Analysis of MSME Loans on Economic Growth in Central Sulawesi in 2015-2022

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Abstract: The role of small and medium enterprises in Central Sulawesi during 2015-2022 in creating added value continues to increase, thus MSMEs are considered to have a strategic role in helping reduce unemployment and poverty. The first role of MSMEs in the economy of Central Sulawesi is as a means of leveling the economic level of society, especially the lower middle class. The aim of this research is to analyze the influence of MSME credit on economic growth in Central Sulawesi. This research uses a simple regression method. Based on research results, the increase in Gross Regional Domestic Product (GRDP) and economic growth in Central Sulawesi in 2015-2022 has a significant positive effect on the amount of MSME credit. According to statistical tests the amount of MSME credit contribute significantly by 0.000 or less than the 5% significance level. This shows that the distribution of MSME credit will help MSME players to develop their businesses, increase the number of workers, which will also increase output per business unit and per worker so that it will have an impact on economic growth.

Keywords: MSMEs (Micro, Small and Medium Enterprises), Credit, Economic Growth.

1. INTRODUCTION

Economic growth is a process of increasing production over time and serves as a crucial indicator of a country’s or region’s development success. It involves an increase in per capita output over time. The primary goal of local economic development efforts is to enhance job opportunities for the local population. Therefore, local governments must be able to assess the necessary potential for establishing and developing the regional economy, in addition to encouraging community participation and utilizing existing resources (Baransano, 2020). One of the most important macroeconomic indicators is a country’s economic growth. However, accurately recording the quantity of goods and services produced within a certain time frame is challenging. This challenge arises because the types of goods and services produced are highly varied. Additionally, since each unit may have different measurement units, the monetary value (money) equivalent to the Gross Regional Domestic Product (GRDP) is used to estimate changes in output. The criteria for measuring economic growth, reflected in the GRDP, allow for an increase in the region’s gross domestic product. Calculating GRDP has become an essential part of macroeconomics, particularly concerning regional economic analysis. The results of GRDP calculations provide a foundational framework for measuring economic activities carried out in the economy. The value of GRDP serves not only as a macroeconomic indicator but also as a basis for assessing economic performance and formulating various policies. Data indicates that this process does not proceed smoothly and faces several challenges, including issues arising from the business sector, which is the locus of production processes. Micro, small, and medium enterprises (MSMEs), as productive enterprises of the people, have contributed significantly to economic growth. This is evident from the fact that MSMEs account for 99.9% of businesses in Indonesia (Indonesian Banking Development Institute & Bank Indonesia, 2015). The presence of MSMEs is crucial for driving economic growth. However, there is a disparity between the contribution of MSMEs in providing employment opportunities and their contribution.
to value-added formation. The faster growth of MSMEs compared to large enterprises is expected to improve the business structure and overall income distribution. Based on the above explanation, this research aims to analyze the impact of MSME credit on economic growth in Central Sulawesi from 2015 to 2022. The purpose of this study is to understand how MSME credit influences economic growth in Central Sulawesi during this period.

2. LITERATURE REVIEW

2.1 Economic Growth

Economic growth refers to the continuous improvement in a country’s economic conditions, characterized by an increase in the ability to provide more economic goods to its citizens. This capacity grows in response to technological advancements and necessary adjustments in institutional and ideological frameworks (Jhingan, 2019). Economic growth is defined as an increase in GDP/GNP, regardless of whether this increase is larger or smaller than the population growth rate or if there are changes in the economic structure. Developing countries can be classified as such if their per capita income shows a long-term upward trend. According to Sukirno (2016), economic growth means the expansion of economic activities, resulting in increased production of goods and services and improved societal welfare. The quantity of services created will rise, driven by the continuous improvement in the quantity and quality of production factors. Economic growth can be understood as a criterion used to evaluate the efficiency and effectiveness of economic activities aimed at adding value to people’s incomes over time (Nurwahida, 2022). Sukirno (2002) suggests that economic growth involves the development of economic activities, where the production of goods and services increases, thereby enhancing societal welfare. This growth is attributed to the continuous enhancement of the quantity and quality of production factors. Economic growth is influenced by two types of factors: economic and non-economic. Economic factors include production factors, which are the main drivers of economic growth. Changes in these production factors cause fluctuations in economic growth. Sukirno (2011) identifies four production factors that influence economic growth:

a. Natural Resources: Natural resources, including fertile land, location, composition, forest abundance, minerals, climate, water resources, and marine resources, are crucial for economic growth. Regions lacking natural resources do not develop rapidly.

b. Organization: This pertains to the use of production factors in economic activities, complementing capital and labor to enhance productivity. Entrepreneurs, according to Schumpeter, are not necessarily capitalists but are innovators who undertake risks in uncertain times.

c. Capital Accumulation: This involves providing reproducible production factors, often referred to as capital accumulation or capital formation, which increases national product and income.

d. Technological Advancement: Technological changes, resulting from new innovations or research methods, enhance the productivity of labor, capital, and manufacturing sectors.

e. Division of Labor and Scale of Production: The division of labor leads to increased productivity, promoting industrial development and creating large-scale economic chains. Economic and non-economic factors, such as social, cultural, and political elements, also play a vital role in economic growth.

2.2 Gross Regional Domestic Product (GRDP)

The Gross Regional Domestic Product (GRDP) is a key indicator commonly used to measure the economic development success of a region. GRDP represents the sum of the added value of goods and services produced by all economic activities within a region. Satonskirino (2005) defines GRDP as the total added value generated from various economic activities in a region, regardless of the
ownership of these production factors. GRDP is calculated based on market values using current prices, while constant prices are used to assess economic growth over time (Sukirno, 2005; BPS, 2016). The Central Statistics Agency (BPS) updated the base year for GRDP calculations from 2000 to 2010 to reflect significant changes in the global and regional order that impacted the national economy. The 2010 base year is based on the 2008 System of National Accounts (SNA), which provides international recommendations for measuring economic activity according to standardized accounting principles (BPS, 2015). GRDP is calculated in two valuation versions: nominal, based on current prices, and constant, representing the added value of goods and services calculated using base year prices (Ali, 2015).

2.2 Micro, Small, and Medium Enterprises (MSMEs)

MSMEs are independent and productive business units operated by individuals or business entities in various economic sectors. The differentiation between micro, small, medium, and large enterprises is often based on initial asset value, annual sales, and the number of permanent employees. However, these criteria vary across countries, making cross-national comparisons of MSMEs challenging (Tambunan, 2012). In Indonesia, the definition of MSMEs is governed by Law No. 20 of 2008. This law categorizes micro enterprises as businesses with net assets under IDR 50 million or annual sales under IDR 300 million, small and medium enterprises as those with assets between IDR 50 million and IDR 500 million or annual sales between IDR 300 million and IDR 2.5 billion, and medium enterprises as those with assets between IDR 500 million and IDR 10 billion or annual sales between IDR 2.5 billion and IDR 50 billion (Tambunan, 2012).

2.3 Challenges Facing MSMEs

MSMEs in developing countries like Indonesia face numerous challenges, including limited working capital and investment, marketing and distribution difficulties, restricted access to market opportunities and other factors, limited product quality, high labor and transportation costs, and regulatory uncertainties (Aprita, 2021). A significant challenge for MSMEs is the presence of high-quality and competitive companies in nearby areas, such as franchised convenience stores in rural and suburban areas, which negatively impact local MSMEs (Wibowo, 2018). Consumers often prefer shopping at these stores due to the quality, facilities, and convenience they offer, making it difficult for MSMEs, which typically have low capital, inadequate labor, and limited facilities, to compete. To address the issue of capital, which is a major constraint for MSMEs, the Indonesian government has implemented support policies, including special credit programs like the People’s Business Credit (KUR) during President Susilo Bambang Yudhoyono’s administration, evolving from earlier programs like KMKP (Fixed Working Capital Credit) and KIK (Small Investment Credit) (Nurani, 2019).

2.4 Credit

According to Banking Law No. 10 of 1998, credit involves providing money or equivalent securities based on a loan agreement between a bank and another party, requiring repayment within a specified period (Kasmir, 2019). Credit generally refers to confidence in the borrower’s ability to repay a certain amount in the future. In the banking industry, the process of granting credit involves evaluating five key factors, known as the “5C” principles: Character, Capacity, Capital, Collateral, and Conditions.

2.5 Previous Research

Dondokambey (2022) explored the impact of micro and small business loans on economic growth and poverty alleviation in Bitung City, finding a significant negative relationship between People’s Business Credit (KUR) and the number of poor residents, suggesting that the KUR program does not
effectively target MSME development. Setiani Sinulingga (2021) investigated the direct impact of MSME financing, foreign investment, and domestic investment on economic growth and unemployment in Central Kalimantan. The study found that MSME financing did not significantly affect economic growth, but foreign and domestic investments did. Pracoyo (2021) examined the impact of SME loans on the Indonesian economy, finding a positive effect on gross savings and the growth of MSMEs, highlighting the importance of credit in supporting these enterprises.

2.6 Research Hypothesis

The hypothesis posits that the growth of MSMEs drives economic development, as MSMEs play a crucial role in boosting the economy. Therefore, financing and capital are needed to expand these businesses, enhancing their contribution to economic growth. Credit serves as a production factor essential for output creation, whether in goods or services. Access to financial facilities is a gateway for businesses to become more developed and productive (Taujirrahman, 2020).

H0: It is hypothesized that MSME credit has a positive and significant impact on economic growth.

3. RESEARCH DESIGN AND METHOD

3.1. Type of Research

This study employs a quantitative approach, utilizing secondary data obtained from official sources such as the Central Statistics Agency, Bank Indonesia, the Ministry of Finance, and other official websites. The research builds on previous literature reviews related to credit feasibility or MSME economic growth in various regions or country groups. The quantitative approach is an empirical research method where data is collected, processed, analyzed, and presented in numerical form, rather than narrative, aiming to measure something precisely. The discussion focuses on the results of data processing, which are then systematically and objectively presented according to the research objectives (Ansori, 2020).

3.2. Scope of Research

The study covers the period from 2015 to 2022, using quarterly data. The data used includes MSME credit and the Constant Price GRDP of Central Sulawesi. The data used in this research are sourced from Bank Indonesia and the Central Statistics Agency of Central Sulawesi.

1. Field Research: The author conducted research at locations that provide the necessary secondary data, such as Bank Indonesia and the Central Statistics Agency.
2. Library Research: To build a strong theoretical foundation, the author conducted literature research using books, scientific articles, journals, periodicals, internet data, and other related documents.
3. Secondary Data: The quarterly data used in this study, covering MSME credit and GRDP from 2015 to 2022, were obtained from Bank Indonesia Central Sulawesi and the Central Statistics Agency Central Sulawesi.

3.3. Data Analysis Method

The author used regression analysis to process the research results. Regression is defined as the average relationship between variables. It is a statistical technique used in finance to determine or analyze the nature of the relationship between a dependent variable and one or more independent variables. The mathematical model used is:

\[ Y = a + bX_i + e \]
Information:
Y = Economic Growth (GRDP)
X₁ = MSME Credit
a = Constant or Y-intercept
b = Regression coefficient or beta
c = Residual or error term

The research also includes the following tests:

1. T-Test: This test is conducted to determine the relationship or influence between individual independent variables and the dependent variable.
2. F-Test: This test shows the relationship or influence of independent variables on the dependent variable.
3. Coefficient of Determination (R²): This is used to determine how well the independent variables explain the dependent variable. Since there are more than two variables in this study, the Adjusted R-squared is considered.

3.4. Variables Measurement

1. Economic Growth: Economic growth is the increase in an economy’s ability to produce goods and services over time. It is typically measured using Gross Domestic Product (GDP) or Gross Regional Domestic Product (GRDP). Economic growth is measured as the percentage change in real GDP or GRDP from one period to the next. In this study, the data used are quarterly GRDP figures expressed in billions of rupiah from 2015 to 2022.
2. MSME Credit: MSME credit refers to the financing facilities provided by financial institutions to micro, small, and medium enterprises (MSMEs) to support their operations, business development, or investment. The goal of these loans is to increase production capacity, expand markets, and enhance the competitiveness of MSMEs. The feasibility of MSME credit is measured based on several key indicators that can be quantified and analyzed. In this study, the data used are quarterly MSME credit figures expressed in billions of rupiah from 2015 to 2022.

4. RESULT AND DISCUSSION

4.1. Result

This section provides an overview of the collected data, data processing results, Gross Regional Domestic Product (GRDP) analysis, and MSME credit analysis. The discussion follows a systematic order: statistical description, classical hypothesis testing, and data analysis through simple linear regression results.

**GRDP at Constant Prices in Central Sulawesi, 2015-2022**

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</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>19637</td>
<td>21895</td>
<td>23095</td>
<td>24607</td>
<td>26216</td>
<td>32747</td>
<td>35097.62</td>
<td>39018.34</td>
</tr>
<tr>
<td>II</td>
<td>20072</td>
<td>23060</td>
<td>24580</td>
<td>26083</td>
<td>27717</td>
<td>32720</td>
<td>38172.37</td>
<td>42429.11</td>
</tr>
<tr>
<td>III</td>
<td>21025</td>
<td>22619</td>
<td>24673</td>
<td>26391</td>
<td>28014</td>
<td>33650</td>
<td>37375.49</td>
<td>44526.75</td>
</tr>
<tr>
<td>IV</td>
<td>22257</td>
<td>23107</td>
<td>25204</td>
<td>26537</td>
<td>29056</td>
<td>35035</td>
<td>39204.33</td>
<td>46585.77</td>
</tr>
</tbody>
</table>

Source: Central Statistics Agency, 2024

The data in Table 1 indicates a continuous increase in GRDP per quarter in Central Sulawesi, highlighting the economic welfare of the region’s population. The GRDP values vary across different
regions, reflecting the regional differences in producing goods and services, which pose challenges to achieving optimal economic growth.

**MSME Credit in Central Sulawesi, 2015-2022**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>6971.2</td>
<td>7311.12</td>
<td>7968.04</td>
<td>9411.77</td>
<td>10358.97</td>
<td>11363.71</td>
<td>11232.14</td>
<td>13073.81</td>
</tr>
<tr>
<td>II</td>
<td>7140.76</td>
<td>7831.93</td>
<td>8268.94</td>
<td>6143.08</td>
<td>9611.73</td>
<td>10919.22</td>
<td>11464.4</td>
<td>13407.57</td>
</tr>
<tr>
<td>III</td>
<td>7164.72</td>
<td>7820.95</td>
<td>8474.17</td>
<td>6351.61</td>
<td>10993.1</td>
<td>11267.3</td>
<td>10801.33</td>
<td>14617.77</td>
</tr>
<tr>
<td>IV</td>
<td>7435.46</td>
<td>7914.16</td>
<td>8755.2</td>
<td>10060.85</td>
<td>10916.73</td>
<td>11110.7</td>
<td>11851.46</td>
<td>15103.2</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, 2024

The data in Table 2 shows the increasing role of MSMEs in Central Sulawesi in value creation across various sectors from 2015 to 2022. MSMEs are particularly strong in the tertiary sector, including industries such as agriculture, plantations, livestock, fisheries, and mining.

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>716.3626</td>
<td>2300.963</td>
<td>0.311332</td>
<td>0.7577</td>
</tr>
<tr>
<td>X</td>
<td>2.936547</td>
<td>0.228718</td>
<td>12.83916</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The table 3 indicates that the sample size or N value in this test is 32, derived from the quarterly MSME Credit and GRDP data of Central Sulawesi from 2015 to 2022.

**Table 5. Adjusted R-Squared Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.846031</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.840898</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>3024.46</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>2.74E+08</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-300.8371</td>
</tr>
<tr>
<td>F-statistic</td>
<td>164.8441</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: EViews 12

According to Chin (1998), an R-squared value is considered strong if it is greater than 0.67, moderate if it is between 0.33 and 0.67, and weak if it is between 0.19 and 0.33. The Adjusted R-
Squared value of 0.840 indicates a strong influence of MSME credit on economic growth in Central Sulawesi for the period 2015-2022.

Regression Equation

\[ Y = a + bX_1 + e \]

\[ Y = 716.3626 + 2.936547 \times X \]
\[ Y = 719.299147 \]

4.2. Discussion

The results of the simultaneous F-test on the independent variables, which include micro and small business loans, indicate an R² value of 0.840. This suggests that the quality of MSME credit strongly influences economic growth in Central Sulawesi, with other external factors accounting for the remainder. The t-test results show a statistical significance level of 0.000 for the MSME credit variable (X). With a significance level of \( \alpha = 0.05\% \), the table value was 12.839, and the absolute t-statistic was less than the table value (0.000 < 0.05), indicating that the null hypothesis (H0) is accepted. This means that the MSME credit variable (X) has a positive influence on economic growth in Central Sulawesi (Y).

The regression analysis confirms that MSME credit positively and significantly impacts economic growth and GRDP. This indicates that providing MSME credit helps business owners expand their operations, increase employment, and improve output per business unit and per worker, which in turn drives economic growth. These findings are consistent with previous research by Yeni Nuraeni (2021), which highlighted that Morowali Regency in Central Sulawesi, known for having the highest nickel content in Indonesia, has developed the PT. IMIP industrial area, poised to become the largest nickel company in Indonesia. The study revealed various MSME opportunities that can be developed in Morowali, supported by both public and private institutions, emphasizing the need to strengthen local economic institutions like cooperatives and BUMDES (village-owned enterprises).

Figure 1. Number of SMEs in 13 districts in Central Sulawesi

Source: (KEMENKOPUKM, 2024)

According to the Ministry of Cooperatives and MSMEs (2024), the number of MSMEs in Central Sulawesi reached 102,986 units in 2022, representing more than one-fourth of Palu City’s population in 2023 and distributed across 13 regencies/cities. Central Sulawesi has significant local/domestic advantages that can be further utilized by micro, small, and medium enterprises. These advantages are primarily in the fisheries, non-timber forestry, and agriculture sectors. Nearly 90% of these MSMEs are located in Palu, the provincial capital, and are primarily involved in trade, selling...
industrial products made from rattan with various modifications, such as mirrors, flower pots, decorative lamp boxes, fried onions (a local specialty), chocolate, coffee, and various types of chips (Teten Masduki, 2022). This research supports the slow growth model theory, which posits that capital investment significantly influences output. In the production function, capital, including MSME credit, is a key input for maximizing output. Mankiw (2006) explains that MSME credit is viewed as an investment in productive activities, leading to positive impacts on national output. The study also aligns with the findings of Sipur and Almastoni (2021), which demonstrate that MSMEs significantly contribute to economic growth in Indonesia. As MSME activities increase, so does the economic sector, leading to overall economic growth. Although MSMEs tend to grow at varying rates, their contribution to economic growth can still increase. Indonesia’s economic growth has also improved, despite fluctuations in growth rates.

5. CONCLUSION

Based on the research findings and discussion, it can be concluded that the statistical test results indicate that the amount of MSME credit significantly contributes to economic growth, with a value of 0.000, which is lower than the 5% significance level. This demonstrates that the amount of MSME credit in Central Sulawesi has a significant positive impact on the Gross Regional Domestic Product (GRDP), thereby confirming the hypothesis H0 that MSME credit has a positive and significant effect on economic growth. The results also show that the increase in MSME credit significantly positively impacts economic growth in Central Sulawesi from 2015 to 2022.

Several recommendations are provided based on the findings. Future studies should include a larger dataset to obtain more comprehensive results and allow for long-term analysis, considering that this study was limited to an eight-year period. Future research should also consider including additional variables, as many factors could influence regional economic growth. As financial intermediaries, banks are encouraged to provide more inclusive financial access to MSMEs. Various banking supports are necessary for business sustainability, including regulations/policies, incentives, inclusive finance, and consumer education/literacy. The study suggests the following policy implications: there should be more inclusive financial access, especially in providing capital loans and financing to MSMEs. The banking sector is expected to play a role in meeting the financial needs of MSMEs. Additionally, the GRDP influences its contribution to MSME credit. The limitations of this study include the relatively short time frame of eight years, with data that is not recent, which may be updated with newer data. The data used is incomplete and may not fully represent the actual situation. Furthermore, the study only focused on the impact of MSME credit without considering other economic variables that may also significantly influence economic growth, such as infrastructure investment, government policies, or external factors.

REFERENCES


