

## Exploratory Factor Analysis of Regional Economic Development Indicators in Indonesia : A Maqasid Al-Shariah Approach

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### ABSTRACT

**Purpose:** This study aims to identify the factor structure of regional economic development indicators in Indonesia using Exploratory Factor Analysis and map them into the five dimensions of maqasid al-shariah, namely the protection of faith (din), soul (nafs), intellect (aql), offspring (nasl), and property (mal).

**Design/methodology:** This research uses an explanatory quantitative approach with Exploratory Factor Analysis (EFA) technique on panel data of 34 provinces in Indonesia during the period 2017-2023.

**Findings:** This study found that 12 out of 18 indicators of regional economic development in Indonesia have represented the five dimensions of maqasid al-shariah. This finding was obtained through exploratory factor analysis (EFA) with Promax Rotation, where all indicators had factor loading values  $\geq 0.5$ . This finding confirms the validity of the factor structure as well as its compatibility with the maqasid al-sharia approach.

**Practical Implication:** This study emphasizes the integration of maqasid al-shariah into regional development, ensuring a balance between material and non-material welfare. The framework supports policymakers in reducing disparities and promoting inclusive and sustainable growth.

**Originality/Value:** This research offers a new approach in mapping conventional economic development indicators into the maqasid al-sharia approach through the EFA method, which has not been widely done in shariah economic development studies in Indonesia.

**Keywords:** Regional Economic Development, Maqashid Al-Shariah, Welfare, Exploratory Factor Analysis, Economic Development Indicators.

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### A. INTRODUCTION

Regional economic development is a cornerstone of Indonesia's national policy, aiming not only to enhance community welfare but also to ensure sustainability and inclusivity across regions. At the provincial level, development serves as both a barometer and a catalyst, enabling the measurement of performance, identification of disparities, and formulation of targeted local government policies (Ministry of National Development Planning, 2025). Data from the Central Statistics Agency (Badan Pusat Statistik, 2025), indicate that achievements in regional development are reflected through three interrelated domains: economic performance, demographic and social conditions, and environmental indicators. Together, these domains provide a nuanced understanding of provincial dynamics, highlighting the complex interplay between economic growth, social well-being, and environmental sustainability, core principles guiding Indonesia's development planning.

Although this framework is relatively comprehensive, regional disparities remain significant. Statistical evidence highlights that Java consistently records the highest Gross Regional Domestic Product (GRDP) growth, averaging above 4 percent, supported by investment levels exceeding Rp 400 trillion. In contrast, eastern regions such as Papua and East

Nusa Tenggara continue to face poverty rates above 19 percent, coupled with limited access to clean water and basic infrastructure. Recovery trajectories also vary considerably across provinces. For example, Central Sulawesi achieved double-digit growth in the post-pandemic period, while Bali and Yogyakarta relied predominantly on tourism and services to stimulate recovery.

In the social dimension, higher education participation exceeds 75 percent in Yogyakarta and Bali, yet Papua and West Papua continue to report low life expectancy and insufficient Information and Communication Technology (ICT) skills. At the national level, the Gini Ratio has stabilized between 0.28–0.33; suggesting relatively even income distribution. However, persistent interregional development disparities indicate that Indonesia's regional economic development indicators remain overly focused on material dimensions, while non-material aspects such as justice, morality, and spiritual values are rarely addressed.

These disparities negatively affect societal welfare. Materially, inequality restrict access to employment, education, healthcare, and basic infrastructure, leaving underdeveloped regions with high poverty and low living standards. Non-materially, disparities generate social injustice, marginalisation, and limited community participation in social, cultural, and spiritual activities. Consequently, uneven development impedes inclusive growth and overall quality of life, necessitating policy interventions that promote economic equity while strengthening social and spiritual values (Yunanto et al., 2025).

A more holistic measurement of welfare can be achieved through a *maqasid al-shariah* based approach, which emphasises the five Shariah objectives: protection of faith (*din*), soul (*nafs*), intellect (*aql*), offspring (*nasl*), and property (*mal*). This approach broadens development indicators, so that societal welfare is assessed not only materially but also in terms of spiritual, moral, social, and intellectual quality of life, including social participation, reinforcement of moral values, and individual capacity development (Al-Jayyousi et al., 2022; Ghulamallah, 2023; Hashem, 2023; Shovkhalov, 2024).

Several previous studies highlight the significance of the *maqasid al-shariah* approach in economic development. Hikmah and Yazid (2025) emphasises *maqasid al-shariah* as a solution in contemporary economics. Azmi (2024) highlights the relevance of *maqasid al-shariah* in the success of people's economic development, while Fajar et al., (2021), Isnaini and Sugara (2024), developed a conceptual approach for economic development that is aligned with the five dimensions of *maqasid al-shariah*. However, most of these studies are still limited to descriptive normative approaches, and have not empirically tested the relationship between economic development indicators and the *maqasid al-shariah* structure.

This study addresses this gap by applying Exploratory Factor Analysis (EFA) to empirically identify and categorise regional economic development indicators in Indonesia according to the five *maqasid al-shariah* dimensions. EFA reveals latent structures within complex datasets, allowing the construction of empirically valid factor models (Gatignon, 2014). Previous research demonstrates EFA's utility: Muhammad et al., (2025) validated instruments measuring *aqidah*, *ibadah*, and *akhlak*; Masuwai et al., (2025) assessed Islamic Education teachers' competence, Mohameda et al. (2023) measured trainee teachers' financial well-being, and Ismail et al., (2025) evaluated constructs including conventional and Islamic economic systems, digital marketing, and gold marketing perfectionism.

By integrating EFA with the *maqasid al-shariah* approach, this study introduces a novel empirical approach to analysing economic development indicators. To the researcher's

knowledge, no prior study has mapped regional indicators within this approach. The novelty lies in linking economic indicators with the five maqasid al-shariah dimensions, producing a holistic set of welfare measurement indicators.

The study contributes theoretically by providing an empirical framework that incorporates shariah principles into economic evaluation, expanding literature on both material and non-material welfare. Practically, it offers a foundation for Indonesian local governments to design inclusive and equitable development policies, such as balanced fund allocation, prioritisation of education and healthcare in underdeveloped areas, and social-spiritual programmes. Ultimately, this research has the potential to enhance societal welfare comprehensively and reduce interregional disparities.

## **B. LITERATURE REVIEW**

### **1. Conventional Economic Development**

According to Ganaka (2025), conventional economic development aims to boost growth by increasing per capita income, reducing poverty and unemployment, maintaining price stability, and generating decent jobs. Rostow's (1960) modernisation theory views development as a linear transition from traditional to high-consumption societies, driven by investment and industrialisation. Similarly, Lewis's (1954) structural change model highlights shifting labour from agriculture to industry to accelerate growth and employment (Todaro and Smith, 2020; Chandra, 2022).

To measure the success of economic development and its supporting factors, various macroeconomic indicators are widely used at regional, national and global levels. These indicators include economic growth rate, per capita income, poverty rate, Human Development Index (HDI), open unemployment rate, income distribution, inflation, and investment. In addition, social indicators such as regional inequality, labour force participation, food security, as well as access to basic services such as health and education, basic infrastructure; water, electricity, and road facilities, and accessibility to religious freedom are also important components in assessing the quality of economic development (Thirlwall and Pacheco-Lopez, 2017; Ahuja, 2019; Custodio et al., 2023).

Previous research shows that conventional economic development indicators have a positive impact on economic growth and improving people's welfare. Azzahra et al., (2024) shows that education plays an important role in driving economic growth and reducing poverty in Indonesia through improving the quality of human resources. In line with the findings Singh et al., (2025) which confirms that increasing per capita income has a significant impact on improving the quality of human resources. Kang and Li (2024) also concluded that economic growth contributes to a consistent reduction in absolute poverty.

Studies have also highlighted the importance of investment in driving economic development. Mohamed and Abdi (2024) finding capital formation boosts economic growth and simultaneously lowers the unemployment rate. Muneer et al., (2025) strengthened the argument by showing that investment can increase economic growth while reducing unemployment. Yeboah et al., (2025) adding investment and trade openness has a positive impact on economic growth in the short term, especially in developing countries.

### **2. Critique of the Conventional Approach**

Conventional economic development has long been used as a benchmark for assessing

a country's success in improving societal welfare, with key indicators including economic growth, per capita income, and HDI. While these indicators provide insights into material achievements, conventional approaches are frequently criticised for emphasising purely economic aspects and neglecting non-monetary dimensions and long-term sustainability.

Several studies highlight these limitations. Dirksen and Alkire (2025) argue that, conventional indicators fail to capture non-monetary poverty and overlook aspects of dignity and social justice. Liu et al., (2024) point to the narrow scope of such indicators, particularly regarding income equity and long-term sustainability. Buchs and Lee (2024) emphasise that, economic growth as the sole development goal is insufficient and advocate for alternative indicators that prioritise social justice, basic needs fulfilment, and holistic well-being.

In addition, spiritual and environmental dimensions are often neglected. Shabbir (2019), also highlighted that development measures overly focused on material aspects tend to overlook the spiritual and environmental dimensions essential for sustainable prosperity. He emphasised the need to integrate the five dimensions of *maqasid al-shariah* into a comprehensive development approach to reflect a balanced fulfilment of physical, social, and spiritual needs. Ullah and Kiani (2017), also criticised the materialistic approach to economic development for failing to reflect substantive Islamic welfare, arguing that conventional indicators overlook distributional justice and moral sustainability key elements of the Islamic development approach.

These critiques underscore the need for development indicators that are comprehensive, equitable, and value-oriented, aligned with Islamic principles. Such indicators should not only focus on material economic growth but also on social and spiritual well-being, thereby supporting sustainable and inclusive development.

### **3. Maqashid al-Shariah and Development Indicators**

Economic development in a sharia perspective does not only focus on material growth, but aims to achieve material, spiritual and social welfare. Different from the conventional approach that emphasises the material aspect, Islam views economic development as a means to protect the five basic needs, namely protection of faith (din), soul (nafs), intellect (aql), offspring (nasl), and property (mal), which form the basis for holistic, fair and sustainable economic development (Karimullah, 2023).

To bridge the gap between the *maqasid al-shariah* approach and development practices, conventional development indicators can be contextualised into the five dimensions of *maqasid al-shariah* to reflect Islamic values (Osman, 2022). Consequently, economic development is not only orientated towards material growth, but must also reflect the values of justice, welfare and sustainability in accordance with shariah principles.

The values of *maqashid al-shariah* are reflected in development indicators that integrate spiritual and social dimensions. Chapra in Azmi et al., (2024) emphasises that these values are reflected in indicators that integrate spiritual and social aspects, such as the guarantee of freedom of worship and the availability of religious facilities, which reflect support for religious life. The fulfilment of people's basic needs such as reducing poverty and unemployment, and access to basic infrastructure services such as clean water, electricity, and roads are important indicators in realising a dignified welfare life (Tarmizi, 2024). The aspect of human resource development is also a major concern, reflected through labour force participation, and HDI achievements as a reflection of the importance of knowledge and competence in Islam (Haraki et al., 2024; Jaya et al., 2025).

On the other hand, protection of future generations is also pursued through improving family health and education services (Munthe et al., 2024). Macroeconomic indicators such as economic growth, per capita income, equitable income distribution, inflation control, and increased investment, are a reflection of the principles of justice and balance in wealth management (Noh, 2022; Zailani and Zakaria, 2022). Thus, the Islamic values-based economic development approach emphasises the balance between material, spiritual and social aspects, as well as between individual and collective interests, to create a just and sustainable society.

Mapping regional economic development indicators into the five dimensions of maqasid al-shariah highlights the potential of this approach to create a more holistic and value-driven development approach. Beyond material aspects, it integrates spiritual and social values often neglected in conventional models. Thus, it is essential to develop indicators that not only quantify outcomes but also reflect social justice, environmental stewardship, and fundamental human rights in line with shariah principles.

However, this integrative mapping also raises critical questions about the adequacy of conventional government indicators in fully representing the five maqasid al-shariah dimensions. Although economic, demographic, social, and environmental measures capture material progress, they may fail to encompass the spiritual and social elements vital to a shariah-based development paradigm. In examining the relationship between conventional economic development indicators and the values of maqasid al-shariah, an analytical approach with empirical orientation is required. Exploratory Factor Analysis (EFA) is an appropriate method for identifying the latent structure of a set of indicators without the need to establish a predefined construct approach (Widaman and Helm, 2023). Through EFA, it can be evaluated whether these indicators statistically form a number of meaningful latent factors, which can substantively be associated with the values of maqasid al-shariah.

This approach facilitates an inductive process to reveal underlying relationships among variables, while allowing for contextual conceptual interpretation of regional economic development indicators within a shariah approach. Thus, EFA functions not only as a statistical tool but also as a foundation for developing a valid and empirically relevant measurement instrument grounded in maqasid al-shariah values.

**H<sub>0</sub>:** Regional economic development indicators in Indonesia do not form latent factors that reflect the dimensions of maqasid al-shariah.

**H<sub>a</sub>:** Regional economic development indicators in Indonesia form latent factors that reflect the dimensions of maqasid al-shariah.

#### **4. Use of Exploratory Factor Analysis (EFA) in Relevant Studies**

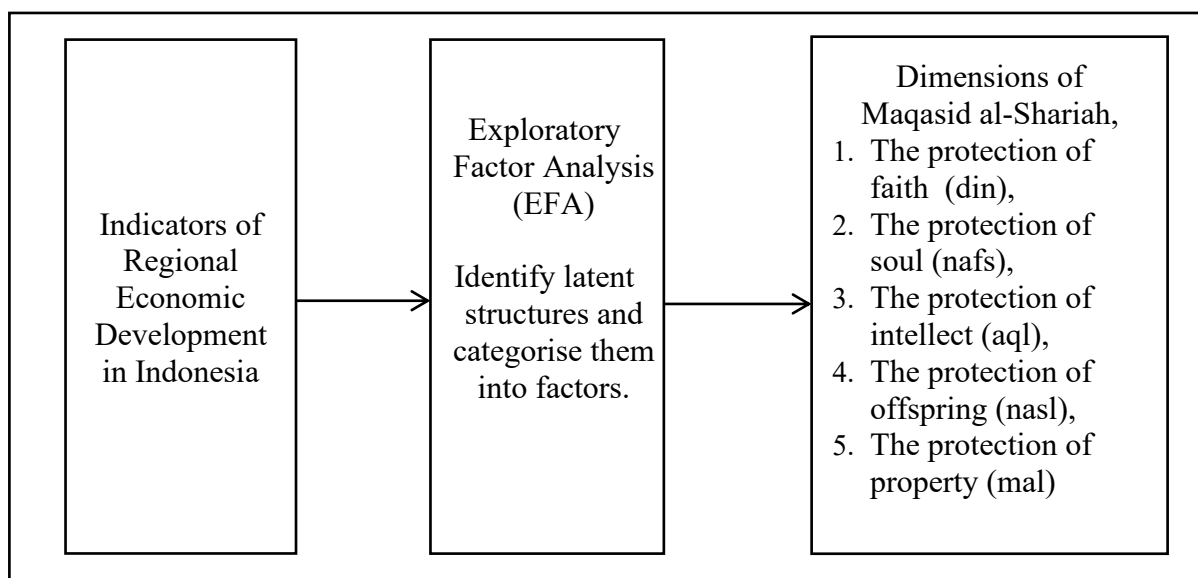
Watskin (2020) explains, EFA is a method used to identify the latent structure of a set of intercorrelated variables. Its purpose is to reduce the indicators into several factors that represent latent constructs. Without requiring a predefined model, EFA is well-suited for the stages of theory exploration or instrument development. This method groups variables based on their patterns of interrelation into dimensions with high internal coherence, thereby playing a vital role in construct validation and in testing conceptual structures based on empirical data. In development economics studies, both within conventional and shariah contexts, the use of EFA remains relatively limited. Several studies have employed EFA to examine construct validity in regional economics and the halal lifestyle (Alamsyah et al., 2024), to assess methodological quality improvements in scientific research (Goretzko et al., 2021), to identify sustainable development factors in agriculture (Laurett and Mainardes, 2021), and to explore

the underlying factors of collaboration in construction development projects in developing countries (Faris et al., 2022).

However, the use of EFA to validate economic development indicators based on maqasid al-shariah dimensions is still limited, especially in the context of regional development. Nonetheless, this approach is crucial to empirically confirm that Indonesia's regional economic development indicators align with the maqasid al-shariah approach.

Exploratory Factor Analysis (EFA) offers a rigorous, data-driven method to uncover the latent structures underlying regional economic development indicators, enabling their contributions to each dimension of maqasid al-shariah to be empirically examined. Unlike purely conceptual or descriptive approaches, EFA produces findings that are measurable, scientifically verifiable, and capable of capturing complex interrelationships among indicators. In this study, EFA is employed to assess how Indonesia's regional development indicators align with the five principal maqasid dimensions, thereby providing a robust methodological contribution to the formulation of a precise and practical shariah-based framework for evaluating regional development.

**Figure 1. Conceptual Framework**



*Source : Researcher, 2025*

### C. METHOD

This study adopts a quantitative explanatory approach, utilising panel data from the Central Statistics Agency (Badan Pusat Statistik/BPS), covering 34 out of 38 provinces in Indonesia for the period 2017–2023. Four provinces were excluded due to data limitations. This exclusion may introduce selection bias, as the included provinces tend to have more complete and consistent data. On the positive side, this allows the analysis to be conducted with higher data quality, making the models and research findings more stable and reliable in representing regional economic development trends in the provinces covered by the study.

The unit of analysis consists of various regional economic development indicators representing economic, socio-demographic, and environmental dimensions. Economic indicators include Gross Regional Domestic Product (GRDP), economic growth rate, access to electricity, clean water, household gas usage, road access, and investment. Socio-demographic indicators cover open unemployment rate, Gini ratio, labour force participation, life expectancy,

school enrolment rate, number of places of worship, and population growth rate. Environmental indicators include HDI, percentage of the population living in poverty, Gender Development Index (GDI), and the proportion of people with ICT skills. The selection of indicators is based on data availability and their relevance to the dimensions of regional economic development within the context of *maqasid al-shariah*.

All indicators were analysed using EFA to explore and identify the structure of latent factors without any prior assumptions regarding the number or form of the factors. EFA was employed to group intercorrelated indicators into factors that statistically represent the latent dimensions of regional economic development in Indonesia. Subsequently, the results of the factor exploration were conceptually analysed and classified into the five dimensions of *maqasid al-shariah*, namely the protection of faith (*din*), life (*nafs*), intellect (*aql*), lineage (*nasl*), and wealth (*mal*). This approach aims to evaluate the alignment of regional economic development indicators with the values of *maqasid al-shariah* as a normative approach within Islamic development economics.

According to Finch (2019), EFA, conducted using SPSS, begins with testing data suitability through the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity, minimum acceptable KMO value is 0.60, while Bartlett's Test must show statistical significance ( $p < 0.05$ ) to confirm that the correlations among variables are sufficient. In addition, sample adequacy is assessed using the Measure of Sampling Adequacy (MSA), with a minimum value of 0.50. The Communalities values indicate the proportion of variance in each variable that can be explained by the factors, with an Extraction value  $\geq 0.50$  considered adequate. The number of factors is determined based on Eigenvalues greater than 1 and a Scree plot analysis. Indicators are assigned to factors based on a minimum factor loading value of 0.50. To clarify the factor structure and facilitate interpretation, a Promax rotation method is applied (Hair et al., 2019).

## D. RESULT AND DISCUSSION

The research findings were obtained through a systematic data analysis process aimed at identifying the structure of latent factors. The initial stage involved testing data suitability to ensure construct validity and sample adequacy, using three primary tests: the Kaiser-Meyer-Olkin (KMO) measure, Bartlett's Test of Sphericity, and the Measure of Sampling Adequacy (MSA). These three tests served as the foundation for proceeding to the more in-depth stage of EFA.

**Table 1. Preliminary Tests of Exploratory Factor Analysis (EFA)**

| N  | Testing Method                             | Analysis Result | Cut off Value   | Conclusion                                                                                                                                                                                                        |
|----|--------------------------------------------|-----------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <i>Kaiser-Meyer-Olkin (KMO)</i>            | 0.671           | $\geq 0.6$      | The KMO value of 0.671 exceeds the 0.6 threshold, indicating the data are adequate for factor analysis and suitable for identifying the dimensions of <i>maqasid al-shariah</i> in regional economic development. |
| 2. | <i>Bartlett's Test of Sphericity (Sig)</i> | 0.00            | $< \alpha 0.05$ | The results of Bartlett's Test of Sphericity show a significance value of 0.00 ( $p < 0.05$ ),                                                                                                                    |

|                                                        |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------|-------|-------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                        |       |       |  | indicating that the correlations among indicators are statistically significant. Therefore, the data are suitable for further analysis through factor analysis                                                                                                                                                                                                                                  |
| 3. <i>Measures of Sampling Adequacy (MSA)</i>          |       |       |  | The MSA results indicate that most indicators exceed the 0.5 threshold, confirming their suitability for further analysis. However, five indicators; GRDP growth rate, road access, Gini ratio, labour force participation, and school enrolment rate, fell below this threshold and were therefore excluded. Subsequently, the preliminary tests (KMO, Bartlett's Test, and MSA) were repeated |
| 1. Gross Regional Domestic Product (GRDP)              | 0.773 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2. GRDP Growth Rate                                    | 0.441 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 3. Percentage of Households with Access to Electricity | 0.702 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4. Number of Clean Water Service Subscribers           | 0.645 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5. Household Gas Usage                                 | 0.713 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 6. Road Access                                         | 0.471 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 7. Investment                                          | 0.749 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 8. Open Unemployment Rate                              | 0.608 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 9. Gini Ratio                                          | 0.438 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10. Labour Force Participation                         | 0.442 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 11. Life Expectancy                                    | 0.837 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 12. School Enrolment Rate                              | 0.430 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 13. Number of Places of Worship                        | 0.696 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 14. Population Growth Rate                             | 0.589 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 15. Human Development Index (HDI)                      | 0.690 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 16. Percentage of Population Living in Poverty         | 0.735 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 17. Gender Development Index (GDI)                     | 0.571 | > 0.5 |  |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 18. Percentage of Population with ICT Skills           |       |       |  |                                                                                                                                                                                                                                                                                                                                                                                                 |

*Source: SPSS Output, 2025*

Table 1 presents the results of the KMO test, which yielded a value of 0.671 ( $> 0.6$ ), and Bartlett's Test, which showed a significance level of 0.00 ( $< 0.05$ ). These results indicate that the data are suitable for factor analysis. The MSA results show that most indicators have values above 0.5; with the exception of five indicators: GRDP growth rate, road access, Gini ratio, labour force participation, and school enrolment rate. Consequently, these five indicators were eliminated, and the preliminary tests were repeated to obtain a more valid factor structure.

**Table 2. Preliminary Tests of Exploratory Factor Analysis  
(After the Elimination of 5 Indicators)**

| N<br>o | Testing Method                                      | Analysis<br>Result | Cut off<br>Value | Conclusion                                                                                                                                                                                                                  |
|--------|-----------------------------------------------------|--------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | <i>Kaiser-Meyer-Olkin (KMO)</i>                     | 0.755              | $\geq 0.6$       | <b>Kaiser-Meyer-Olkin (KMO):</b> The KMO value of 0.755 exceeds the 0.6 threshold, indicating adequate sampling and data suitability for factor analysis in identifying the dimensions of <i>maqasid al-shariah</i> .       |
| 2.     | <i>Bartlett's Test of Sphericity (Sig)</i>          | 0.00               | $< \alpha 0.05$  | <b>Bartlett's Test of Sphericity (Sig):</b> The significance value of 0.00 ( $p < 0.05$ ) confirms that correlations among indicators are statistically significant, supporting the feasibility of further factor analysis. |
| 3.     | <i>Measures of Sampling Adequacy (MSA)</i>          |                    |                  | The MSA values for all indicators exceed 0.5, indicating adequate sample adequacy and inter-variable correlations. Thus, the data are deemed suitable for factor analysis within the <i>maqasid al-shariah</i> approach.    |
| 1.     | Gross Regional Domestic Product (GRDP)              | 0.759              | $> 0.5$          |                                                                                                                                                                                                                             |
| 2.     | Percentage of Households with Access to Electricity | 0.838              | $> 0.5$          |                                                                                                                                                                                                                             |
| 3.     | Number of Clean Water Service Subscribers           | 0.607              | $> 0.5$          |                                                                                                                                                                                                                             |
| 4.     | Household Gas Usage                                 | 0.854              | $> 0.5$          |                                                                                                                                                                                                                             |
| 5.     | Investment                                          | 0.673              | $> 0.5$          |                                                                                                                                                                                                                             |
| 6.     | Open Unemployment Rate                              | 0.794              | $> 0.5$          |                                                                                                                                                                                                                             |
| 7.     | Life Expectancy                                     | 0.787              | $> 0.5$          |                                                                                                                                                                                                                             |
| 8.     | Number of Places of Worship                         | 0.551              | $> 0.5$          |                                                                                                                                                                                                                             |
| 9.     | Population Growth Rate                              | 0.613              | $> 0.5$          |                                                                                                                                                                                                                             |
| 10.    | Human Development Index (HDI)                       | 0.721              | $> 0.5$          |                                                                                                                                                                                                                             |
| 11.    | Percentage of Population Living in Poverty          | 0.894              | $> 0.5$          |                                                                                                                                                                                                                             |
| 12.    | Gender Development Index (GDI)                      | 0.634              | $> 0.5$          |                                                                                                                                                                                                                             |
| 13.    | Percentage of Population with ICT Skills            | 0.610              | $> 0.5$          |                                                                                                                                                                                                                             |

Source: SPSS Output, 2025

Table 2 shows that the KMO value (0.755) exceeds the threshold ( $> 0.6$ ), and Bartlett's Test yields a significance value of 0.00 ( $p < 0.05$ ), confirming sufficient correlations among variables. All MSA values are above 0.5, indicating adequate sample adequacy. Thus, the data are suitable for EFA to examine the alignment of regional economic development indicators with the dimensions of maqasid al-shariah.

In the second stage, Communalities analysis was conducted to assess the extent to which the 13 regional economic development indicators represent data variability, using an extraction threshold of  $\geq 0.5$ .

**Table 3. Factor Variability Testing (Communalities)**

| No | Indicators of Regional Economic Development in Indonesia | Analysis Result (Extraction) | Cut off Value | Conclusion                                                                                                                                                                                                                    |
|----|----------------------------------------------------------|------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Gross Regional Domestic Product (GRDP)                   | 0.679                        | $\geq 0.5$    | All 13 regional economic development indicators in Indonesia have extraction values $\geq 0.5$ ; confirming their adequacy for EFA and suitability for mapping development dimensions within the maqasid al-shariah approach. |
| 2  | Percentage of Households with Access to Electricity      | 0.739                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 3  | Number of Clean Water Service Subscribers                | 0.750                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 4  | Household Gas Usage                                      | 0.672                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 5  | Investment                                               | 0.791                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 6  | Open Unemployment Rate                                   | 0.559                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 7  | Life Expectancy                                          | 0.713                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 8  | Number of Places of Worship                              | 0.640                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 9  | Population Growth Rate                                   | 0.932                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 10 | Human Development Index (HDI)                            | 0.750                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 11 | Percentage of Population Living in Poverty               | 0.692                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 12 | Gender Development Index (GDI)                           | 0.515                        | $\geq 0.5$    |                                                                                                                                                                                                                               |
| 13 | Percentage of Population with ICT Skills                 | 0.682                        | $\geq 0.5$    |                                                                                                                                                                                                                               |

*Source: SPSS Output, 2025*

Table 3 shows that all regional economic development indicators have Extraction (Communalities) values  $\geq 0.5$ , indicating their adequacy in representing the factor structure. The highest value is found in the Population Growth Rate (0.932), suggesting that its variance is almost entirely explained by the extracted factors.

Other indicators that also show high Extraction values include Investment (0.791), Number of Clean Water Service Subscribers (0.750), and the Human Development Index (HDI) (0.750), indicating a strong contribution to factor formation. Meanwhile, the lowest Extraction values are found in the Gender Development Index (GDI) (0.515) and the Open Unemployment Rate (0.559), although they still fall within the acceptable range. This suggests that most of the variance in these indicators can still be explained by the factors within the model, even though their contributions are not as strong as those of the other indicators. These results confirm that

all 13 indicators are suitable for further analysis using EFA, as they meet the Communalities criteria adequately.

The third stage involves determining the number of factors formed from the indicators that passed the eligibility tests. This determination is conducted using two approaches: Total Initial Eigenvalues (TIE), with the criterion of values  $> 1$ , and the Scree Plot, which observes the point of sharp decline. Both methods are employed to ensure the most representative factor structure for the data.

**Table 4. Determination of the Number of Factors (Components)**

| <i>Component</i> | Initial Eigenvalues | Cut off Value | Conclusion                                                                                                                                                                |
|------------------|---------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | Total               |               |                                                                                                                                                                           |
| 1                | 4.376               | $>1$          | Eigenvalue analysis identified five components with values $> 1$ , indicating they explain substantial variance and justify reducing the indicators to five main factors. |
| 2                | 1.597               | $>1$          |                                                                                                                                                                           |
| 3                | 1.087               | $>1$          |                                                                                                                                                                           |
| 4                | 1.035               | $>1$          |                                                                                                                                                                           |
| 5                | 1.020               | $>1$          |                                                                                                                                                                           |
| 6                | 0.925               | $>1$          |                                                                                                                                                                           |
| 7                | 0.789               | $>1$          |                                                                                                                                                                           |
| 8                | 0.636               | $>1$          |                                                                                                                                                                           |
| 9                | 0.523               | $>1$          |                                                                                                                                                                           |
| 10               | 0.334               | $>1$          |                                                                                                                                                                           |
| 11               | 0.291               | $>1$          |                                                                                                                                                                           |
| 12               | 0.252               | $>1$          |                                                                                                                                                                           |
| 13               | 0.136               | $>1$          |                                                                                                                                                                           |

*Source: SPSS output, 2025*

Table 4 presents the results of the KMO test, which yielded a value of 0.671 ( $> 0.6$ ), and Bartlett's Test, which showed a significance level of 0.00 ( $< 0.05$ ). These results indicate that the data are suitable for factor analysis. The MSA results show that most indicators have values above 0.5; with the exception of five indicators: GRDP growth rate, road access, Gini ratio, labour force participation, and school enrolment rate. Consequently, these five indicators were eliminated, and the preliminary tests were repeated to obtain a more valid factor structure.

**Table 5. Preliminary Tests of Exploratory Factor Analysis  
(After the Elimination of 5 Indicators)**

| N  | Testing Method                             | Analysis Result | Cut off Value   | Conclusion                                                                                                                                                                                                            |
|----|--------------------------------------------|-----------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <i>Kaiser-Meyer-Olkin (KMO)</i>            | 0.755           | $\geq 0.6$      | <b>Kaiser-Meyer-Olkin (KMO):</b> The KMO value of 0.755 exceeds the 0.6 threshold, indicating adequate sampling and data suitability for factor analysis in identifying the dimensions of <i>maqasid al-shariah</i> . |
| 2. | <i>Bartlett's Test of Sphericity (Sig)</i> | 0.00            | $< \alpha 0.05$ | <b>Bartlett's Test of Sphericity (Sig):</b> The significance value of 0.00 (p                                                                                                                                         |

|     |                                                     |       |       |                                                                                                                                                                                                                   |
|-----|-----------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                                                     |       |       | < 0.05) confirms that correlations among indicators are statistically significant, supporting the feasibility of further factor analysis.                                                                         |
| 3.  | <i>Measures of Sampling Adequacy (MSA)</i>          |       |       | The MSA values for all indicators exceed 0.5, indicating adequate sample adequacy and inter-variable correlations. Thus, the data are deemed suitable for factor analysis within the maqasid al-shariah approach. |
| 14. | Gross Regional Domestic Product (GRDP)              | 0.759 | > 0.5 |                                                                                                                                                                                                                   |
| 15. | Percentage of Households with Access to Electricity | 0.838 | > 0.5 |                                                                                                                                                                                                                   |
| 16. | Number of Clean Water Service Subscribers           | 0.607 | > 0.5 |                                                                                                                                                                                                                   |
| 17. | Household Gas Usage                                 | 0.854 | > 0.5 |                                                                                                                                                                                                                   |
| 18. | Investment                                          | 0.673 | > 0.5 |                                                                                                                                                                                                                   |
| 19. | Open Unemployment Rate                              | 0.794 | > 0.5 |                                                                                                                                                                                                                   |
| 20. | Life Expectancy                                     | 0.787 | > 0.5 |                                                                                                                                                                                                                   |
| 21. | Number of Places of Worship                         | 0.551 | > 0.5 |                                                                                                                                                                                                                   |
| 22. | Population Growth Rate                              | 0.613 | > 0.5 |                                                                                                                                                                                                                   |
| 23. | Human Development Index (HDI)                       | 0.721 | > 0.5 |                                                                                                                                                                                                                   |
| 24. | Percentage of Population Living in Poverty          | 0.894 | > 0.5 |                                                                                                                                                                                                                   |
| 25. | Gender Development Index (GDI)                      | 0.634 | > 0.5 |                                                                                                                                                                                                                   |
| 26. | Percentage of Population with ICT Skills            | 0.610 | > 0.5 |                                                                                                                                                                                                                   |

Source: SPSS Output, 2025

Table 5 shows that the KMO value (0.755) exceeds the threshold ( $> 0.6$ ), and Bartlett's Test yields a significance value of 0.00 ( $p < 0.05$ ), confirming sufficient correlations among variables. All MSA values are above 0.5, indicating adequate sample adequacy. Thus, the data are suitable for EFA to examine the alignment of regional economic development indicators with the dimensions of maqasid al-shariah.

In the second stage, Communalities analysis was conducted to assess the extent to which the 13 regional economic development indicators represent data variability, using an extraction threshold of  $\geq 0.5$ .

**Table 6. Factor Variability Testing (Communalities)**

| No | Indicators of Regional Economic Development in Indonesia | Analysis Result (Extraction) | Cut off Value | Conclusion                                         |
|----|----------------------------------------------------------|------------------------------|---------------|----------------------------------------------------|
| 1  | Gross Regional Domestic Product (GRDP)                   | 0.679                        | $\geq 0.5$    | All 13 regional economic development indicators in |

|    |                                                     |       |            |                                                                                                                                                                            |
|----|-----------------------------------------------------|-------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2  | Percentage of Households with Access to Electricity | 0.739 | $\geq 0.5$ | Indonesia have extraction values $\geq 0.5$ ; confirming their adequacy for EFA and suitability for mapping development dimensions within the maqasid al-shariah approach. |
| 3  | Number of Clean Water Service Subscribers           | 0.750 | $\geq 0.5$ |                                                                                                                                                                            |
| 4  | Household Gas Usage                                 | 0.672 | $\geq 0.5$ |                                                                                                                                                                            |
| 5  | Investment                                          | 0.791 | $\geq 0.5$ |                                                                                                                                                                            |
| 6  | Open Unemployment Rate                              | 0.559 | $\geq 0.5$ |                                                                                                                                                                            |
| 7  | Life Expectancy                                     | 0.713 | $\geq 0.5$ |                                                                                                                                                                            |
| 8  | Number of Places of Worship                         | 0.640 | $\geq 0.5$ |                                                                                                                                                                            |
| 9  | Population Growth Rate                              | 0.932 | $\geq 0.5$ |                                                                                                                                                                            |
| 10 | Human Development Index (HDI)                       | 0.750 | $\geq 0.5$ |                                                                                                                                                                            |
| 11 | Percentage of Population Living in Poverty          | 0.692 | $\geq 0.5$ |                                                                                                                                                                            |
| 12 | Gender Development Index (GDI)                      | 0.515 | $\geq 0.5$ |                                                                                                                                                                            |
| 13 | Percentage of Population with ICT Skills            | 0.682 | $\geq 0.5$ |                                                                                                                                                                            |

*Source: SPSS Output, 2025*

Table 6 shows that all regional economic development indicators have Extraction (Communalities) values  $\geq 0.5$ , indicating their adequacy in representing the factor structure. The highest value is found in the Population Growth Rate (0.932), suggesting that its variance is almost entirely explained by the extracted factors.

Other indicators that also show high Extraction values include Investment (0.791), Number of Clean Water Service Subscribers (0.750), and the Human Development Index (HDI) (0.750), indicating a strong contribution to factor formation. Meanwhile, the lowest Extraction values are found in the Gender Development Index (GDI) (0.515) and the Open Unemployment Rate (0.559), although they still fall within the acceptable range. This suggests that most of the variance in these indicators can still be explained by the factors within the model, even though their contributions are not as strong as those of the other indicators. These results confirm that all 13 indicators are suitable for further analysis using EFA, as they meet the Communalities criteria adequately.

The third stage involves determining the number of factors formed from the indicators that passed the eligibility tests. This determination is conducted using two approaches: Total Initial Eigenvalues (TIE), with the criterion of values  $> 1$ , and the Scree Plot, which observes the point of sharp decline. Both methods are employed to ensure the most representative factor structure for the data.

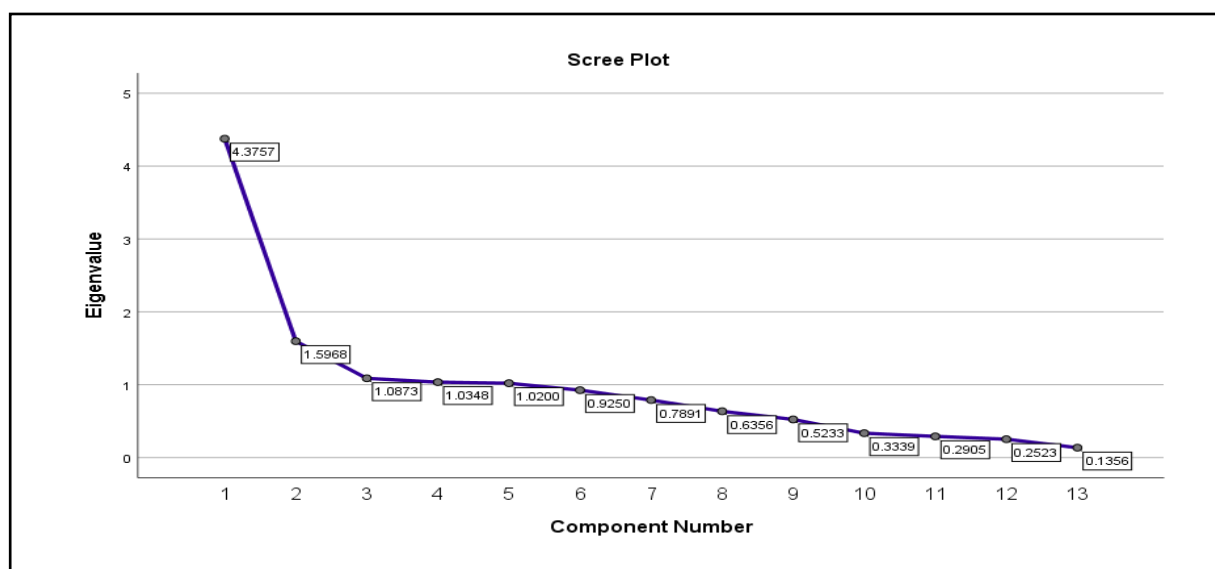
**Table 7. Determination of the Number of Factors (Components)**

| <i>Component</i> | Initial Eigenvalues | Cut off Value | Conclusion                                                                                                                                                                |
|------------------|---------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | Total               |               |                                                                                                                                                                           |
| 1                | 4.376               | $>1$          | Eigenvalue analysis identified five components with values $> 1$ , indicating they explain substantial variance and justify reducing the indicators to five main factors. |
| 2                | 1.597               | $>1$          |                                                                                                                                                                           |
| 3                | 1.087               | $>1$          |                                                                                                                                                                           |
| 4                | 1.035               | $>1$          |                                                                                                                                                                           |
| 5                | 1.020               | $>1$          |                                                                                                                                                                           |
| 6                | 0.925               | $>1$          |                                                                                                                                                                           |

|    |       |    |
|----|-------|----|
| 7  | 0.789 | >1 |
| 8  | 0.636 | >1 |
| 9  | 0.523 | >1 |
| 10 | 0.334 | >1 |
| 11 | 0.291 | >1 |
| 12 | 0.252 | >1 |
| 13 | 0.136 | >1 |

Source: SPSS output, 2025

Figure 2. Scree Plot



Source: SPSS Output, 2025

Table 7 and Figure 2 present the results of the Eigenvalue analysis used to determine the appropriate number of factors to retain. Based on the Kaiser criterion (Eigenvalue > 1), five principal components were identified with Eigenvalues exceeding 1, namely: 4.376; 1.597; 1.087; 1.035; and 1.020. These five components are considered significant and appropriate for factor formation, as they account for a substantial proportion of the variance.

Figure 2 (Scree Plot) shows a clear elbow after the fifth component, where the Eigenvalue drops sharply and levels off. This indicates that five main factors represent the optimal number for capturing the data structure in the EFA. These five factors are detailed in Table 8.

Table 8. Component Grouping Results (Component Matrix)  
Using the Principal Component Method

| No | Indicators of Regional Economic Development in Indonesia | Component 1 (Loading) | Component 2 (Loading) | Component 3 (Loading) | Component 4 (Loading) | Component 5 (Loading) | Component Grouping (Loading) |
|----|----------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
|    |                                                          | 1                     | 2                     | 3                     | 4                     | 5                     | Cut-off Value $\geq 0.5$     |
| 1. | Gross Regional Domestic Product (GRDP)                   | 0.176                 | 0.287                 | -0.641                | -0.013                | 0.393                 | No factor grouping           |
| 2. | Percentage of Households with                            | <b>0.764</b>          | -0.367                | 0.011                 | 0.128                 | 0.055                 | Factor 1                     |

|                                                |              |              |              |              |        |                    |
|------------------------------------------------|--------------|--------------|--------------|--------------|--------|--------------------|
| 3. Access to Electricity                       | <b>0.553</b> | <b>0.618</b> | 0.165        | 0.161        | -0.096 | Factors 1 and 2    |
| 4. Number of Clean Water Service Subscribers   | <b>0.766</b> | -0.230       | 0.013        | 0.129        | -0.125 | Factor 1           |
| 5. Household Gas Usage                         | <b>0.630</b> | <b>0.609</b> | -0.001       | 0.098        | -0.118 | Factors 1 and 2    |
| 6. Investment                                  | 0.435        | 0.360        | -0.397       | -0.141       | 0.251  | No factor grouping |
| 7. Open Unemployment Rate                      | <b>0.803</b> | 0.009        | 0.109        | -0.117       | -0.204 | Factor 1           |
| 8. Life Expectancy Number of Places of Worship | 0.026        | 0.491        | <b>0.582</b> | 0.072        | 0.232  | Factor 3           |
| 9. Population Growth Rate                      | -0.113       | -0.120       | -0.042       | <b>0.916</b> | 0.253  | Factor 4           |
| 10. Human Development Index (HDI)              | <b>0.842</b> | -0.168       | 0.014        | -0.111       | -0.024 | Factor 1           |
| 11. Percentage of Population Living in Poverty | -0.770       | 0.294        | 0.109        | -0.038       | 0.007  | No factor grouping |
| 12. Gender Development Index (GDI)             | <b>0.564</b> | -0.235       | 0.219        | -0.014       | 0.305  | Factor 1           |
| 13. Percentage of Population with ICT Skills   | 0.061        | -0.136       | 0.279        | -0.272       | 0.713  | No factor grouping |

*Source: SPSS Output, 2025*

Table 8 shows that GRDP has the highest loading value of 0.393 on Factor 5; however, it does not reach the cut-off value of 0.5 and thus cannot be statistically grouped. The percentage of households with access to electricity (0.764), household gas usage (0.766), life expectancy (0.803), and HDI (0.842) are classified under Factor 1, as they all have loading values above 0.5. The Gender Development Index (GDI) (0.564) is also grouped under Factor 1. The number of clean water service subscribers has a loading of 0.553 on Factor 1 and 0.618 on Factor 2, while investment shows loadings of 0.630 on Factor 1 and 0.609 on Factor 2, indicating cross-loading. The open unemployment rate has a loading value of 0.435 and does not meet the cut-off criterion. The number of places of worship (0.582) loads on Factor 3, while population growth rate (0.916) loads on Factor 4, and ICT skills (0.713) on Factor 5. The percentage of the population living in poverty shows a negative loading (-0.770) on Factor 1 and is therefore not included in any grouping.

Overall, the analysis indicates that most regional economic development indicators in Indonesia can be grouped into five main factors based on loading values of  $\geq 0.5$ . Factor 1 includes indicators of infrastructure and basic welfare, such as electricity, gas, HDI, life expectancy, and GDI. Some indicators, such as investment and clean water service subscribers, demonstrate cross-loading, indicating the presence of multiple dimensions within the data structure. Three other indicators, GRDP, open unemployment, and percentage of the population

living in poverty, do not meet the cut-off value and thus cannot be statistically grouped. Therefore, Promax rotation is required to simplify the factor structure and enhance interpretability (Hair et al; 2019).

**Table 9. The First Rotated Matrix (Pattern Matrix) Using the Promax Method**

| No  | Indicators of Regional Economic Development in Indonesia | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Component Grouping<br>(Loading)<br>Cut-off Value $\geq 0.5$ |
|-----|----------------------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------------------------------------------|
|     |                                                          | 1                       | 2                       | 3                       | 4                       | 5                       |                                                             |
| 1.  | Gross Regional Domestic Product (GRDP)                   | -0.133                  | -0.048                  | <b>0.877</b>            | 0.095                   | 0.096                   | Factor 3                                                    |
| 2.  | Percentage of Households with Access to Electricity      | <b>0.910</b>            | -0.097                  | -0.032                  | 0.149                   | 0.075                   | Factor 1                                                    |
| 3.  | Number of Clean Water Service Subscribers                | 0.081                   | <b>0.812</b>            | 0.061                   | 0.057                   | -0.122                  | Factor 2                                                    |
| 4.  | Household Gas Usage                                      | <b>0.829</b>            | 0.032                   | -0.087                  | 0.089                   | -0.100                  | Factor 1                                                    |
| 5.  | Investment                                               | 0.133                   | <b>0.721</b>            | 0.201                   | -0.007                  | -0.179                  | Factor 2                                                    |
| 6.  | Open Unemployment Rate                                   | 0.052                   | 0.174                   | <b>0.658</b>            | -0.096                  | 0.100                   | Factor 3                                                    |
| 7.  | Life Expectancy                                          | <b>0.682</b>            | 0.236                   | -0.102                  | -0.203                  | -0.080                  | Factor 1                                                    |
| 8.  | Number of Places of Worship                              | -0.273                  | <b>0.748</b>            | -0.201                  | 0.068                   | 0.349                   | Factor 2                                                    |
| 9.  | Population Growth Rate                                   | 0.072                   | 0.085                   | 0.029                   | <b>0.993</b>            | -0.069                  | Factor 4                                                    |
| 10. | Human Development Index (HDI)                            | <b>0.817</b>            | 0.037                   | 0.021                   | -0.129                  | 0.063                   | Factor 1                                                    |
| 11. | Percentage of Population Living in Poverty               | -0.847                  | 0.114                   | -0.069                  | -0.041                  | 0.003                   | No factor grouping                                          |
| 12. | Gender Development Index (GDI)                           | <b>0.634</b>            | 0.030                   | -0.033                  | 0.064                   | 0.400                   | Factor 1                                                    |
| 13. | Percentage of Population with ICT Skills                 | 0.088                   | -0.061                  | 0.147                   | -0.073                  | <b>0.841</b>            | Factor 5                                                    |

*Source: SPSS Output, 2025*

Table 9 presents the results of the Promax rotation, which yielded five main factors based on loading values  $\geq 0.5$ . Factor 1 includes: the percentage of households with access to electricity (0.910), household gas usage (0.829), life expectancy (0.682), Human Development Index (HDI) (0.817), and Gender Development Index (GDI) (0.634). Factor 2 comprises: number of clean water service subscribers (0.812), investment (0.721), and number of places of worship (0.748). Factor 3 consists of: Gross Regional Domestic Product (GRDP) (0.877) and open unemployment rate (0.658). Factor 4 contains population growth rate (0.993), while Factor 5 includes the percentage of the population with ICT skills (0.841).

Meanwhile, the indicator for the percentage of the population living in poverty does not meet the cut-off loading value of  $\geq 0.5$  and was therefore excluded from the analysis. As such, it was necessary to re-conduct the EFA using Promax rotation to ensure a more stable and interpretable factor structure (Howard, 2023).

**Table 10. Second Rotation Results (Pattern Matrix) Using the Promax Method**

| No  | Indicators of Regional Economic Development in Indonesia | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Compone nt<br>(Loading) | Componen t Grouping<br>(Loading) |
|-----|----------------------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------------|
|     |                                                          | 1                       | 2                       | 3                       | 4                       | 5                       | Cut-off Value $\geq 0.5$         |
| 1.  | Gross Regional Domestic Product (GRDP)                   | -0.154                  | -0.070                  | <b>0.889</b>            | 0.096                   | 0.101                   | Factor 3                         |
| 2.  | Percentage of households with access to electricity      | <b>0.912</b>            | -0.119                  | -0.022                  | 0.156                   | 0.073                   | Factor 1                         |
| 3.  | Number of clean water service subscribers                | 0.117                   | <b>0.777</b>            | 0.069                   | 0.059                   | -0.131                  | Factor 2                         |
| 4.  | Household gas usage                                      | <b>0.824</b>            | 0.012                   | -0.081                  | 0.091                   | -0.100                  | Factor 1                         |
| 5.  | Investment                                               | 0.151                   | <b>0.684</b>            | 0.210                   | -0.006                  | -0.186                  | Factor 2                         |
| 6.  | Open unemployment rate                                   | 0.037                   | 0.157                   | <b>0.670</b>            | -0.096                  | 0.103                   | Factor 3                         |
| 7.  | Life expectancy                                          | <b>0.711</b>            | 0.198                   | -0.091                  | -0.196                  | -0.085                  | Factor 1                         |
| 8.  | Number of places of worship                              | -0.265                  | <b>0.800</b>            | -0.214                  | 0.053                   | 0.353                   | Factor 2                         |
| 9.  | Population growth rate                                   | 0.061                   | 0.080                   | 0.028                   | <b>0.994</b>            | -0.076                  | Factor 4                         |
| 10. | Human Development Index (HDI)                            | <b>0.845</b>            | -0.006                  | 0.038                   | -0.116                  | 0.057                   | Factor 1                         |
| 11. | Gender Development Index (GDI)                           | <b>0.692</b>            | -0.003                  | -0.014                  | 0.081                   | 0.391                   | Factor 1                         |
| 12. | Percentage of population with ICT skills                 | 0.115                   | -0.022                  | 0.147                   | -0.075                  | <b>0.850</b>            | Factor 5                         |

*Source: SPSS Output, 2025*

Table 10 presents the results of the second Promax rotation, identifying 12 regional economic development indicators in Indonesia, which can be grouped into five principal factors with loadings  $\geq 0.5$ . Factor 1 includes 1) percentage of household with access electricity, 2) household gas usage, 3) life expectancy, 4) Human Development Index (HDI), and 5) Gender Development Index (GDI). These factor represents the dimension of protection of soul (nafs), relating to the fulfilment of basic needs and public health. These findings are consistent with previous studies emphasising the relationship between basic infrastructure and quality of life (Pincus, 2024; Ma and Li, 2025). These indicators highlight the importance of ensuring a decent standard of living. Achieving this dimension requires enhancing equitable access to basic infrastructure, healthcare services, education, and social protection across all provinces in Indonesia (Fuad, 2024; Ahmad and Hanafi, 2025).

Factor 2 comprises three indicators: (1) number of clean water service subscribers, (2) investment, and (3) number of places of worship, representing the dimension of protection of religion (din). Places of worship facilitate religious rituals (Lussier, 2024), clean water is essential for purification (Dewi and Hanifah, 2024), and investment in social infrastructure

reflects the state's support for spiritual life (Clark, 2020). These findings are consistent with prior studies emphasising equitable development of worship facilities (Burchardt, 2023), and access to clean water for both health and religious practice (Suar et.al., 2025)

Factor 3 consists of two key indicators: (1) Gross Regional Domestic Product (GRDP) and (2) the open unemployment rate. This factor represents the dimension of protection of property (mal), which emphasises the importance of safeguarding ownership, management, and fair distribution of wealth. GRDP reflects the economic capacity of a region, while the unemployment rate indicates the population's access to employment opportunities. These two indicators are directly related to the creation and equitable distribution of economic access (Ihwandi, 2023). These findings are consistent with previous studies showing that regional economic growth and unemployment levels significantly influence equitable welfare and economic access for communities (Zailani et al., 2022). Efforts to achieve this dimension may include strengthening the real sector, creating productive employment, supporting micro and small enterprises, and implementing economic empowerment programmes for the community. Such initiatives promote inclusive and equitable economic growth while ensuring material well-being across all provinces in Indonesia.

Factor 4 is defined by a single indicator (population growth rate), representing the dimension of offspring protection (nasl). This dimension highlights the critical role of sustainable population management in ensuring the welfare of future generations (Brida et al., 2024). These findings are consistent with previous research indicating that population management through family planning programmes and access to maternal and child healthcare services has a significant impact on long-term community welfare (Memon et al., 2024). Efforts to achieve this dimension may include the implementation of family planning programmes, improved access to maternal and child healthcare services, and the provision of quality and sustainable family education.

Factor 5 is defined by a single indicator (percentage of population with ICT skills), representing the dimension of intellect protection (aql). This dimension emphasises the critical role of enhancing society's intellectual capacity to navigate the digital era. Prior studies have shown that ICT proficiency is strongly associated with improved problem-solving, rational decision-making, and ethical reasoning, supporting the relevance of this indicator for aql protection (Nguyen et al., 2024). These findings are consistent with previous research confirming the role of digital skills in strengthening intellectual capacity and promoting the development of competitive human resources (Blaique et al., 2024; Herawati, and Mukhsin, 2025).

Beyond the retained factors, six indicators were eliminated during the EFA process: GRDP growth rate, road access, gini ratio, labour force participation, school enrolment rate, and the percentage of the population living in poverty. Their exclusion affects the comprehensiveness of the maqasid al-shariah dimensions: GRDP growth rate, road access, gini ratio, labour force participation, school enrolment rate, and the percentage of the population living in poverty. This elimination affects the comprehensiveness of the maqasid al-shariah dimensions.

GRDP growth rate, Gini ratio, and labour force participation relate to the protection of property (mal), reflecting economic capacity, property distribution, and access to productive employment. Their exclusion reduces the ability to fully capture economic welfare and equitable access (Shen et al., 2024; Zhang et al., 2025). Road access, labour force

participation, and the percentage of the population living in poverty are linked to the protection of soul (nafs), while the elimination of indicators such as household sanitation and preventive healthcare access further limits holistic representation of this dimension (Meka'a et al., 2024; Mohetaer et al., 2025).

Labour force participation and school enrolment contribute to the protection of intellect (aql), reflecting educational access. The exclusion of computational thinking, digital collaboration, and critical reasoning indicators limits the full representation of aql, suggesting policies should enhance ICT and broader cognitive skills (Prasastiningtyas et al., 2024). Indicators related to protection of faith (din) and offspring (nasl) were also eliminated, affecting the comprehensiveness of spiritual and demographic dimensions (Jalili et al., 2025; (Karim et al., 2025).

While EFA simplifies the factor structure, key aspects of the maqasid, such as economic welfare, infrastructure, education, and intellectual capacity, remain underrepresented. These limitations should be taken into account when interpreting the results, and further research could incorporate additional indicators or complementary methods to ensure the integrity of the maqasid al-shariah dimensions. Despite these constraints, each factor still provides meaningful insights and can be interpreted in ways that broaden its initial meaning.

Factor 1 (nafs) not only reflects the fulfilment of basic needs but also indicates the effectiveness of public infrastructure and healthcare services, given that several indicators were eliminated. Factor 2 (din), in addition to safeguarding spiritual life, may reflect the quality of the social ecosystem that supports education, health, and social values. Factor 3 (mal) highlights regional economic opportunities, as indicators such as GRDP growth, Gini ratio, and labour force participation were eliminated. Factor 4 (nasl) also reflects regional demographic transitions and emphasises the importance of improving the quality of life of future generations. Finally, Factor 5 (aql) signals societal adaptability to technological and economic changes, suggesting the need for comprehensive enhancement of cognitive and analytical competencies.

## E. CONCLUSION

This study empirically examines the integration of maqasid al-shariah principles into regional economic development analysis in Indonesia, identifying 12 of 18 indicators grouped into five principal factors via Exploratory Factor Analysis (EFA) with Promax rotation. These factors align with the five core dimensions of maqasid al-shariah. Factor 1 represents the protection of soul (nafs), including electricity access, household gas usage, life expectancy, Human Development Index (HDI), and Gender Development Index (GDI). Factor 2 reflects the protection of faith (din), comprising clean water customers, investment, and places of worship. Factor 3 pertains to the protection of property (mal), namely Gross Regional Domestic Product (GRDP) and open unemployment rate. Factor 4, population growth rate, indicates the protection of offspring (nasl), while Factor 5, community ICT skills, represents the protection of intellect (aql). All indicators demonstrated factor loadings  $\geq 0.50$ , confirming the validity and robustness of the factor structure.

This study contributes to the theoretical development of maqasid al-shariah by providing an empirically grounded framework linking regional economic indicators to the five dimensions. It demonstrates how factor analysis can operationalise maqasid al-shariah concepts in a measurable way, supporting the integration of Islamic ethical principles into economic development planning.

Despite these contributions, the study has several limitations. Some indicators were eliminated during EFA, limiting the full representation of certain maqasid al-shariah dimensions, particularly mal, nafs, and aql. The data are cross-sectional, preventing assessment of temporal dynamics or causal relationships. Additionally, the study focuses solely on Indonesia, which may limit generalisability to other contexts.

Future research should incorporate additional indicators to capture underrepresented dimensions, consider longitudinal data to analyse trends and causal links, and extend the study to other countries to test the applicability of the empirical maqasid al-shariah framework in diverse socio-economic settings. Researchers may also explore complementary methodologies, such as Structural Equation Modelling (SEM), to examine interactions among the five dimensions and their impact on regional development outcomes.

## F. BIBLIOGRAPHY

- Ahmad Yunadi, Syafiq Mahmadah Hanafi, A. M. (2025). Community Welfare Perspective Islamic Human Development Index (IHDI). *Al-Intaj: Jurnal Ekonomi Dan Perbankan Syariah*, 11(1), 77–95. <https://doi.org/http://dx.doi.org/10.29300/aj.v11i1.6919>
- Ahuja, H. L. (2019). *Advanced economic theory LPSPE*. S. Chand Publishing.
- Al-Jayyousi, O., Tok, E., Saniff, S. M., Wan Hasan, W. N., Janahi, N. A., & Yesuf, A. J. (2022). Re-thinking sustainable development within Islamic worldviews: a systematic literature review. *Sustainability*, 14(12), 7300. <https://doi.org/https://doi.org/10.3390/su14127300>
- Alamsyah, I. F., Notolegowo, H. K., & Uddin, M. N. (2024). Factor Analysis and Strategies for Regional Economic Development based on Creative Industry and Halal Lifestyle. *Al Tijarah*, 10(1), 13–24. <https://doi.org/http://ejournal.unida.gontor.ac.id/index.php/altijarah>
- Azmi, N., Hamzah, I., Ahmad, M. Y., & Lousada, S. A. N. (2024). Maqasid al-Shariah: Foundation for sustainable Sharia economic development. *Al-Tijarah: Journal of Islamic Economics, Finance and Business*, 1(1), 1–11. <https://doi.org/https://ejournal.kampusalazhar.ac.id/index.php/JAT/article/view/26>
- Azzahra, A., Rahayu, R., Marlina, N. S., Saebah, N., & Saputro, W. E. (2024). The role of education in economic growth and breaking the chain of poverty in Indonesia. *Journal of Management, Economic, and Financial*, 2(2), 55-63. <https://doi.org/https://doi.org/10.59261/jmef.v2i2.31>
- Badan Pusat Statistik. (2025). *BPS-Statistics Indonesia*.
- bin Osman, M. D. H. (2022). Maqashid Al Shariah in Economic Development: Theoretical Review of Muhammad Umer Chapra's Thoughts. *Millah: Journal of Religious Studies*, 21(2), 583-612. <https://doi.org/https://doi.org/10.20885/millah.vol21.iss2.art10>
- Blaique, L., Abu Salim, T., & Mir, F. A. (2024). Does human capital mediate the relationship between digital competence and service innovation capability? Evidence from the UAE during covid-19 pandemic. *International Journal of Innovation Science*, 16(4), 709–730. <https://doi.org/https://doi.org/10.1108/IJIS-11-2022-0214>
- Brida, J. G., Alvarez, E., Cayssials, G., & Mednik, M. (2024). How does population growth affect economic growth and vice versa? An empirical analysis. *Review of Economics and Political Science*, 9(3), 265-297. <https://doi.org/https://doi.org/10.1108/REPS-11-2022-0093>
- Büchs, M., Koch, M., & Lee, J. (2024). Sustainable welfare: Decoupling welfare from growth and prioritizing needs satisfaction for all. In *De Gruyter Handbook of Degrowth*, (pp. 89-106.). De Gruyter.
- Burchardt, M. (2023). Infrastructuring religion: materiality and meaning in ordinary urbanism.

- Space and Culture*, 26(2), 180-191. <https://doi.org/https://doi.org/10.1177/12063312221130248>
- Chandra, R. (2022). *Endogenous Growth in Historical Perspective*. Springer International Publishing.
- Clark, J. (2020). Investment in local health-shaping institutions: Reconsidering the role of the religious environment. *Social Science & Medicine*, 262, 113048. <https://doi.org/https://doi.org/10.1016/j.socscimed.2020.113048>
- Custodio, H. M., Hadjikakou, M., & Bryan, B. A. (2023). A review of socioeconomic indicators of sustainability and wellbeing building on the social foundations framework. *Ecological Economics*, 203, 107608. <https://doi.org/https://doi.org/10.1016/j.ecolecon.2022.107608>
- Dewi, S. S., Shabrina, S., & Hanifah, E. (2024). The Role of Ecological Values in Fiqh Wudhu': An Effort to Maintain the Sustainability of Water Resources. *International Journal of Religion and Social Community*, 2(1), 61-67. <https://doi.org/https://doi.org/10.30762/ijoresco.v2i1.3511>
- Dirksen, J., & Alkire, S. (2025). *Multidimensional Poverty: Measurement, Analysis, Applications*. In *Handbook of Labor, Human Resources and Population Economics*. Springer.
- Fajar, R., Noviarita, H., Anggraini, E., & Bin Jamel, S. (2021). National Development Program Development Program According to the Maqashid Shariah Perspective. *Buletin Studi Ekonomi*, 26(1), 135–150. <https://doi.org/https://doi.org/10.24843/BSE.2021.v26.i01.p10>
- Faris, H., Gaterell, M., & Hutchinson, D. (2022). Investigating underlying factors of collaboration for construction projects in emerging economies using exploratory factor analysis. *International Journal of Construction Management*, 22(3), 514-526. <https://doi.org/https://doi.org/10.1080/15623599.2019.1635758>
- Finch, W. H. (2019). *Exploratory Factor Analysis*. Inc SAGE Publications.
- Fuad, M. (2024). Integration of Islamic Jurisprudence Principles within the UN Global Human Security Framework. *Khazanah Hukum*, 6(3), 251-268. <https://doi.org/https://doi.org/10.15575/kh.v6i3.40205>
- Ganaka, S. (2025). *Modern Economic Development*. Educohack Press.
- Gatignon, H. (2014). Confirmatory Factor Analysis. *Statistical Analysis of Management Data*, 77–154. [https://doi.org/10.1007/978-1-4614-8594-0\\_4](https://doi.org/10.1007/978-1-4614-8594-0_4)
- Ghulamallah, E. (2023). Sustainable Development And Islamic Economics Paradigms Compared. *International Journal of Islamic Economics and Finance Research*, 6(2), 84-98. <https://doi.org/10.53840/ijiefer121>
- Goretzko, D., Pham, T. T. H., & Bühner, M. (2021). Exploratory factor analysis: Current use, methodological developments and recommendations for good practice. *Current Psychology*, 40(1), 3510-3521. <https://doi.org/https://doi.org/10.1007/s12144-019-00300-2>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (219 C.E.). *Multivariate data analysis* (8th ed). Cengage Learning.
- Haraki, E., Widuri, C., Jaenudin, M., & Nadofah, N. (2024). The Effect of Maqashid Syariah toward Human Development Index: Evidence from Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 10(3), 2954–2968. <https://doi.org/https://doi.org/10.29040/jiei.v10i3.14892>
- Hashem, M. (2023). *Maqāṣid Al-Sharī'ah A Civilizational Perspective*. International Institute of Islamic Thought IIIT.
- Herawati, M., & Mukhsin, M. (2025). Islamic Financial Literacy In Digital Age: The Role Of Social Capital And Digital Literacy. *Al-Intaj: Jurnal Ekonomi Dan Perbankan Syariah*, 11(1), 111–122. <https://doi.org/http://dx.doi.org/10.29300/aij.v11i1.7074>
- Hikmah, N., & Yazid, M. (2025). Maqashid Al-Syariah as a Contemporary Economic Solution According to Yusuf Al-Qaradawi. *ITQAN: Journal of Islamic Economics*,

- Management, and Finance*, 4(1), 51–63.  
<https://doi.org/https://doi.org/10.57053/itqan.v4i1.62>
- Howard, M. C. (2023). A systematic literature review of exploratory factor analyses in management. *Journal of Business Research*, 164, 113969. <https://doi.org/113969>.
- Ismail, M. S., Yaakob, R., & Chik, Z. (2025). Developing and Validating Instruments for Measuring System Economic Conventional, System Economic Islam, Marketing Digital and Perfection Gold Marketing. *International Journal of Contemporary Research and Review (ICRRD)*, 6(2), 142–155.  
<https://doi.org/https://doi.org/10.53272/icrrd>
- Isnaini, I., & Sugara, B. (2024). The significance and application of Maqashid Sharia in contemporary economic practices: a qualitative analysis. *Saqifah: Jurnal Hukum Ekonomi Syariah*, 9(1), 64–71.  
<https://doi.org/https://journals.fasya.uinib.org/index.php/saqifah/article/view/439>
- Jalili, I., Sitorus, I. R., Julir, N., Shulthoni, M., Ulfa, F., & Solihu, A. K. H. (2025). Role of Qawā'id Fiqhiyyah in Promoting Green Investment within Islamic Economics: Theoretical and Practical Frameworks. *Journal of Islamic Thought and Civilization*, 15(1), 202–223. <https://doi.org/https://doi.org/10.32350/jitc.151.12>
- Jaya, T. J., Meylianingrum, K., Aghniacakti, A., Kholilah, K., & Syariati, D. (2025). Impact Of Macroeconomic Variables And Zakat On Poverty Alleviation: Evidence From Indonesian Panel Data Analysis. *Al-Intaj: Jurnal Ekonomi Dan Perbankan Syariah*, 11(1), 156–172. <https://doi.org/http://dx.doi.org/10.29300/aij.v11i1.4943>
- Kang, Y., & Li, Y. (2024). The impact of China's economic growth on poverty alleviation: From absolute to relative poverty. *ArXiv Preprint ArXiv*, 2412.20176.  
<https://doi.org/https://doi.org/10.48550/arXiv.2412.20176>
- Karim, R., Pk, M. B., Dey, P., Akbar, M. A., & Osman, M. S. (2025). A study about the prediction of population growth and demographic transition in Bangladesh. *Journal of Umm Al-Qura University for Applied Sciences*, 11(1), 91–103.  
<https://doi.org/https://doi.org/10.1007/s43994-024-00150-0>
- Karimullah, S. S. (2023). Exploration of Maqasid Al-Shariah Concepts in the Development of Islamic Economic Policies. Mu'amalah. *Jurnal Hukum Ekonomi Syariah*, 2(2), 153–172. <https://doi.org/https://doi.org/10.32332/muamalah.v2i2.7747>
- Laurett, R., Paco, A., & Mainardes, E. W. (2021). Measuring sustainable development, its antecedents, barriers and consequences in agriculture: An exploratory factor analysis. *Environmental Development*, 37, 100583.  
<https://doi.org/https://doi.org/10.1016/j.envdev.2020.100583>
- Liu, K., Wang, R., Behrens, P., Schrijver, I., Jansen, A., A. Rum, I., & Hoekstra, R. (2024). A comprehensive Beyond-GDP database to accelerate wellbeing, inclusion, and sustainability research. *Scientific Data*, 11(1), 1166.  
<https://doi.org/https://doi.org/10.1038/s41597-024-04006-4>
- Lussier, D. N. (2024). Reconceptualizing Houses of Worship to Advance Comparisons across Religious Traditions. *Religions*, 15(7), 785.
- Ma, Y., Shui, J., & Li, Y. (2025). Digital infrastructure and quality of life: A quasi-natural experimental study based on the 'Broadband China' pilot policy. *Technology Analysis & Strategic Management*, 37(8), 890–903.  
<https://doi.org/https://doi.org/10.1080/09537325.2023.2298847>
- Masuwai, A., Zulkifli, H., & Hamzah, M. I. (2025). Exploratory factor analysis of secondary school Islamic Education Teacher self-assessment Instrument: A pilot study. *Social Sciences & Humanities Open*, 11, 101573.  
<https://doi.org/https://doi.org/10.1016/j.ssaho.2025.101573>
- Meka'a, C. B., Fotso, S. R., & Kamdem, B. R. G. (2024). Investments in basic public infrastructure and their effects on economic growth in a developing country: The case of Cameroon. *Heliyon*, 10(4), e26504.

- [https://doi.org/https://www.cell.com/heliyon/fulltext/S2405-8440\(24\)02535-0](https://doi.org/https://www.cell.com/heliyon/fulltext/S2405-8440(24)02535-0)
- Memon, Z. A., Tahmeena, Fazal, S. A., Reale, S., Spencer, R., Bhutta, Z., & Soltani, H. (2024). Effective strategies for increasing the uptake of modern methods of family planning in South Asia: a systematic review and meta-analysis. *BMC Women's Health*, 24(1), 13. <https://doi.org/https://link.springer.com/article/10.1186/s12905-023-02859-2>
- Ministry of National Development Planning. (2025). *Indonesia 2045: Visi Indonesia Emas 2045*.
- Mohamed, A. A., & Abdi, A. H. (2024). Exploring the dynamics of inflation, unemployment, and economic growth in Somalia: a VECM analysis. *Cogent Economics & Finance*, 12(1), 2385644. <https://doi.org/https://doi.org/10.1080/23322039.2024.2385644>
- Mohamed, N. N. N., Sahida, S., Izwan, M., & Mahmuda, N. A. (2023). Exploratory Factor Analysis (EFA) and Reliability Analysis of Financial Well-being Instrument Among Trainee Teachers. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 12(3), 487–500. <https://doi.org/http://dx.doi.org/10.6007/IJARAFMS/v12-i3/19070>
- Mohetaer, Y., Han, C., Meng, L., Shangguan, Y., & Liu, P. (2025). From Flush to Fulfillment: Unveiling the Influence of Upgraded Sanitation on Subjective Well-Being. *Social Indicators Research*, 178, 335–370. <https://doi.org/https://doi.org/10.1007/s11205-025-03589-8>
- Muhammad, J., Yusoff, Z., Yaakob, R., Lateh, H. M., & Chik, Z. (2025). Developing and Validating an Instrument to Measure Religious Field, Field of Worship and Morality at the Rahmatan Lil'Alamin Foundation in northern Thailand. *International Center for Research and Resources Development (ICRRD)*, 6(3), 113–119. <https://doi.org/https://doi.org/10.53272/icrrd>
- Muneer, S., Singh, A., & Anum, S. (2025). Exploring the influence of sustainable economic growth and unemployment on FDI: evidence from Saudi Arabia. *Discover Sustainability*, 6(1), 1–17. <https://doi.org/https://link.springer.com/article/10.1007/s43621-025-00966-8>
- Munthe, I. H. N., Hasibuan, R. R. A., & Harahap, M. I. (2024). The Effectiveness Of The Community Social Care Management Program On The Welfare Of The Community Of Sengon Sari Village, Asahan Regency. *HSS (Journal Of Humanities And Social Studies)*, 4(2), 622–630. <https://doi.org/https://doi.org/10.33751/jhss.v8i3.10601>
- Nguyen, T. Q., Ngoc, P. T. A., Phuong, H. A., Duy, D. P. T., Hiep, P. C., McClelland, R., & Noroozi, O. (2024). Digital competence of Vietnamese citizens: An application of digcomp framework and the role of individual factors. *Education and Information Technologies*, 29(15), 19267–19298. <https://doi.org/https://link.springer.com/article/10.1007/s10639-024-12585-3>
- Noh, M. S. M. (2022). Economic sustainability from maqasid al-shariah perspective in Ir 4.0 Era. *Albasirah Journal*, 12(2), 153–165. <https://doi.org/https://doi.org/10.22452/basirah.vol12no2.11>
- Pincus, J. D. (2024). Well-being as need fulfillment: implications for theory, methods, and practice. *Integrative Psychological and Behavioral Science*, 58(4), 1541–1579. <https://doi.org/https://doi.org/10.1007/s12124-023-09758-z>
- Prasastiningtyas, W., Kurniawan, A. A., Ruswandi, A., Gymnastiar, I. A., & Amin, F. (2024). Digital literacy initiatives empowering marginalized communities through technology integration. *Indonesian Journal of Studies on Humanities, Social Sciences and Education*, 1(2), 60–76. <https://doi.org/https://doi.org/10.54783/gf8b0m66>
- Shabbir, M. S. (2019). *Human Prosperity Measurement within The Gloom of Maqasid Al-Shariah*. 7(2), 105–111. <https://doi.org/https://doi.org/10.14421/grieb.2019.072-05>
- Shen, Y., Agyekum, F., Reddy, K., & Wallace, D. (2024). The welfare impact of financial inclusion: a research agenda. *Journal of Accounting Literature*. <https://doi.org/https://doi.org/10.1108/JAL-10-2023-0190>

- Shovkhalov, S. (2024). Islamic economic principles and their contributions to ecological sustainability and green economy development. *In E3S Web of Conferences*, 04009.
- Singh, K., Cheemalapati, S., RamiReddy, S. R., Kurian, G., Muzumdar, P., & Muley, A. (2025). Determinants of Human Development Index (HDI): A Regression Analysis of Economic and Social Indicators. *ArXiv Preprint ArXiv*, 2502.00006. <https://doi.org/https://doi.org/10.9734/ajeba/2025/v25i11630>
- Suar, H. P. N., Sari, I. R., Ramadhan, M. F., & Muda, F. V. (2025). Addressing Water Inequality in Rural Indonesia: A Community-Based Approach with Clean Water Intervention Mechanism. *In Asia Pacific Sociological Association Conference (APSA 2024)*, 4–20. [https://doi.org/https://doi.org/10.2991/978-94-6463-680-2\\_2](https://doi.org/https://doi.org/10.2991/978-94-6463-680-2_2)
- Thirlwall, A. P., & Pacheco-López, P. (2017). *Economics of development: Theory and evidence*. Bloomsbury Publishing.
- Todaro, M.P. and Smith, S. C. (2020). *Economic Development. 14th ed.* Pearson, New York.
- Ullah, S., & Kiani, A. K. (2017). Maqasid-al-Shariah-based socio-economic development index (SCECDI): The case of some selected Islamic economies. *Journal of Emerging Economies and Islamic Research*, 5(3).
- Watskin, M. W. (2020). *A Step-by-Step Guide to Exploratory Factor Analysis with R and RStudio*. Taylor & Francis.
- Widaman, K. F., & Helm, J. L. (2023). Exploratory factor analysis and confirmatory factor analysis. *In APA PsycBooks*. <https://doi.org/https://doi.org/10.1037/0000320-017>
- Yeboah, E., Baffour, A. A., Chibalamula, H. C., & Atiso, F. (2025). The significance of foreign direct investment (FDI) and trade openness: evidence from nine European economies. *N Business & Economics*, 5(3), 27. <https://doi.org/https://link.springer.com/article/10.1007/s43546-025-00798-8>
- Yunanto, A., Laksana, R. D., & Jati, D. P. (2025). Poverty Analysis through Spiritual, Multidimensional and Monetary Material Approaches in Indonesia Rural Agricultural Area. *In E3S Web of Conferences*, 06005. <https://doi.org/https://doi.org/10.1051/e3sconf/202560906005>
- Zailani, M. N., Mohd Satar, N., & Zakaria, R. H. (2022). A Review of Indicators for the Preservation of Wealth (Hifz al-Mal) based on Maqasid al-Shariah. *Journal of Islamic Philanthropy & Social Finance (JIPSF)*, 4(1), 23–29. [https://doi.org/10.24191/jipsf/v4n12022\\_23-29](https://doi.org/10.24191/jipsf/v4n12022_23-29)
- Zailani, M. N., Satar, N. H. M., & Zakaria, R. H. (2022). Maqasid Al-Shariah based index of socio-economic development: A literature review. *The Journal of Muamalat and Islamic Finance Research*, 19(1), 47–62. <https://doi.org/https://doi.org/10.33102/jmifr.v19i1.409>
- Zhang, H., Fan, H., & Cheng, Z. (2025). Social network of digital inclusive finance and urban-rural income gap. *Applied Economics*, 1–18. <https://doi.org/https://doi.org/10.1080/00036846.2025.2467262>