Effects of Inflation, Sharia Bank Financing, and Conventional Bank Credit on Gross Regional Domestic Product

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ABSTRACT

This research aims to know the impact of inflation, conventional BPR loans, and sharia BPR financing on the regional Gross Domestic Product (GDP) of Southern Kalimantan Province. This research uses secondary data (time series) for 2017-2021, collected from the official website of the Southern Kalimantan Statistical Centre and the Financial Services Authority. The study used a double linear regression analysis method using the Eviews-12 application. This study concluded that in part inflation of the region has no impact on the regional GDP, in part conventional BPR loans and sharia BPR financing have a significant positive effect on the regional GDP, and simultaneously the variable inflation, conventional BPR loans and sharia BPR financing has an impact on regional GDP of the Province of Southern Kalimantan.

Keywords : GDP; Inflation; Conventional BPR Credit; Sharia BPR Financing; UMKM

ABSTRAK


Kata Kunci : PDRB; Inflasi; Kredit BPR konvensional; Pembiayaan BPR Syariah; UMKM
INTRODUCTION

The banking sector has a strong contribution to encouraging economic growth in a region. The banking sector also has a driving role in the development of the real sector with high capital accumulation and technological innovation. To be precise, in the banking zone that can mobilize savings. They can provide borrowers with a wide array of high-quality financial instruments and low leverage. Thus it can increase investment and regulate the pace of economic development in a region. In other cases, asymmetric information can occur, manifested in the form of high transaction costs and data costs in financial markets that can be reduced or minimized if the banking sector works effectively (Inggrid, 2006).

One good parameter that can be used to find out how the economic condition in the region at a certain time is data derived from Gross Regional Domestic Product (GDP), based on constant prices or based on prevailing prices. Generally, GRDP is the output of all business activities in a particular area that have more value, or the total value of goods or services that have been created by the business activities of economic units. GDP based on prevailing prices is a description of the added value of goods or services calculated based on prices prevailing each year, while GRDP based on constant prices shows the added value of goods or services calculated based on prices prevailing in a certain period as a basis (Prishardoyo, 2008).

South Kalimantan’s economy has been affected by the Covid-19 pandemic. Since the second quarter of 2020, South Kalimantan’s economy on a year-on-year (YOY) basis, or compared to the same period in 2019, has continued to decline. Economic growth in the second quarter decreased to -2.86%. It got worse in the third quarter, which was -4.93%. Then, it improved although it was still relatively low in the fourth quarter at -2.94%. If totaled annually, the economy of South Kalimantan in 2020 decreased by 1.81%. This decrease is quite large from 2019, when South Kalimantan’s economic growth grew by 4.08%, (Central Statistics Agency, 2021).

The indicator that affects GDP is inflation (Sukirno, 2016). Inflation has always been a concern for many audiences, both the government itself and academics such as researchers, especially in developing countries such as Indonesia, (Masdarika &; Effendi, 2022). So far, inflation has also become one of the factors that greatly disrupt the economy. If inflation only occurs in the short term, it may benefit producers because it raises the price level and producers will increase the amount of production. GDRP and Inflation have a effect on local revenue (Dimas Priyono, 2021). However, what is a problem in Indonesia and especially South Kalimantan itself is that inflation is very complex, high, and unstable, (Central Statistics Agency, 2021).

Economic independence in a region will be realized if there are financial institutions such as BPR that finance MSMEs in Indonesia. Based on the policy made by Bank Indonesia (BI) with No. 23/13/PBI/2021 concerning the Macroprudential Inclusive Loan or financing Ratio for Conventional Commercial Banks, Sharia Commercial Banks, and Sharia Business Units which contains “to improve the intermediation function that is equitable and quality, it is necessary to develop access to financing or editing inclusively and develop MSME units and people with low income, by establishing a macroprudential inclusive credit and financing ratio”.

MSMEs (Micro, Small, and Medium Enterprises) contribute greatly to Indonesia's economic growth when viewed from the aspects of increasing job opportunities, sources of income, economic development in rural areas, and non-oil and gas export growth. According to the Ministry of Cooperatives and Small and Medium Enterprises in March 2021, the total MSMEs touched 64.2 million and contributed to GDP (Gross Regional Domestic Product).
Domestic Product) of 61.07% or equal to Rp. 8,573.89 trillion. Then, MSMEs can also attract 97% of the total workforce and 60.42% of total investment in Indonesia (Junaidi, 2023).

Seeing the important role of MSMEs (Micro, Small, and Medium Enterprises) causes the government to participate in its development. Government participation efforts in helping the development of MSMEs are in the form of providing revolving funds and facilitating MSME establishment licensing. In addition, Financial Institutions (Financial Institutions) also take a role in the development of MSMEs by providing special loans to MSMEs.

Based on the Law of the Republic of Indonesia no. 10 of 1998 concerning the Banking Sector, according to its type, banks are divided into two, namely Commercial Banks (BU) and People's Credit Banks (BPR). The existence of Conventional and Sharia Rural Banks during the rise of Commercial Banks, BPR, and BPRS has an important meaning because it has a specific market segment to support the productivity of the real sector economy as a support for the economic rate or growth of a region (Syathiri & Adhitama, 2022).

With the regulation made by Bank Indonesia in PBI No. 23/13/PBI/2021, it can be seen that the contribution of MSMEs to the country's economic growth, starting from the middle level to the shift to Industrial Revolution 4.0. In theoretical studies, it has been explained that one of the factors that can affect income is the amount of capital used. Out there, BPR and BPRS Financial Institutions become supporting institutions for financing or lending MSME units in Indonesia and this also runs as a means of strategy from Indonesian banks to expand the economic impact on the economy of people from the lower, middle, and to upper layers.

Ramadhan (2014) in his research shows the results that the amount of conventional banking credit and the amount of Islamic banking financing have a significant effect on Gross Regional Domestic Product. The difference between the research conducted by Ramadhan and this research is in its scope, this previous research used a wider scope, namely all provinces in Indonesia, while this research only focused on South Kalimantan Province. Research by Zainuddin & Ria, (2022) shows that inflation has no significant influence on GDP in Jakarta. The difference between the research conducted by Zainuddin & Ria and this research is in terms of data type, this study uses time series data while the research conducted by Zainuddin & Ria uses Panel data. In addition, this previous study used an annual period from 2009-2019 while this study used a monthly period from 2017-2021.

The inflation variable has a positive and significant effect on GDP (Silaban & Rejeki, 2020). However, other results show different things, as stated by Herlina & Permata Rahmi's research, (2022) shows that inflation does not have a significant positive effect on Gross Domestic Product (GDP) in Indonesia. The difference between the research conducted by Herlina & Permata Rahmi with this research in the method used, this previous research used the Ordinary Least Square method while this study used the Multiple Linear Regression method. shows the results that the distribution of Islamic Bank Financing to MSMEs has a significant effect on GDP. The difference between the research conducted before and this research can be seen in the type of research, this previous research was a descriptive-qualitative type of research, while this research was of a quantitative type.

There is a significant positive relationship between disbursed working capital credit and GRDP (Budiyanti, 2018). Research by Taujiharrahman et al., (2021) shows the results that financing for MSMEs has a significant effect on GDP. The difference between the research conducted before and this research can be seen from the method used, this
previous research used the Comparative method while this study used the Multiple Linear Regression method.

Based on the data and description above, the author conducted this research to find out whether regional inflation and total BPR credit and BPRS financing affected South Kalimantan’s GRDP, therefore the author took the title “Effects of Inflation, Sharia Bank Financing, and Conventional Bank Credit on Gross Regional Domestic Product”.

RESEARCH METHOD

The study conducted between 2017 and 2021 employed multiple linear regression techniques. Monthly data was utilized, encompassing inflation rates, conventional BPR credit, sharia BPR financing, and the Gross Regional Domestic Product (GRDP) of South Kalimantan Province. This quantitative research sourced its data from the Central Statistics Agency and the Financial Services Authority. Secondary data collection involved examining and documenting relevant documents, websites, or journals containing information, financial statistics, and other pertinent data related to the study. The dataset primarily consisted of time series data spanning from 2017 to 2021.

To delve deeper into the relationships between independent and dependent variables, the study employed multiple linear regression analysis. This methodological approach was chosen to ascertain the nature and strength of these relationships, using the following Formula 1.

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon
\]

Based on Formula 1, where \(Y\) represents the dependent variable, while \(X_1, X_2, X_3\) denote the independent variables (inflation data, conventional BPR credit, sharia BPR financing, and GRDP data respectively), \(\beta_0\) is the intercept, \(\beta_1, \beta_2, \text{ and } \beta_3\) are the coefficients associated with each independent variable, and \(\epsilon\) represents the error term.

RESULTS AND DISCUSSION

Results

The Gross Regional Domestic Product (GRDP) of South Kalimantan generally shows a consistent increase during period of 2017 to 2022. The trend of GRDP is displayed in Figure 1.
Based on Figure 1, the Gross Regional Domestic Product (GRDP) of South Kalimantan consistently increased from 2017 to 2019. However, in 2020, the GRDP experienced a decline, which rebounded in 2021 and continued to rise through 2022. The GRDP generally showed annual growth, but the decline in 2020 was due to the impact of the COVID-19 pandemic. The pandemic not only affected the GRDP but had widespread impacts on everything.

![Figure 2. Inflation in South Kalimantan](image)

Based on Figure 2, inflation in South Kalimantan experienced fluctuations from 2017 to 2022. In 2017, the inflation rate was 3.82%, which decreased by 1.19% to 2.63% in 2018. The inflation rate increased again in 2019, reaching 4.01%, then declined by 2.33% to 1.68% in 2020. In 2021, inflation rose to 2.55%, followed by a significant increase in 2022, with the rate reaching 6.99%.

![Figure 3. Total of Financing and Credit of BPRS and BPR](image)

According to Figure 3, the total financing by Rural Credit Banks (BPR) and Sharia Rural Credit Banks (BPRS) showed a relatively stable increase from 2017 to 2020. In 2021, however, the financing experienced a slight decline. In 2022, total financing by BPR and BPRS saw a substantial increase.
Classical Assumption Test

This research uses primary data and it is necessary to test the data results. The following Table 1 presents the classic assumption test used.

<table>
<thead>
<tr>
<th>Table 1. Classical Assumption Test</th>
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<tbody>
<tr>
<td><strong>Criterion</strong></td>
</tr>
<tr>
<td>Normality Test</td>
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<tr>
<td>Multicollinearity Test</td>
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<td></td>
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<td></td>
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<tr>
<td>Heteroscedasticity Test</td>
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<tr>
<td>Autocorrelation Test</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Based on Table 1, normality testing can be analyzed by looking at the Jarque-Bera test, and the Jarque-Bera value of 1.137975. The value is greater than 0.05 (5%), so it can be interpreted that the data is normally distributed. The test aims to stay away from habits during the decision-making process regarding the influence of the partial test of each independent variable on the dependent variable if VIF < 10 means that there is no multicollinearity. The result of X1 (Inflation) has a VIF value of 1.008489. If the value is less than 10.00, then the variable X1 means that multicollinearity does not occur. Then, X2 (Conventional BPR Credit) also has a VIF value of 6.908135 > 10.00, then the variable X2 does not occur multicollinearity and the last X3 (Sharia BPR Financing) has a VIF value of 6.923671 > 10.00, then the variable X3 also does not occur multicollinearity.

A good regression model is one in which homoscedasticity or heteroscedasticity does not occur, (Santoso, 2012). From the result of the data processed, the Obs*R-Square value is 1.962047 with the value of Prob. Chi-Square of 0.1613. This value can be stated that the regression model has met the heteroscedasticity test due to the value of Prob. Chi-Square > 0.05 (5%), so from the table it is obtained that the value of 0.1613 > 0.05 or 16.13% > 5%, it can be ascertained that the variable is free from heteroscedasticity problems which means that the classical assumption test has been fulfilled.

The autocorrelation test aims to determine whether or not there is a correlation between confounding variables in a certain period with confounding variables in a certain period with previous variables. For autocorrelation testing with Prob values. Chi-Square > significance level of 0.05 (5%), that the Obs*R-Square value is 5.517851 with Prob. Chi-Square of 0.0634. This value represents that the regression model has met the autocorrelation test because it has Prob. Chi-Square > a significance level of 0.05 (5%), with a value of 0.0634 > 0.05 or 6.34% > 5%. So from these results, it is said that the variable is free from autocorrelation problems, which means that the classical assumption test is fulfilled.

Multiple Linear Test

In the analysis of the determinant coefficient test where if the value of the coefficient of determination is equal to one or close to one, it means that the regression results obtained have a strong relationship, on the other hand, if the value of the determinant coefficient has zero or close to zero, it means that there is no good relationship. The following Table 2 presents the results of the coefficient of determination test.
Based on table 2, it has shown an Adjusted R-square value of 0.676524 meaning that Gross Regional Domestic Product (Y) can be explained by inflation (X1), conventional rural bank loans (X2), and Islamic rural bank financing (X3) of 67.65% while the remaining 32.35% is explained by other variables not studied in this research.

**Simultan Test**

This test is carried out to determine the magnitude of the influence of the independent variable on the dependent variable simultaneously. The test criteria are H0 rejected or H1 accepted with a probability value of F < α = 0.05. The following Table 3 presents simultaneous test results (F):

**Table 3. Simultaneous Test Results (F-test)**

<table>
<thead>
<tr>
<th>F-Statistic</th>
<th>Prob. F-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.13122</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

*Source: Data processed, 2023*

From Table 3 it can be seen that the regression results in Prob. F is 0.000000 with a = 0.05. From these results, it can be said that Prob. F < α or 0.000000 < 0.05 then it can be ascertained that the f test has been met. Variable X (inflation, conventional rural bank credit, and Islamic rural bank financing) simultaneously have a significant effect on the GDP variable (Y) so the first hypothesis in this study is accepted.

**Partial Test**

The T-test is used to see whether the independent variables, namely inflation, conventional BPR credit, and sharia BPR financing affect the dependent variable, namely South Kalimantan’s GRDP, then the test criteria are H0 rejected or H1 accepted with a probability value of t < α = 0.05. The following Table 4 presents Partial test results (t).

**Table 4. Partial Test Results (T-test)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>T-statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Std. error</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>9222101.0</td>
<td>433912.7</td>
<td>2125335</td>
</tr>
<tr>
<td>Inflation (X1)</td>
<td>-21159.62</td>
<td>77537.82</td>
<td>-0.272894</td>
</tr>
<tr>
<td>Conventional BPR Credit (X2)</td>
<td>3.283037</td>
<td>1.436958</td>
<td>2.284713</td>
</tr>
<tr>
<td>Sharia BPR Financing (X3)</td>
<td>9.702699</td>
<td>4.703928</td>
<td>2.062680</td>
</tr>
</tbody>
</table>

*Source: Data processed, 2023*

Based on Table 4, t-inflation statistics of -0.272894 which has a profitability value of 0.7859 greater than 0.05 or 0.7859>0.05, it can be said that inflation does not affect the GDP of South Kalimantan Province. Meanwhile, the t-statistical value of conventional BPR loans is 2.284713 which has a profitability value of 0.0261 smaller than 0.05 or 0.0261 <
0.05, and the t-statistical value of sharia BPR financing of 2.062680 which has a
profitability value of 0.0438 smaller than 0.05 or 0.0438 < 0.05, it can be concluded that
conventional BPR loans and sharia BPR financing have a significant effect on the GRDP of
South Kalimantan Province.

Discussion

The Effect of Regional Inflation on Gross Regional Domestic Product

The results of research through t-test for t-statistics show that there is no
significant influence of inflation variables on South Kalimantan’s Gross Regional Domestic
Product (GRDP). According to Malik & Chowdhury, (2001), Inflation and GDP have a
positive relationship, if the inflation rate tends to be high, then economic growth,
investment, and export levels will be negatively affected.

However, in this case, it is not in line with the theory where inflation does not
influence Gross Regional Domestic Product (GDP) due to fluctuating inflation rates, such
as in a certain year there is very high inflation and then in another year, inflation drops
sharply and drastically so that therefore the movement of inflation does not influence
Gross Regional Domestic Product (GDP). This research is supported by the results of
research by Zainuddin &; Ria, (2022) which shows that inflation does not have a significant
effect on GDP. In addition, research conducted by Herlina & Permata Rahmi, (2022) also
shows the same results that inflation does not affect GDP.

The Effect of Conventional BPR Credit on Gross Regional Domestic Product

The results of research through t-tests for t-statistical values show that there is a
positive and significant influence of conventional BPR credit variables on South
Kalimantan’s Gross Regional Domestic Product (GRDP). This means that the greater the
conventional BPR credit disbursed will increase the GRDP in South Kalimantan Province.
This research is supported by research by Ramadhan, (2014), which shows the results that
the total financing of Sharia rural banks has a positive and significant influence on GDP. In
addition, this result is also supported by Hasan’s research, (2019) which says that
conventional BPR loans affect economic growth.

The Effect of Sharia BPR Financing on Gross Regional Domestic Product

The results of research through t-tests for t-statistical values show that there is a
positive and significant influence of sharia BPR financing variables on South Kalimantan’s
Gross Regional Domestic Product (GRDP). This means that if the financing distributed by
Sharia rural banks is higher, it will make the GDP growth rate in South Kalimantan
Province will increase.

This also follows Schumpeter’s theory and is related to each other with the theory
of production function. In the finance-led growth or supply-leading view, Schumpeter’s
theory states that the financial sector spurs economic growth. In Islamic banking, the
support provided to economic growth is carried out with an intermediary function
between banks that will distribute funds obtained from the results of collecting from
customers who have excess funds to people or customers who need funds. The
distribution of these funds follows the rules of economic sectors that exist in the general
public or the public. Then the credit and financing is used either for personal consumption,
investment, or for working capital. The higher the credit and financing provided for
economic activities, the more impact on economic growth (Hasyim, 2016).
CONCLUSION

Based on the data analysis, it can be concluded that the inflation variable does not affect the Gross Regional Domestic Product (GRDP) when considered individually. However, rural sharia bank financing and rural bank credit have a positive and significant impact on the GRDP in South Kalimantan Province during the period from 2017 to 2021. The greater the BPRS financing and BPR credit disbursed will increase the GRDP in South Kalimantan Province. Simultaneously, the variables of inflation, rural sharia bank financing, and rural bank credit collectively influence the GRDP in South Kalimantan Province from 2017 to 2021. If these variables are used together to influence GRDP in South Kalimantan, changes will occur, hence the government must safeguard inflation and investments from the banking sector.

RECOMMENDATION

Based on the results obtained from this research, there is no significant influence of inflation variables on South Kalimantan’s Gross Regional Domestic Product (GRDP). Then the variables of conventional BPR credit and sharia BPR financing stated the results that there was a significant positive influence on the Gross Regional Domestic Product (GRDP) of South Kalimantan. Therefore, related parties must pay attention to independent variables that have a significant effect on boosting the rate of South Kalimantan’s Gross Regional Domestic Product (GRDP).

Based on the results of the research that has been conducted, researchers have suggestions in the form of first, for BPR &BPRS South Kalimantan, by expanding the distribution of financing to MSMEs, this research can be used as study material and useful information to increase Gross Regional Domestic Product (GRDP) in South Kalimantan Province. For future researchers, who are interested in researching the same research, it is hoped that in the future it will not only focus on inflation variables, conventional BPR credit, and Islamic BPR financing because many other variables have an influence on the Gross Regional Domestic Product (GRDP) in South Kalimantan Province.

REFERENCES


