

Macroeconomic Determinants of Labor Absorption in Indonesia: The Role of Corruption as a Moderator and the Islamic Human Development Index (I-HDI) Variable

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Abstract. *This study aims to examine labor absorption in Indonesia over the period 2021–2024. It also seeks to investigate the effects of economic growth, foreign direct investment (FDI), government expenditure, the Islamic Human Development Index (I-HDI), and inflation on labor absorption, with corruption as a moderating variable. The research employs a quantitative approach with hypothesis testing. Moderated Regression Analysis (MRA) is utilized as the primary analytical tool. The results reveal that economic growth, FDI, the I-HDI, and inflation exert significant effects on labor absorption, whereas government expenditure shows no significant impact. Furthermore, corruption significantly moderates the relationship between FDI, the I-HDI, and inflation with labor absorption. In contrast, corruption non-significantly moderates the correlation of economic growth or government expenditure and labor absorption.*

Keywords: *Labor Absorption, Islamic Human Development Index (I-HDI), Corruption, Moderated Regression Analysis, Indonesia.*

Abstrak. *Studi ini bertujuan untuk mengkaji tingkat penyerapan tenaga kerja di Indonesia selama periode 2021–2024 serta menganalisis pengaruh beberapa faktor ekonomi terhadapnya, dengan pendekatan kuantitatif melalui prosedur pengujian hipotesis dan teknik Moderated Regression Analysis (MRA). Hasil penelitian menunjukkan bahwa pertumbuhan ekonomi, investasi asing langsung (FDI), Islamic Human Development Index (I-HDI), serta tingkat inflasi berpengaruh signifikan terhadap penyerapan tenaga kerja, sementara pengeluaran pemerintah tidak memberikan pengaruh yang bermakna. Lebih lanjut, korupsi terbukti secara signifikan memoderasi hubungan antara FDI, I-HDI, dan inflasi dengan penyerapan tenaga kerja, namun tidak memoderasi hubungan antara pertumbuhan ekonomi maupun pengeluaran pemerintah dengan variabel tersebut.*

Kata Kunci: *Penyerapan Tenaga Kerja, Islamic Human Development Index (I-HDI), Korupsi, Analisis Regresi Moderasi, Indonesia.*

Introduction

The economy of a country, particularly in developing nations such as Indonesia, is indirectly affected when high unemployment arises from economic challenges, ultimately impacting overall economic performance. In the context of economic development indicators, the availability of employment opportunities remains a persistent major issue (Hartono et al., 2018). Unemployment represents a critical problem that requires prompt resolution. Labor absorption rates must increase annually, as Indonesia's population and workforce continue to expand over time (Adriyanto et al., 2020).

Indonesia's unemployment rate stands at 5.2%, amid a population of 279.96 million. In comparison, Vietnam, the ASEAN country with the second-largest population maintains an unemployment rate of only 2.1%. Overall, labor absorption in Indonesia has yet to yield optimal outcomes (Pranadji & Hardono, 2021). This situation warrants particular attention, given that Indonesia's large population and abundant labor force should theoretically provide a competitive economic advantage. However, the country exhibits a relatively high unemployment rate compared to other ASEAN nations.

A nation's economic stability reflects its capacity to address various economic challenges, including limited employment opportunities, sluggish expansion, suboptimal Islamic Human Development Index (I-HDI) scores—an alternative metric blending material and spiritual dimensions under maqasid shariah, uncontrolled inflation, and elevated corruption. Achieving high, sustainable economic growth alongside low and stable unemployment remains a primary macroeconomic policy goal in all countries, including Indonesia (Simionescu et al., 2025).

Unemployment constitutes a longstanding socioeconomic phenomenon with adverse effects on populations worldwide. As a key indicator of economic health, unemployment rates have attracted considerable research attention over recent decades. This topic has gained increasing prominence in scholarly discourse (Hartono et al., 2018; Astari et al., 2019; Widjajanto & Agus, 2020;

Silvia & Susilowati, 2023; Febriyanti et al., 2024), particularly amid Indonesia's ongoing population growth. Furthermore, Indonesia is projected to experience a demographic bonus, peaking between 2030 and 2045.

Okun's Law highlights an inverse correlation between economic expansion and unemployment, suggesting that a 1% decline in the unemployment rate corresponds to a 3% increase in economic output (Sadiku et al., 2022). This theory demonstrates that rises in real GDP or economic output align with increased employment within a country. These insights are supported by Moridian et al. (2024), who found that a 1% increase in economic growth reduces the unemployment rate by approximately 0.5%.

Ibn Khaldun argued that a nation's wealth depends on its production levels and a favorable balance of payments. Production factors serve as primary drivers of development by absorbing labor, boosting national income, and generating product demand-key elements for economic progress (Mannan, 2016). According to Ibn Khaldun, rising demand for goods stimulates improvements in production processes, which in turn fosters advancements in human resources and labor capabilities.

Todaro (2020) argues that investment plays a pivotal role in the economy, particularly in the real sector. Sustainable economic development constitutes progress supported by investment, as it enhances production capacity and generates employment opportunities, thereby contributing to sustained growth (Appiah et al., 2023). Direct investment promotes manufacturing activities and infrastructure development (Andini, 2022).

As noted by Mangkoesubroto in Rakhmawati & Boedirochminarni (2018), government expenditure reflects a country's economic policy. To foster robust economic performance, governments should implement policies that enhance productivity among economic actors, thereby facilitating job creation.

One major impediment to economic development is the availability of high-quality human resources. A country's output level correlates with the number of available jobs, many of which demand skilled workers (Rego et al.,

2022). Higher human quality of life influences workforce participation in job-seeking activities.

The Phillips Curve illustrates a short-term compromise between inflation and unemployment, showing a positive link initially. However, this association may weaken over the long run if inflation is not accompanied by productivity gains. Within aggregate demand theory, moderate inflation stimulates economic activity, promoting growth that positively affects labor demand (Ball et al., 2022).

This study examines the factors influencing labor absorption across Indonesian provinces, emphasizing the role of the Islamic Human Development Index (I-HDI) as an independent variable and corruption as a moderating variable, from an Islamic economics perspective. By incorporating these variables, the research addresses inconsistencies in prior studies through a novel moderated model in which corruption may either strengthen or weaken the effect of I-HDI on labor absorption, thereby advancing understanding of socioeconomic dynamics in labor markets. Drawing on provincial-level data from 2021 to 2024, the study presents empirical evidence across diverse regional contexts in Indonesia. Its contributions to the literature include the introduction of novel variables and the utilization of a recent, province-specific dataset, offering a more comprehensive framework for analyzing labor absorption and supporting the development of Islamic economic models for policy formulation and scholarly advancement.

Literature Review

How Economic Growth Influences Labor Absorption

According to Pratiwi & Indrajaya (2019), Gross Regional Domestic Product (GRDP) figures highlight the enhanced application of production resources during manufacturing activities. In the context of Islamic economics, a high GRDP value signifies sustainable economic development. This sustainable and inclusive economy involves an increase in the output of goods

and services that generates employment opportunities for the community, thereby enhancing societal welfare (Hartati, 2021).

The connection between GRDP and workforce is characterized by a positive correlation, whereby an increase in GRDP leads to heightened demand for labor. This rise in GRDP is directly proportional to the acceleration of economic growth, which in turn contributes to improved societal welfare. As the economy expands, firms tend to expand their operations, thereby creating additional employment opportunities for the local population (Djadjuli 2018).

Linkages of Foreign Direct Investment (FDI) and Labor Absorption

Todaro (2020) argued that investment's essential function within the tangible economic sector. Sustainable economic development constitutes economic progress supported by investment, as it stimulates production capacity and generates employment opportunities for the population, thereby contributing to sustained economic growth (Appiah et al., 2023). Such investment can mitigate unemployment rates by enhancing output or production within a country. Paramita and Christianingrum (2022) stated that a nation's economy is determined by production factors, including capital derived from investment.

Andini (2022) found that direct investment contributes to promoting manufacturing activities and infrastructure development. Dewi and Syaifullah (2022) demonstrated that elevated levels of investment can augment production capacity, thereby leading to an increase in labor absorption by achieving optimal output levels. Alalawneh & Nessa (2020) showed that Foreign Direct Investment (FDI) can create employment opportunities by establishing new jobs. When a country undertakes an investment project capable of generating income for the population, overall advancement quickens, resulting in expanded job availability.

The Relationship Between Government Expenditure and Labor Absorption

Government expenditure reflects a country's economic policy. Chodariyanti (2019) argued that government expenditure on the implementation of national projects encompasses various development sectors

that impact the creation of employment opportunities. Allocations aimed at strengthening community economic capabilities play a key part in fostering job growth, while also addressing poverty and joblessness.

Connection Between the Islamic Human Development Index (I-HDI) and Labor Absorption

The achievement of economic advancement is greatly influenced by high-quality human resources. The output level of a country correlates with the number of available jobs, as numerous employment opportunities require qualified workers (Rego et al., 2022). Higher levels of human quality of life influence the workforce in seeking employment.

While Klugman et al. (2011) stated that the Islamic Human Development Index (I-HDI) represents an adjustment to the conventional Human Development Index (HDI) to provide a more accurate depiction. Alkire & Foster (2011) argued that the I-HDI offers a better representation of successful high-quality human development by accounting for social inequalities. The I-HDI used in this study follows the framework introduced by Hendrie Anto (2009), which extends beyond conventional HDI by grounding human development measurement in maqashid al-shariah principles. While conventional HDI captures only three dimensions – health, education, and income – the I-HDI integrates five dimensions aligned with Islamic objectives: preservation of religion (Ad-Dien), life (An-Nafs), intellect (Al-Aql), lineage (An-Nasl), and wealth (Al-Maal). This broader framework is particularly relevant for Indonesia as the world's largest Muslim-majority country, where human development outcomes are shaped not only by material conditions but also by social, moral, and spiritual dimensions that conventional metrics fail to capture (Zulhanafi et al., 2020; Yuli et al., 2022). The inclusion of I-HDI as an independent variable – rather than conventional HDI – constitutes a key contribution of this study to the Islamic economics literature on labor absorption.

How Inflation Affects Labor Absorption

Links between inflation and labor exhibit a positive direction in the short term. However, this relationship may weaken if inflation is not accompanied by productivity improvements in the long term. Within the aggregate demand theory, inflation contributes significantly to invigorating business activities, thus promoting expansion that shapes labor requirements (Ball et al., 2022). Uncontrolled inflation (either excessively high or low) can diminish the purchasing power of the population. The condition of excessively low inflation is termed deflation, which represents the opposite of inflation and refers to a general decline in the prices of goods and services within the economy. Septina et al. (2024) indicated that deflation can lead to a reduction in aggregate demand in the economy.

The Relationship Between Corruption and Labor Absorption

Corrupt behavior in a country exerts an indirect impact on the economy. Economic development is impeded by the prevalence of corrupt practices. From an Islamic perspective, corruption violates legal and religious principles that prioritize justice, welfare, and the common interest (Dewata, 2024). According to the grabbing hand theory, corruption hinders the economy by imposing additional costs that must be paid to facilitate economic operations. However, on the other hand, Meressa (2022) argued that corruption can also expedite economic processes through these payments.

Earlier Empirical Research

Empirical studies on how macroeconomic variables affect labor absorption reveal varied findings. Febriyanti et al. (2024) demonstrated that economic advancement delivers a meaningful positive effect on employment uptake. Meilasari (2020) found that foreign direct investment (FDI) has a significant positive influence on labor absorption in Java Island. Alalawneh & Nessa (2020) also indicated that FDI exerts a positive and significant effect on the level of labor absorption. Wu & Shi (2021) revealed that government expenditure exhibits a strong relationship with labor absorption, as government spending can enhance economic growth, thereby promoting the creation of employment opportunities.

Putri et al. (2025) examined the relationship between government expenditure and the level of labor absorption in OECD member countries. The results showed that government expenditure has a positive and significant effect on increasing labor absorption through the availability of jobs in the construction and transportation sectors. Contrasting findings from other studies indicated that government expenditure does not exert a significant influence on labor absorption (Shahzadi et al., 2024; Shuang et al., 2024).

Other previous studies showed that Febriyanti et al. (2024) identified the human development index as having a favorable and meaningful effect on labor absorption among young workers in the long term. Shafira (2020) stated that inflation exerts a positive and significant influence on labor absorption. Gupta (2017) revealed that corruption weakens the relationship between economic growth and labor absorption. Another study by Wang et al. (2024) indicated that corruption acts as a negative moderator in the relationship between FDI and labor absorption. Wilantari et al. (2024) demonstrated that corruption reduces the effectiveness of government expenditure in boosting household consumption, which impacts labor absorption due to changes in aggregate demand.

Isa et al. (2023) noted that high levels of corruption exhibit a negative relationship with human quality. Such corruption moderates the relationship with the human development index, thereby hindering the process of achieving high-quality human development. Corruption also moderates the relationship with investment, as it impedes the inflow of foreign investment funds. Incoming foreign investment tends to prefer streamlined bureaucratic processes. In addition, Gupta (2017) revealed that corruption weakens the relationship between direct investment and labor absorption. Employment opportunities provided by investment funds become disrupted due to prolonged administration and additional costs resulting from corruption.

Research Hypotheses

Grounded in conceptual frameworks and earlier investigations, this study advances the following propositions: H1: Economic growth exerts an

influence on labor absorption. H2: Foreign direct investment (FDI) exerts an influence on labor absorption. H3: Government expenditure exerts an influence on labor absorption. H4: The Islamic Human Development Index (I-HDI) exerts an influence on labor absorption. H5: Inflation exerts an influence on labor absorption. H6: Corruption weakens the positive effect of economic growth on labor absorption. H7: Corruption weakens the positive effect of foreign direct investment (FDI) on labor absorption. H8: Corruption weakens the positive effect of government expenditure on labor absorption. H9: Corruption weakens the positive effect of I-HDI on labor absorption. H10: Corruption strengthens the negative effect of inflation on labor absorption.

Methods

This study employs a quantitative research design using secondary annual panel data from 30 Indonesian provinces over the 2021–2024 period, yielding a total of 120 observations (30 provinces × 4 years). Saturated sampling was applied, meaning all provinces with complete data across all variables were included. Data were obtained from the following sources: labor absorption (number of employed workforce) from the Central Bureau of Statistics (BPS); GRDP from BPS; foreign direct investment from the Investment Coordinating Board (BKPM); government expenditure (regional budget realization) from the Ministry of Finance; inflation from BPS; and corruption from the KPK's Integrity Assessment Survey (Survei Penilaian Integritas/SPI). The Islamic Human Development Index (I-HDI) was constructed by the authors following the maqashid al-shariah framework of Hendrie Anto (2009), incorporating five dimensions – Ad-Dien (religion), An-Nafs (life), Al-Aql (intellect), An-Nasl (lineage), and Al-Maal (wealth) – proxied by available provincial-level indicators from BPS. This composite index captures both

material and spiritual dimensions of human development, distinguishing it from the conventional HDI. The dependent variable is labor absorption, the independent variables are GRDP, FDI, government expenditure, I-HDI, and inflation, and corruption serves as the moderating variable. Data analysis employs Moderated Regression Analysis (MRA) with the Fixed Effects Model, selected based on Chow test ($p = 0.000$) and Hausman test ($p = 0.000$) results, which confirmed Fixed Effects as the most appropriate specification.

Results and Discussion

Overview of Research Variables

The results of research on the variables used in the study, namely employment as the dependent variable and economic growth, foreign direct investment (FDI), government spending, Islamic Human Development Index (I-HDI) and inflation rate as independent variables, as well as the level of corruption as a moderator variable from 2021 to 2024.

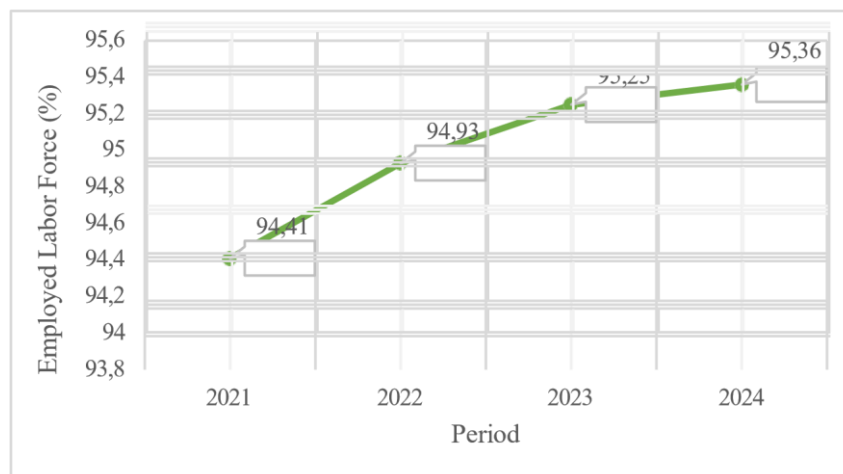


Figure 1. Average Employed Labor Force 2021-2024 (%)

Source: Data processed by the author

The results show that economic growth described through the value of Gross Regional Domestic Product (GRDP) in each province sampled in the study shows different values. This shows the condition and performance of the economy that is not the same. In general, the average GRDP sampled in the

study has increased every year. DKI Jakarta Province has the highest GRDP value every year, reflecting that DKI Jakarta is the center of the national economy. Bengkulu, Bangka Belitung, Gorontalo, Maluku and North Maluku provinces are provinces that have low GRDP values, indicating a lack of rapid economic activity in these provinces.

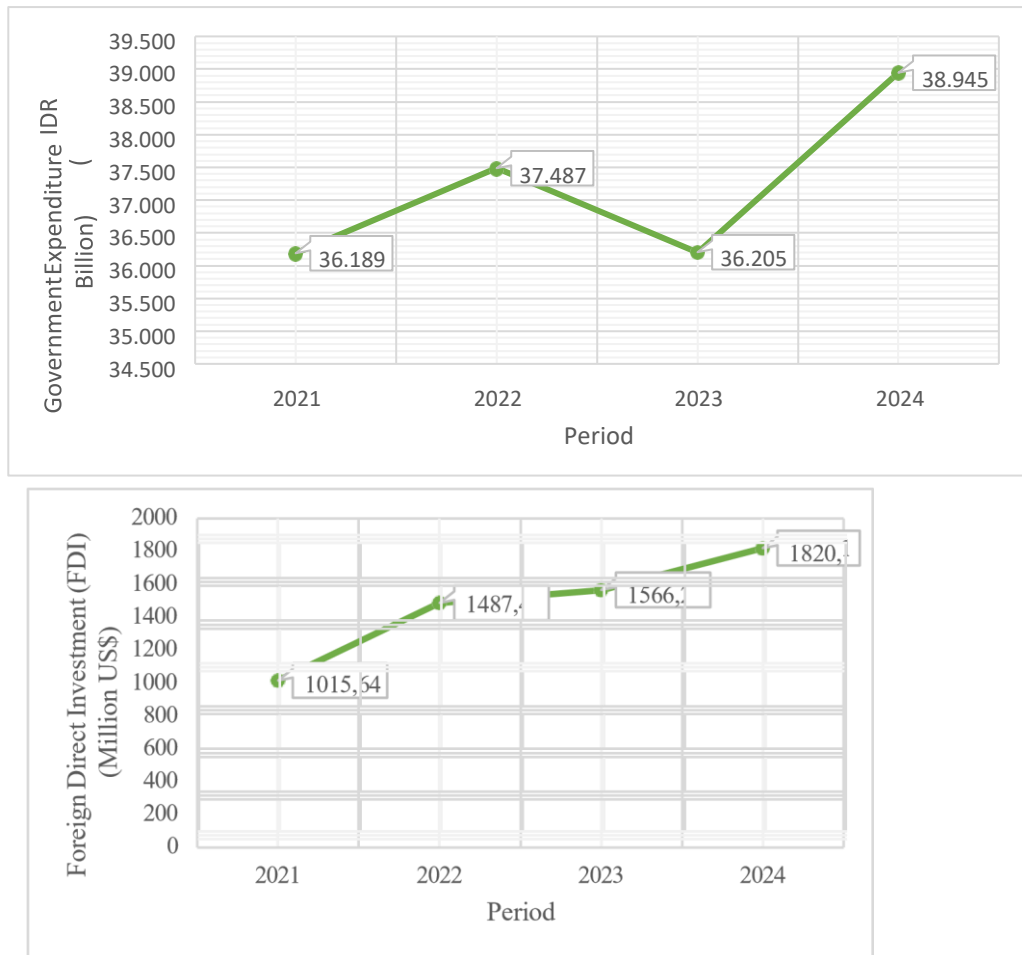


Figure 2. Average Gross Domestic Product (GRDP) 2021-2024 (IDR Trillion)

Source: Data processed by the author

Average foreign direct investment (FDI) in the period 2021-2024 has a positive trend direction by increasing every year. Foreign direct investment in

Indonesia shows a high concentration on the island of Java, namely the provinces of West Java, DKI Jakarta and Banten. In addition, North Maluku is also a province that has a high FDI value. The advantages and potential of natural/economic resources owned by each province are different and become an attraction for foreign investors to invest their capital. Promotion of the wealth owned by the province is also one way to attract investors. Maluku and Gorontalo are the provinces with the lowest FDI value, due to the lack of natural/economic resources that have not been utilized properly.

Figure 3. Average Government Expenditure 2021-2024 (IDR Billion)

Source: Data processed by the author

Government expenditure in the 2021-2024 period has different budget realizations. The largest realization of government expenditure is in large provinces such as West Java, Central Java, East Java and DKI Jakarta. Government spending in 2021 focuses on economic recovery after the COVID-19 pandemic. Government spending depends on what the country prioritizes each year. Spending is a stimulus for the economy to provide aggregate benefits to society.

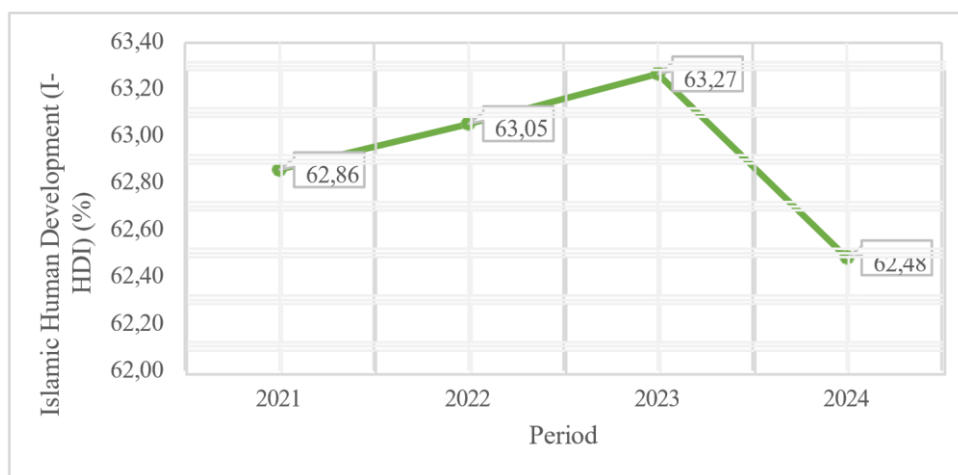


Figure 4. Average Islamic Human Development Index (I-HDI) 2021-2024 (%)

Source: Data processed by the author

The value of the Islamic Human Development Index (I-HDI) in each province in Indonesia fluctuates from year to year. The I-HDI value has a high value, but tends to decrease in the following years. The I-HDI value based on 2021-2023 experienced a positive trend by continuing to rise, which illustrates that human quality in Indonesia is improving. However, in 2024 the I-HDI level experienced a very low decline even more the I-HDI value in that year was lower than the previous 2021. These I-HDI values reflect the quality of human resources owned by each province. Provinces that have the highest I-HDI values are Central Java and DI Yogyakarta.

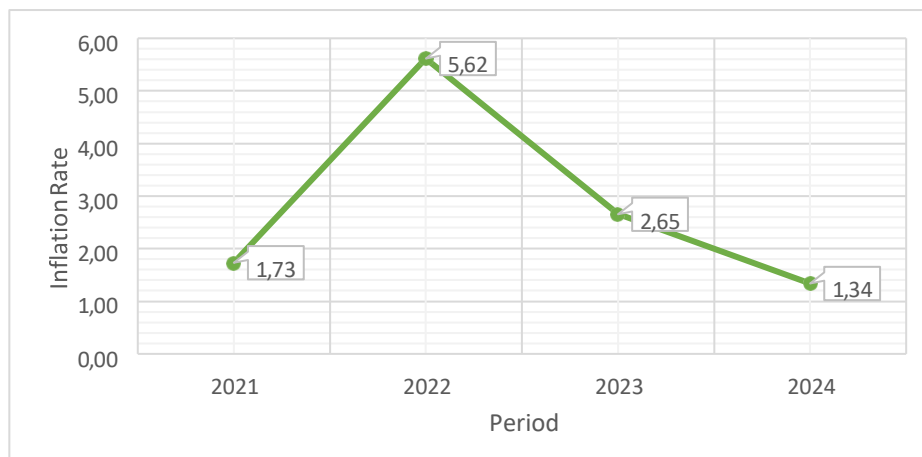


Figure 5. Average Inflation Rate 2021-2024 (%)

Source: Data processed by the author

The inflation rate in each province of Indonesia is different; in 2021 the inflation rate has an average low value. This is because Indonesia is still recovering from the COVID-19 pandemic. The inflation rate in 2022 is very high, almost in all provinces, it reflects that the economy in Indonesia is back on track. The government transition period and global political uncertainty caused the inflation rate in 2023-2024 to be low.

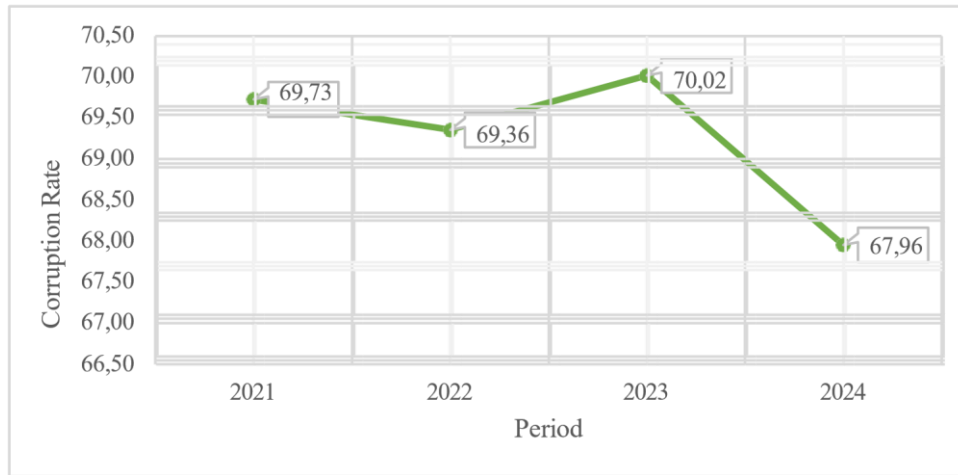


Figure 6. Average Corruption Level in 2021-2024 (Score)

Source: Data processed by the author

The level of corruption in all provinces sampled has increased. The scores given by the KPK in all provinces tend to decrease every year, which means that the province is more prone to corruption. The least corrupt provinces are DI Yogyakarta and Central Java, indicating that the people there are qualified. The tendency to commit corruption in Indonesia is increasing with the decreasing score from the KPK.

The Chow Test

Table 1. Chow Test

	Prob Value.
Cross-section Chi-square	0.000

Source: Data Proceed (2025)

Based on the output results in table 1, it is known that the crosssection chi-square probability value is $0.0000 < 0.05$, so the test results accept H1 and reject H0, that is, the Fixed Effect Model is a model that is more appropriate to use than the Common Effect Model, therefore, the Hausman test is then carried out to compare the more appropriate model between the Fixed Effect Model and the Random Effect Model.

The Hausman Test

Table 2. Hausman Test

	Prob Value.
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Cross-section random	0.000
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Source: Data Proceed (2025)

The Hausman test results indicate a cross-section random probability value of 0.000, which is less than the 0.05 significance level, so the test results accept that the Fixed Effect Model is the most appropriate model to use in this study.

To assess whether the Common Effect Model outperforms the Random Effect Model, the Lagrange Multiplier (LM) test is typically applied. However, an initial Chow test was conducted, which established that the Fixed Effect Model is superior to the Common Effect Model. Following this, the Hausman test further reinforced the preference for the Fixed Effect Model over the Random Effect Model. Consequently, the Fixed Effect Model is selected as the preferred specification, rendering the Lagrange Multiplier test unnecessary in this case, since the Hausman test has already provided clear guidance toward the Fixed Effect approach.

Multicollinearity Test

Table 3. Multicollinearity Test

	X1	X2	X3	X4	X5	Z
X1	1,000000	-0,238338	0,071239	-0,164245	-0,297347	-0,152817
X2	-0,238338	1,000000	-0,011021	0,168925	0,278711	-0,005528
X3	0,071239	-0,011021	1,000000	0,058075	-0,099405	0,044811
X4	-0,164245	0,168925	0,058075	1,000000	0,584666	0,641536
X5	-0,297347	0,278711	-0,099405	0,584666	1,000000	0,446222
Z	-0,152817	-0,005528	0,044811	0,641536	0,446222	1,000000

Source: Data Proceed (2025)

The outcomes from Table 3 reveal that the correlation coefficients for all variables are below 0.80 (specifically, all values < 0.80). This evidence supports the conclusion that multicollinearity does not pose a concern in the model.

Hypothesis Testing

Table 4. Analysis Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5,013333	8,834014	-0,567503	0,5720
X1	3,295081	1,466734	2,246543	0,0275
X2	0,041076	0,015084	2,723260	0,0080
X3	0,000179	0,000106	1,684864	0,0960
X4	12,32192	5,690771	2,165245	0,0334
X5	-9,360653	2,461916	-3,802183	0,0003
Z	1,214451	2,065262	0,588037	0,5582
X1Z	-0,669018	0,346743	-1,929437	0,0573
X2Z	-0,009561	0,003569	-2,678759	0,0090
X3Z	0,020690	0,019120	1,082103	0,2825
X4Z	-3,680013	1,341402	-2,743408	0,0075
X5Z	2,311178	0,585169	3,949589	0,0002
R-squared	0,995441			
Adjusted R-Squared	0,993132			
F-statistic	431,2008			
Prob(F-statistic)	0,000000			

The t-test outcomes, along with the corresponding statistical evaluations of the research hypotheses, are presented in Table 4. The results of this test show the relationship between the variables being examined and the extent of their statistical significance and explain whether the proposed research hypothesis is accepted or rejected according to the empirical evidence obtained. Based on Table 4, the following is the interpretation of the research results:

H1: The Effect of Economic Growth on Labor Absorption Level

The statistical analysis yields a p-value of 0.0275 (below the 0.05 threshold), indicating a significant positive influence of economic growth on labor absorption in Indonesia. With a coefficient of 3.29, the results imply that

a 1% rise in economic growth corresponds to an approximate 3.29% increase in labor absorption. Overall, these outcomes demonstrate a clear positive and statistically meaningful link between economic expansion and enhanced levels of workforce integration in the Indonesian context.

H2: The Link of Foreign Direct Investment (FDI) and Labor Absorption Level

The t-test produces a probability value of 0.0080 (< 0.05), the results demonstrate that FDI significantly affects labor absorption in Indonesia. The coefficient of 0.04 implies that a 1% rise in FDI contributes to a 0.04% increase in labor absorption. Thus, FDI has influence on the level of labor absorption in Indonesia.

H3: The Influence of Government Expenditure on the Level of Labor Absorption

The probability value of 0.0960 (> 0.05) shows that government expenditure does not have a statistically significant impact on labor absorption in Indonesia. Accordingly, the evidence suggests that government expenditure lacks a significant influence on the level of labor absorption in Indonesia.

H4: The Impact of the Islamic Human Development Index (I-HDI) on Labor Absorption Level

A probability value of 0.0334 (< 0.05) confirms that the I-HDI significantly influences labor absorption in Indonesia. The coefficient of 12.32 indicates that a 1% improvement in the I-HDI results in a 12.32% increase in labor absorption. These results therefore support the conclusion that the I-HDI has a significant positive effect on the level of labor absorption in Indonesia.

H5: The Influence of the Inflation Rate on the Level of Labor Absorption

The probability value of 0.0003 (< 0.05) reveals a significant relationship between the inflation rate and labor absorption in Indonesia. The negative coefficient of -9.36 signifies that a 1% rise in inflation reduces labor absorption by 9.36%. Hence, inflation is negatively and significantly associated with the level of labor absorption in Indonesia.

H6: The Moderating Influence of Corruption on the Relationship Between Economic Growth and Labor Absorption

The probability value of 0.0573 (> 0.05) indicates that corruption does not significantly moderate the relationship between economic growth and labor absorption in Indonesia. The findings therefore suggest that corruption plays no significant moderating role in this relationship.

H7: The Moderating Influence of Corruption on the Link of Foreign Direct Investment (FDI) and Labor Absorption

A probability value of 0.0090 (< 0.05) demonstrates that corruption significantly moderates the link of FDI and labor absorption in Indonesia. The moderated coefficient of -0.009561 implies that a 1% increase in the corruption-moderated FDI variable attenuates labor absorption by 0.009561%. Consequently, corruption exerts a significant negative moderating effect on the relationship between FDI and labor absorption.

H8: The Moderating Influence of Corruption on the Correlation of Government Expenditure and Labor Absorption Level

With a probability value of 0.2825 (> 0.05), the findings indicate that corruption does not exert a significant moderating influence on the relationship between government expenditure and labor absorption in Indonesia. Thus, corruption has no significant moderating influence in this context.

H9: The Moderating Influence of Corruption on the Relationship Between the Islamic Human Development Index (I-HDI) and Labor Absorption

The probability value of 0.0075 (< 0.05) confirms that corruption significantly moderates the connection the I-HDI and labor absorption in Indonesia. The moderated coefficient of -3.68 suggests that a 1% increase in the corruption-moderated I-HDI variable diminishes labor absorption by 3.68%. These findings therefore indicate that corruption exerts a significant negative moderating effect on the I-HDI-labor absorption relationship.

H10: The Moderating Influence of Corruption on the Relationship Between the Inflation Rate and Labor Absorption

A probability value of 0.0002 (< 0.05) establishes that corruption significantly moderates the connection between inflation and labor absorption in Indonesia. The moderated coefficient of 2.31 reveals that a 1% increase in the

corruption-moderated inflation variable amplifies labor absorption by 2.31%. Accordingly, corruption displays a significant positive moderating influence on the relationship between inflation and labor absorption.

F Test

The F-test is employed to assess the overall feasibility of the regression model. In other words, the F-test determines whether the regression model is suitable for further analysis. The decision criterion for the F-test is based on comparing the calculated F-value with the critical F-value from the table, as well as evaluating the probability value (p-value) of the F-statistic against the chosen significance level (α).

According to Table 4, the probability value of the F-statistic is 0.000 (< 0.05). Consequently, it can be concluded that the independent variables – economic growth, foreign direct investment (FDI), government expenditure, the Islamic Human Development Index (I-HDI), and the inflation rate – along with corruption as the moderating variable, jointly and simultaneously exert a significant influence on the level of labor absorption in Indonesia.

Coefficient Determination Test (R²)

The coefficient of determination measures the extent to which variations in the dependent variable can be explained by the independent variables in the regression model. In this study, an R-squared value of 0.995441 indicates that the model accounts for approximately 99.54% of the variation in the dependent variable, while the remaining 0.46% is attributable to factors outside the model. This suggests that nearly all changes in the dependent variable are captured by the included independent variables. Additionally, the Adjusted R-squared value of 0.993132 reflects the model's robustness after adjusting for the number of independent variables.

A high R-squared value in panel data regression models, particularly in the Fixed Effects Model (FEM), is common and does not necessarily signal errors or overfitting. This is because panel data models incorporate two dimensions – time and individual units – allowing them to capture a broader range of data variations compared to standard cross-sectional regressions.

Consequently, a high R-squared value demonstrates the model's strong ability to explain the extent of changes or differences in the dependent variable driven by the included predictors.

Discussion

The Impact of Economic Growth on Labor Absorption Level

The statistical analysis results indicate that economic growth exerts a significant influence on the level of labor absorption. These findings align with previous studies conducted by Hartono et al. (2018), Astari et al. (2019), Widjajanto & Agus (2020), Silvia & Susilowati (2023), and Febriyanti et al. (2024), which found that Gross Domestic Product (GDP) has a significant positive effect on the level of labor absorption. This evidence reinforces Okun's law theory, which posits that an increase in real GDP or economic output is accompanied by a corresponding rise in labor absorption within a country (Moridian et al., 2024).

The findings of this paper are also consistent with Pane et al. (2024), who argued that a country's economy heavily relies on contributions from various economic sectors, such as agriculture, manufacturing, trade, industry, services, and others. Advances in these sectors substantially impact a nation's economic activities, including the availability of employment opportunities. An increase in output within a country reflects heightened economic circulation and national income, which in turn leads to greater demand for labor (Maryati et al., 2021).

The Effect of Foreign Direct Investment (FDI) on the Level of Labor Absorption

The research findings indicate that FDI has a significant effect on the level of labor absorption. These results are consistent with studies by Mahmoodi & Mahmoodi (2016), Meilasari (2020), Alalawneh & Nessa (2020), Choudhry et al. (2020), and Dewi & Syaifullah (2022), which demonstrated that

foreign direct investment (FDI) displays a significant positive impact on labor absorption.

Foreign direct investment (FDI) constitutes the most suitable option for supplying capital to developing countries. FDI involves cross-border investment encompassing the establishment, acquisition, or purchase of firms within a host nation, thereby contributing to job creation (Paramita & Christianingrum, 2022). Compared to portfolio investment, FDI yields greater benefits. Portfolio investment typically directs funds toward entities issuing securities but does not consistently lead to the generation of new employment opportunities.

The Influence of Government Expenditure on the Level of Labor Absorption

Hypothesis testing reveals that government expenditure lacks a statistically significant impact on the level of labor absorption. These findings diverge from research conducted by Chodariyanti (2019), Wu & Shi (2021), and Putri et al. (2025), which reported a significant positive association between government expenditure and labor absorption. However, they align with Shahzadi et al. (2024) and Shuang et al. (2024), who found no linkages between government expenditure and labor absorption. The non-significant result in this study reflects a pattern specific to the Indonesian provincial context during 2021–2024. This period was dominated by post-COVID-19 fiscal recovery spending that was largely consumptive in nature – concentrated in social assistance, healthcare subsidies, and operational expenditure rather than productive investment in labor-intensive sectors. When government spending is directed toward short-term relief rather than structural economic empowerment, its multiplier effect on employment creation is weakened. Furthermore, Indonesia's fiscal decentralization creates significant heterogeneity in spending quality across provinces: large provinces allocate funds toward capital-intensive infrastructure, while smaller provinces with limited budgets prioritize routine expenditure, which collectively weakens the aggregate expenditure–labor absorption relationship when analyzed at the national panel level.

Rakhmawati & Boedirochminarni (2018) highlighted that government expenditure mirrors a nation's economic policy. Government spending exhibits a robust connection with labor absorption, as it can stimulate economic growth and foster job creation (Wu & Shi, 2021). To support sound economic performance, governments must adopt policies that enhance productivity among economic agents, thereby promoting employment opportunities. Expenditure targeted at community economic empowerment plays a critical role in generating job prospects and mitigating poverty (Monoarfa et al., 2024).

In contrast, Shahzadi et al. (2024) observed that government spending in Bangladesh has failed to contribute to employment growth, often providing only temporary aid for daily needs rather than prioritizing job provision. Such expenditure remains largely consumptive, particularly in national defense sectors. Similarly, Shuang et al. (2024) reported parallel outcomes, noting that government spending does not facilitate job creation, instead offering short-term social assistance for everyday requirements without pursuing empowerment strategies to sustain employment and alleviate unemployment and poverty.

The Influence of the Islamic Human Development Index (I-HDI) on the Level of Labor Absorption

The study results show that the I-HDI significantly affects the level of labor absorption. These findings correspond with research by Zulhanafi et al. (2020), Parisi et al. (2021), and Febriyanti et al. (2024), which established a significant positive relationship between the I-HDI and labor absorption.

A primary barrier to economic development lies in the availability of qualified human resources, upon which the success of economic progress largely depends. Klugman et al. (2011) noted that the Islamic Human Development Index (I-HDI) serves as an adaptation of the conventional Human Development Index (HDI) to provide a more precise depiction of inequality's impact on human development outcomes. The I-HDI offers an improved portrayal of high-quality human development achievements by incorporating social inequalities (Alkire & Foster, 2011).

The Influence of the Inflation Rate on the Level of Labor Absorption

Statistical analysis demonstrates that the inflation rate has a significant effect on the level of labor absorption. These results align with Septina et al. (2024), who identified a significant negative association between inflation and labor absorption. Uncontrolled inflation erodes societal purchasing power. This phenomenon accords with cost-push inflation theory, which posits that elevated inflation increases production costs, potentially prompting layoffs as firms seek to curb expenses.

The Moderating Role of Corruption in the Association of Macroeconomic Variables and Labor Absorption Level

This study indicates that corruption effectively moderates the relationships involving foreign direct investment (FDI), the Islamic Human Development Index (I-HDI), and inflation. By contrast, corruption does not moderate the effects of other macroeconomic variables, namely economic growth and government expenditure on labor absorption in Indonesia.

The negative moderating role of corruption in the links between FDI and I-HDI with labor absorption arises from the cascading effects of corrupt practices. Wang et al. (2024) found that corruption functions as a negative moderator in the association between FDI and labor absorption. Economic uncertainty stemming from corruption impedes job-creating investments, consistent with the grabbing hand theory, which likens corruption to a grasping hand that elevates costs in market activities, distorts resource allocation, and diminishes the output potential of foreign investment (Meressa, 2022). The positive moderation by corruption in the inflation-labor absorption relationship stems from shared detrimental traits between corruption and inflation, both adversely affecting national economic growth, including disruptions to labor absorption. Ball et al. (2022) argued that corruption contributes to inflation through widespread bribery in governance and hoarding of essential commodities for profit maximization, resulting in high inflation levels that harm the workforce.

The failure of corruption to moderate the relationships between economic growth and government expenditure with labor absorption can be explained by the structural characteristics of these variables in the Indonesian context. Economic growth, measured by GRDP, represents broad aggregate output driven by diverse sectors – many of which operate through informal channels that are less directly affected by formal corruption mechanisms. The employment-generating effect of GRDP growth is therefore diffuse and not easily intercepted by corruption at the bureaucratic level. Similarly, government expenditure in Indonesia's decentralized fiscal system is subject to multiple layers of oversight through BPK and KPK audits, which partially insulates the expenditure-employment link from corruption's moderating influence. This contrasts with FDI and I-HDI, where corruption operates through more direct and concentrated channels: bureaucratic barriers that deter foreign investors from job-creating activities, and institutional failures that systematically undermine human development programs before they reach intended beneficiaries.

Conclusion

Economic growth has a significant positive effect on the level of labor absorption in Indonesia. This finding suggests that higher Gross Regional Domestic Product (GRDP) values reflect robust economic activity across Indonesian provinces. Elevated GRDP levels indicate that key economic sectors, such as manufacturing and industry, are performing well, thereby facilitating greater labor absorption.

Foreign direct investment (FDI) displays a significant positive impact on labor absorption in Indonesia. High FDI inflows in various provinces contribute substantially to employing the Indonesian workforce. To maximize FDI benefits, investments should prioritize societal interests by providing decent employment opportunities, enabling citizens to secure suitable jobs.

Government expenditure shows no significant association with the level of labor absorption in Indonesia. Despite substantial spending, it has not yet

succeeded in promoting increased labor absorption across provinces. Ideally, higher expenditure should yield stronger economic outcomes. Governments are advised to allocate funds toward long-term economic empowerment initiatives that create abundant decent jobs, rather than consumptive measures such as temporary cash or social assistance.

The Islamic Human Development Index (I-HDI) exhibits a significant positive relationship with labor absorption in Indonesia. Improvements in human quality of life influence workforce participation in job seeking. Challenges in securing employment in Indonesia often stem from relatively low average educational attainment; thus, enhanced education empowers individuals to more readily obtain suitable positions.

The inflation rate has influenced labor absorption in Indonesia. Excessively high or low inflation raises production costs, potentially leading to layoffs as firms attempt to control expenses.

The results also reveal that corruption significantly moderates the relationship between FDI, the I-HDI, and inflation with labor absorption. In contrast, corruption insignificantly moderates the links between economic growth or government expenditure and labor absorption.

This study has several limitations that may serve as a foundation for future research, including the use of theories that remain inconsistent, restricted sample size, and limited variables representing Islamic economics. Additionally, the construction of I-HDI using provincial-level proxy indicators from BPS involves methodological choices in operationalizing each maqashid dimension; future studies are encouraged to use more direct and validated measures of Islamic human development, particularly for the Ad-Dien dimension, to more accurately capture the spiritual and moral dimensions intended by the original framework. Recommendations for subsequent researchers include extending the study period, incorporating additional variables – particularly those related to Islamic economics and finance relevant to the topic – and employing alternative analytical tools to examine long-term or short-term relationships, thereby yielding more comprehensive insights.

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