

The Influence of Macro Variables on Economic Growth in Indonesia

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ABSTRACT

Economic growth is an important indicator in assessing the progress of a country, including Indonesia. Various macroeconomic factors can affect this growth, and a deep understanding of the relationship between these variables is essential to formulating effective policies. This study aims to analyze the influence of macroeconomic variables, namely inflation, Human Development Index (HDI), labor wages, digital technology transformation, and manufacturing industry on economic growth in Indonesia. This study uses a quantitative approach with panel data regression analysis to test the relationship between independent and dependent variables. The data used includes secondary data from various official sources such as the Central Statistics Agency (BPS) from 2013 to 2023 in 12 provinces in Indonesia. The results of the analysis show that inflation has a negative impact on economic growth, while HDI, labor wages, and digital technology transformation show a significant positive effect. In addition, the manufacturing industry also contributes positively to economic growth. This finding emphasizes the importance of price stability and improving the quality of human resources and adopting technology in driving economic growth. The conclusion of the research results is that macroeconomic variables have an important role in influencing economic growth in Indonesia. Therefore, policies that focus on controlling inflation, increasing HDI, adjusting labor wages in accordance with productivity, and supporting digital transformation and the manufacturing sector need to be prioritized to achieve sustainable economic growth.

INTRODUCTION

Economic growth is one of the important indicators in assessing the economic health of a country. In Indonesia, economic growth is influenced by various factors, including macroeconomic variables such as inflation, interest rates, and exchange rates. In this context, poverty becomes a crucial issue because uneven growth can worsen the conditions of the less fortunate. This study aims to analyze the influence of macro variables on economic growth and its implications for poverty in Indonesia. Indonesia is the country with the largest economy in Southeast Asia, and in recent decades, has experienced significant economic growth. However, this growth is uneven and is often accompanied by high poverty problems in some areas. Therefore, it is important to understand how macroeconomic variables such as inflation, interest rates, and unemployment affect economic growth and their impact on poverty levels.

Macroeconomic variables play a crucial role in determining the direction and speed of a country's economic growth. For example, high inflation can reduce people's purchasing power, while low interest rates can encourage investment. By analyzing the relationship between these variables and economic growth in Indonesia, we can gain better insight into the factors that influence people's welfare. Economic growth is often considered as a solution to reduce poverty; however, not all economic growth has a positive impact on all levels of society. In the Indonesian context, further research is needed on how economic growth contributes to poverty reduction and whether certain groups are left behind.

Government fiscal and monetary policies have a direct impact on macroeconomic variables and in turn affect economic growth and poverty levels. This study will explore how government policies in addressing macroeconomic challenges can help create an environment conducive to inclusive growth. In the current era of globalization, the interaction between Indonesia's domestic economy and the global economy is increasingly complex. Fluctuations in international commodity prices, changes in global trade policies, and the impact of the global financial crisis can affect macroeconomic variables in Indonesia. Therefore, this study will also consider external factors that contribute to the dynamics of economic growth and poverty in Indonesia.

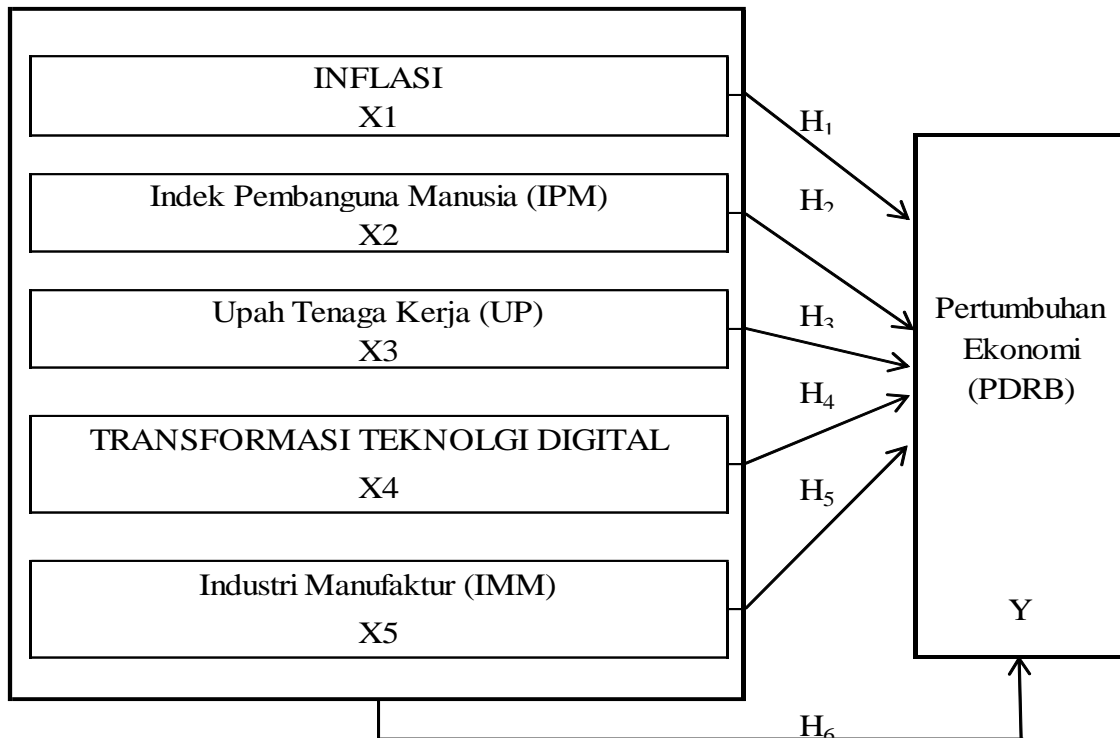
Library Theory

The theories underlying this research are classical and modern economic growth theories. According to classical theory, economic growth is influenced by production factors such as labor, capital, and technology. Meanwhile, modern theory emphasizes the importance of macroeconomic variables in influencing growth. For example, the IS-LM model shows the interaction between the goods market and the money market that can affect the level of investment and consumption. In addition, the multidimensional poverty theory explains that poverty is not only measured by income but also by access to education, health, and other basic services.

1. **Solow Growth Model**
This theory explains how capital accumulation, population growth, and technological progress contribute to long-term economic growth. In the Indonesian context, macro variables such as investment in infrastructure and education can affect the level of economic growth. Research can explore how increased public investment in infrastructure reduces transaction costs and increases productivity, which in turn can reduce poverty levels.
2. **Aggregate Demand Theory**
This theory emphasizes the importance of aggregate demand in determining the level of output and prices in the economy. Macro variables such as government spending, household consumption, and private investment play an important role in driving aggregate demand. Research can analyze how fluctuations in government spending or fiscal policy affect Indonesia's economic growth and its impact on poverty reduction.
3. **Welfare Economics Theory**
This theory focuses on how the distribution of resources affects the welfare of society. In this context, macro variables such as inflation, unemployment rates, and income distribution become very relevant. Research can explore the relationship between uneven economic growth and increasing poverty in several regions in Indonesia, as well as how redistributive policies can help address the problem.
4. **Business Cycle Theory**
This theory explains the periodic economic fluctuations due to changes in aggregate demand and aggregate supply. In the Indonesian context, macro variables such as interest rates and monetary policy have a significant impact on the business cycle. Research can investigate how the cycle of economic expansion and contraction affects employment and people's income, as well as its implications for poverty levels.
5. **Economic Uncertainty Theory**
This theory discusses how uncertainty about economic conditions – such as high inflation or financial crises – can affect investment and consumption decisions. In Indonesia, macro variables such as political stability and economic policies greatly influence risk perceptions by investors and consumers. Research can evaluate how such uncertainty impacts economic growth and its consequences for poverty alleviation efforts.

METHODOLOGY

This study uses a quantitative approach with partial and multiple regression analysis to test the effect of macro variables on economic growth in Indonesia. The data used includes secondary data from the Central Statistics Agency (BPS) and Bank Indonesia during the period 2013-2024. The independent variables in this study include Inflation, HDI, Wages, Digital Technology Transformation, and Manufacturing Industry, while the dependent variable is GDP growth. Based on the Research Concept Framework.



RESEARCH RESULT

Based on the results of Eviews calculations, namely as follows:

Table 4.12 Results of T-Statistic Test Model 1

Dependent Variable LNPDDB	Coefficient (Prob)	Hypothesis
INFLATION (Inflation)	-0.02234 (0.03360)*	Receive H1
IPM (IPM)	0.21740 (0.00000)*	Receive H2
LNUP (Labor Wages)	-0.01038 (0.00000)*	Receive H3
LNTTD (Digital Technology Transformation)	0.21505 (0.00000)*	Receive H4
LNIMM (Manufacturing Industry)	-0.05097 (0.04060)*	Accept H5

Table 4.13 Results of F Test Model 1

Dependent VariableLNPDRB	Model 1 Estimation Results
C	12.36793 (0.00010)*
INFLATION (Inflation)	-0.02434 (0.03160)*
IPM (IPM)	0.237395 (0.00000)*
LNUP (Labor Wages)	-0.01038 (0.00000)*
LNTTD (Digital Technology Transformation)	0.245014 (0.00000)*
LNIMM (Manufacturing Industry)	-0.051970 (0.03960)*
Adjusted R-squared	0.744480
F-statistic	539,5862
Prob(F-statistic)	0.00000
Durbin-Watson stat	2.033830

Explanation of research results based on tables 4.12 and 4.13 model 1, namely as follows:

1. The Effect of Inflation Inflation has a negative impact on economic growth. Increased inflation can reduce people's purchasing power and increase economic uncertainty. The results of the analysis show that inflation has a significant negative effect on economic growth in Indonesia.
2. Human Development Index (HDI) HDI reflects the quality of life and education of the community. The results of the study showed that increasing HDI contributes positively to economic growth. This is due to the increase in the productivity of a more educated and healthy workforce.
3. Labor Wages Labor wages also have a positive effect on economic growth. Higher wages can increase people's purchasing power and encourage domestic consumption. However, if wages are too high without being balanced by adequate productivity, this can be a burden for companies.
4. Digital Technology Transformation Digital technology transformation plays a vital role in increasing the efficiency and productivity of economic sectors. Research shows that the adoption of digital technology can accelerate innovation and expand market access, thus positively impacting economic growth.
5. Manufacturing Industry The manufacturing industry sector is a major pillar in the Indonesian economy. The analysis shows that the

development of the manufacturing industry contributes significantly to economic growth through job creation and exports.

Simultaneous Analysis Simultaneous analysis shows that all of these macro variables together have a significant influence on economic growth in Indonesia. The regression model built has a high R-squared value, indicating that variations in economic growth can be explained by a combination of the five variables.

Conclusion From the results of this study it can be concluded that inflation has a negative effect while HDI, labor wages, digital technology transformation, and manufacturing industry have a positive effect on economic growth in Indonesia both partially and simultaneously. Therefore, government policies need to be focused on controlling inflation as well as improving the quality of human resources and supporting the industrial sector to encourage sustainable economic growth.

RESEARCH RESULTS

1. Human Development Index (HDI)

Research shows that HDI has a significant positive impact on economic growth in Indonesia. The increase in HDI, which includes aspects of health, education, and income, contributes to increased labor productivity. With the increase in people's quality of life, purchasing power also increases, which in turn drives economic growth.

2. Inflation

Inflation has been shown to have a negative impact on economic growth. Price instability can reduce the attractiveness of investment and reduce public consumption. High inflation causes economic uncertainty, so that business actors tend to postpone investment and business expansion.

3. Labor Wages

Labor wages have a positive effect on economic growth. Wage increases can increase workers' purchasing power, which drives domestic consumption. However, if wage increases are not accompanied by comparable productivity, this can be a burden for companies and have a negative impact on job creation.

4. Digital Technology Transformation

Digital technology transformation has a significant positive impact on economic growth. Adoption of new technologies improves operational efficiency and opens up new opportunities in various industrial sectors. It also facilitates innovation and creates new jobs in technology-based sectors.

5. Manufacturing Industry

The influence of the manufacturing industry on economic growth in Sumatra, DKI, and Banten is negative, because the LNIMM coefficient is -0.05097 with a probability of 0.04060. This can be caused by several factors, such as high production costs, dependence on imported raw materials, and lack of technological innovation. In addition, the manufacturing industry can also cause environmental pollution and a decrease in the quality of life of the community, which can have a negative impact on economic growth.

LNIMM Coefficient Analysis

The LNIMM (Natural Logarithm of Manufacturing Index) coefficient of -0.05097 indicates that there is a negative relationship between manufacturing industry growth and economic growth in the regions of Sumatra, DKI Jakarta, and Banten. This coefficient value means that every one unit increase in the manufacturing index will be associated with a decrease of 0.05097 units in economic growth. This is an indication that the manufacturing sector is not making the expected positive contribution to the economy of the region.

The probability of 0.04060 indicates that this result is statistically significant at the 5% level of significance. That is, there is only a 4.06% chance that this negative relationship occurred by chance. In other words, we can be fairly confident that the negative effect of manufacturing on economic growth is not the result of random fluctuations but is a real phenomenon.

Factors Causing Negative Influence

Some factors that may cause this negative effect include:

1. **Unbalanced Economic Structure:** In some areas such as DKI Jakarta and Banten, the service sector may be more dominant than the manufacturing sector. When the manufacturing industry grows but not in line with the development of the service sector or other sectors, this can cause an imbalance that is detrimental to overall economic growth.
2. **Labor Quality:** If the workforce in the manufacturing sector is not adequately skilled or if there are gaps in education and training, then the productivity of the sector can be low. This can hamper positive contributions to GDP.
3. **Environmental Impact:** Industrial activities often have negative environmental impacts such as air and water pollution. The social costs of environmental damage can outweigh the economic benefits of industrial growth itself.
4. **Infrastructure Constraints:** In some areas of Sumatra and Banten, transportation and logistics infrastructure may not be adequate to effectively support the growth of the manufacturing industry. These limitations can hamper the distribution of goods and increase operational costs.
5. **Government Regulation and Policy:** Unfavorable government policies or overly restrictive regulations can hinder the development of the manufacturing sector. For example, high taxes or complicated bureaucracy can reduce the incentive for companies to invest in production expansion.

CONCLUSION

Based on the analysis of the LNIMM coefficient and its probability, and considering various causal factors, we can conclude that the influence of the manufacturing industry on economic growth in Sumatra, DKI Jakarta, and Banten is negative. This indicates the need to re-evaluate the industrial development strategy to be more balanced with the needs of the local economy and pay attention to social and environmental aspects. Therefore, further analysis is needed to determine the exact cause of this negative influence and find solutions to increase economic growth in the region. The unemployment rate is negatively related to economic growth. High unemployment rates indicate a mismatch between workforce skills and market needs, and indicate a lack of available job opportunities. Reducing unemployment through skills training and job creation is essential to drive economic growth.

Overall, this study concludes that these macro variables are interrelated and have significant implications for economic growth and poverty in Indonesia. Policies that support increased HDI, inflation stability, sustainable wage increases, adoption of digital technology, and reduced unemployment rates will be critical to achieving inclusive economic development goals.

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