The Effect of Islamic Financial Inclusion, Urbanization, Inflation, and GDP on Poverty in Indonesia

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ABSTRACT

This research aims to assess the influence of Islamic financial inclusion, urbanization, inflation, and GDP on the alleviation of poverty in Indonesia. The methodology employed is quantitative, utilizing secondary data in a panel data format spanning the period from 2018 to 2022. A total of 165 samples were gathered, and the data underwent processing through Eviews 10. The findings indicate that individually, the Sharia Financial Inclusion Index (IIKS), inflation, and GDP do not exhibit a significant impact on poverty reduction in Indonesia. Conversely, urbanization has a noteworthy and negative effect on poverty reduction in Indonesia. When considered collectively, the IIKS, urbanization, inflation, and GDP variables jointly exert a substantial influence on poverty reduction in Indonesia, reflected in an Adjusted R-squared value of 98%, while the remaining 2% is attributed to other unexplored factors in this study. For future research endeavors, it is advisable to introduce additional variables for a more comprehensive and profound exploration of this subject.

Keywords: Islamic Financial Inclusion, Urbanization, Inflation, GDP, Poverty

Introduction

Indonesia’s economy is the largest in Southeast Asia and it is home to the fourth-largest population in the world (Bank, 2022). Indonesia is the biggest economy in Southeast Asia, but unfortunately, the welfare of the entire population is yet to be achieved. Poverty remains a big challenge in the country’s development process and it is an issue that needs to be addressed on an urgent basis (Adams and Atmanti, 2021). Based on the report by the Central Bureau of Statistics in 2023, the number of poor individuals in Indonesia has decreased from the previous year, with 26.50 million in 2021 and 26.36 million in 2022. However, the decrease is still relatively small and slow, which means that there is still a need for more efforts to be made to overcome poverty in Indonesia (BPS, 2023).

Figure 1
Poverty Rate in Each Province

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https://doi.org/10.14421/jmes.2023.022-06
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The data presented in figure 1 indicates that the poverty rate was high across all regions during the period of 2018-2022, which can have adverse effects on the economy of those regions. To address this issue, the Indonesian government has taken various measures to reduce the number of people living in impoverished conditions. One such measure is financial inclusion (Adams and Atmanti, 2021). Financial inclusion is crucial for reducing poverty and improving well-being, according to the World Bank (Keuangan, 2017).

Financial inclusion can benefit both individuals and society. In this case, financial inclusion can help reduce poverty and inequality by encouraging people to use their money more efficiently, invest for the future, and manage risk (Bayar and Gavrilletea, 2018).

The results of SNLIK 2022 indicate that the financial literacy index for the people of Indonesia has increased from 38.03% in 2019 to 49.68%. Additionally, the financial inclusion index has also increased from 76.19% in 2019 to 85.10% (OJK, 2022). Based on the OJK data in 2022, there are a total of 499 head offices and 1,345 sub-branch offices for Sharia Commercial Banks as of January 2022. Additionally, there are 177 head office units and 201 sub-branch office units for Sharia Business Units (Rizaty, 2022).

According to the Financial Services Authority (OJK) 2023, as of June 2022, the market share of Islamic finance increased by 10% compared to the previous year. However, despite the increase, the literacy index is still far below the national financial literacy index which reached 49%. According to the results of the National Survey of Financial Literacy and Inclusion (SNLIK) in 2022, the Islamic finance index only reached 12.12%, far behind the conventional finance index (Finance, 2023). According to the results of research conducted by Maulidina et al. (2023) revealed that financial inclusion has no effect on poverty levels. However, according to Kusuma & Indrajaya (2020); Sari & Amaliah (2021); Adams & Admanti (2021); Williams et al. (2017) indicate that financial inclusion has a major impact on poverty levels.

One of the variables used to reduce poverty is urbanization. Urbanization in Indonesia continues to grow rapidly, largely because the shift from rural to urban areas and better economic opportunities in cities have helped many Indonesians escape poverty and join the middle class (World Bank, 2018).

According to Todaro’s theory, urbanisation has the potential to reduce poverty levels. This is because cities offer better income opportunities compared to villages due to the concentration of the economic system progress. As a result, there are more job opportunities available in urban areas, and the income earned there is significantly higher than in rural areas. This leads to the development of a better economy in the city (Harahap, 2018). In accordance with research conducted by Nguyen et al. (2020) and Minh et al. (2021), urbanisation has been found to have both negative and positive effects on poverty, with Williams et al. (2017) reporting its impact on poverty alleviation.

Inflation is a variable that is often associated with poverty. It refers to the economic state where prices of goods and services increase over time. As this happens, the value of the currency decreases, causing people with low incomes to lose purchasing power. Consequently, their overall income decreases as inflation rises (Rahma et al., 2022). According to research conducted by Waseso and Muhamad (2020), Imelia (2012), and Fitri (2012), inflation has a negative impact on poverty rates. However, the results of a study by Rahmat et al. (2022) show that inflation has a positive effect on poverty.

Urbanisation can have a positive impact on a country’s economy by increasing Gross Domestic Product (GDP) per capita and reducing poverty levels, as reported by the World
Bank in 2018. However, in Indonesia, the effect of urbanisation on increasing per capita income has not significantly improved people’s welfare, preventing them from moving out of poverty (Chen et al., 2019). In contrast to the research of Suliswanto (2012), which found that GDP has no effect on poverty reduction, other studies such as those conducted by Rahmat et al. (2022) and Mustika (2011) have shown that GDP has a significant impact on poverty levels.

This study refers to research conducted by Hadijah and Sadali (2020) on the effect of urbanisation on poverty reduction in Indonesia, where researchers only use urbanisation as an independent variable in contrast to the research to be conducted, namely by adding Islamic financial inclusion variables, inflation, and GDP to be a novelty in this study. The Islamic financial inclusion variable in this study is measured by 3 dimensions, namely, the dimension of Islamic banking penetration, the dimension of the availability of Islamic financial services, and the dimension of Islamic banking usage. Based on the above background, the authors are interested in knowing more about the effect of Islamic financial inclusion, urbanisation, inflation and GDP on poverty in Indonesia.

Literature Review and Hypothesis

Poverty

Poverty is a complex phenomenon that arises due to a lack of growth or unequal distribution of resources. Poverty is a multidimensional economic issue that has social and political implications. The primary objective of development policies is to eliminate poverty and inequality while promoting sustainable development. These policies should focus on the economic growth of the country to generate more job opportunities and livelihoods, and also promote democracy and respect for human rights (Tarigan, 2016). The poverty rate in Indonesia is measured as a percentage.

Islamic Financial Inclusion

Financial inclusion pertains to the equitable provision of affordable financial services to all sectors of the community. This concept is crucial to a country’s efforts to enhance the well-being of its citizens by expanding the financial sector, particularly for those who lack knowledge or access to traditional banking services (Suirdarma, 2019).

Index of Financial Inclusion (IFI), introduced by Sarma in 2012, serves as a valuable instrument for assessing the degree of financial inclusion. The IFI measures various aspects of inclusiveness, including banking penetration, available services, and usage of the banking system. It is a multidimensional index that provides insights into the level of financial inclusion in a given area (Zahara et al., 2021).

The extent of Islamic banking penetration is determined by the count of individuals utilizing Islamic bank accounts. However, since we don't have the exact number of people who use such accounts, we calculate this by dividing the Third Party Funds by the total population and then multiplying it by 1,000 (Zahara et al., 2021).

\[
D_1 = \frac{\text{Total deposits of Islamic banking (year}_t\text{)}}{\text{Total Population (year}_t\text{)}} \times 1,000
\]

The dimension of availability of Islamic financial services, to calculate this dimension, the total population is divided by the quantity of banking service offices, and multiplied by 100,000 adults in Indonesia (Puspitasari et al., 2020).
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\[ D_2 = \frac{\text{Number of Islamic bank service offices (year}_t\text{)} \times 100.000}{\text{Total Population (year}_t\text{)}} \]

The utilization dimension comprises two main indicators: the quantity of bank loan accounts per 1,000 individuals and the count of bank borrowers per 1,000 adults (Azimi, 2022).

\[ D_3 = \frac{\text{Total Islamic Financing (year}_t\text{)}}{\text{PDRB Value (year}_t\text{)}} \times 1.000 \]

The final formula for the Islamic financial inclusion index can be expressed as follows (Sarma, 2012):

\[ \text{IIKS} = \frac{1}{2} \left[ \sqrt{d_p^2 + d_a^2 + d_u^2} + \left( 1 - \sqrt{(1 - d_p)^2 + (1 - d_a)^2 + (1 - d_u)^2} \right) \right] \]

**Urbanization**

Urbanization is the phenomenon of individuals relocating from rural regions to urban areas leading to an increase in the urban population (Tauhid, 2013). Urbanization plays a significant role in promoting economic growth, reducing poverty, and enhancing human development (Koroso et al., 2021).

Urbanization is a social phenomenon that is triggered by various circumstances. One of the main factors is the scarcity of job opportunities in hometowns. Numerous individuals move from rural regions to urban centers in pursuit of employment to meet their fundamental necessities. Cities offer a wide range of employment opportunities, which are much more diverse than those available in rural areas (Haris, 2015). Urbanization plays a significant role in driving economic growth, reducing poverty, and promoting human development (Koroso et al., 2021). The urbanization rate can be calculated using this formula (Eva, 2018):

\[ U = \left( \frac{\text{JP}_k}{\text{JP}} \right) \times 100\% \]

Where: \( U = \text{Urbanization} \)
  \( \text{JP}_k = \text{Total Population City/Urban} \)
  \( \text{JP} = \text{Total Population} \)

**Inflation**

Rising production costs can result in inflation. When input prices increase, such as when there is a hike in the minimum wage, the cost of raw materials and other resources required for production also go up. This increase in production cost ultimately leads to an increase in the selling price of the product. Subsequently, people's purchasing power decreases, leading to a rise in poverty levels (Rahma et al., 2022). Inflasi is a common and continuous phenomenon of rising prices for goods and services, driven by demand surpassing supply (Lestari & Sapari, 2020).
Quantity Theory

The quantity theory is the most widely used theory of inflation. According to this theory, inflation only happens when the money supply, including both banknotes and notes, increases. However, if there is a crop failure, for instance, the increase in rice prices will naturally stop without any intervention if the money supply is not increased (Ningsih & Andiny, 2018).

Inflation is an economic condition where prices generally increase, which is considered as one of the factors affecting poverty. During inflation, the prices of goods and services tend to increase. As inflation increases, low-income groups experience a decrease in their purchasing power to buy their daily needs. This decrease in purchasing power leads to difficulties in fulfilling their daily needs, ultimately causing an increase in poverty (Rahma et al., 2022).

As per the above-mentioned definition, inflation does not cover the price hikes of individual items or the price increases caused by the failure of crops, for instance. The most widely used yardstick to measure inflation is the "Consumer Price Index". This index mirrors the expenditure patterns of consumers and is calculated based on the prices of a particular set of commodities (Nurasila et al., 2020).

Gross Domestic Product (GDP)

Indicators of success in achieving development progress can be seen from a country’s Gross Domestic Product (GDP). If the GDP has increased significantly every year, it can be concluded that the country’s development is good. This is because GDP represents a figure that can enhance the overall standard of living of the people and alleviate poverty (Mustika, 2011). One of the most effective economic indicators to measure a country’s economic progress is the Gross Domestic Product (GDP) (Suryanto & Kesuma, 2013).

Economic growth is a crucial factor in reducing poverty in a country. When there is an increase in economic growth in a region or province every year, it indicates that the government of that region or province has been successful in improving the welfare of its people by implementing measures to boost its economy.

This study utilizes annual data on Gross Regional Domestic Product (GRDP) at constant prices (ADHK) with a base year of 2022 to 2028. The data was obtained through the Central Statistics Agency (BPS).

Hypothesis

Based on the variable descriptions in the theory, the study’s thinking framework can be formulated:
In accordance with the outlined framework, the hypothesis for this study can be structured as follows:
H1: The inclusion of Islamic finance in Indonesia negatively impacts the reduction of poverty.
H2: The process of urbanization contributes positively to poverty reduction in Indonesia.
H3: Inflation has a positive effect on poverty reduction in Indonesia.
H4: Poverty reduction in Indonesia is negatively impacted by GDP.

Research Methods

This research uses secondary data in the form of panel data. Researchers obtained information for this study from various sources, including the Central Statistics Agency (BPS), the Financial Services Authority (OJK), and Bank Indonesia (BI). The focus of the research is on 33 Indonesian provinces from 2018-2022. The type of sample used in this research is purposive sampling technical. The criteria that are considered in determining the sample in this study are provinces that publish data related to the amount of Islamic banking deposits, the number of Islamic bank service offices, the amount of Islamic financing in OJK from 2018 to 2022. Provinces that publish related to poverty, population, inflation, GDP at BPS for the last 5 years, starting from 2018 to 2022, the total sample of this study amounted to 165 samples. The variable definitions in this study are:

a. The Islamic financial inclusion index is a combination of several dimensions of financial inclusion, namely penetration, availability, and use of the banking system (Umar, 2017). According to Sarma (2012), the calculation of each financial inclusion indicator is done one by one. After the results of each indicator or dimension are found, then combine the results using the final formula of the Islamic financial inclusion index.
b. Urbanisation or the movement of people from rural to urban areas is unavoidable (Harahap, 2018). The measurement of urbanisation uses the number of city residents divided by the total population, which data can be found at BPS.
c. Inflation is a continuous upward trend in the prices of common goods, which will inevitably increase the cost of production and reduce the profitability of the business (Maronrong & Nugrwoho, 2017). Inflation measurement can be seen at BPS using the consumer price index which is more often used as the basis for calculating inflation (Mayasari, 2021).
d. Gross Domestic Product (GDP) is the value of goods and services produced in the country in a given year (Silitonga, 2021). In this study, the data used is on the basis of constant prices (ADHK) obtained through the Central Statistics Agency (BPS).

The data analysis technique used is panel data multiple linear regression using classical assumption testing which is processed using Eviews 10, in the equation multiple linear regression is as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \]

Where:
- \( Y \) = Poverty
- \( X_1 \) = Sharia Financial Inclusion
- \( X_2 \) = Urbanisation
- \( X_3 \) = Inflation
- \( X_4 \) = GDP
\[ \alpha = \text{Constant} \]
\[ \beta_1, \beta_2, \beta_3, \beta_4 = \text{Regression Coefficient} \]

**Research Results**

**Descriptive Statistics Test**

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive Statistical Analysis Results</strong></td>
</tr>
<tr>
<td><strong>POVERTY</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Observation</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

Based on the outcomes of the descriptive statistical analysis detailed in table 1, this study encompassed 165 observational data samples. The analysis revealed that the dependent variable, poverty (Y), ranged from a minimum value of 1.229641 to a maximum value of 3.311637, with an average of 2.163845. The independent variable, Sharia Financial Inclusion Index (X1), exhibited a range from -4.605170 to -0.430783, with an average of -2.940371. The urbanization variable (X2) ranged from -1.021651 to 2.910719, averaging at 0.681823. The inflation variable (X3) spanned from -3.218876 to 2.005526, with an average of 0.740149. Lastly, the GDP variable (X4) ranged from 0.832909 to 3.025291, with an average of 1.587285.

**Chow Test**

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes of the Chow Test</strong></td>
</tr>
<tr>
<td>Effects Test</td>
</tr>
<tr>
<td>Cross-section F</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

The results presented in table 2 reveal that the probability value for Cross-section F is 0.0000 < 0.05, indicating the superiority of the FEM compared to the CEM.

**Hausman Test**

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes of the Hausman Test</strong></td>
</tr>
<tr>
<td>Test Summary</td>
</tr>
<tr>
<td>Cross-section random</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

Following the execution of the Chow test, the subsequent step involves conducting the Hausman test to ascertain the superior model between the FEM and the REM. According to the results shown in table 3, the cross-section random probability is 0.0196, which is less than the significance level of 0.05. This indicates that FEM is a better choice than REM.

**Best Regression Model**

After conducting both the Chow and Hausman tests, it was determined that the FEM regression model is the most suitable method for interpreting the panel regression. Here is a panel regression analysis using FEM method.
Table 4  
Fixed Effects Model Regression Results

<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>2.622915</td>
<td>0.181473</td>
<td>14.45349</td>
<td>0.0000</td>
</tr>
<tr>
<td>IIKS</td>
<td>0.000146</td>
<td>0.008731</td>
<td>0.016744</td>
<td>0.9867</td>
</tr>
<tr>
<td>URBANIZATION</td>
<td>-0.605621</td>
<td>0.231755</td>
<td>-2.613199</td>
<td>0.0108</td>
</tr>
<tr>
<td>INFLATION</td>
<td>-0.007205</td>
<td>0.009965</td>
<td>-0.723038</td>
<td>0.4719</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.025440</td>
<td>0.024953</td>
<td>-1.019521</td>
<td>0.3112</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

Following the examination of panel data, the regression equation in table 4 was obtained using multiple linear regression analysis:

\[
\text{LOG}\text{Poverty} = 2.622915 + 0.000146\text{LOG}(\text{IIKS}) - 0.605621\text{LOG}(\text{Urbanisation}) - 0.007205\text{LOG}(\text{Inflation}) - 0.025440\text{LOG}(\text{GDP})
\]

a. The constant value is 2.622915. This means that if IIKS, urbanization, inflation, and GDP are all equal to 0, then poverty is also equal to 2.622915.

b. The coefficient value on the IIKS variable is 0.000146, meaning that every 1% increase in IIKS will increase poverty by 0.000146 with the assumption that the other variables in the regression model are constant or fixed.

c. The coefficient for the urbanization variable is -0.605621. This indicates that, while maintaining the constant values of the other variables in the regression model, a 1% increase in urbanization leads to a decrease in poverty by -0.605621.

d. The coefficient for inflation is -0.007205. This implies that, holding all other variables constant, a 1% increase in inflation is associated with a reduction in poverty by -0.007205.

e. The coefficient for the GDP variable is -0.025440. This indicates that, while maintaining the constant values of the other variables in the regression model, a 1% increase in GDP leads to a decrease in poverty by -0.025440.

Classical Assumption Test

Normality Test

The validity of the t-test for the effect of the independent variable depends on the normal distribution of the residuals. This can be checked using a histogram and the Jarque-Bera test (Widarjono, 2018). If the significance level of the P-value exceeds 0.05, it indicates that the residuals follow a normal distribution.

Table 5  
Results from The Normality Test

<table>
<thead>
<tr>
<th>Jarque-Bera</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.181195</td>
<td>.123613</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

As indicated in the presented table 5, the Jarque-Bera (JB) probability value is 0.123613, surpassing the threshold of 0.05. Therefore, it can be concluded that the residuals follow a normal distribution.

Multicollinearity Test

Revealing the existence of a linear relationship between independent variables in multiple regression, which can be perfect or less than perfect, is called a multicollinearity test (Widarjono, 2018)
Table 6  
Multicollinearity Test Results  

<table>
<thead>
<tr>
<th></th>
<th>IIKS</th>
<th>URBANISATION</th>
<th>INFLATION</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIKS</td>
<td>1.00000</td>
<td>0.505885</td>
<td>-0.045112</td>
<td>-0.001556</td>
</tr>
<tr>
<td>URBANIZATION</td>
<td>0.505885</td>
<td>1.000000</td>
<td>0.056100</td>
<td>-0.113264</td>
</tr>
<tr>
<td>INFLATION</td>
<td>-0.045112</td>
<td>0.056100</td>
<td>1.000000</td>
<td>-0.072605</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.001556</td>
<td>-0.113264</td>
<td>-0.072605</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: Eviews 10 Tests (processed, 2023)

Table 6 shows that the independent variable, which is the Sharia Financial Inclusion Index (IIKS), urbanization, inflation, and GDP have a correlation value of < 0.8, so there is no multicollinearity problem in this study.

**Autocorrelation Test**

The autocorrelation test refers to the relationship between two nuisance variables and another one (Widarjono, 2018). Utilising the Durbin Watson (DW) value, you can determine whether autocorrelation exists. When the DW value falls between -2 and +2, autocorrelation is not an issue.

Table 7  
Autocorrelation Test Results  

<table>
<thead>
<tr>
<th></th>
<th>Hannan-Quinn criter.</th>
<th>Durbin-Watson stat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2.369590</td>
<td>.779843</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

According to the findings in table 7, the Durbin-Watson (DW) value of 0.779843 falls within the range of -2 to +2, indicating the absence of autocorrelation issues in the data.

**Heteroscedasticity Test**

The heteroscedasticity test determines whether there is a difference in variance between residuals from one phenomenon to another (Ghozali, I., Ratmono, 2013). The Glejser test is employed in this study.

Table 8  
Heteroscedasticity Test Results  

<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>-0.041105</td>
<td>0.196854</td>
<td>-0.208810</td>
<td>0.8352</td>
</tr>
<tr>
<td>IIKS</td>
<td>0.005285</td>
<td>0.009472</td>
<td>0.558006</td>
<td>0.5785</td>
</tr>
<tr>
<td>URBANISATION</td>
<td>0.305345</td>
<td>0.251398</td>
<td>1.214586</td>
<td>0.2283</td>
</tr>
<tr>
<td>INFLATION</td>
<td>-0.011240</td>
<td>0.010810</td>
<td>-1.039808</td>
<td>0.3018</td>
</tr>
<tr>
<td>GDP</td>
<td>0.040970</td>
<td>0.027068</td>
<td>1.513589</td>
<td>0.1343</td>
</tr>
</tbody>
</table>

Source: Analyzed results from Eviews 10 Tests in the year 2023

According to the findings from the heteroscedasticity test presented in table 8, it is apparent that each independent variable IIKS, urbanization, inflation, and GDP exhibits a probability value exceeding 0.05. This implies the absence of heteroscedasticity issues in the residuals of the research model.

**Hypothesis Testing**

**T Test**

The t-test is employed to ascertain the extent of the impact of each independent variable on the dependent variable. The significance level set is 5%. The outcomes of the t-test are presented in the following table:
a. According to table 9’s data, the IIKS variable’s regression coefficient is 0.000146, and the associated probability value is 0.9867, which is greater than 0.05. Consequently, H1 is rejected. Based on these results, it can be inferred that the IIKS variable does not have a partial effect on poverty reduction.

b. The urbanization variable has a regression coefficient of -0.605621, and the associated probability value is 0.0108, which is less than 0.05. Thus, H2 is accepted. Based on these findings, it can be deduced that the urbanization variable individually exerts a significant negative impact on poverty reduction.

c. The inflation variable has a regression coefficient of -0.007205, and the associated probability value is 0.4719, which exceeds 0.05. Therefore, H3 is turned down. These results suggest that there is no individual or partial impact of the inflation variable on reducing poverty.

d. The GDP variable has a regression coefficient of -0.025440, and the associated probability value is 0.3112, which is greater than 0.05. Consequently, H4 is rejected. Based on these findings, it can be concluded that the GDP variable does not have a partial or individual effect on poverty reduction.

F Test

The F test results in the rejection of the hypothesis that all independent variables collectively impact the dependent variable (Widarjono, 2018). The F-test results are displayed below:

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>218.1159</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob</td>
<td>.000000</td>
</tr>
</tbody>
</table>

Table 10 above displays the probability value based on the F-statistic test findings. Ha is accepted when Prob(F-Statistic) is 0.000000 < 0.05. According to this, the IIKS, urbanization, inflation, and GDP variables simultaneously affect the poverty variable.

Determinant Coefficient Test (R²)

The coefficient of determination test is conducted to check the fit of the model by looking at R². The results are shown in the table below:

<table>
<thead>
<tr>
<th>R-squared</th>
<th>.990271</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>.985731</td>
</tr>
</tbody>
</table>

Table 11 Determination Coefficient Test Results (R²)
Table 11’s results show that the Adjusted R-Squared value is 0.985731. This indicates that the IIKS, urbanisation, inflation, and GDP variables collectively account for 98% of the variation in the poverty variable, leaving the remaining 2% to be explained by other variables not considered in this study.

Discussion

Based on the test and the results of the test data analysis used using the E-Views version 10 programme, it can be seen that of the four independent variables used, 1 variable shows an influence on the dependent variable and there are 3 variables that do not show an influence on the dependent variable.

The Effect of Islamic Financial Inclusion on Poverty Reduction in Indonesia

The Islamic financial inclusion index has no impact on poverty reduction in Indonesia, according to the results of multiple linear regression hypothesis testing, which shows that the IIKS variable has no significant effect of 0.9867 greater than 0.05. Thus, H1 is rejected. The value of the coefficient is positive, which means a one-way relationship in which when the Islamic financial inclusion index value increases, the higher the poverty rate in Indonesia with an increase in the Islamic financial inclusion index does not guarantee that the number of poverty decreases, this can occur because the development of the Islamic banking industry is still uneven in Indonesia (Kusuma & Indrajaya, 2020). The findings of other studies are in line with the results of Maulidina et al. research (2023), which states that savings collected by banks from Third Party Funds (DPK) have no significant impact on poverty levels.

The Effect of Urbanization on Poverty Reduction in Indonesia

The hypothesis test results show that the urbanisation variable has a significant negative effect of 0.0108 < 0.05, which indicates that H2 is accepted. Therefore, urbanization has an influence on poverty reduction in Indonesia. The negative coefficient value means that the relationship is in the opposite direction, which means that if there is an increase in urbanisation, the poverty rate in Indonesia will decrease, otherwise if there is a decrease in urbanization, there will be an increase in poverty in Indonesia (Hadijah & Sadali, 2020).

This research is in line with research conducted by Nguyen et al. (2020); Minh et al. (2021); Hadijah (2020) in which the results can be concluded that the level of urbanization has a negative influence on the poverty rate. The movement of people from rural to urban areas has indirectly resulted in a decrease in the number of poor people in rural areas through remittances and improved living standards. On the other hand, urban areas have experienced an increase in the number of poor people from rural areas. This research emphasises the importance of viewing urbanization and poverty as a multi-dimensional phenomenon, not just an urban event (Hadijah & Sadali, 2020).

The Effect of Inflation on Poverty Reduction in Indonesia

The hypothesis test results show that the inflation variable has no significant effect of 0.4719 > 0.05, which indicates that H3 is rejected. Therefore, inflation has no influence on poverty reduction in Indonesia. The coefficient value is negative, meaning the relationship is in the opposite direction. If we consider the coefficient value, inflation has a negative impact on the poverty rate. This is different from the previous theory which states that inflation should have a positive impact on the poverty rate. However, the negative relationship between inflation and poverty rate is reinforced by Amalia’s (2012) research which states that inflation is considered a macroeconomic determinant that...
affects changes in poverty conditions in a country. An economic growth that is accompanied by an improvement in income distribution among groups of income earners is believed to increase collective purchasing power, increase per capita consumption expenditure, thus reducing the number of poor people or lowering the poverty rate of a country’s population (Amalia, 2012).

This research is also in line with research conducted by Waseso & Muhamad (2020); Imelia (2012); Fitri (2012); Segoro (2016) which in their research results concluded that inflation has no significant effect on poverty. Uneven income distribution in some areas causes no significant effect on the purchasing power of people in the area, especially in rural areas (Segoro & Pou, 2016). Meanwhile, research conducted by Adams (2021) states that inflation does not always have a negative impact. Inflation is considered important because it reflects the development of economic activity. Therefore, an increase in the inflation rate does not always mean an increase in the poverty rate (Adams & Atmanti, 2021).

The Effect of GDP on Poverty Reduction in Indonesia

The hypothesis test results show that the GDP variable has no significant effect of $0.3112 > 0.05$, which indicates that $H_4$ is rejected. Thus, it can be concluded that the GDP variable has no significant effect on poverty reduction in Indonesia. The coefficient value is negative, meaning the relationship is in the opposite direction. This indicates that when GRDP increases, poverty will decrease. Conversely, when GRDP decreases, poverty will increase (Nabil & Herianingrum, 2022).

The findings of this research align with the investigations carried out by Suliswanto (2012); Segoro (2016) whose research results concluded that the effect of Gross Regional Domestic Product (GRDP) on poverty levels was not so significant. This condition is caused by the lack of ability of local governments in several provinces in Indonesia to allocate funds effectively and wisely, so that an equitable distribution of income is not created and as a result, a reduction in the poverty rate is not achieved (Segoro & Pou, 2016). In addition, this research is also supported by Novita (2017) which states that there is no effect of GRDP on the poverty rate in Sambas Regency. This contradicts several previous studies which show that economic growth has a significant impact on the poverty rate of its people (Novita & Istiqamah, 2017).

Conclusion

Based on the conducted test results in this research, it can be concluded that the Sharia Financial Inclusion Index (IIKS) variable, despite having a positive coefficient value, does not individually contribute to poverty reduction in Indonesia. Similarly, the inflation and GDP variables, both displaying negative coefficient values, do not exert a significant impact on poverty reduction in Indonesia. On the other hand, the urbanization variable, featuring a negative coefficient value, demonstrates a noteworthy effect on poverty reduction in Indonesia. When considered collectively, the IIKS, urbanization, inflation, and GDP variables collectively hold significant influence on poverty reduction in Indonesia, as indicated by the an Adjusted R-squared value of 98% is observed, with the remaining 2% ascribed to variables not included in this study. So, it can be concluded that the urbanization variable can be one of the solutions to reduce the poverty rate in Indonesia, by urbanizing it is expected to change the community's economy for the better so that poverty will be reduced.

Researchers provide suggestions for future researchers, it is recommended to add new variables or change research using other methods that can affect poverty reduction
in Indonesia and for the research period can be made longer so that it can expand the research by increasing the sample or research population.

**Reference**


Nasution et al. : The Effect of Islamic Financial Inclusion, Urbanisation, Inflation, and GDP on Poverty in Indonesia


