The Position of MSME Credit to Total Credit and its Effect on Digital Sales: A Case Study of 2015-2019

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ARTICLE INFO	ABSTRACT
Keywords *MSMEs,* *MSME Credit,* *Digital Sales,* *Economic Growth,*	The Micro, Small and Medium Enterprises (MSMEs) sector plays a vital and important role in Indonesia's economy, contributing more than 60 percent to the Gross Domestic Product (GDP) and absorbing the majority of the national workforce. The availability of quality credit has been a key factor in advancing the MSME sector. However, the limited access to credit and the challenges faced by MSMEs trigger questions regarding the role of credit in supporting their transition to the rapidly growing digital market. This study aims to analyze the relationship between MSME credit position to total credit and its effect on digital sales in the period 2015 to 2019. The data used is sourced from the Central Bureau of Statistics (BPS) for MSME credit and total credit data, and from the Indonesian Internet Service Providers Association (APJII) and Google Temasek organizations for digital sales data. Multiple linear regression analysis was used to test the hypotheses of the study. The results show a positive and moderately influential correlation between the position of credit for MSMEs to total credit and digital sales. This finding indicates that MSME credit plays an important role in supporting MSME players to enter the growing digital market, improve competitiveness, and adopt digital technology. Therefore, this study has important implications for MSME players, financial institutions, government, and academics in an effort to improve economic growth and community welfare through the MSME sector in the digital era. Further research can be conducted to understand other factors that influence this relationship, such as business characteristics and consumer behavior.

INTRODUCTION

The MSME sector (Micro, Small and Medium Enterprises) is a sector that has an important value in the Indonesian economy. According to BPS data, the MSME sector contributed up to 60.34 percent to Indonesia's Gross Domestic Product (GDP) in 2019. In addition, the MSME sector was also able to open employment opportunities for workers as much as 97.22 percent of the total national workforce in the same year. Thus, the MSME sector has a very impactful potential to increase people's income and economic growth.

One of the things that can support the development of the MSME sector is the availability of adequate and quality credit. Credit is one source of capital that can be accessed by MSME actors to meet the needs of working capital, investment, and business expansion. However, in reality, access to credit for the MSME sector still faces various obstacles, such as strict requirements, high interest rates, short terms, and difficult collateral.As a result, the position of credit for MSMEs to total credit provided by financial institutions is still low and not optimal. Based on BPS data, the position of credit for MSMEs to total credit only ranged from 18 percent to 20 percent during the period 2015 to 2019.

On the other hand, the pace of internet development has opened up new opportunities for the MSME sector to enter the digital market. A digital market is a market that uses an online platform as a transaction medium between sellers and buyers. The digital market has several advantages, such as wide market reach, low operational costs, ease of access, and time flexibility. Therefore, the digital market can be one of the strategies for the MSME sector to increase its competitiveness and productivity.

Digital sales is one of the indicators to measure digital market activity. Digital sales refer to the value of transactions made through online platforms, whether through the web, apps, or social media. According to APJII and Google Temasek data, digital sales in Indonesia experienced significant growth during the period 2015 to 2019. Digital sales in Indonesia increased from USD 8 billion in 2015 to USD 40 billion in 2019. Digital sales in Indonesia are projected to continue to increase to reach USD 133 billion by 2025.

Based on this background, the following research questions arise: Is there a correlation between MSME credit position to total credit and digital sales? If so, how does it affect them? To find out the answers to these questions, this study aims to analyze the correlation and causality between MSME credit position to total credit and its effect on online sales.

To achieve these objectives, this study uses secondary data sourced from reliable and relevant sources. Data on MSME credit and total credit are taken from BPS, while data on digital sales are taken from APJII and Google Temasek. The data covers the period from 2015 to 2019. In this research, the multiple linear regression analysis method is used, which is implemented through the Google Sheets application.

This research is expected to provide benefits and illustrations for various parties, especially for MSME actors, financial institutions, government, and academics. For MSME players, this research can provide information about the importance of credit as a source of financing to develop businesses in the digital market.

For financial institutions, this research can provide input on the need to improve access and quality of credit for the MSME sector. For the government, this research can provide recommendations on policies that can support the development of the MSME sector in the digital era. For academics, this research is expected to contribute to the development of science, especially in the fields of economics and business.

METHOD

In this study, we used secondary data obtained from reliable and relevant sources. Data on MSME loans and total loans were obtained from the Central Statistics Agency (BPS), while data on digital sales were taken from the Indonesian Internet Service Providers Association (APJII) and Google Temasek organizations. The data covers the period from 2015 to 2019.

Data on MSME loans and total loans are obtained from the Indonesian Banking Statistics publication issued by BPS. The data shows the amount of credit disbursed by financial institutions to the MSME sector, both by business type, region, and business scale. The data is processed into annual data by taking the monthly average of each year.

Digital sales data was obtained from the eConomy SEA 2019 report published by APJII and Google Temasek. The report presents data on the value of online transactions in six Southeast Asian countries, including Indonesia, both by sector, platform, and market segment. The data is processed into annual data by taking the value of online transactions in Indonesia in each year.

MSME credit data and total credit and digital sales data are then combined into one panel data using Google Spreadsheet Panel data is data that combines cross section data (between individuals or units) and time series data (over time). Panel data has several advantages, such as being able to overcome heterogeneity problems, improve estimation efficiency, and expand data variation.

In this research framework, multiple linear regression analysis was applied using the Google Sheets platform. This multiple linear regression analysis approach is used to evaluate the correlation between one dependent variable and two or more independent variables. Multiple linear regression analysis can be used to test research hypotheses, estimate model parameters, and to measure the significance level of the influence of independent variables on the dependent variable.

The dependent variable in this study is digital sales (Y), which is measured by the value of online transactions in Indonesia in units of billion USD. The independent variable used in this study is the position of MSME credit to total

credit (X), which is measured by the percentage of MSME credit to total credit disbursed by financial institutions. The research hypothesis proposed is as follows:

H0: Micro, Small and Medium Enterprises' loan position relative to total loans has no effect on digital sales.

H1: The loan position of micro, small and medium enterprises relative to total loans has a positive effect on digital sales.

The multiple linear regression model used in this study is as follows:

$Y = a + bX + e$

Where:

Y = Digital sales

X = MSME credit position to total credit a = Constant b = Regression coefficient e = Error

RESULTS AND DISCUSSION

Table 1 shows data on MSME loans and total loans for the period 2015 to 2019. The data is expressed in trillion rupiah. Table 1 also shows the position of MSME loans to total loans, which is calculated using the formula:

MSME credit position = (MSME credit / Total credit) x 100 percent.

Table 1. Table 1. MSME loan and total loan data 2015-2019

Year	MSME Credit	Total credit	MSME credit position
2015	748,9	4.088,2	18.32 percent
2016	816,8	4.379,7	18.65 percent
2017	893,2	4.763,3	18.75 percent
2018	1.006,7	5.271,0	19.10 percent
2019	1.092,3	5.602,0	19.50 percent

Source: BPS (2020)

Table 2 shows the digital sales data for the period 2015 to 2019. The data is expressed in billion USD.

Year	Digital sales
2015	8
2016	12
2017	18
2018	27
2019	40

Source: APJII and Google Temasek (2019)

The table below illustrates the descriptive statistics of the MSME credit, total credit, MSME credit position, and digital sales data. Descriptive statistics include mean value, minimum value, maximum value, standard deviation, and coefficient of variation.

Table 3. Descriptive statistics of MSME credit and digital sales data

V	R	Min	Max	S D	K V
MSME Credit	911,58	748,9	1.092,3	136,67	14.99 percent
Total credit	4.820,84	4.088,2	5.602	603,11	12.51 percent
MSME credit position	18.86 percent	18.32 percent	19.50 percent	0.47 percent	2.49 percent
Digital sales	21	8	40	12,65	60.24 percent

Source: Data processing results

Please note that in this context, R refers to Average, Min refers to Minimum Value, Max refers to Maximum Value, SD stands for Standard Deviation, and KV is the Coefficient of Variation. Then, based on the data in the table above, it can be inferred that the average value of the position of MSME loans to total loans is around 18.86 percent, and it can be seen that in this data, the minimum value is around 18.32 percent, while the maximum value reaches around 19.50 percent. Over the period of the observed years, it appears that the position of MSME loans to total loans tends to remain stable and does not experience significant fluctuations.

DISCUSSION

The results of multiple linear regression analysis show that the position of MSME credit to total credit has a positive and significant relationship with digital sales. This means that the greater the credit position of MSMEs, the higher the digital sales. The regression coefficient of the MSME credit position variable is 0.85, which means that every one percentage point increase in the MSME credit position will increase digital sales by 0.85 billion USD.
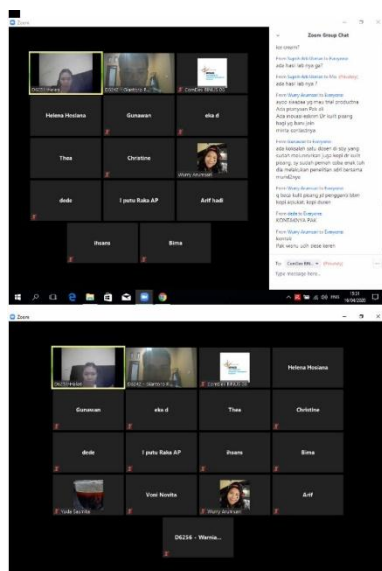
Based on our discussion, the positive relationship between MSME credit position and digital sales can be explained by several factors.
1) First, MSME loans can help MSME players to expand their businesses, both in terms of working capital, investment, and market expansion. Thus, MSME players can increase their productivity, efficiency, and competitiveness in the market.
2) Second, MSME credit can facilitate MSME players to adopt digital technology in their businesses, such as using e-commerce platforms, social media, digital applications, and digital payment facilities. Thus, MSME players can expand their market reach, reduce operational costs, increase ease of access, and adapt to consumer behavior that is increasingly shifting to online transactions.
3) Third, MSME loans can improve the welfare of MSME players, both in terms of income, consumption, and savings. Thus, MSME players can increase demand for goods and services offered in the digital market.

This finding has several important implications for various parties. For MSME players, the findings show that MSME credit is one of the most important sources of financing to increase business value for MSMEs today. So, ideally, MSME players need to utilize MSME credit wisely and responsibly, and pay attention to aspects such as ability to pay, financial management, and business risk.

For financial institutions, these findings indicate that MSME credit is a potential and profitable market segment. Therefore, financial institutions need to improve access to and quality of MSME credit by simplifying requirements, lowering interest rates, extending tenors, and providing guidance and mentoring.

For the government, this finding shows that MSME credit is one of the effective policy instruments to support the development of the MSME sector in the digital era. Therefore, the government is expected to build and create a calm or conducive business climate for the MSME sector in ways such as providing fiscal incentives, providing credit guarantees, providing legal assistance and business licensing, and providing infrastructure and technology facilities.

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CONCLUSIONS

This research has the purpose and objective to analyze the correlation between the credit position of Micro, Small, and Medium Enterprises (MSMEs) to total credit and its influence on digital sales. The data used in this study are MSME credit data and total credit from BPS, as well as digital sales data from APJII and Google Temasek. The data covers the period from 2015 to 2019. In this research, multiple linear regression analysis method is used which is implemented through Google Sheets application.

The results show that the position of MSME loans to total loans has a positive and significant relationship with digital sales. This means that the greater the credit position of Micro, Small and Medium Enterprises (MSMEs), the higher the digital sales. The regression coefficient of the Micro, Small and Medium Enterprises (MSME) credit position variable is 0.85, which means that every one percent point increase in the MSME credit position will increase digital sales by 0.85 billion USD.

This finding is in line with theory and previous studies which state that MSME credit can help MSME actors to expand their businesses, adopt digital technology, and improve their welfare. The findings also have important implications for MSME actors, financial institutions, government, and academia.

Based on the results of this study, it can be concluded that the position of MSME loans to total loans has a positive influence on online or digital sales. Therefore, the recommendations that can be proposed are as follows:

1) MSME players need to utilize MSME credit wisely and responsibly, and pay attention to aspects such as ability to pay, financial management, and business risk.
2) Financial institutions need to improve access to and quality of MSME credit by simplifying requirements, lowering interest rates, extending terms, and providing guidance and mentoring.
3) The government needs to build and create a conducive business climate for the MSME sector by providing fiscal incentives, providing credit guarantees, providing legal assistance and business licensing, and providing infrastructure and technology facilities.
4) Academics need to conduct further research on other causes or factors that may influence the relationship between MSME credit and digital sales, such as business characteristics, consumer behavior, market competition, and socioeconomic impacts.

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