : 3 = 0.47	2.60 – 3.07	3.07 – 3.53	3.53 – 4.00
Length of Business (X5)	(4.0 – 2.0) : 3 = 0.67	2.00 – 2.67	2.67 – 3.33	3.33 – 4.00
Information Technology (X6)	(4.0 – 2.8) : 3 = 0.4	2.80 – 3.20	3.20 – 3.60	3.60 – 4.00
MSME Income (Y)	(4.0 – 2.4) : 3 = 0.53	2.40 – 2.93	2.93 – 3.46	3.46 – 4.00

Source : Primary Data Processed

Tables 9 and 10 above show that of the 7 variables studied, 5 of them are included in the high category, the remaining 2 variables are included in the medium category. The five variables included in the high category are own capital (X1), people's business credit (X2), entrepreneurial attitude (X3), business location (X4), and length of business (X5). Two variables that fall into the medium category are Information technology (X6) and MSME Income (Y).

Data Quality Test

Validity Test

The Validity Test is used to find out whether the questionnaire questions of each variable are valid or not. In this study, validity tests were conducted using *Pearson's Product Moment Correlations*. Based on the validity test, it shows that all significance values from the correlation between score items and the total have a value of less than 0.05. Therefore, it can be concluded that all question items from each variable are declared valid so that all question items can be used as indicators of the variable.

Reliability Test

The Reliability Test is used to test whether the questionnaire is consistent or stable over time or not. The Reliability Test is based on *Cronbach's alpha value*. The questionnaire is said to be reliable if *Cronbach's alpha* value is greater than 0.60 or 60%. The results of reliability tests showed that all variables tested in this study had a *Cronbach's alpha* value greater than 0.60. Therefore, it can be concluded that all variables in this study are reliable and can be used for further research instruments. The following Table 11 presents the results of reliability tests in this study:

Table 11. Reliability Test

Variabel	Cronbach's Alpha	Explanation
Own Capital (X1)	0.824	Reliabel
People's Business Credit (X2)	0.918	Reliabel
Entrepreneurial Attitude (X3)	0.846	Reliabel
Business Location (X4)	0.702	Reliabel
Length of Business (X5)	0.901	Reliabel
Information Technology (X6)	0.846	Reliabel
MSME Income (Y)	0.868	Reliabel

Source : Primary Data Processed

Classical Assumption Test**Normality Test**

The normality test in this study was carried out using the *Kolmogorov-Smirnov Test*. Based on the normality test results show that the value of *Asymp.sig (2-tailed)* is 0.200. Therefore, it is concluded that the research data are normally distributed and feasible for use in subsequent analyses. The following Table 12 presents the normality test results.

Tabel 12. Hasil Uji Normalitas

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		110
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.34146545
	Most Extreme Differences	
	Absolute	.059
	Positive	.038
	Negative	-.059
Test Statistic		.059
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Source : Primary Data Processed

Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between independent variables between one another. If the VIF value < 10 and *the tolerance* value > 0.1 , then there is no multicollinearity between independent variables. Here's a table of results from the multicollinearity test:

Table 13. Multicollinearity Test

Variable	Collinearity Statistics		Keterangan
	Tolerance	VIF	
(Constant)			
Own Capital (X1)	0,884	1,131	No Multicollinearity
People's Business Credit (X2)	0,874	1,144	No Multicollinearity
Entrepreneurial Attitude (X3)	0,931	1,075	No Multicollinearity
Business Location (X4)	0,912	1,096	No Multicollinearity
Length of Business (X5)	0,652	1,533	No Multicollinearity
Information Technology (X6)	0,701	1,426	No Multicollinearity

Source : Primary Data Processed

Based on the results of the multicollinearity test in table 13, it is known that the *tolerance* value for each variable shows a number greater than 0.1, namely for each variable is 0.884; 0.874; 0.931; 0.912; 0.652; 0.701. As for the VIF value, each variable shows a result of less than 10. The VIF value of the own capital variable is 1,131, the people's business credit variable is 1,144, the entrepreneurial attitude variable is 1,075, the business location variable is 1,096, the business length variable is 1,533, and the information technology variable is 1,426. Therefore, it can be concluded that the regression model in this study is free from symptoms of multicollinearity, meaning that there is no correlation between independent variables.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether one variable to another has variance inequality from residuals. In this study, the glejzer test was used to determine heteroskedaticity. Based on the glezer test, it shows that all variables have a significance value greater than 0.05, so it is concluded that the regression model in this study does not occur heteroscedasticity. The following Table 14 presents the results of the heteroscedasticity test:

Table 14. Heteroscedasticity Test

Variabel	Sig.	Keterangan
(Constant)	0,882	
Own Capital (X1)	0,872	No heteroscedasticity
People's Business Credit (X2)	0,189	No heteroscedasticity
Entrepreneurial Attitude (X3)	0,576	No heteroscedasticity
Business Location (X4)	0,711	No heteroscedasticity
Length of Business (X5)	0,066	No heteroscedasticity
Information Technology (X6)	0,845	No heteroscedasticity

a. Dependent Variable: Abs_Res

Source : Primary Data Processed

Hypothesis Test Results

In this study, the authors used multiple linear regression analysis to test the research hypothesis. Table 15 Here are the results of multiple linear regression test processing:

Table 15. Hypothesis Test Results

Variable	Direction	Regression Coefficient (B)	T-Statistic	Sig.-t	Conclusion
(Constant)		-0.370	-0.705	0.482	
Own Capital (X1)	Positive	0.251	3.401	0.001	H1 Supported
People's Business Credit (X2)	Positive	0.161	2.401	0.040	H2 Supported
Entrepreneurial Attitude (X3)	Positive	0.186	2.335	0.020	H3 Supported
Business Location (X4)	Positive	-0.142	-1.601	0.112	H4 Not Supported
Length of Business (X5)	Positive	0.240	2.341	0.021	H5 Supported
Information Technology (X6)	Positive	0.356	3.592	0.001	H6 Supported

F statistic= 14.656; Sig F =0.000; Adj R square=0.429

Source : Primary Data Processed

Based on the table above it can be expressed in multiple linear regression equations as follows:

$$Y = - 0.370 + 0.251 X1 + 0.161 X2 + 0.186 X3 - 0.142 X4 + 0.240 X5 + 0.356 X6$$

Based on table 15 shows that of the 6 hypotheses tested, 5 were supported by data, namely H1, H2, H3, H5 and H6, while H4 was not supported by data. These results show that own capital, people's business credit, entrepreneurial attitude, length of business, information technology are proven to have a significant positive influence on MSME income, while business location is not proven to have an effect on MSME income in Sleman Regency.

The F statistic value of 14.656 with a significance of 0.000 indicates that the resulting regression model passed the model suitability test so that it can be used as a basis for further analysis. The R-Square value of 0.429 shows that the ability of independent variables which include own capital, people's business credit, entrepreneurial attitude, business location, length of business, and information technology in explaining the variation of the dependent variable, namely MSME income of 0.429 or 42.9%, while the remaining 57.1% is influenced by other variables outside the model. The complete discussion of research results is described as follows:

The Effect of Own Capital on MSME Income

The results showed that the capital variable itself was proven to have a significant positive influence on the income of MSMEs in Sleman Regency. This means that the higher or greater the own capital owned by MSMEs to finance their business and production activities, the business income obtained will increase.

The results of this study are in line with Marfuah & Hartiyah (2019) research which states that the greater the capital owned by the owner used for the production process, the income obtained will increase. Capital itself is one of the most important factors for an entrepreneur when starting a business. Business actors use their own capital to open a business. Without their own capital, business actors cannot run their business as expected. Therefore, to obtain greater income, greater capital is also needed.

Business actors can increase the stock of goods for sale, carry out production activities quickly, and improve the quality of products or services to be sold because they have large capital. According to Rahmanda & Amanah (2021), the greater the quantity of products or services produced, the greater the business income. This is because business actors have the opportunity to sell their products in large quantities. The results of this study are also in accordance with research conducted by Riawan & Kusnawan (2018) and Aji & Listyaningrum (2021) which states that own capital has a significant positive effect on MSME income.

The Effect of People's Business Credit to MSME Income

The results of hypothesis testing show that the variable of people's business credit has proven to have a significant positive influence on the income of MSMEs in Sleman Regency. This can be interpreted that the better the utilization of People's Business Credit loan capital carried out by business actors, the income to be obtained will also increase.

Capital from loans is very useful for business actors to develop their business. People's Business Credit can facilitate business, improve the quality of credit and other financial institutions, and can minimize the poverty level in Indonesia by lending capital and developing jobs (Monica, 2021). People who want to do business but only have limited capital can make people's business credit loans to develop their business. KUR loans must be used appropriately to develop their business and not used for interests outside the business. According to research conducted by Wiratna & Lila (2015), there is another advantage of using borrowed capital sourced from KUR, namely increased performance in business in the MSME sector. This happens because with the obligation to pay interest every month, business actors become more enthusiastic to develop their business. This is different from business actors who only use their own capital, because their capital is limited and they do not have the burden to return capital (Riawan & Kusnawan, 2018). Therefore, by using borrowed capital from KUR, it can increase business income.

This research is in accordance with the research of Riawan & Kusnawan (2018), Marfuah & Hartiyah (2019) and Meilinda & Mahmud (2020) which found that people's business credit loans have a significant positive effect on MSME income. Therefore, if KUR loans are managed and utilized properly, it will increase MSME income.

The Effect of Entrepreneurial Attitude towards MSME Income

The results of hypothesis testing show that the variable entrepreneurial attitude is proven to have a significant positive influence on the income of MSMEs in Sleman Regency. This can be interpreted that the better the entrepreneurial attitude that business actors have in entrepreneurship, the higher the business income obtained.

Someone who has a high entrepreneurial attitude must have a high will and strong confidence in running their business so that the business can run smoothly (Devi, 2021). MSME actors in Sleman Regency must always think positively in order to benefit in the future, trying to recognize the company's weaknesses to make those weaknesses a lesson so that the business grows. In addition, business actors who have an entrepreneurial attitude must also be creative, innovative, confident, have a leadership attitude, be responsible and result-oriented. Therefore, in order for a business to succeed, it must have a good attitude and knowledge about entrepreneurship (Gemina & A, 2020).

The results of this study are in line with Rakib's (2010) research which found that with a good entrepreneurial attitude which includes high discipline, honesty in action, high creativity, it can improve the performance of small businesses. The results of this study are also in accordance with research conducted by Devi (2021) and Nurfitriya (2018)(Nurfitriya, 2018) which found that entrepreneurial attitudes have a significant effect on MSME income. When a business actor has a good entrepreneurial attitude, the income obtained by business actors increases.

The Effect of Business Location to MSME Income

The results of hypothesis testing show that the business location variable has not proven to have a significant positive effect on MSME income in Sleman Regency. This means that wherever the business location is located, it does not affect the income of MSMEs.

The results of this study are not in line with research conducted by Aji & Listyaningrum (2021) and Putri & Jember (2016) which concluded that business location has a significant positive effect on business income. However, this study is in accordance with research conducted by Meilinda & Mahmud (2020) and Tampubolon et al. (2021) which also failed to prove that business location has a significant positive effect on business income. The unsupported influence of business location on business income in this study is likely due to many MSME actors in Sleman Regency in running their businesses do not have business locations such as kiosks and only use private homes for their place of business. Although they do not have an established business location, MSME players use social media to sell and promote their products. Although business actors do not have an established business location, they also get orders from consumers through online sales transactions, without consumers having to come to the business location. Most MSME players in Sleman Regency are engaged in the culinary business that has made sales through *goofood* or *grabfood* so that wherever the location of MSME players in Sleman Regency does not affect their business income.

The Effect of Length of Business to MSME Income

The results showed that the variable length of business was proven to have a significant positive influence on the income of MSMEs in Sleman Regency. This can be interpreted that the longer business actors pursue and run their business, the income obtained will increase. This research is in line with Marfuah & Hartiyah (2019) and Ernawatai et al. (2019) which states that the length of business has a positive and significant effect on business income. The longer the business runs, the more MSME players will be able to understand the criteria of competitors well so that it can affect the income of creative economy businesses.

Most MSME actors in Sleman Regency pursue their business for more than 1 year, some even more than 10 years. The length of the business will affect income because the longer someone runs their business, the more expertise and experience will increase in managing their business. With increasing business experience and expertise, MSME players can develop their business optimally so that they can increase their business income. The length of business has an important role in entrepreneurship because it can affect productivity for business actors. The longer the business runs, the more MSME players can

understand consumer tastes so that they will have many regular customers and good relationships with customers.

The Effect of Information Technology on MSME Income

The results showed that information technology variables proved to have a significant positive influence on MSME business income in Sleman Regency. This can be interpreted that the higher the application of information technology, the higher the business income obtained. This research is in accordance with Marfuah & Hartiyah (2019) and Aji & Listyaningrum (2021) which concluded that information technology has a positive effect on MSME income. These results indicate that there are already many business actors who use information technology correctly so that they fully understand the uses and benefits of information technology.

Business actors use information technology to run their business. They use technology such as computers and sophisticated machines for their business activities. By utilizing sophisticated information technology, MSME players can produce many products with high quality in a short time. In addition, the use of information technology is also used for marketing and sales aspects. Business actors use social media, such as *Facebook, Instagram, Twitter* to promote and sell the products or services produced. They can also use *market places* such as *shopee, tokopedia* to sell their products. By using social media, business actors can reach a wider market, using more efficient promotional costs and a fairly short time. Therefore, information technology plays an important role to support businesses in order to increase revenue.

CONCLUSION

Conclusion

Based on the results of data analysis, it is concluded as follows:

1. The variables of own capital, people's business credit, entrepreneurial attitude, length of business and information technology have proven to have a significant positive effect on the income of MSMEs in Sleman Regency. This indicates that MSME actors in Sleman Regency who have high own capital to finance business needs, good utilization of people's business credit loan capital, good entrepreneurial attitude, have experience running a business for a long time, and have a good understanding of information technology, will increase the income of MSME actors in Sleman Regency.
2. The variable of business location does not have a significant positive effect on the income of MSMEs in Sleman Regency. This means that wherever the location of MSMEs in Sleman district is located, it does not affect the income of the MSMEs concerned.

Implication

The results of this study have implications for MSME actors to be able to increase their income, namely by increasing the number and ability to manage business capital both from their own capital and from borrowed capital, especially people's business credit. In addition, MSME actors are also expected to always improve entrepreneurial attitudes, experience and skills in running a business and increase their understanding and ability to use information technology to support the operation and sale of products or services produced.

The results of this study also have implications for the Sleman district government in order to reduce poverty and unemployment rates and increase employment, one of which can be done is to make regulations and policies that encourage the development of MSMEs in Sleman district. With the development of MSMEs, government revenue will also increase.

Limitations and Suggestions

The limitations of this study mainly relate to its data collection techniques. This research data collection technique was carried out by distributing questionnaires to respondents through google forms, without conducting interviews with respondents resulting in data analysis could not explain in depth whether or not there was an influence of each independent variable on MSME income in Sleman Regency. It is recommended for future research, in addition to data collection carried out by distributing

questionnaires, direct interviews with several respondents were also conducted to obtain more complete data and more in-depth analysis.

REFERENCE

- Aji, A. W., & Listyaningrum, S. P. (2021). Pengaruh Modal Usaha, Lokasi Usaha, Dan Teknologi Informasi Terhadap Pendapatan UMKM Di Kabupaten Bantul. *Jurnal Ilmiah Akuntansi Indonesia*, 06(01), 87–102.
- Amalia, F. (2014). Analisis Fungsi Produksi Cobb-Douglas Pada Kegiatan Sektor Usaha Mikro Di Lingkungan Uin Syarif Hidayatullah Jakarta. *Signifikan: Jurnal Ilmu Ekonomi*, 3(1), 45–62. <https://doi.org/10.15408/sigf.v3i1.2056>
- Devi, R. (2021). Pengaruh Modal Usaha dan Sikap Kewirausahaan Terhadap Pendapatan Usaha Kecil (Mikro) Di Kawasan M. Said Samarinda. *eJournal Administrasi Bisnis*, 9(1), 36–45.
- Ernawati, E., Susyanti, J., & Salim, M. A. (2019). Pengaruh Modal Kerja Dan Lama Usaha Terhadap Pendapatan Usaha. *E-Jurnal Riset Manajemen*, 136–148.
- Gemina, D., & A, A. W. P. (2020). Keberhasilan Usaha Berbasis Sikap Kewirausahaan dan Pengetahuan Kewirausahaan Pada Usaha Mikro Kecil Menengah Makanan Minuman Kecamatan Ciawi Kabupaten Bogor. *Jurnal Visionida*, 6, 20–32.
- Hasanah, R. L., Kholifah, D. N., & Alamsyah, D. P. (2020). Pengaruh Modal, Tingkat Pendidikan, dan Teknologi Terhadap Pendapatan UMKM di Kabupaten Purbalingga. *Jurnal Akuntansi Dan Manajemen*, 17(2), 305–313.
- Helmalia, & Afrinawati. (2018). Pengaruh E-Commerce Terhadap Peningkatan Pendapatan Usaha Mikro Kecil Dan Menengah Di Kota Padang. *JEBI (Jurnal Ekonomi Dan Bisnis Islam)*, 3(2), 237. <https://doi.org/10.15548/jebi.v3i2.182>
- Karnando, Agin, A. A., & Oktalina, G. (2019). Analisis Pengaruh Keanekaragaman Produk Olahan dan Lokasi Terhadap Pendapatan Usaha Pecel Lele di Kota Pangkalpinang. *Jurnal Progresif Manajemen Bisnis (JIPMB)*, 6(November), 307–315.
- Kementerian Koperasi dan UKM. (2021). *Perkembangan Data Usaha Mikro, Kecil, Menengah (UMKM) dan Usaha Besar (UB)*. Kemenkopukm.go.id.
- Kolanus, L. T. O., Rumat, V. A., & Engka, D. S. M. (2020). Faktor-Faktor Yang Mempengaruhi Pendapatan Usaha Mikro Kecil (Umk) Di Kota Manado. *Journal Pembangunan Ekonomi Dan Keuangan Daerah*, 20(04), 39–53.
- Kriesdinar, M. (2021). *Jumlah UMKM di Sleman Meningkatkan Signifikan di Masa Pandemi*. TribunJogja.com.
- Marfuah, S. T., & Hartiyah, S. (2019). Pengaruh Modal Sendiri, Kredit Usaha Rakyat (KUR), Teknologi, Lama Usaha, dan Lokasi Usaha Terhadap Pendapatan Usaha (Studi Kasus Pada UMKM di Kabupaten Wonosobo). *Journal of Economic, Business and Engineering*, 1(1), 183–195.
- Mayasari, T., Puspita, I. L., & Ariningrum, H. (2015). Pengaruh Modal Sendiri, Modal Pinjaman dan Lama Usaha Terhadap Pendapatan Pedagang Kecil Pengrajin Keripik di Kawasan Sentra Industri Keripik (Gang Pu) Jalan Za. Pagar Alam Bandar Lampung. *Jurnal Riset Akuntansi Dan Manajemen*, 4(2).

- Meilinda, D., & Mahmud, A. (2020). Pengaruh Kredit Usaha Rakyat (KUR), Total Aset, Jumlah Tenaga Kerja, Biaya Pemasaran, dan Lokasi Usaha Terhadap Pendapatan Usaha Mikro Kecil dan Menengah (UMKM) Berbasis Ekonomi Kreatif di Kota Semarang. *Business and Accounting Education Journal*, 1(3), 247–257.
- Monica, M. (2021). *Pengaruh Kredit Usaha Rakyat (KUR), Modal Sendiri, Lama Usaha Dan Jumlah Tenaga Kerja Terhadap Pendapatan Usaha Mikro Kecil Menengah (Umkem) Di Kota Malang*. 9(2), 1–11.
- Nurfitriya, M. (2018). Sikap Kewirausahaan Dan Pengaruhnya Terhadap Perkembangan Usaha Kerajinan Batik Di Tasikmalaya. *Jurnal Pendidikan Ekonomi*, 11(1), 1–8. <https://doi.org/10.17977/um014v11i12018p001>
- Putri, N. M. D. M., & Jember, I. M. (2016). Pengaruh Modal dan Sendiri Lokasi Usaha Terhadap UMKM di Kabupaten Tabanan (Modal Pinjaman sebagai Intervening). *Jurnal Ekonomi Kuantitatif Terapan*, 9(2), 142–150.
- Rahmanda, E., & Amanah, L. (2021). Pengaruh Modal Pribadi, Harga Dan Sosial Media Terhadap Pendapatan Umkm. *Jurnal Ilmu Dan*
- Rakib, M. (2010). Pengaruh Model Komunikasi Wirausaha, Pembelajaran Wirausaha, dan Sikap Kewirausahaan Terhadap Kinerja Usaha Kecil. *Jurnal Ilmu Pendidikan*, 2, 121–129.
- Riawan, & Kusnawan, W. (2018). Pengaruh Modal Sendiri dan Kredit Usaha Rakyat (KUR) Terhadap Pendapatan Usaha (Studi Pada UMKM di Desa Platihan Kidul Kec. Siman). *Jurnal Akuntansi Dan Pajak*, 19(1), 31. <https://doi.org/10.29040/jap.v19i1.158>
- Sari, T. L. (2006). *Pengaruh Modal Sendiri, Kredit Usaha Rakyat (KUR), Teknologi, Lokasi Usaha Dan Lama Usaha Terhadap Pendapatan Umkm Kabupaten Bengkulu Selatan (Studi Kasus Nasabah Bank Bri Kc Manna)*.
- Setiaji, K., & Fatuniah, A. L. (2018). Pengaruh Modal, Lama Usaha dan Lokasi Terhadap Pendapatan Pedagang Pasar Pasca Relokasi. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPED)*, 6(1), 1–14. <https://doi.org/10.21009/jped.006.1.1>
- Tampubolon, G. Y., Usaha, L., Usaha, L., Teknologi, K., & Tampubolon, G. Y. (2021). Telaah Penentu Pendapatan UMKM di Kecamatan Balige. *SANISTEK*, 235–243.
- Wiratna, S., & Lila, U. R. (2015). Analisis Dampak Pembiayaan Dana Bergulir KUR (Kredit Usaha Rakyat) Terhadap Kinerja UMKM (Studi Kasus di Daerah Istimewa Yogyakarta). *Jurnal Bisnis Dan Ekonomi (JBE)*, 22(1), 11–25.