



Islamic Financing for Economic Growth and Labour Absorption in Indonesia's Green Development

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Abstract. This study examines the relationship between **Islamic financing, economic growth, and labor absorption** within the framework of **green and inclusive development in Indonesia**. Using a **quantitative panel data approach** across **33 provinces** from **2010 to 2023**, this research applies a **simultaneous regression model (SEM)** to analyze both direct and indirect effects. The findings reveal that **Islamic financing has a negative and significant effect on economic growth**, suggesting that current financing allocations are not optimally directed toward productive and labor-intensive sectors. Similarly, **Islamic financing also exerts a negative and significant influence on labor absorption**, while **economic growth shows no significant effect on employment**. As a result, the **indirect effect of Islamic financing on labor absorption through economic growth** is also insignificant. These outcomes indicate that although Islamic finance theoretically promotes equitable and sustainable growth, its implementation in Indonesia still faces structural and sectoral limitations. The study highlights the need for **policy realignment** to channel Islamic financing toward **green, inclusive, and labor-intensive sectors** to strengthen its role in supporting sustainable economic transformation.

Keywords: Islamic Financing, Economic Growth, Labor Absorption, Green Development.

1 Introduction

Labor absorption is one of the key indicators of successful economic development, as it directly relates to the level of social welfare and poverty reduction. In Indonesia, the challenge of creating broad and quality employment opportunities remains a central issue—particularly amid regional development disparities, disruptions caused by digitalization and automation, and the long-term impacts of the COVID-19 pandemic on the informal sector and micro, small, and medium enterprises (MSMEs). The informal sector and MSMEs, which have traditionally served as the backbone of employment, experienced substantial disruptions in their activities, consequently reducing their capacity to absorb labor [1, 2, 3, 4, 5, 6].

Moreover, global challenges such as trade wars and international market volatility have intensified economic uncertainty, hampering investment and the expansion of

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productive sectors—thereby constraining the labor market’s ability to absorb new entrants. Within the framework of good governance, inclusive and sustainable macroeconomic policies are needed—policies that not only focus on economic growth but also incorporate the social and cultural values embedded in society [6, 7, 8, 9, 10, 11].

One increasingly relevant dimension to be integrated into public policy is religion, particularly through the lens of Islamic economics and labor regulations that emphasize social justice. The Islamic financial system—characterized by profit-and-loss sharing, prohibition of interest (*riba*), and promotion of fairness—offers an alternative financing mechanism that supports sustainable development, as it aligns with the principles of the green economy, which emphasizes environmental stewardship and social inclusion as integral components of growth [12, 13, 14, 15, 16].

Empirical evidence from Indonesia shows that financing through Islamic financial institutions contributes to labor absorption by channeling productive financing into the real sector. For instance, several studies examining the role of Islamic bank financing for MSMEs found a positive effect on job creation. However, a significant research gap remains concerning the transmission mechanism through which Islamic financing affects labor absorption—both directly and indirectly via economic growth—particularly within the context of green development. Few studies have explored this relationship simultaneously across provinces in Indonesia, despite its increasing relevance amid the national and global push toward a green and sustainable economy [17, 18, 19, 20, 21, 22].

Therefore, understanding the relationship between Islamic financing, economic growth, and labor absorption becomes crucial in designing sustainable development strategies in Indonesia. Integrating Sharia principles into the financial system not only has the potential to strengthen the real economic foundation and promote social inclusivity but also serves as a catalyst for a just and green economic transformation. In light of ongoing global uncertainty caused by trade conflicts, governance challenges, and the accelerating transition toward a green economy, an empirical analysis examining the simultaneous effects of Islamic financing on economic growth and labor absorption at the provincial level is both relevant and urgent. This study aims to contribute conceptually and practically to the discourse on building an economy that not only grows but does so sustainably, inclusively, and in alignment with the values of social justice and environmental preservation [23, 24, 25, 26, 27, 28].

2 Literature Review

2.1 Labor Absorption, Economic Growth and Green Development

The relationship between economic growth and labor absorption in developing countries is complex and often nonlinear. The classic theory of employment elasticity posits that increases in economic output will lead to proportional increases in labor demand. However, empirical evidence shows that this relationship does not always hold true. Factors such as inefficient labor market structures, rapid population growth, and inadequate policy frameworks often weaken the capacity of growth to

create jobs [29]. Consequently, many developing countries, including Indonesia, experience jobless growth—a phenomenon in which GDP expands without a corresponding rise in employment opportunities, reflecting structural mismatches within the economy.

Rapid population growth further intensifies the challenge by increasing the labor supply faster than the creation of decent employment opportunities. Historically, between 1960 and 1980, several developing countries succeeded in absorbing labor into more productive sectors, resulting in higher income per worker [29]. However, this success remains constrained by dualistic labor markets, where a modern formal sector coexists with a large informal economy characterized by low productivity and minimal protection. This duality limits the trickle-down effects of growth, as much of the workforce remains concentrated in low-wage, low-productivity occupations, thereby diminishing the welfare impact of aggregate economic expansion.

Within the framework of sustainable and inclusive development, the informal sector plays a pivotal role in maintaining economic resilience and supporting livelihoods. Sultana et al. [30] highlight that informal employment contributes positively to economic growth in developing economies and aligns with *Sustainable Development Goal (SDG) 8*, which promotes decent work and productive employment. Rather than being marginalized, the informal sector should be integrated into national development strategies through skill enhancement, credit access, and formalization policies. This approach aligns with the *green economy* paradigm, where labor-intensive, resource-based industries—such as sustainable agriculture, creative industries, and waste recycling—generate “green jobs” that combine environmental responsibility with social inclusiveness.

Recent literature also emphasizes that real sector growth and financial development are crucial drivers of employment-oriented growth in emerging economies. Raghutla and Chittedi [31] find that increased real sector expenditure supported by financial development enhances economic performance by expanding infrastructure and productive capacity. Similarly, digitalization and good governance are identified as essential enablers that reduce transaction costs and improve labor productivity [32]. However, government spending alone does not necessarily guarantee higher growth rates; its effectiveness depends on the quality of public investment and alignment with productive sectors [33]. In the context of green development, channeling public and private investment toward sustainable infrastructure, clean technology, and green skills training is key to transforming economic growth into an inclusive and environmentally conscious model of development.

2.2 Islamic Financing and Economic Growth

Islamic economics fundamentally promotes economic stability and sustainable growth through its core principles of profit-sharing, prohibition of interest (*riba*), and commitment to social justice. These principles foster equitable wealth distribution and encourage participation in real, productive activities. Central to this framework is the concept of risk-sharing, which stands in contrast to the risk-transfer mechanism of conventional finance. As emphasized in the Kuala Lumpur Declaration at 2012, risk-

sharing mechanisms enhance inclusivity and stability by channeling resources into asset-backed and equity-based ventures, reducing procyclicality and fostering a more just financial system [34].

Empirical studies—particularly from Malaysia—demonstrate that Islamic bank financing positively affects GDP growth, especially in the short term [35]. However, the long-term impact tends to be weaker, suggesting that sustained economic benefits require stronger emphasis on profit-and-loss sharing (PLS) contracts such as *mudarabah* and *musharakah*. In Malaysia, Islamic financing directed toward construction and infrastructure projects has shown strong multiplier effects on GDP, particularly when aligned with sustainability and green economy objectives [36].

Islamic finance also broadens the understanding of economic success beyond GDP growth by integrating moral and social dimensions such as equity and justice [37]. Unlike conventional growth models that often ignore social welfare, the Islamic economic system aligns financial intermediation with ethical and developmental goals. Evidence from Malaysia and Pakistan indicates that Sharia-based financing supports not only economic expansion through SMEs and infrastructure investment but also inclusive development that harmonizes material growth with moral values [35, 38].

In Indonesia, the Islamic Economic Masterplan (IME) 2019–2024 represents a milestone in integrating Sharia economics into the national development strategy. The IME emphasizes market expansion, financial inclusion, product innovation, and institutional strengthening as key pillars for a resilient Islamic finance sector [39, 40]. Through the diversification of instruments—such as sovereign sukuk, Islamic microfinance, and digital Islamic finance—the IME aims to expand access, attract investors, and strengthen consumer trust. Additionally, human capital development and governance reforms underpin these efforts, ensuring institutional integrity and long-term stability [41].

Finally, the IME aligns Indonesia's Islamic finance system with global standards and ESG principles, positioning it as a driver of sustainable and inclusive economic transformation. Integration with the global Islamic economy, combined with digital innovation and potential fiscal incentives, reflects a strong commitment to the green economy vision [42, 43]. Collectively, these developments underscore Indonesia's strategic potential to harness Islamic finance as a foundation for ethical, environmentally conscious, and socially inclusive growth.

2.3 Islamic Financing and Labor Absorption

Sharia-compliant financing plays an essential role in supporting Micro, Small, and Medium Enterprises (MSMEs) and labor-intensive sectors by providing an ethical and inclusive alternative to conventional finance. Its profit-and-loss-sharing principles enable MSMEs to access funds without the burden of interest, which often serves as a barrier in traditional banking systems [44, 45]. By targeting underserved communities—such as women entrepreneurs and rural producers—Sharia-compliant financing promotes financial inclusion, strengthens local economies, and fosters community resilience [1, 20]. Moreover, its alignment with ethical business practices ensures that

capital is directed toward productive sectors such as agriculture and handicrafts, which can enhance employment and social welfare [21].

In theory, this inclusive financial model should stimulate economic growth and employment through greater capital accessibility and sustainable enterprise development. However, empirical findings from Indonesia reveal that Sharia-compliant financing has a negative impact on economic growth [39, 40]. This indicates that, while the system is expanding, its structural design, limited scale, and focus on low-risk, short-term financing may restrict its broader macroeconomic impact. Consequently, since economic growth in Indonesia has shown weak or insignificant influence on employment absorption [20], the indirect effect of Sharia-compliant financing on job creation through growth channels remains limited. The financing system, therefore, contributes more directly at the micro and community levels rather than through national growth multipliers.

Despite these limitations, Islamic finance maintains strong potential for promoting socially inclusive and sustainable development, particularly within the context of the green economy. Instruments such as Green Sukuk have emerged to finance renewable energy, sustainable agriculture, and environmental restoration projects, combining ethical finance with sustainability goals [46]. Furthermore, by integrating environmental, social, and governance (ESG) criteria into investment decisions, Islamic financial institutions reinforce the alignment between ethical principles and environmental responsibility [47]. This synergy enhances the social dimension of green finance, emphasizing justice, equity, and shared prosperity as core developmental objectives.

Based on a literature review and previous empirical findings, this study develops a conceptual framework that illustrates the linkages between Islamic financing, economic growth, and employment in the context of sustainable and inclusive development. This framework is designed to analyze the direct and indirect impacts of Islamic financing on employment, with economic growth as a mediating variable. This approach allows the study to capture how financing within the Islamic system can influence real sector performance and employment outcomes.

Accordingly, this study proposes two main hypotheses:

- There is a positive and significant effect of Islamic financing on employment, both directly and indirectly through economic growth.
- There is a positive and significant effect of economic growth on employment.

The conceptual framework, as shown in Figure 1, visually presents the relationships between these variables and guides the empirical testing of the proposed hypotheses.

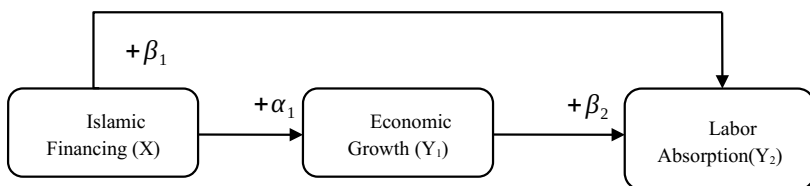


Fig. 1. Conceptual framework
Source: Author elaboration, 2025.

3 Methodology

3.1 Research Approach

This study employs a quantitative approach to analyze the relationship between Islamic financing, economic growth, and labor absorption within the context of sustainable development in Indonesia. The quantitative method is chosen because it allows for an objective and systematic measurement of economic phenomena and provides an empirical foundation for testing causal relationships among variables through mathematical and statistical models.

This approach enables an assessment of the extent to which value-based financial instruments—such as Sharia-compliant financing—contribute to fostering inclusive and sustainable economic growth and labor absorption. Accordingly, the findings of this study are expected to provide empirical evidence on the contribution of Islamic economics to economic growth, job creation, and the strengthening of ethical, transparent, and sustainability-oriented economic governance.

3.2 Research Location

This research covers 33 provinces in Indonesia, reflecting the diversity of economic structures, social characteristics, and development levels across regions. From the total of 38 provinces currently existing, the selection of 33 provinces was based on data availability and completeness during the study period. This regional diversity allows for a more comprehensive analysis of the variations in the relationship between Islamic financing, economic growth, and labor absorption across different provinces.

Nationally, labor absorption has shown an upward trend in recent years. However, structural challenges—such as regional disparities, digital transformation, and the post-pandemic impact—continue to influence the quality and sustainability of job growth. In this context, the study seeks to identify how Sharia-based financing can stimulate green economic growth and promote more equitable and socially just employment opportunities. By understanding these relationships, this study aims to provide a foundation for developing policy models that are ethical, inclusive, and oriented toward sustainability.

3.3 Types and Sources of Data

This study utilizes secondary data obtained from various official institutions such as the Central Bureau of Statistics (BPS) and the Financial Services Authority (OJK). The type of data used is panel data, which combines both time series and cross-sectional data.

The time series data cover the period 2010–2023, selected to capture the dynamics of the economy over more than a decade, including the implementation period of the *Indonesian Islamic Economic Masterplan (MEKSI) 2019–2024*. The cross-sectional data encompass 33 provinces in Indonesia, allowing for the analysis of interregional differences in economic performance. This combination enables the study to depict the pattern of relationships between Islamic financing, economic growth, and labor absorption simultaneously within the framework of green development and sustainable economic governance.

3.4 Data Collection Method

The data collection method applied in this study is library research. Data were gathered from various secondary sources, including official publications from government institutions, annual reports from Bank Indonesia, as well as academic literature such as books, journals, and relevant scholarly articles. The data were compiled using direct recording techniques for panel data, combining cross-sectional data (across provinces) and time series data (2010–2023).

Panel data provides advantages in analyzing dynamic changes across both time and regions simultaneously, resulting in more accurate and informative estimates. This approach enhances the empirical validity of the research in explaining the transmission mechanism of Islamic financing toward economic growth and labor absorption—central to building sustainable economic governance and supporting Indonesia’s transition toward a green and inclusive economy.\

3.5 Data Analysis Technique

The data analysis in this study involves descriptive statistical analysis and hypothesis testing based on the conceptual framework previously presented. The analytical model constructed aims to empirically examine the relationships among the study variables—specifically, the direct and indirect effects of Islamic financing on labor absorption through economic growth—within the broader context of sustainable and green development.

$$Y_1 = f(X)$$

(1)

$$Y_2 = f(X, Y_1)$$

(2)

Here’s the English translation of your sentence written in an academic style:

Where:

- Y_1 = Economic Growth, measured in percentage (%)
- Y_2 = Labor Absorption, measured in percentage (%)
- X_1 = Islamic Financing, measured in rupiah (IDR)

Equations (1) and (2) above can be explicitly expressed in the form of a Cobb-Douglas function as follows:

$$Y_1 = \alpha_0 X^{\alpha_1} e^{\mu_1}$$

(1.a)

$$Y_2 = \beta_0 X^{\beta_1} e^{\beta_2 Y_1 + \mu_2}$$

(2.a)

The non-linear Equations (1.a) and (2.a) can then be transformed into a linear form using natural logarithms (ln), as shown in the following linear regression estimation equations:

$$Y_1 = \ln \alpha_0 + \alpha_1 \ln X + \mu_1 \tag{1.b}$$

$$Y_2 = \ln \beta_0 + \beta_1 \ln X + \beta_2 Y_1 + \mu_2 \tag{2.b}$$

Subsequently, based on the equations previously presented, the functional equations and the simultaneous model (Structural Equation Model, SEM) with the reduced form (Appendix 1) can be constructed as follows:

$$Y_2 = A_0 + A_1 \ln X + V$$

(3)

Where;

- $A_0 = \ln \beta_0 + \beta_2 \ln \alpha_0$
- $A_1 = \beta_1 + \alpha_1 \beta_2$
- $V = \beta_2 \mu_1 + \mu_2$

4 Results

Based on the simultaneous regression results, with Islamic Financing (X) as the exogenous variable and Economic Growth (Y1) and Labor Absorption (Y2) as the endogenous variables, the findings are presented in Table 1. The R-Square value for Y1 (R²Y1) is 0.030, indicating that 3 percent of the variation in economic growth can be simultaneously explained by changes in Islamic financing. The remaining 97 percent is influenced by other factors outside the model.

Furthermore, the estimation results for the economic growth function show that Islamic financing has a negative and significant effect on economic growth, with a t-value of -3.777 and a coefficient of -0.357 at the 5 percent significance level. This implies that a 1 percent increase in Islamic financing leads to a 0.357 percent decrease in economic growth.

Table 1. The Estimate Regression Results.

Directions of Effect	Constanta	Regression Coefficients	t-Statistic	Probability
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$\ln X \Rightarrow Y_1$	7.803	-0.357*	-3.777	0.000
$\ln X \Rightarrow Y_2$	96.894	-0.379*	-5.824	0.000
$Y_1 \Rightarrow Y_2$		0.030	0.944	0.346

*) Significant at $\alpha = 5\%$; $R^2 Y_1 = 0.030$; $R^2 Y_2 = 0.076$; $N = 462$

Still referring to Table 1, the R-Square value for Y_2 ($R^2 Y_2$) is 0.076, indicating that 7.6 percent of the variation in labor absorption can be simultaneously explained by Islamic financing and economic growth, while the remaining 92.4 percent is influenced by other factors outside the model.

The estimation results further show that economic growth has an insignificant effect on labor absorption, whereas Islamic financing exhibits a negative and significant influence at the 5 percent significance level, with a t-value of -5.824 and a coefficient of -0.379. This implies that a 1 percent increase in Islamic financing leads to a 0.379 percent decrease in labor absorption.

The insignificant effect of economic growth on labor absorption indicates that economic expansion in Indonesia does not necessarily translate into proportional increases in employment opportunities. This suggests that much of Indonesia's growth may be driven by capital-intensive or non-labor-intensive sectors, such as extractive industries or digitalized production systems. Consequently, the indirect effect of Islamic financing on labor absorption through economic growth is also found to be statistically insignificant.

Overall, these findings reflect a structural challenge in aligning Islamic financing with inclusive and labor-intensive growth pathways. While Islamic finance aims to promote equitable development through ethical financial intermediation, its actual economic transmission mechanism in Indonesia appears to be constrained by sectoral composition, limited access to productive MSMEs, and insufficient integration with green and inclusive economic initiatives.

5 Discussion

Islamic financing's significant negative impact on Indonesia's economic growth can be understood as a reflection of the sector's early development stage and structural limitations. The Islamic finance ecosystem—comprising Islamic banking, sukuk markets, and Islamic capital markets—has yet to reach full integration and maturity, resulting in inefficiencies and limited capacity to stimulate broad-based economic expansion [40]. This fragmented growth is compounded by uneven regulatory effectiveness, where initiatives aimed at promoting Islamic finance are not yet supported by consistent enforcement and comprehensive oversight [48]. Moreover, technological integration within Islamic finance remains nascent; slow adoption of fintech innovations reduces financial inclusion and constrains operational efficiency [13]. These conditions collectively limit the sector's ability to channel funds into productive, high-value sectors that drive sustainable economic growth.

Beyond structural and regulatory issues, socio-economic factors also shape the muted role of Islamic financing in supporting growth. Despite Indonesia's large Muslim population, public familiarity and trust still lean toward conventional finance, limiting the expansion of Islamic financial products [49, 50]. Furthermore, macroeconomic variables—such as inflation volatility, exchange rate fluctuations, and uneven money supply—affect Islamic financial operations, reducing their growth transmission capacity [48]. These findings suggest that the negative correlation between Islamic financing and economic growth does not imply inefficiency but indicates a transition phase, where the Islamic financial ecosystem is still consolidating toward greater productivity, inclusivity, and technological integration [51, 52, 53, 54].

The negative effect of Islamic financing on employment also reflects deeper structural, institutional, and behavioral constraints. Regionally, Islamic financing in Indonesia remains unevenly distributed, limiting access to financial resources and thereby restricting job creation in underdeveloped areas [28]. Institutional challenges, particularly in adapting regulatory frameworks to support Islamic fintech, have further constrained its potential to create employment through digital financial inclusion [13, 48]. Meanwhile, limited literacy and utilization of Islamic finance instruments—such as *mudharabah* and *musyarakah*—among small and medium enterprises reduce entrepreneurial activity and slow job expansion [50, 55].

Consequently, the observed negative relationship between Islamic financing and employment does not signify an unproductive system but highlights an ecosystem still in consolidation. To unlock its developmental potential, Islamic financing must shift focus from short-term trade and consumption-based lending toward labor-intensive and sustainable sectors, such as green agriculture, halal tourism, and the creative economy. This strategic reorientation would strengthen Islamic finance's alignment with Indonesia's green economy agenda and enable it to contribute meaningfully to inclusive growth and job creation.

The indirect relationship between Islamic financing and employment through economic growth in Indonesia appears insignificant—primarily due to the negative effect of Islamic financing on economic growth itself. Empirical findings indicate that the expansion of Islamic financing does not necessarily stimulate productive economic activities capable of generating broad-based growth. In Indonesia, a large share of Islamic financing remains concentrated in short-term trade, consumer, and *murabahah*-based contracts, which emphasize low-risk, high-turnover transactions rather than capital formation and productive investment. This structural bias limits the capacity of Islamic finance to drive real sector expansion or industrial development, leading to a situation where its growth coincides with a contractionary or neutral impact on aggregate economic performance [43, 56].

Moreover, since economic growth itself shows no significant impact on employment absorption in Indonesia, the indirect transmission channel from Islamic financing to employment through economic growth becomes even weaker. Indonesia's economic growth over the past decade has been characterized as “jobless growth,” where increased output largely results from productivity gains and capital-intensive sectors rather than labor-intensive industries. Consequently, even if Islamic financing were to

marginally influence GDP growth, this effect would not automatically translate into expanded employment opportunities [40, 57].

This combination—where Islamic financing negatively affects growth and growth fails to generate employment—creates a structural disconnect in the economy. Islamic finance’s potential to promote inclusive and sustainable labor markets is thus hindered by its concentration in low-multiplier sectors and its limited alignment with national development priorities. As supported by studies from other dual-banking countries, such as Pakistan and Malaysia, the developmental impact of Islamic finance depends heavily on its distributional structure and real-sector integration [38, 58]. In Indonesia’s case, the lack of such alignment explains why Islamic financing exerts no significant indirect effect on employment through economic growth—highlighting the need for policy realignment toward long-term, productive, and labor-intensive sectors.

In the context of Indonesia’s green economic framework, these findings underscore an urgent need for policy realignment. Islamic financing must be reoriented from low-multiplier, short-term activities toward labor-intensive and environmentally sustainable sectors such as green agriculture, renewable energy, halal tourism, and the creative economy [51, 52, 54]. Aligning Islamic finance with *maqasid al-shariah* principles and the Sustainable Development Goals (SDGs) can transform it into a genuine instrument for inclusive, ethical, and sustainable employment creation.

6 Conclusion

The findings reveal that Islamic financing in Indonesia exerts a negative and significant influence on both economic growth and employment absorption, while the effect of economic growth on employment is statistically insignificant. Specifically, a 1% increase in Islamic financing reduces economic growth by 0.357% and employment absorption by 0.379%. These results suggest that Islamic financing has yet to function as a catalyst for productive and sustainable economic activity, reflecting structural inefficiencies in its current implementation.

This negative relationship between Islamic financing and economic growth illustrates that the Islamic financial ecosystem in Indonesia is still in an early consolidation stage, characterized by fragmented sectoral development, uneven regulation, and limited technological integration. A large share of Islamic financing is directed toward short-term trade and consumption-based contracts, which provide limited value-added impact on the real economy. Consequently, Islamic finance fails to stimulate long-term productive sectors that can foster both economic growth and employment creation—sectors that are crucial in achieving the objectives of a green and sustainable economic framework.

Moreover, the insignificant link between economic growth and employment confirms the persistence of a “jobless growth” pattern in Indonesia, where economic expansion is concentrated in capital-intensive rather than labor-intensive industries. As a result, even if Islamic financing marginally influences GDP, it does not translate into employment opportunities. This disconnect weakens the indirect

pathway from Islamic financing to employment through economic growth, reinforcing the finding that current financial

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