ANALYZING FACTORS DRIVING ECONOMIC GROWTH IN INDONESIA USING THE AUTOREGRESSIVE DISTRIBUTED LAG (ARDL) MODEL

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ABSTRACT

Purpose: This research aims to determine the effect of foreign direct investment (FDI), inflation, and employment on Indonesia's economic progress from 1990 to 2021.

Theoretical framework: The theoretical literature on the influence of foreign direct investment on economic growth offers two distinct approaches. On the basis of the preceding theoretical explanation, it can be determined that inflation is a continuous increase in the price of goods and services over a given period, not just for a single item.

Design/methodology/approach: This study uses the ARDL (Autoregressive Distributed Lag) model. Various model and method have been carried out for empirical studies of economic development; analysis Vector Auto Regression

Findings: According to the findings, inflation has a considerable and negative impact on Indonesia's long-term economic growth. At lags 2 and 3, FDI has a big advantageous influence on the Indonesian economy but has a significant negative impact in the long run. Over time, employment has no substantial and negative impact on economic growth.

Research, Practical & Social implications: According to this study, the Indonesian government should continue controlling inflation and establishing a more conducive investment climate to boost economic growth.

Originality/value: This study reveals that the inflation component has a large and negative impact on Indonesia's economic growth over the long term. Long-term inflation increases can support economic growth in Indonesia.

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ANÁLISE DOS FATORES QUE IMPULSIONAM O CRESCIMENTO ECONÔMICO NA INDONÉSIA USANDO O MODELO AUTORREGRESSIVO DE DEFASAGEM DISTRIBUÍDA (ARDL)

RESUMO
Objetivo: esta pesquisa tem como objetivo determinar o efeito do investimento estrangeiro direto (IED), da inflação e do emprego no progresso econômico da Indonésia de 1990 a 2021.
Estrutura teórica: A literatura teórica sobre a influência do investimento estrangeiro direto no crescimento econômico oferece duas abordagens distintas. Com base na explicação teórica anterior, é possível determinar que a inflação é um aumento contínuo no preço de bens e serviços em um determinado período, e não apenas em um único item.
Projeto/metodologia/abordagem: Este estudo utiliza o modelo ARDL (Autoregressive Distributed Lag). Vários modelos e métodos foram realizados para estudos empíricos de desenvolvimento econômico; análise de regressão automática vetorial
Conclusões: De acordo com os resultados, a inflação tem um impacto considerável e negativo sobre o crescimento econômico de longo prazo da Indonésia. Nas defasagens 2 e 3, o IED tem uma grande influência vantajosa sobre a economia da Indonésia, mas tem um impacto negativo significativo no longo prazo. Ao longo do tempo, o emprego não tem impacto substancial e negativo sobre o crescimento econômico.
Implicações para a pesquisa, práticas e sociais: De acordo com este estudo, o governo indonésio deve continuar a controlar a inflação e estabelecer um clima de investimento mais propício para impulsionar o crescimento econômico.
Originalidade/valor: Este estudo revela que o componente da inflação tem um impacto grande e negativo sobre o crescimento econômico da Indonésia no longo prazo. O aumento da inflação no longo prazo pode apoiar o crescimento econômico da Indonésia.

ANÁLISIS DE LOS FACTORES QUE IMPULSAN EL CRECIMIENTO ECONÓMICO EN INDONESIA MEDIANTE EL MODELO AUTORREGRESIVO CON RETARDO DISTRIBUIDO (ARDL)

RESUMEN
Objetivo: Esta investigación pretende determinar el efecto de la inversión extranjera directa (IED), la inflación y el empleo en el progreso económico de Indonesia entre 1990 y 2021.
Marco teórico: la literatura teórica sobre la influencia de la inversión extranjera directa en el crecimiento económico ofrece dos enfoques distintos. Basándose en la explicación teórica anterior, se puede determinar que la inflación es un aumento continuo del precio de los bienes y servicios en un período determinado, no sólo en un único artículo.
Diseño/metodología/enfoque: Este estudio utiliza el modelo ARDL (Autoregressive Distributed Lag). Se han llevado a cabo varios modelos y métodos para estudios empíricos del desarrollo económico; el análisis de autorregresión vectorial
Conclusiones: Según los resultados, la inflación tiene un impacto considerable y negativo en el crecimiento económico a largo plazo de Indonesia. En los rezagos 2 y 3, la IED tiene una gran influencia ventajosa en la economía de Indonesia, pero tiene un impacto negativo considerable a largo plazo. A largo plazo, el empleo no tiene un impacto sustancial y negativo en el crecimiento económico.
Investigación, implicaciones prácticas y sociales: Según este estudio, el gobierno indonesio debería seguir controlando la inflación y establecer un clima de inversión más propicio para impulsar el crecimiento económico.
Originalidad/valor: Este estudio revela que el componente de inflación tiene un impacto amplio y negativo en el crecimiento económico de Indonesia a largo plazo. Aumentar la inflación a largo plazo puede favorecer el crecimiento económico de Indonesia.
Palabras clave: Inversión Extranjera Directa, Inflación, Empleo, Crecimiento Económico.
INTRODUCTION

Economic development is essentially a series of government policies aimed at achieving positive and influential outcomes for the well-being of society (Kurniawan & Managi, 2018). The objective of economic development is to raise the standard of living in a community, expand employment opportunities with a balanced amount of employment in each field, and evenly distribute income across each level (Purnomo et al., 2020). Economic development and economic growth are closely related due to economic development can stimulate economic growth, and vice versa, economic growth accelerates the economic development process (Sarkodie & Strezov, 2019). Thus, both are interdependent, and both are essential to the success of a nation's prosperity efforts (Nurvira & Ichsan, 2022, Rahmidani et al, 2023).

Moreover, every economic development is expected to stimulate economic expansion by boosting national income or per capita income (Qwanthala et al., 2022). Existence of economic development will result in economic growth that enhances the production of goods and services in society. the rising economic growth is an indicator of economic development's achievement. Indonesia’s economy growth rate in 2018 was 5.17 percent, making it one of the best years on record. This is a result of a rise in the processing industry, followed by a rise in retail trade and forestry (Barata, 2019). Within 2020, the Indonesia economic escalated on volatile rate of 2.07, associated to 5.02 in 2019. This occurred due to the decline in demand and supply of goods and services as a result of the covid-19 pandemic, so nearly every component recorded a decrease, including household consumption, investment, and imports. Consequently, the average annual economic growth is 0.03 percent (Suryahadi et al., 2020).

In the current growth period, inflation is one of the challenges that must be addressed. Inflation is one of the economic conditions in a country characterized by a long-term tendency for the prices of goods and services to rise due to an imbalance in the flow of goods and money (Olivia et al., 2020). As inflation is one of the most important economic indicators, the rate of change is constantly monitored to prevent economic instability (Erlando et al., 2020). According to Ardiansyah (2017), inflation is a frequent and undesirable economic occurrence. Inflation is axiomatically a monetary phenomenon that reflects excessive and unstable monetary expansion. On the basis of the preceding theoretical explanation, it can be determined that inflation is a continuous increase in the price of goods and services over a given period, not just for a single item (Ardiansyah, 2017). A region's economy will be weakened by the high rate of inflation. People's purchasing power declines as a result of the continuous rise in prices (Hansen, 2018). As a developing country, Indonesia is susceptible to inflationary swings from
both external and internal factors. Thus, there is a negative correlation between inflation and economic growth (M. Khan & Hanif, 2018).

Moreover, the role of foreign funds and foreign capital in advancing economic growth and development in developing countries has long been a source of contention among global economic organizations (Nasir et al., 2019). To overcome the lack of funds required in the national development process, funds from abroad are carried in, both in the form of foreign debt (ULN) and foreign direct investment (FDI), both of which are direct investments (Holmberg & Sandbrook, 2019). For Indonesia, FDI plays a crucial role in complementing domestic investment in increasing production capabilities and serving as a medium for technology transfer. With FDI, domestic products can be made more competitive and superior (Sahoo & Bishnoi, 2021).

The current economic acceptance in Indonesia is a potential that must be seized; in view of the compositional prospects, a conscious effort to generate interest for investment growth must be made; as a result, the expansion of the financial sector will be complemented by a rise in Foreign Direct Investment (FDI) this will intensify economic development. As the performance of the level of economic acceptance progresses, the country's trade sectors, whether industrial or infrastructure, will improve, allowing Indonesia to attract further investment (Erika & Sasana, 2022).

Foreign investment is a positive thing to grow in the current economic inclusivity, seeing as it becomes an incentive for achieving the shortage in savings that can be accumulated domestically, boosting foreign exchange reserves, intensifying state spending, and also evolving prudential competence for the economy to obtain the foreign investment (Kristi et al., 2022). Foreign direct investment has the potential to affect economic growth and development. Investment is defined as the expenditure by investors or businesses to purchase capital goods and manufacturing equipment in order to increase the economic growth potential to generate commodities and services (Genthner & Kis-Katos, 2022). Therefore, Capital plays an important role in economic growth. As a result, the country must consider for more sources of funding.

In addition to FDI, employment is the next factor that influences economic growth. According to Employment Law No. 13 of 2003, labor is anyone who is able to produce goods and services for both their own needs and those of the community. Absorption of labor is the number of individuals who are employed by an organization or business. Creating employment opportunities is one of the accomplishments of economic development. Absorption of labor is the amount of labor utilized by a sector or business unit (Surya et al., 2021). Moreover, every
Analyzing Factors Driving Economic Growth in Indonesia Using the Autoregressive Distributed Lag (ARDL) Model

Ichsan, Husein, Andriyani, D., Irmayani, D., Maulana, I. (2023)

Economic development is expected to stimulate economic expansion by boosting national income or per capita income (Qwanthala et al., 2022).

Moreover, the role of foreign funds and foreign capital in advancing economic growth and development in developing countries has long been a source of contention among global economic organizations (Nasir et al., 2019). To overcome the lack of funds required in the national development process, funds from abroad are carried in, both in the form of foreign debt (ULN) and foreign direct investment (FDI), both of which are direct investments (Holmberg & Sandbrook, 2019). For Indonesia, FDI plays a crucial role in complementing domestic investment in increasing production capabilities and serving as a medium for technology transfer. With FDI, domestic products can be made more competitive and superior (Sahoo & Bishnoi, 2021).

Therefore, Capital plays an important role in economic growth. As a result, the country must consider for more sources of funding. For instance, by bringing in foreign capital, such as foreign debt and foreign investment. Additional capital is required to boost economic growth. This increased capital comes from investments and savings. The dynamics of investment determine the rate of economic growth, which indicates the widespread slowing (Du et al., 2022).

In addition to FDI, employment is the next factor that influences economic growth. According to Employment Law No. 13 of 2003, labor is anyone who is able to produce goods and services for both their own needs and those of the community. Absorption of labor is the number of individuals who are employed by an organization or business. Creating employment opportunities is one of the accomplishments of economic development. Absorption of labor is the amount of labor utilized by a sector or business unit (Surya et al., 2021).

In this study the relation among the affected factor of economic development namely foreign direct investment (FDI), inflation, and employment on economic growth in Indonesia from 1990 to 2021. The ARDL (Autoregressive Distributed Lag) model was employed to obtain significant impacted results.

LITERATURE REVIEW

Economic progress is inextricably linked to worldwide and regional economic realities (Oktora & Firdani, 2019). Previous literature implies that economic development can influence a country's economic growth by regulating foreign direct investment and employment (Iamsiraroj, 2016). Economic development can contribute to an increase in domestic output via
improving access to global production goods, markets, technology transfer, and employment gain (Heger & Neumayer, 2019) (Stievany & Jalunggono, 2022).

In relation to economic development with FDI, the relationship between rising FDI and rapid economic development has proven evident (Lindblad, 2015). The FDI climate in Indonesia has shifted drastically, most notably in 1974, when it became more restrictive, and again in 1994, when it became less demanding. Over the next two decades, FDI inflows continuously grew, reaching an all-time high in response to deregulation in the mid-1990s (Udembata & Philip, 2022). Foreign investor confidence was significantly affected by the Asian financial crisis, and it took several years into the twenty-first century for any major resurgence in inbound FDI to occur (Wang Li et al, 2023). In other words, since the mid-1960s, rising FDI in Indonesia has been associated with both deteriorating and improving conditions for such investment, while legislative measures to attract foreign capital have proven fruitless at other times. Indonesia's relationship between FDI and economic growth has also been less clear than in neighboring countries (M. A. Khan, 2007). Rapid economic growth in the 1970s and 1980s was driven mostly by the oil boom and accelerating, tardy industrialization, rather than huge FDI inflows. Only in the mid-1990s did a substantial positive association between FDI and economic growth emerge, and it did not sustain. The Asian financial crisis stifled new FDI and economic growth.

The theoretical literature on the influence of foreign direct investment on economic growth offers two distinct approaches. These are the modernization and dependency theories, respectively. According to modernization theory, FDI has the potential to boost economic growth in underdeveloped countries. This idea is founded on the fundamental tenet that economic progress necessitates capital investment. Modernization theory is further subdivided into neoclassical and endogenous growth models (Holtbrügge & Kreppel, 2012). Long-run growth in the neoclassical model could only result from external variables like as investment growth, industrial dynamics, and labor strength progress, described to as technical make progress. FDI be able to support economic growing if it continuously improves industrial innovation.

In contrast to economic development, FDI drive the fiscal progress not simply through explicit benefits such as employment creation, investment accumulation, and income tax revenue, but also ultimately out of controls derived from the endogenic progress type. Unlike modernization theory, which focuses on the beneficial benefits of FDI on economic development, dependence theory demonstrates a negative relationship between the two factors,
the principles of center and peripheral are central to this paradigm (Hsieh et al., 2019). Advanced industries are concentrated in the center, whereas enterprises on the periphery are limited, for example, the production of raw materials for the industries. The industries on the outskirts are precluded from accumulating money. Rather of being invested in the elsewhere, accrued investment is transferred to the center. External cash only transmits a partial amount of equipment; as a result, it has effect on incapability of assisting the financial system to expand. Furthermore, the concept contends that reliance on foreign investment will have a negative impact on economic development, particularly on economic expansion and revenue allocations. This is owing to the fact that the multiplier effect from demand elasticity between two sectors is minimal, resulting in stagnant growth in emerging countries (Yiew & Lau, 2018).

Moreover, inflation variable is employed as a barometer tool in economic development to gauge an economy's stability variable. High inflation reduces the amount of social benefit available, while very low inflation indicates a slowing economy, sluggish job development, and increased poverty in the society (Hafni & Hariani, 2022). Inflation is a macroeconomic issue that is intimately related to economic development. The variable inflation rate makes it more difficult for businesses to manage, discourages people from saving, and has a variety of other negative repercussions that harm the economy as a whole (Hafni & Hariani, 2022). Inflation is made up of two parts: inflation caused by a scarcity of goods (natural inflation), and inflation caused by human error owing to corruption and poor management, an excessive taxing policy, and a surplus of money. Inflation is described as an economic scenario in which the increase of the money supply is "faster" than the production of new goods and services under same economic conditions (Angelina & Nugraha, 2020). Multiple definitions of inflation have been proposed by experts, but in general, inflation can be understood as a constant increase in the overall price of products. Inflation as an occurrence that reveals an increase in prices in general and takes place constantly within a given time range. Due to the fact that inflation is measured by the average price level, it is feasible for the prices of individual commodities to fluctuate continuously without affecting the average price level (Silva et al., 2021).

Apart from the above factors since of the existence of economic development, the problem of employment is generally related to the economic growth and economic development that occurred, the level and quality of life of is determined by the level of income, career prospects, and employment options for respectable jobs. Labor resources are the most important aspect in production. Economic growth in each country is determined by labor potential and the efficient utilization of labor resources. The world economy is paying special attention to
global employment patterns. The issue that arises as a result of an imbalance in employment between supply and demand at a certain level of compensation. This general condition is caused by an excess of labor in each sector and this circumstance has implications for the business’s ability to provide job opportunities for the new workforce (Manzoor et al., 2019).

Various model and method have been carried out for empirical studies of economic development; analysis Vector Auto Regression (Syamni et al., 2018) Multivariate Regression Analysis (Lasbrey et al., 2018), Interregional Input-Output (IRIO) model (Allo et al., 2022). spatial panel model (Zhang et al., 2022) The empirical research on economic development discussed above concentrate on the variables that drive economic growth.

The proponent of the deviation hypothesis, on the other hand, claims that the economic development has long term significant effect on short term and long-term period in ensuring the insight into the links between economic growth. This research strengthens the existing literature by focusing on factors driving economic growth in Indonesia using the Autoregressive Distributed Lag (ARDL) Model.

**RESEARCH METHODS**

The Autoregressive Distributed Lag (ARDL) Analysis Model is used to analyze the economic growth factors in Indonesia. The ARDL approach is similar to other time series models in that LAG (p,q) is still used, but the lag can vary as short-term and long-term estimates, with the basic model as follows:

\[ Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \alpha_2 Y_{t-p} + b_1 X_{t-1} + b_1 X_{t-q} + e_t \]

The model is used to examine the effects of FDI, employment, and inflation on Indonesia’s economic growth. For each variable, the ARDL equation model can be written as follows:

\[ \Delta ECO_t = \beta_0 + \sum_{i=1}^{n_1} \beta 1 \Delta ECO_{t-i} + \sum_{i=0}^{n_2} \beta 2 \Delta INF_{t-i} + \sum_{i=0}^{n_3} \beta 3 \Delta FDI_{t-i} + \sum_{i=0}^{n_4} \beta 4 \Delta EMP_{t-i} + \varepsilon t \]
Whereas,

ECO_t : Economic growth, INF_t : Inflation, FDI_t : Foreign direct investment, EMP_t : Employment absorption, β_0 : Intercept/constant, β_1 ... β_4 : Short run coefficient

RESULTS AND DISCUSSION

Economic development is a crucial indicator for assessing a country's economic development. Economic growth measures the extent to which economic activity improves people's well-being by increasing income over a given time period. Indonesia's economic growth has fluctuated over the last 32 years, from 1990 to 2021, as shown in the graph below:

Figure 1. Economic Growth in Indonesia in 1990-2021

Based on Figure 1, economic growth has fluctuated over the past 32 years. Starting in 1990, economic growth was 7.24 percent, and it increased to 7.82 percent by 1996. Due to the global financial crisis of 1998, economic growth contracted to -13.13 in 1998, resulting in a decline in global economic activity and trade, which disrupted Indonesia's economic expansion.

Stationarity Test

A unit root test with the Augmented Dickey Fuller (ADF) method is used to determine whether the time series data used is stationary or not. If the test at the level reveals that the data is not stationary, it will be tested at the first difference level to determine the research model's viability, as shown in the table below:
Table 1. Phillips-Perron Unit Root Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>C/T</td>
</tr>
<tr>
<td>ECO</td>
<td>3.291***</td>
<td>-4.016***</td>
</tr>
<tr>
<td>INF</td>
<td>6.834***</td>
<td>-4.307***</td>
</tr>
<tr>
<td>LNFDI</td>
<td>9.325***</td>
<td>-3.379**</td>
</tr>
<tr>
<td>LNEMP</td>
<td>0.336***</td>
<td>-1.465</td>
</tr>
</tbody>
</table>

Note: *, **, *** are significant at the 10%, 5%, and 1%, respectively. \( H_0 \) assumes that series are non stationary or contains a unit root.

Source: Prepared by the Authors,(2023).

According to Table 1, at stationary level the variables of economic growth and inflation, foreign investment means rejecting \( H_0 \), and employment is not stationary or accepting \( H_0 \), but in the first difference variables, economic growth, inflation, FDI, and employment are wholly stationary and reject \( H_0 \), so this model is appropriate for the case of Autoregressive Distributed Lagged Model (ARDL)(Yucel, 2022)

Results of Model Stability Tests

To determine a stable and valid model in the ARDL method, several diagnostic tests must be performed, including the CUSUM test, which is used to measure coefficient stability and determine whether there is a structural break in the model as a result of the analysis, and the Correlogram of Residuals Squared, which is used to determine whether a model is valid or not. The findings of the stability and validity tests for each ARDL model in this study are as follows:

![Figure 2. Cussum Test](image)

According to Figure 2, the model is considered stable because the blue line does not intersect the red line. This signifies that the ARDL model has been pronounced stable and has passed the CUSUM test, and all variables have been checked.
Results of Cointegration Tests

Long Run Form and Bound Test and Akaike Information Criteria could well be utilized for cointegration testing (Philips model). The Bond cointegration test depends on the presence of a stationary long-term equation residual.

Table 2. Bounds Cointegration Test

<table>
<thead>
<tr>
<th>N</th>
<th>K</th>
<th>90% level</th>
<th>95% level</th>
<th>99% level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I(0)</td>
<td>I(1)</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

Source: Prepared by the Authors, (2023).

The results of the Bound Test are shown in Table 4 above; the cointegration test based on the bound test approach yields F-statistic value of 21.96, which is greater than the Lower Bonds Test I (0) value and the Upper Bonds Test I value. (1) limit both at the significance levels of 10%, 5%, and 1%, it is possible to conclude that there is cointegration in the long run on the variables in the tested model, implying that there is a short-term and long-term balance in the ARDL model, causing the variable is already valid.

Table 3. Short-term Model Estimation 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>D(LNFDI)</td>
<td>-0.212565</td>
<td>0.608607</td>
<td>-0.349264</td>
<td>0.7307</td>
</tr>
<tr>
<td>D(LNFD (-1))</td>
<td>0.429241</td>
<td>0.642676</td>
<td>0.667897</td>
<td>0.5122</td>
</tr>
<tr>
<td>D(LNFD (-2))</td>
<td>1.523809</td>
<td>0.463008</td>
<td>3.291103</td>
<td>0.0038</td>
</tr>
<tr>
<td>D(LNFD (-3))</td>
<td>1.729791</td>
<td>0.478962</td>
<td>3.611542</td>
<td>0.0019</td>
</tr>
<tr>
<td>CointEq(-1)*</td>
<td>-0.888897</td>
<td>0.077099</td>
<td>-11.52931</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.909887</td>
<td>Durbin-Watson stat</td>
<td>1.912135</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.894215</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Results of Data Processing, 2022

The ARDL model's short-term estimation outcomes are shown in Table 5, and the model can be written as follows:

\[ \Delta ECO_t = -0.213 \Delta LnFDI_t + 0.429 \Delta LnFDI(-1) + 1.524 \Delta LnFDI(-2) + 1.730 \Delta LnFDI(-3) - 0.889 ECT(-1) \]

CointEq/ECT(-1) = -0.889 is significant at the 1% level, indicating that this model has short-term cointegration. The CointEq coefficient will then be used to determine the rate of adaptation, which is the rate of adaptation in response to changes. If the coefficient is negative with a significant probability at the 1% level, the CointEq value is valid. It can be observed that each variable, the coefficient on the significance level, and the probability are distinct.
FDI variable coefficient of -0.213 has an influence but is not significant on Indonesia’s economic development, implying that a 1% change in the FDI variable will reduce economic growth by 0.21% or will not immediately respond to changes in economic growth during that period.

While at lag 1, the FDI variable has a positive but non-significant effect on economic growth, with a coefficient of 0.429, this suggests that increases in economic growth do not result in an increase in FDI in the short run.

The coefficient of FDI variable at lag 2 of 1.524 has a positive and significant effect at the 1% level, meaning that when FDI grows by 1%, economic growth increases by 1.52%, implying that changes in FDI are instantly reacted to changes in economic growth in the lag 2 period. While the FDI variable coefficient of 1.730 has a positive and significant influence at the 1% level in lag 3. Increasing the value of the change in FDI in lag 3 by 1% will increase changes in economic growth by 1.73%. Implies that changes in economic growth will increase in the short run. At lag 3, the value of FDI was increased in response.

**Long Term Model**

The Ordinary Least Squares (OLS) model can be used to determine the long-term model, as indicated in the table 4 below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>INF</td>
<td>-0.328324</td>
<td>0.056316</td>
<td>-5.830079***</td>
</tr>
<tr>
<td><strong>LNFDI</strong></td>
<td>-2.419556</td>
<td>1.106250</td>
<td>-2.187168**</td>
</tr>
<tr>
<td>LNEMP</td>
<td>-0.211293</td>
<td>5.381129</td>
<td>-0.039265</td>
</tr>
<tr>
<td>C</td>
<td>73.89124</td>
<td>78.35196</td>
<td>0.943068</td>
</tr>
</tbody>
</table>

Description: *** Significant 1% and ** Significant 5%.
Source: Results of Data Processing, 2022

Table 4 reveals, based on the findings of the long-term estimation using the ARDL model, that:

\[ ECO_t = 73.89 – 0.328INF_t – 2.420\ln FDI_t – 0.211\ln EMP_t, \]

A constant of 73.89 indicates that while the variables of inflation, FDI, and employment absorption are fixed, economic growth will be 73.89. The inflation variable coefficient of 0.328 has a negative and significant effect on economic growth at the level of 1%. If inflation
increases by 1%, economic growth will decrease by 0.33%, assuming that foreign investment and employment remain constant. This means that over the long term, an increase in the inflation variable will be associated with a decline in economic growth, indicating that inflation has a negative and significant effect on economic growth in Indonesia.

FDI has a variable coefficient of 2.420, which has a negative and significant effect on economic growth at the level of 5%. When FDI increases by 1%, it reduces economic growth by 2.42 percentage points, assuming that inflation and employment variables remain constant. This means that over the long term, the increase in FDI led to a decline in economic growth. This is because the development of FDI in Indonesia is still hampered by the complexity of managing bureaucratic permits, the low quality and productivity of human resources, which has prevented the proper implementation of the technology transfer plan, the small risk country of the domestic market, which results in a low rate of return on investment, and the lack of facilities.

The results of this study are consistent with the findings of Aryatama (2014) and (Nurvira & Ichsan, 2022), that found FDI has a negative impact on economic growth in East Java. In contrast, the findings of (Syaharani, 2011) (Madin, 2016), (Hussain & Haque, 2016), and Amaruddin (2018), that found that FDI plays an important role in the economic growth of developing countries, contradict the findings of this study.

Furthermore, the variable coefficient of employment of -0.211 has a negative and insignificant effect on economic growth. When employment rises by 1%, economic growth falls by 0.21%, assuming inflation and FDI remain constant, indicates that in the long run, an increase in labor absorption is associated with a decline in economic growth. The findings of this study are consistent with the findings of Rusalia (2018), Nurvira and Ichsan (2021), that found that employment absorption had no substantial effect on economic growth.

CONCLUSION

This study investigates factors driving economic growth in Indonesia using the Autoregressive Distributed Lag (ARDL) Model. This study reveals that the inflation component has a large and negative impact on Indonesia's economic growth over the long term. Long-term inflation increases can support economic growth in Indonesia. The variable of FDI in the short term is positively and significantly influenced by FDI at lags 2 and 3, indicating that an increase in FDI in the previous period can boost Indonesia's economic growth in the short term, but has a negative and significant effect on economic growth in the long term. The variable of
employment absorption has no long-term effect on Indonesia's economic growth and increasing the variable of employment has not been able to enhance economic growth in Indonesia. Based on the research results, to enhance economic growth, the Indonesian Government needs to continue to control inflation through monetary, fiscal, and exchange rate policies. The government also needs to create a more conducive investment climate in terms of regulation, costs, incentives, and political and security condition.

REFERENCES


Ichsan, Husein, R., Andriyani, D., Irmayani, D., Maulana, I. (2023) Analyzing Factors Driving Economic Growth in Indonesia Using the Autoregressive Distributed Lag (ARDL) Model


