Analyzing The Impact Of Inflation And Unemployment On Indonesia's Economic Growth

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Abstract

This paper uses secondary data from BPS and BI from 1995 to 2004 to examine how inflation and unemployment affect economic growth in Indonesia. This period was chosen because it is a period full of dynamics and challenges of the Indonesian economy, such as monetary and economic crises, political reforms, trade wars and terrorism global, as well as changes in the structure of the economy. This article uses correlation and multiple regression analysis methods using the Spreadsheet program. It is hypothesized that unemployment and inflation have a detrimental impact on Indonesia's economic growth. This article elucidates the relationship among inflation, unemployment, and economic growth, also delving into the Phillips Curve hypothesis. The analysis demonstrates that there is no application of the Philips curve in Indonesia, with unemployment and inflation having a modest negative association. This can be caused by several factors, including the structure of the Indonesian economy, monetary and fiscal policies, and external factors. To enhance economic growth, reduce inflation, and decrease unemployment in Indonesia, the government and future researchers can find valuable recommendations and guidance in this article.

Keyword: Unemployment, Inflation, Economic Growth, Philips Curves.
JEL Classification: E24, E31, O11, 053

Received: August 6,2023 Accepted: September 1,2023
DOI : 10.54204/TAJI/Vol1112023002

Introduction

The GDP growth rate, which is one measure of public welfare, can be used to calculate economic growth. To overcome unemployment and inflation, the government can take fiscal and monetary policies. Unemployment is a state in which individuals who have the ability and desire to work do not have the opportunity to work which can potentially reduce people's income and consumption. While inflation is a condition in which price increases in general can reduce people's purchasing power (Sasongko & Huruta, 2019). A major issue for the economies of both developing and developed nations is unemployment. Increased unemployment will negatively affect economic growth, emphasizing the importance of addressing unemployment challenges in developed nations tends to be easier to overcome compared to developing countries because it is related to economic fluctuations alone (Adelowokan, Maku, Babasanya, & Adesoye, 2019). In contrast, developing countries continue to face challenges in socio-political problems, investment limitations, and population increase. However, due to inefficient and effective management and utilization of natural and human resources, developing countries face more complex natural problems of managing and utilizing these resources (Jahanger, Usman, Murshed, Mahmood, & Balsalobre, 2022).

Unemployment can disrupt economic growth if not addressed promptly, has the potential to hinder economic growth and create obstacles to the achievement of economic development goals (Singh, Singh, Alam, & Agrawal, 2022). An increase in the unemployment rate can result in people's real national income being lower than the potential or supposed income . A high unemployment rate can cause a decrease in people's income, which will potentially affect a decrease in tax revenue from the community. This also results in a reduction in funds allocated to government economic activities when tax revenues decline, and the impact can be felt through low economic growth (Yanindah, 2021). Additionally, a nation's primary concern is the issue of inflation. Philips suggests a robust connection between the unemployment rate and the inflation rate, attributing this to the observation that low unemployment rates are generally linked to elevated inflation rates (Ojonta, Ogbonna, & Ukwueze, 2022). A state of affairs known as inflation occurs when the cost of goods and services rises steadily over time . Price increases for one or two goods alone do not qualify as inflation unless they are significant and have an effect on the price increases of other goods and services. Conversely, the state in which prices generally fall is called deflation. The calculation of the inflation rate is generally carried out by the Central Bureau of Statistics (BPS) Indonesia. BPS conducts surveys to collect price data on various goods and services that are considered to reflect people's consumption spending patterns. Calculates the inflation rate by comparing current prices with previous periods (Rudd, 2022).

The idea of the Philips curve can be used to analyze the relationship between inflation and unemployment. A.W. Philips first proposed this idea in 1958. It was based on British data from 1861-1957, which showcased an inverse correlation and offered understanding into the immediate association between unemployment and the inflation rate. Ultimately, though, there is no clear correlation between inflation and unemployment (Moloi, Marwala, Moloi, & Marwala, 2020). Indonesia's economic growth reached its lowest condition in 1998 at -13.13%, inflation reached its highest point at 77.63%, while the unemployment rate reached 5.47%. In the next year, Indonesia sought to recover from the crisis through various reforms in the economic, political, and social sectors (Purba, Fathiah, & Steven, 2021).

This study analysis of the effects of unemployment and inflation rates on Indonesia's economic growth is motivated by the aforementioned issues. Between 1995 and 2004, the data utilized in this study was supplied by the Central Bureau of Statistics (BPS) and Bank Indonesia (BI). Researchers chose this period because it was a very dynamic and difficult time for the Indonesian economy. At that time, Indonesia experienced a monetary crisis that had an impact on economic, political, and social crises. Beginning in 1997, the monetary crisis caused the rupiah exchange rate to plummet, inflation to soar, and a sharp decline in economic growth. This study assesses the intensity of the link between inflation and unemployment through the correlation method, and it investigates the influence of unemployment and inflation rates on economic growth using the multiple linear regression method with the Sheets program. The hypothesis proposed is that there is an influence between unemployment and inflation and negatively affects Indonesia's economic growth. The expectation is that perusing this research will enhance readers' understanding of the connection between unemployment and inflation, as well as its impact on the economic growth of Indonesia. In addition, this article is expected to provide advice and recommendations for the government and subsequent researchers on how to increase economic growth and reduce unemployment and inflation in Indonesia.

Literature Review

Three interrelated macroeconomic indicators that affect a nation's economic performance are inflation, unemployment, and economic growth. Economic growth reflects the increase in output

or national income in a given period (Dalevska, Khobta, Kwilinski, & Kravchenko, 2019). The degree to which prices of goods and services have generally increased over the same period is measured by inflation. Conversely, unemployment indicates the proportion of the workforce that is without employment at a specific moment. One theory that explains the connection between unemployment and inflation rates is the Philips theory, which makes use of the idea of the Philips curve (Tanjung & Siswanto, 2022)

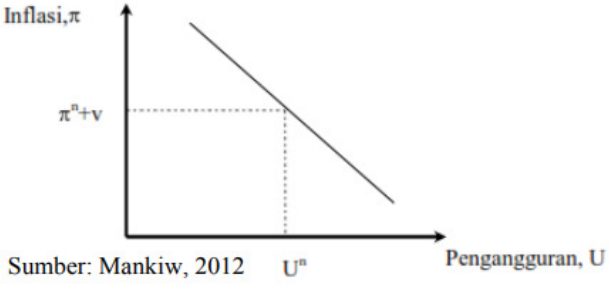

Figure 1. Philips curves

The concept of the Phillips curve was initially introduced in a groundbreaking paper by A.W. Phillips in 1958, titled "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957." Drawing on data spanning from 1861 to 1957 in the United Kingdom, the paper revealed a negative correlation between the unemployment rate and the rate of inflation. This idea can be understood as a short-term trade-off between unemployment and inflation, with high unemployment rates typically accompanying low inflation rates and vice versa. The labor market mechanism can be explained that when demand for labor increases, wages will rise, increase production costs, and eventually push up prices . On the other hand, when labor demand declines, wages also decline, which lowers production costs and, eventually, prices. Consequently, there exists an inverse relationship between the unemployment rate and the inflation rate (Petrongolo, & Ronchi, 2020). The Phillips Curve theory has undergone evolution over time. In fact, this theory underscores a direct correlation between the unemployment rate and the inflation rate (McLeay & Tenreyro, 2020). However, as it progressed, more advanced models emerged that took into account additional variables such as inflation expectations and gradual adjustments. In his 1936 publication "The General Theory of Employment, Interest, and Money," John Maynard Keynes elaborated on his theory concerning the impact of inflation and unemployment rates on economic growth. This theory is based on the notion that the primary determinant of output, employment, and price levels in an economy is aggregate demand, representing the overall demand for goods and services (Marglin, 2020).

Keynes argued that in a crisis or recession, aggregate demand would decline as society reduced consumption and investment, leading to decreased production, increased unemployment, and deflation (Baqaee & Farhi, 2022). Keynes acknowledged that inflation could arise from excess demand, but its main focus was on tackling unemployment. To address this problem, Keynes recommended government fiscal policies, such as public spending, to stimulate economic activity and achieve a level of full employment. His thinking formed the basis for contraceptional economic policy, emphasizing the active role of governments in managing economic imbalances through fiscal and monetary interventions. Although more vocal about unemployment (Ng'andwe, 2020). Keynes's ideas also provide insight into tackling inflation in a macroeconomic context. High economic growth can create inflationary pressures because increasing aggregate demand exceeds production capacity, it can also lower the unemployment

rate due to increased demand for labor. Conversely, low economic growth can lead to deflation due to declining aggregate demand that is below production capacity. In addition, low economic growth can also increase the unemployment rate due to declining demand for labor (Dell'Anna, 2021). Numerous studies demonstrate how the unemployment rate affects economic expansion (Maneejuk & Yamaka, 2021). According to the conventional interpretation of the Philips curve, there exists a correlation between unemployment and inflation rate. meaning that a decline in the unemployment rate may be followed by an increase in inflation and vice versa. The complex interconnection between economic growth and unemployment in Indonesia can be attributed to various factors, including the configuration of the labor market and employment regulations (Mikail & Arundina, 2019).

Utilizing the Phillips curve approach, the study investigated the influence of inflation on Indonesia's unemployment rate spanning from 1985 to 2008. The research employed the Granger Causality Test and Ordinary Least Square (OLS) multiple regression methods. Additionally, the Chow Breakpoint Test will be utilized to evaluate the effects of the economic crisis between 1997 and 1998. The results indicated an absence of a noticeable connection between the unemployment rate and inflation rate. The inflation coefficient has a positive but negligible value, which reflects this. In the meantime, it has been demonstrated that the labor force's size significantly affects the unemployment rate (Baharumshah, Soon, & Wohar, 2021). (Ruchba & Hadiyan2018) using the Phillips model to Analyze the correlation between unemployment and inflation in Indonesia during the period from 1980 to 2016. This research makes use of quantitative data from publications published by the Central Statistics Agency (BPS), incorporating metrics such as the Consumer Price Index (CPI) and the yearly report on unemployment rates, the study utilized the Vector Error Correction Model (VECM) as the data analysis method. VECM is a VAR model constrained to account for cointegration, indicating long-term relationships among variables in the VAR model. The results revealed a significant negative association between the CPI and the lag 2 of the unemployment rate variable. Simultaneously, there exists a robust positive correlation between the CPI and unemployment rate variables over a three-year period (lag 3). Over an extended period, the CPI variable is positively impacted by the unemployment rate variable.

Initiating the hypothesis testing procedure involves formulating the null hypothesis (H_0), asserting the absence of correlation ($\rho = 0$), and the alternative hypothesis (H_1), positing the presence of a correlation ($\rho \neq 0$). The correlation test's findings reveal information about the connection between inflation and the unemployment rate. The hypothesis test is carried out by formulating a null hypothesis (H_0) that the rate of economic growth is not significantly impacted by either inflation or unemployment ($\rho_1 = \rho_2 = 0$), and the alternative hypothesis ($_{H1}$) that there is an influence ($\rho_1 \neq 0$ or $\rho_2 \neq 0$). The results of regression analysis provide information on the extent to which unemployment and inflation rates can explain variations in economic growth.

Research Methods

This study employs quantitative methodologies To assess the influence of inflation and unemployment rates in Indonesia on the nation's economic growth. Using the Philips curve perspective as a theoretical basis, with the aim of testing hypotheses that have been formulated and describing them. Secondary data from Bank Indonesia (BI) and the Central Statistics Agency (BPS) were used in this investigation. This data, which takes the form of a time series covering the years 1995 to 2004, comprises information regarding the inflation rate, economic growth, and unemployment rate in Indonesia. Correlation analysis is employed to investigate the relationship

between inflation and the unemployment rate. This statistical technique is utilized to ascertain and understand the connection between two or more variables within a dataset. The analysis involves gauging the extent and direction of the relationship between these variables. The objective of correlation analysis is to determine whether there is a notable association between the independent and dependent variables.

$$r = \frac{\sum(x - \underline{x})(y - \underline{y})}{(n-1)s_x s_y}$$

Description:
n : Sample
Sx : Standard deviation from variablel x (unemployment)
Sy : Standard deviation from variable y (inflation)

Moreover, the study utilizes multiple linear regression methods to investigate the impacts of inflation and unemployment rates on economic growth. In a multiple linear regression model, the multiple regression test is a statistical approach employed to assess the relationship between two independent variables and one dependent variable. The objective of this analysis is to quantify the influence of the independent variable on the dependent variable.
This model can be characterized in the equation $\hat{y} = \alpha + \beta 1\ x_1 + \beta 2\ x_2 + \varepsilon$, where $\hat{y}$ is the affected economic growth (dependent variable), α is the constant (slope), β_1 and β_2 are regression coefficients for unemployment and the inflation rates (independent variables), where x_1 and x_2 represent the unemployment and inflation rates, and ε denotes an error.

Results And Discussion

The rate of unemployment in Indonesia is a problem that continues to swell. Before the economic crisis in 1997, Indonesia's unemployment rate was usually below 5%. However, after 1998, the unemployment rate began to rise beyond 5%. The greater increase in the labor force compared to the availability of employment continues to create ever larger disparities. Data on unemployment rate, inflation, and economic growth in 1995-2004 show in table 1.

Table 1. Data on Unemployment Rate, Inflation, and Economic Growth in 1995-2004 in Indonesia (in percent)

Year	Unemployment Rate	Inflation Rate	Economic Growth
1995	8.6	8.64	8.1
1996	4.87	6.47	7.8
1997	4.68	11.05	4.7
1998	5.47	77.63	-13.13
1999	6.63	2.01	0.79
2000	6.07	9.35	4.92
2001	8.11	12.55	3.44
2002	9.06	10.03	3.66
2003	9.67	5.06	4.1
2004	9.86	6.4	5.07

Source: Central Statistical Agency, Bank of Indonesia

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1998, the unemployment rate began to rise beyond 5%. The greater increase in the labor force compared to the availability of employment continues to create ever larger disparities. The situation worsened after the economic crisis, not only because of the gap between labor force growth and low job availability, but also due to termination of employment (layoff). As a result, the unemployment rate in Indonesia continues to increase from year to year. Similarly, economic growth shows fluctuations, if the period before the crisis economic growth was relatively stable despite declining, entering a crisis period economic growth plummeted to 13.3% as seen in Figure 1.

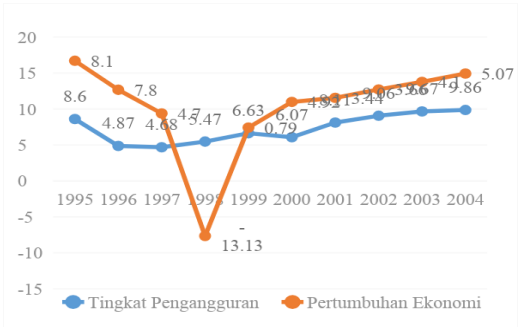

Figure 1. Evolution of the Unemployment Rate and Economic Growth in Indonesia from 1995 to 2004 (in percentage)
Source: Statistical Center Agency, 2023

The information reveals certain trends and connections between the rate of unemployment and economic expansion. During the initial part of the period, the unemployment rate dropped from 8.6% in 1995 to 4.68% in 1997. Meanwhile, in the same time frame, economic growth also decreased from 8.1% to 4.7%. This suggests an inverse correlation between the unemployment rate and the rate of economic growth, with a decline in the former corresponding to a decline in the latter. In 1998, there were significant changes in both indicators. The unemployment rate jumped sharply to 5.47%, while economic growth experienced a drastic decline of -13.13%. This significant increase in the unemployment rate coincided with a very negative decline in economic growth. This shows a correlation between high unemployment and declining economic growth. Furthermore, from 1999 to 2004, the unemployment rate gradually increased from 6.63% to 9.86%. Meanwhile, economic growth fluctuated, but remained generally positive. In this period, there was a sustained increase in the unemployment rate, while economic growth remained positive despite fluctuations. This suggests that there are other factors, such as governmental policies and global economic conditions, that can influence the connection between unemployment and economic growth, which is not necessarily straightforward.

High inflation levels can be an early sign of a country's deteriorating economic condition. This condition encourages central banks to increase interest rates, which can cause contraction or negative growth in the real sector of the economy. Moreover, an increase in the unemployment rate may be a result of a high rate of inflation. Although an increase in inflation may signal economic growth in the short run, a substantial and prolonged surge in inflation can have detrimental effects on a country's economy. High inflation can make the price of domestic goods relatively more expensive than imported goods, this will encourage people to prefer goods imports and ultimately can harm the competitiveness of domestic products, so as to cause low demand for domestic products and result in a decrease in production due to some entrepreneurs will reduce their production levels.

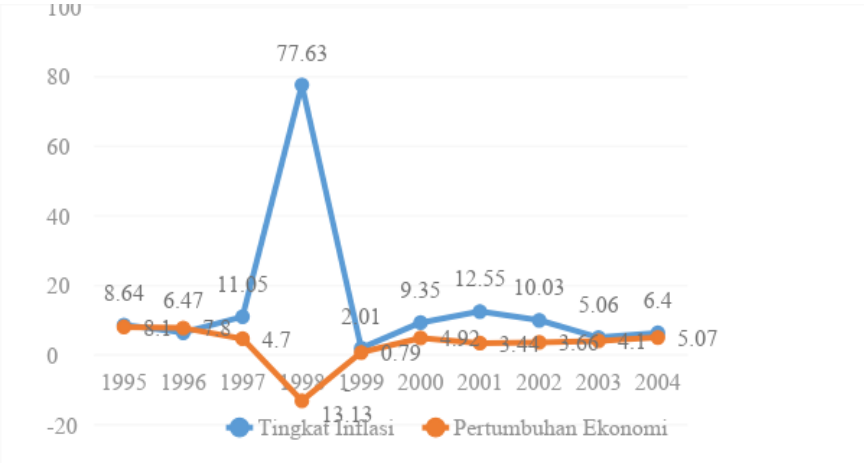

Figure 2. Development of Inflation &; Economic Growth in Indonesia in 1995-2004 (in percent)

Source: Central Bureau of Statistics, Bank Indonesia, processed 2023

In Figure 2 it is shown that rates of inflation and economic growth from 1995 to 2004. The rate of inflation fluctuated during this period, peaking in 1998 with a percentage of 77.63%, while the lowest point occurred in 1999 with a percentage of 2.01%. Economic growth has also fluctuated, with the highest peak occurring in 1995 at 8.1%, and the lowest peak occurring in 2001 at 3.44%.

This data reveals various patterns regarding the connection between the inflation rate and the economic growth rate can be described as follows in 1995 and 1996, the inflation rate declined while economic growth remained relatively high. This implies an inverse correlation between inflation and economic growth, with robust economic growth being correlated with a decline in the inflation rate. However, by 1997 and 1998, there had been a significant increase in the inflation rate, while economic growth had declined dramatically in 1998. This implies that a correlation exists between elevated inflation and a reduction in economic growth. Inflationary pressures can wreak havoc on the economy and stifle growth. Furthermore, from 1999 to 2004, the inflation rate tended to stabilize or decline, while economic growth fluctuated but remained generally positive. This circumstance demonstrates that the correlation between the inflation rate and economic growth is not consistently linear and can be impacted by additional factors such as government policies and the prevailing global economic conditions.

Table 2 shows a correlation result of -03321 or weak negative, Highlighting an inverse correlation between the unemployment rate and the inflation rate in Indonesia, meaning that when the unemployment rate is elevated, inflation tends to be subdued. and vice versa. This is a weak relationship, meaning it is not very strong or close.

Table 2. Correlation Analysis Results

	Unemployment	Inflation
Unemployment	1	
Inflation	-0.332144438	1

The correlation value is roughly between -1 and 1, with -1 indicating a completely negative relationship. The correlation value of -0.3321 is in the range of -0.3 to -0.5, indicating a weak negative relationship. As a result, the connection between unemployment and inflation is feeble, suggesting that alterations in the unemployment rate exert a constrained influence on shifts in inflation rates, and vice versa. By using unemployment and inflation rate data as independent

variables and economic growth as dependent variable, multiple linear regression analysis is obtained as in table 1:

Table 3. Multiple Linear Regression Analysis Results

	Coefficients	Standard Error	T Stat	P-Value
Intercept	7.694	3.886	1.980	0.088
Unemployment	-0.135	0.483	-0.280	0.788
Inflation	-0.252	0.043	-5.833	0.001

Hence, it can be expressed in the equation:

$$\hat{y} = 7{,}694 - 0{,}135x_1 - 0{,}252x_2$$

Table 3 shows how the unemployment and inflation rates affect the rate of economic growth. At a significance level of 0.05, the examination indicates that the coefficient for β1 is -0.135, suggesting that a one percentage point rise in the unemployment rate leads to a 0.135 percentage point reduction in economic growth. The p-value associated with β_1 is 0.788, surpassing the significance level, signaling that, between 1995 and 2004, the unemployment rate did not exert an impact on economic growth in Indonesia. This phenomenon can be explained by the presence of factors other than the unemployment rate that influence economic growth, such as government policies, global conditions, and so on.

The coefficient of β_2 is -0.252, indicating that every A one percentage point elevation in the inflation rate corresponds to a 0.252 percentage point decline in economic growth. The p-value for β_2 is 0.001, falling below the predetermined level of significance. This signifies that the inflation rate significantly influences economic growth in Indonesia. Indonesia from 1995 to 2004. This finding is consistent with macroeconomic theory, which states that inflation is an indicator of declining purchasing power, which reduces consumption and investment, both of which are important components of economic growth.

Based on the results of this investigation, there exists a mild inverse correlation between the unemployment rate and inflation rate in Indonesia. This means that when the unemployment rate rises, the tendency is for there to be a decrease in the inflation rate, and vice versa. But this relationship is weak and statistically meaningless, suggesting that factors other than unemployment also influence inflation. The rejection of the Philips curve hypothesis in Indonesia is in accordance with several previous studies. Several factors contribute to Indonesia's negative weak correlation between unemployment and inflation. One of them was the monetary crisis that occurred in 1997-1998. This crisis led to the depreciation of the rupiah exchange rate , economic growth plunged. This crisis affected Indonesia's economic condition for the next few years, as Indonesia needed to undergo structural reforms with the help of the IMF and other international financial institutions. Political reforms began in 1998, which ended the New Order period and brought changes to the political, governmental, and legal system in Indonesia. Trade wars and terror that occur in the 21st century, which affect world economic conditions including Indonesia. The trade war between the United States and China is one example, Aside from the terrorist attacks that occurred on September 11, 2001, in the United States., creating uncertainty and tension in global markets, which influence on trade, investment, and tourism in Indonesia. In the face of the complexity of these economic and geopolitical challenges, the Indonesian government implements proactive policies. Such measures could involve efforts to increase economic resilience through trade degradation, investment liberalization, and increased

competitiveness. At the same time, policies to improve education and workforce skills can be a way to reduce unemployment. To maintain stability and attractiveness of investment in Indonesia, the government develops infrastructure and investment facilities. The potential and challenges for the Indonesian economy are natural resources (SDA) and human resources (HR), Indonesia has diverse and abundant natural resources that can be source of income and exports for Indonesia. However, Indonesia must also face environmental problems that can threaten the sustainability of natural resources. Indonesia also has large and productive natural resources, which are assets for economic development. However, to create quality and competitive natural resources, Indonesia must also improve the quality of education, health, and infrastructure. in 2000-2004, Indonesia experienced an economic recovery , which supported by prudent monetary and fiscal policies, relative political stability, and increasing global demand. This recovery can be thought of as a positive aggregate demand shock, which caused the Philips curve to shift downward, meaning that inflation and unemployment declined simultaneously. In addition, in the period 1995-2004, Indonesia also experienced changes in economic structure, marked by an increase in the manufacturing, services, and non-oil and gas sectors , as well as a decline agriculture and oil and gas sector. These changes can affect inflation expectations, productivity and potential growth, which can affect the Philips curve in the long run.

The Philips curve, illustrating the exchange relationship between inflation and the unemployment rate, is not entirely applicable in Indonesia, as indicated by the limited inverse connection between the nation's inflation rate and unemployment rate. Various factors can elucidate this occurrence, including the unreliability of the unemployment rate as a comprehensive indicator of the labor market's condition. the Philips curve is only useful in the short term, and the influence of factors other than aggregate demand on inflation and unemployment, which can result in shifts in the Philips curve.

According to research using multiple regression testing, Indonesia's economic growth is negatively and marginally impacted by the country's unemployment rate. This implies that economic growth will be slower the higher the unemployment rate. According to macroeconomic theory, unemployment is a sign that human resources are not being used effectively in the production process, which lowers output and national income. This idea is consistent with that theory. This research also shows that the unemployment rate does not play a significant role, indicating that other factors-such as international conditions, governmental policies, and other factors-may have a greater impact on economic growth.

Indonesia's economic growth is significantly hampered by the rate of inflation. That is, economic growth will be slower the higher the rate of inflation. This phenomenon is consistent with macroeconomic theory, which holds that inflation is a sign of dwindling purchasing power, which in turn lowers investment and consumption-two key drivers of economic growth. The results of the study also clarify that the impact of inflation is higher than that of unemployment, indicating that inflation is a more significant issue for the Indonesian economy. In an effort to stabilize the value of the rupiah currency, which can help control inflationary pressures, the Indonesian government has implemented a number of strategic measures to lessen the negative effect of inflation on economic growth as part of its handling of the monetary crisis.

Fiscal and monetary policy is focused on investment and consumption through economic incentives, instructor enhancement, and structural reforms to improve economic competitiveness. In accordance with Keynesian theory, the overall demand, encompassing the total request for goods and services within an economy, has an impact on both inflation and unemployment. This point of view contends that a wide range of variables, such as net exports, government spending,

investment, and consumption levels, can affect changes in aggregate demand. A rise in aggregate demand will result in higher output and employment, which will lower unemployment. However, as prices rise, inflation will also rise. A decline in aggregate demand will result in lower output and employment, which will raise unemployment. However, as prices decline, inflation will also decline. As per the theory, it posits that there exists a trade-off between inflation and the rate of unemployment. and that, depending on the level, unemployment may be below or above the natural rate.

Monetarist theory, which says that unemployment and inflation are influenced by the money supply in an economy. This view emphasizes that the money supply can change due to monetary policy carried out by monetary authorities, such as central banks. If the money supply increases, aggregate demand will increase, so output and employment will increase, but prices will also rise, so inflation increases. If the money supply decreases, aggregate demand will decrease, so output and employment will decrease, but prices will also fall, so inflation decreases. Because output and employment will eventually return to their natural levels and unemployment will only be influenced by nonexistent factors, this theory therefore assumes that there is a relationship, or trade-off, between The short run exhibits a correlation between the inflation rate and the unemployment rate, while such a connection is absent in the long run, financial, like the way the labor market is organized.

Conclusion

Utilizing the Philips curve framework, this research effectively explored the connection between Indonesia's economic growth, the inflation rate, and the unemployment rate. The limited inverse correlation observed between the inflation rate and the unemployment rate implies that alterations in the unemployment rate have minimal impact on changes in the inflation rate. Notably, the study identifies an inverted L-shaped relationship between the unemployment rate and inflation rate, where the unemployment rate demonstrates a negative yet insignificant effect, while the inflation rate exerts a negative and significant influence. This study contributes to the advancement of economics, particularly in the field of macroeconomics, and provides valuable insights for formulating appropriate and effective economic policies.

Sugesstion

From the results of the studies that have been conducted, the author gives advice to several parties. Prospective researchers interested in exploring the interrelation between Indonesia's economic growth and the inflation and unemployment rates through the Philips curve can utilize this study as a reference. Researchers can then use more complete and up-to-date data, and test other variables that can affect the rate of economic growth, such as investment, exports & import, and so on. The government needs to control inflation so that it is not too high, so as to increase the economic growth rate. The government can implement tight monetary policy, balanced fiscal policy, and structural policies that promote efficiency and productivity. The government also needs to keep an eye on external factors that can trigger inflation, such as global demand, commodity prices, and exchange rates. The government needs to increase the number of jobs and improve the quality of natural resources, so as to reduce unemployment and increase productivity. The government can carry out policies that encourage the growth of labor-intensive sectors, such as industry, agriculture, and services. The government also needs to improve education, training, and public welfare, so as to improve the skills, motivation, and competitiveness of the workforce.

Limitation

This abstract has several limitations that need to be noted. First, this research is limited to the use of secondary data from BPS and BI in the period 1995 to 2004, so it does not cover the time period before and after which may have different characteristics and economic conditions. Second, the research methodology only involves correlation analysis and multiple linear regression using the Spreadsheet program, without considering other factors that might influence the complex relationship between inflation, unemployment and economic growth, such as macroeconomic variables, government policies and socio-cultural aspects. Third, this research focuses on testing the Phillips Curve hypothesis, a particular theory that explains the relationship between inflation and unemployment, without comparing it with alternative theories that may be more relevant to the Indonesian context, such as hysteresis theory, NAIRU theory, or other paradigms. Finally, although it provides general recommendations for increasing economic growth and reducing inflation and unemployment, this research does not provide specific measurable strategies and steps to achieve these goals, leaving room for further research in the development of more detailed economic policies.

References

Adelowokan, O. A., Maku, O. E., Babasanya, A. O., & Adesoye, A. B. (2019). Unemployment, poverty and economic growth in Nigeria. Journal of Economics and Management, 35(1), 5-17.

Baharumshah, A. Z., Soon, S. V., & Wohar, M. E. (2021). Phillips curve for the Asian economies: a nonlinear perspective. Emerging Markets Finance and Trade, 57(12), 3508-3537.

Baqaee, D., & Farhi, E. (2022). Supply and demand in disaggregated Keynesian economies with an application to the Covid-19 crisis. American Economic Review, 112(5), 1397-1436.

Dalevska, N., Khobta, V., Kwilinski, A., & Kravchenko, S. (2019). A model for estimating social and economic indicators of sustainable development. Entrepreneurship and sustainability issues, 6(4), 1839.

Dell'Anna, F. (2021). Green jobs and energy efficiency as strategies for economic growth and the reduction of environmental impacts. Energy Policy, 149, 112031.

Jahanger, A., Usman, M., Murshed, M., Mahmood, H., & Balsalobre-Lorente, D. (2022). The linkages between natural resources, human capital, globalization, economic growth, financial development, and ecological footprint: The moderating role of technological innovations. Resources Policy, 76, 102569.

Maneejuk, P., & Yamaka, W. (2021). The impact of higher education on economic growth in ASEAN-5 countries. Sustainability, 13(2), 520.

Marglin, S. A. (2020). Raising Keynes: a twenty-first-century general theory. Harvard University Press.

McLeay, M., & Tenreyro, S. (2020). Optimal inflation and the identification of the Phillips curve. NBER Macroeconomics Annual, 34(1), 199-255.

Mikail, A., & Arundina, T. (2019). Implementation of dual monetary policy and its relevance to inflation and unemployment in the Phillips curve context in Indonesia. International Journal of Islamic and Middle Eastern Finance and Management, 12(5), 680-697.

Moloi, T., Marwala, T., Moloi, T., & Marwala, T. (2020). The Phillips Curve. Artificial intelligence in economics and finance theories, 53-62.

Ng'andwe, C. (2020). Inadequacies of monetarism for developing countries with mass unemployment: a theoretical framework. Journal of Economics and Development Studies, 8(4), 50-67.

Ojonta, O. I., Ogbonna, O. E., & Ukwueze, E. R. (2022). Validity of Augmented Philips Curve Hypothesis in Sub Saharan African Countries: Evidence from Rational Expectations of inflation rate. International Journal of Commerce, Industry and Entrepreneurship Studies, 2(1), 76-88.

Petrongolo, B., & Ronchi, M. (2020). Gender gaps and the structure of local labor markets. Labour Economics, 64(1), 1-10.

Purba, J. H. V., Fathiah, R., & Steven, S. (2021). The impact of Covid-19 pandemic on the tourism sector in Indonesia. Riset: Jurnal Aplikasi Ekonomi Akuntansi dan Bisnis, 3(1), 389-401.

Ruchba, S. M., & Hadiyan, F. (2018). Analisis Pengangguran dan Inflasi di Indonesia untuk Periode 1980-2016 menggunakan Pendekatan Kurva Philipps. Jurnal Ekonomi Pembangunan, 19(2), 173-186.

Rudd, J. B. (2022). Why do we think that inflation expectations matter for inflation?(and should we?). Review of Keynesian Economics, 10(1), 25-45.

Sasongko, G., & Huruta, A. D. (2019). The causality between inflation and unemployment: the Indonesian evidence. Business: Theory and Practice, 20 (1), 1-10.

Singh, H. P., Singh, A., Alam, F., & Agrawal, V. (2022). Impact of sustainable development goals on economic growth in Saudi Arabia: Role of education and training. Sustainability, 14(21), 1-10.

Tanjung, A. A., & Siswanto, A. A. (2022). Analisis Kurva Phillips Di Indonesia. Media Ekonomi, 30(1), 71-77.

Yanindah, A. (2021). An insight into Youth Unemployment in Indonesia. In Proceedings of The International Conference on Data Science and Official Statistics, 2, (1), 666-682.