
Macroeconomic Dynamic and Sustainability Index Reporting: An Islamic Economic Perspective on ASEAN Markets

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ABSTRACT

This study investigates the relationship between macroeconomic variables and stock indices within the framework of Sustainability Index Reporting in selected ASEAN countries, incorporating an Islamic Economic perspective. Utilizing quantitative data from 2018 to 2022, the research employs panel data regression analysis, specifically a fixed effect model approach, to explore the impact of key economic indicators. The results indicate that GDP growth rate, population, interest rates, and exchange rates collectively have a significant effect on Sustainability Index Reporting, affirming the suitability of the regression model. Individually, the analysis reveals that GDP growth rate and exchange rates positively influence the Sustainability Index, while population and interest rates exert a negative impact. Moreover, GDP growth rate and interest rates are identified as significant factors, whereas population and exchange rates show an insignificant influence. These findings underscore the importance of macroeconomic stability in shaping sustainable financial practices in ASEAN markets, offering insights into the integration of Islamic economic principles in enhancing sustainable development and financial reporting.

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INTRODUCTION

A sustainability index is a tool used to measure the level of sustainability of a country or region (Mori et al., 2012). Sustainability refers to the ability of an economic system to meet the needs of the present without compromising the ability of future generations to meet their needs (Stefani & Paramitha 2022). The sustainability index covers various aspects, such as economic, environmental, and social, which constitute sustainable urban development (*sustainable urban development/SUD*), as the development of sustainable development is a multilayer concept (Verma & Raghubanshi, 2018).

World Commission on Environment and Development (WCED), with its report entitled "*Our Common Future*," was published in 1987 when the concept of sustainable development was developing rapidly (Tang & Lee, 2016). In the report, sustainable development (*sustainable development*) seeks to meet the needs of the present without reducing/reducing the capabilities of future generations (Narendra et al., 2021). This SUD concept combines environmental, social, and economic aspects, including encouraging human activities and quality of life through the environment's carrying capacity, land development, and efforts to preserve nature (Kusuma et al., 2022). SUD protects the built environment and community welfare (Lestari & Khomsiyah, 2023).

In recent years, sustainability has become an increasingly important topic in economic and public policy discussions (Anwar, 2022). Decision-makers in various countries and international institutions increasingly realize the importance of integrating sustainability into monetary policy. Therefore, it is important to understand the factors that influence a country's or region's sustainability. (Luluk et al., 2021).

In particular, ASEAN countries have committed to achieving sustainable development (*sustainable development*), as stated in the Kuala Lumpur Declaration on ASEAN Environment and Development in 2015 (Kusuma et al., 2022; Piliyanti, 2019). One indicator of achieving sustainable development is the ASEAN Sustainability Index (ASEAN et al.), measured based on three pillars: economic, social, and environmental. This index shows the extent to which ASEAN countries have implemented the principles of sustainable development (Anwar, 2022). However, the achievements of the ASEAN Sustainability Index in each ASEAN country still vary greatly. It indicates that several factors influence the achievement of the sustainability index in each country (Harjo et al., 2021).

Regional sustainability is the idea that an area can be managed independently with renewable resources without excessive dependence (Erianto et al., 2023; Nihayah & Walyoto, 2018). Regional sustainability must also consider the environmental, economic, and social impacts of providing a resilient environment and place to live without reducing the ability of future generations to do the same thing. It is hoped that each region will be able to take advantage of opportunities to improve the sustainability of its city (Nihayah & Walyoto, 2018).

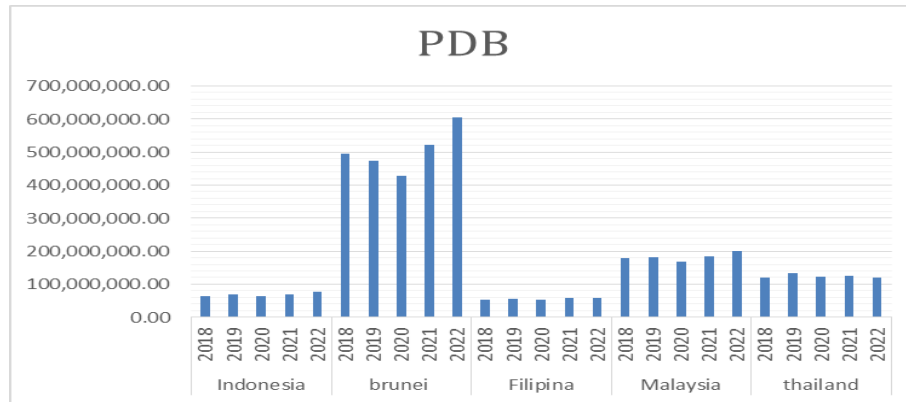
Countries must develop new techniques and innovations to meet the needs of their population as the population increases, the level of urbanization increases, and the impact of climate change occurs (Suryana & Setyani 2023). The country must become a center for innovation and efficient economic progress. All this is done to develop, occupy, and maintain cities with long-term global effects (Wahyuandari et al., 2022).

By theory, presented by Wernerfelt, 1984 *Resources Theory* (RBT) is a theory developed to describe an advantage for companies, which states that competitive advantage will be created if a company has professional resources that do not exist in other companies. (Hadith 2022). This theory explains how a company can utilize and manage existing resources. Where in the form of tangible assets and intangible assets. One of the intangible assets is *intellectual capital* (Cahya et al., 2021).

Resources-based Theory (RBT) explains that the company can control its *intellectual capital* optimally; in this case, all existing resources are good *structural capital* for *capital employees*, and employees (*human capital*) can create *value-added*. Based on the explanation of this theory, it can be concluded that companies can create added value (*value added*) by managing *intellectual capital* in the company (Igoni et al., 2020).

The following is GDP data for ASEAN countries in 2022, where GDP is still experiencing fluctuations in several countries. Many ASEAN countries strive to increase their GDP through policies such as ease of licensing, fiscal incentives, and infrastructure improvements (Yana et al., 2021). This has attracted attention from developing countries to improve sustainability index reporting (Widiastuti et al., 2022). The realization in ASEAN countries then created a positive multiplier effect for job opportunities, technology, and people's income, as well as increasing GDP growth in each country (Lisnawati & Mulyati 2021). GDP in a country does not guarantee whether a country is developed, but GDP describes the success of the country's government's economic development, as explained above.

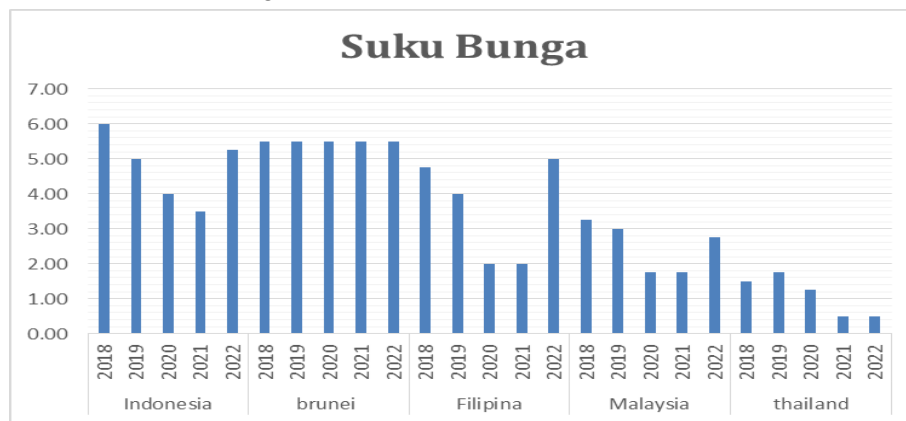
Figure 1 GDP data for 2018-2022



Source: ASEAN Statistical Yearbook (processed data)

The following is interest rate data for ASEAN countries in 2022, where GDP is still experiencing fluctuations in several countries.

Figure 2. Interest Rate Data for 2018-2022

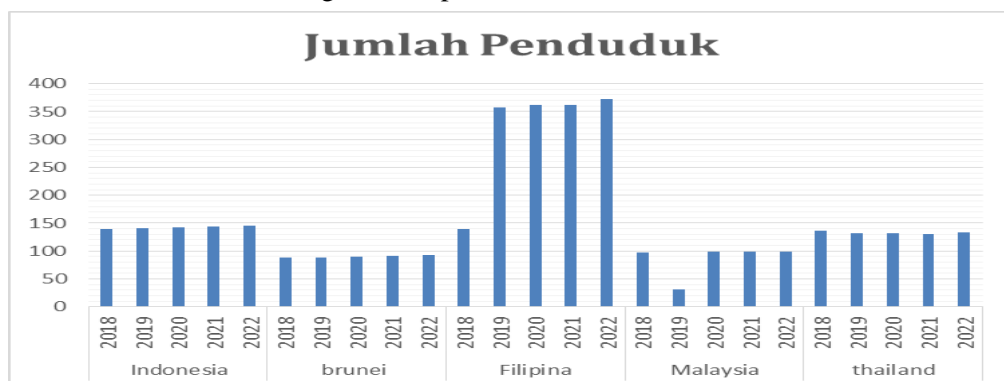


Source: ASEAN Statistical Yearbook (processed data)

The recorded interest rate in Indonesia in 2022 was 5.25%, while Brunei reached 5.5%, whereas in the previous year, these two countries were very volatile but stable in 2022. This is followed by the Philippines at 5% and Thailand at 0.50%. Next is Malaysia, with the lowest interest rate at 2.75%, which Malaysia itself has decreased; Malaysia has experienced a decline from year to year, whereas, in 2018, the interest rate in Malaysia itself was 3.25.

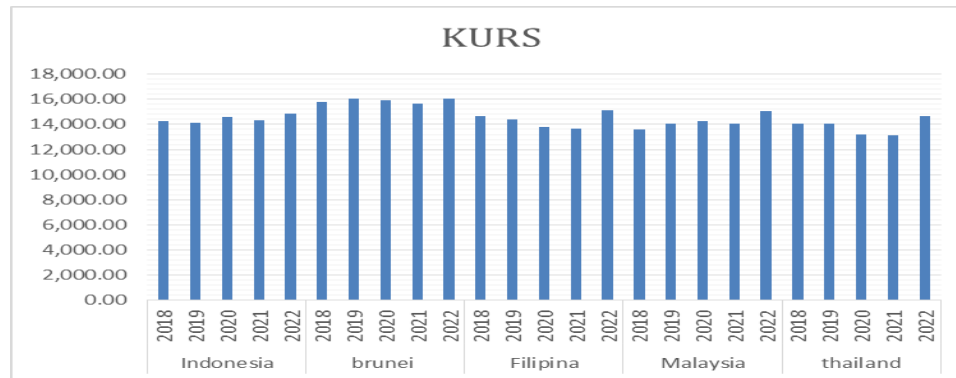
Table 3 shows the population in each ASEAN country for the 2018-2022 period, where the highest population is Indonesia at 145.7 per square meter. Km and the smallest population is Malaysia at 31.4 per sq. km.

Figure 3. Population data for 2018-2022



Another factor that influences the sustainability of the reporting index is the exchange rate, which has a macro impact, especially the cause of price increases, which have a comprehensive or universal effect so that the exchange rate rises (Sakti, 2016). The highest exchange rate in Brunei is 16,041.38 in 2022, and the lowest in Thailand is 13,165.03 in 2021. there are also many reasons this exchange rate rises and falls, which could be due to comparing inflation rates between two countries, comparing interest rates between two countries, and political stability. & Economy (Djumadi, 2024). The ASEAN regional exchange rate for 2018-2022 can be seen in Figure 4.

Figure 4. Exchange rate data for 2018-2022



Source: ASEAN Statistical Yearbook (processed data)

ASEAN countries have tried to improve access to and quality education to develop human resources (Yana et al., 2021). Data shows that the average length of schooling in ASEAN has increased in recent decades. An increase in the average size of education is positively correlated with increased productivity and economic growth in ASEAN countries (Fauzi et al., 2020). A more educated workforce makes industrialization and economic transformation easier (Febrian, 2019).

According to the Islamic economic view, sustainability index reporting (*sustainability reporting*) by the company is a form of implementation of the concept of responsibility (*accountability*) (Fauzi et al., 2020). Several Islamic economics principles relevant to sustainability reporting include Khalifah (*vicegerent*). Humans are positioned as caliphs on Earth responsible for preserving the environment (Anwar et al., 2023). Sustainability reporting is a form of company responsibility for the impact of its activities on the environment.

From an Islamic economic perspective, the *Sustainability Index Reporting* describes how an entity (e.g., a company or a country) can balance economic growth, environmental sustainability, and social welfare. Sustainable economic growth is expected to contribute to the Sustainability Index Reporting because it creates stability and prosperity. Sustainable economic growth will balance economic development and environmental sustainability; Islam recommends that humans live simply, avoid waste, and care for nature to create equitable prosperity (Mardiyah et al, 2018).

Second, Justice (*Justice*), Islamic economics emphasizes a fair distribution of economic resources for all members of society (Kusuma et al., 2022). Sustainability reporting ensures corporate accountability regarding fair business practices. And finally, welfare (*falah*). Islamic economics aims to realize true prosperity in this world and the hereafter (Somantri & Sukardi, 2019). Sustainability reporting shows the company's commitment to contributing to the welfare of society at large. As Allah says in Surah Ar-Rahman [55]: 7-9 And He raised heaven and set the balance so that you do not transgress in the balance (), maintain the weight fairly, and do not lose the balance. It means: "And He raised the heavens and created balance. So that you don't break the balance. and establish that balance justly and do not diminish that balance." (Q.S.: Al-Rahman Verse 7-9)

The quote above contains Islamic legal education (fiqh) regarding honesty and Justice. Verse 7 means, "And He raised the heavens, and He raised the balance that was created", verse 8 means, "so that balance is not destroyed," and verse 9 means, "and established the balance fairly and did not reduce the balance. As a science about Islamic law, fiqh is a group of sciences with a broad scope. The discussion consists of various Islamic law types and regulations regarding life and human behavior based on practical Sharia postulates. Verse 7 means "and Allah raised the heavens and

created balance", verse 8 means "so that you do not destroy the balance." Verse 9 means "and straighten the balance with logical and spiritual arguments fairly and you do not reduce the balance" that is the content of Islamic education which tells about law and Justice that regulate human life so that their lives are good, disciplined and prosperous, especially from the aspect of the practice (*muamalah*).

These verses underlie the Islamic economic view of the importance of accountability, social responsibility, and the corporate environment in realizing the common good. These values are reflected in sustainability index reporting practices. Thus, the practice of reporting sustainability indices aligns with the ethical framework of Islamic economics. This reporting reflects an awareness of a country's integral responsibility towards the environment, society, and stakeholders.

METHOD

This research uses *explanatory* methods, namely explaining the causal relationship between independent and dependent variables and the influence between two or more variables through hypothesis testing (Siregar, 2021). In this research, researchers used a quantitative research approach. Quantitative research uses data in numbers or statements that are assessed and analyzed using statistical analysis.

The type of data used in this research is quantitative data. Quantitative data is presented as numbers, extracted indirectly through research results or the results of processing qualitative data into quantitative data. The data source used by the author is secondary data obtained from ASEAN Statistics and the World Bank. Secondary data is published or used by an organization that is not processing.

Population is a generalized area of objects/subjects with certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. The population in this study uses data from 11 ASEAN countries. The method used in sampling this research is purposive sampling, namely a sampling technique with certain considerations or criteria, using samples from 5 ASEAN countries.

The data analysis method used is Multiple Linear Regression Analysis (*multiple linear regression method*) with a panel data model and as a data processing tool using the Eviews 10 program. Panel data combines time series data (*time series*) and cross-section (*cross-section*). Data *time series* is data collected over time on an individual. Meanwhile, data *cross-section* is collected simultaneously on many individuals (Dr. Abd. Mukhid, M.Pd. 2021). With data in the form of a time series from 2019 to 2023 and a data *cross-section* of 5 ASEAN countries, *pooled* data is a combination of data *time series* (2018-2022: 5 years) with data *cross-section* 5 ASEAN countries.

The regression model estimation method using panel data can be done using three approaches. First, CEM is the simplest panel data model approach because it only combines data *time series* and *cross-section*. In this model, time or individual dimensions are not considered, so it is assumed that the behavior of company data is the same over various periods (Luluk et al., 2021). This method can use the *Ordinary Least Square* (OLS) or least squares technique for estimating panel data models (Anwar et al., 2023). Second, this model assumes that differences between individuals can be accommodated by differences in intercepts. To estimate panel data models, *Fixed Effects* uses dummy variable techniques to capture differences in intercepts between companies; differences in intercepts can occur due to differences in work culture, managerial, and incentives. However, the slope is the same between companies. This estimation model is often also called a technique called *Least Squares Dummy Variable* (LSDV) (Sakti, 2016). Third, this model will estimate panel data where disturbance variables may be interconnected over time and between individuals. In models, *Random Effect* Intercept differences are accommodated by the error terms of each company. The advantages of using the model *Random Effect* include eliminating heteroscedasticity (Luluk et al., 2021; Tunut et al., 2022). This model is also called *the Error Component Model* (ECM), or the technique *Generalized Least Square* (GLS).

RESULTS

The results presented in Table 1, 2, and 3 display the outcomes of the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) respectively, as applied in the panel data regression analysis. Each table provides insights into the relationship between the independent variables and Sustainability Index Reporting within the ASEAN region.

In the Common Effect Model (Table 1), the constant (C) was found to have a coefficient value of 0.397171, with a standard error of 0.118439 and a t-statistic of 3.353383, leading to a probability value of 0.0025. The Gross Domestic Product (X1) variable showed a positive coefficient of 2.24E-09, with a t-statistic of 6.601759 and a highly significant probability value of 0.0000. The Population variable (X2) had a negative coefficient of -2.29E-06 but was not significant, with a probability of 0.8095. The Interest Rate (X3) displayed a negative coefficient of -0.001430, which was significant with a probability value of 0.0117. Lastly, the Exchange Rate (X4) had a positive but non-significant coefficient of 0.004323, with a probability of 0.8776.

Moving to the Fixed Effect Model (Table 2), the constant (C) was higher at 0.653381, with a t-statistic of 2.901335 and a probability value of 0.0085. The GDP variable (X1) remained positive and highly significant, with a coefficient of 2.16E-09 and a probability value of 0.0000. The Population variable (X2) had a larger negative coefficient of -1.91E-05, but still was not significant, with a probability value of 0.1853. The Interest Rate (X3) showed a stronger negative coefficient of -0.002094, with a significant probability value of 0.0004. The Exchange Rate (X4), while having a positive coefficient of 0.023615, remained non-significant with a probability value of 0.6026.

The Random Effect Model (Table 3) presented results similar to the Common Effect Model. The constant (C) was slightly lower at 0.397171, with a t-statistic of 4.014641 and a probability value of 0.0005. The GDP variable (X1) remained consistently positive and significant, with a coefficient of 2.24E-09 and a probability value of 0.0000. The Population variable (X2) continued to show a negative but non-significant coefficient of -2.29E-06, with a probability of 0.7729. The Interest Rate (X3) exhibited a negative coefficient of -0.001430, which was significant with a probability value of 0.0032. The Exchange Rate (X4) showed a positive yet non-significant coefficient of 0.004323, with a probability value of 0.8537.

Table1. CEM Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.397171	0.118439	3.353383	0.0025
X1	2.24E-09	3.39E-10	6.601759	0.0000
X2	-2.29E-06	9.42E-06	-0.243673	0.8095
X3	-0.001430	0.000526	-2.721439	0.0117
X4	0.004323	0.027778	0.155631	0.8776

Table2. FEM Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.653381	0.225200	2.901335	0.0085
X1	2.16E-09	3.48E-10	6.217994	0.0000
X2	-1.91E-05	1.40E-05	-1.369623	0.1853
X3	-0.002094	0.000504	-4.158048	0.0004
X4	0.023615	0.044671	0.528633	0.6026

Table 3. REM Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.397171	0.098931	4.014641	0.0005
X1	2.24E-09	2.83E-10	7.903569	0.0000
X2	-2.29E-06	7.86E-06	-0.291723	0.7729
X3	-0.001430	0.000439	-3.258083	0.0032
X4	0.004323	0.023203	0.186321	0.8537

To determine the most appropriate model for the data, a series of model selection tests were conducted, including the Hausman, Lagrange Multiplier, and Chow tests (Srihardianti & Prahutama, 2016). After evaluating the results, the Fixed Effect Model was identified as the best fit for the panel data regression analysis.

The coefficient value of each variable where C is a constant worth 0.653381 while X1 is the Gross Domestic Product variable with a coefficient of 2.16E-09, 0.002094 *Sustainability Index Reporting*) as follows:

$$Y = 0.653380977174 + 2.16217465556e-09X1 - 1.91485921098e-05X2 - 0.00209429318167X3 + 0.0236146535558X4$$

Information:

1. The constant value is 0.653381, meaning that without the variables X1 (Gross et al.), *Sustainability Index Reporting*) will experience an increase of 0.65%
2. x1 significant to *Sustainability Index Reporting* in ASEAN countries. So if the Gross Domestic Product increases by 1%, it will increase an average *Sustainability Index Reporting* of 2.16E-09%.
3. x2 significant to *Sustainability Index Reporting* in ASEAN countries. So when the total population increases by 1%, it will decrease on average *Sustainability Index Reporting* of -1.91E-05%.
4. x3 *Sustainability Index Reporting* in ASEAN countries. So when the interest rate increases by 1%, it will, on average, decrease the *Sustainability Index Reporting* of -0.002094%.
5. X4 y, where the exchange rate variable (X4) has a probability of 0.6026 or greater than the significance value of A 0.05 (5%) and has a positive coefficient value (+) of 0.023615 which means the exchange rate affects positive or not significant to *Sustainability Index Reporting* in ASEAN countries. So when the exchange rate increases by 1%, it will increase on average *Sustainability Index Reporting* amounting to 0.023615%.

Table 4. T Test Results (Partial)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.653381	0.225200	2.901335	0.0085
X1	2.16E-09	3.48E-10	6.217994	0.0000
X2	-1.91E-05	1.40E-05	-1.369623	0.1853
X3	-0.002094	0.000504	-4.158048	0.0004
X4	0.023615	0.044671	0.528633	0.6026

The hypothesis tests further elucidate the significance of these findings. The t-test reveals that the GDP variable (X1) has a significant individual effect on Sustainability Index Reporting, while the Population (X2) and Exchange Rate (X4) variables do not. However, the Interest Rate (X3) does have a significant individual impact. The F-test confirms that, collectively, the independent variables—GDP, Population, Interest Rates, and Exchange Rates—have a significant combined effect on Sustainability Index Reporting.

Finally, the coefficient of determination (R2) indicates the explanatory power of the model. The R2 value of 0.864951 suggests that approximately 86.5% of the variance in Sustainability Index Reporting is explained by the independent variables in the model. This demonstrates a strong relationship between the macroeconomic variables studied and Sustainability Index Reporting in the ASEAN region, with a high level of predictive accuracy.

DISCUSSION

Based on the results of the panel data regression analysis, the GDP variable was found to have a coefficient value of 2.16E-09, indicating a positive direction. The probability value associated with this result is 0.0000, which is well below the significance threshold of 0.05. This suggests that GDP has a statistically significant and positive influence on the sustainability reporting index within the ASEAN region during the period from 2018 to 2022. These findings align with the initial hypothesis, which posited that GDP would have a positive and significant impact on Sustainability Index

Reporting, thus validating the acceptance of H1. This conclusion is consistent with previous research that work similarly identified GDP growth and loan interest rates as having the most substantial impact on VCB share prices in Vietnam (Igoni et al., 2020).

Regarding the influence of population size on Sustainability Index Reporting in the ASEAN region from 2018 to 2022, the panel data regression analysis revealed a coefficient value of $-1.91E-05$, indicating a negative direction. The associated probability value is 0.1853, which is greater than the significance threshold of 0.05, indicating that the population variable is not statistically significant. Thus, while the population variable exhibits a negative direction, it does not have a significant effect on Sustainability Index Reporting in the ASEAN region during the specified period. These results corroborate the initial hypothesis, which suggested that population size would have a negative and insignificant effect on the Sustainability Index Reporting, leading to the acceptance of H2. This outcome is in line with the findings of research that reported that these variables do not have a significant impact on the IHS (Sasono, 2022).

Concerning the effect of interest rates on Sustainability Index Reporting in the ASEAN region between 2018 and 2022, the panel data regression analysis identified a coefficient value of -0.002094 , indicating a negative direction. The probability value of 0.0004, which is less than 0.05, signifies that the interest rate variable is both negative and statistically significant. These findings support the initial hypothesis that postulated interest rates would negatively and significantly influence Sustainability Index Reporting, thereby leading to the acceptance of H3. This is consistent with the research which similarly concluded that interest rates have a detrimental effect on the IHS (Ahmad & Badri, 2022).

With regard to the impact of exchange rates on Sustainability Index Reporting in the ASEAN region for the period of 2018-2022, the panel data regression analysis presented a coefficient value of 0.023615, reflecting a positive direction. However, the probability value of 0.6026, which exceeds the significance threshold of 0.05, indicates that the exchange rate variable is not statistically significant. This implies that although the exchange rate shows a positive direction, it does not have a significant effect on Sustainability Index Reporting in the ASEAN region during the specified period. These findings are consistent with the initial hypothesis, which posited that GDP would have a positive and significant impact on Sustainability Index Reporting, leading to the acceptance of H1. This outcome aligns with the research of Beh and Yeaw (2020) that an increase in exchange rates, according to their findings, would lead to an increase in Sustainability Index Reporting within the ASEAN region.

From an Islamic economic perspective, the influence of GDP, population size, interest rates, and exchange rates on Sustainability Index Reporting in the ASEAN region during the 2018-2022 period can be comprehensively understood through the fundamental principles of Islamic economics. Key principles such as responsibility, justice, simplicity, and balance play a critical role in shaping Islamic economic thought regarding sustainability reporting (Fauzi et al., 2020). This perspective is grounded in the teachings of the Qur'an, as illustrated in Q.S. An-Nahl: 90, which emphasizes justice, good deeds, and the prohibition of immorality and oppression. The verse encourages individuals to act justly, perform good deeds, and avoid injustice, with justice being defined as fair judgment, rectification of wrongs, and the upholding of righteousness.

In the context of sustainability, Islamic economics underscores the importance of maintaining a balance between the needs of the present and future generations. The principle of responsibility for nature in Islam mandates humans as stewards of the earth, tasked with the protection and preservation of the environment. This aligns with Sustainability Index Reporting, where companies are expected to disclose the environmental impacts of their operations and the measures taken to mitigate negative effects (Erianto et al., 2023). Additionally, the concept of Maslahah, or societal well-being, in Islamic economics, underscores the importance of considering the social impacts of business operations. Sustainability Index Reporting serves as a tool for companies to identify and address the social ramifications of their activities, ensuring they contribute positively to society.

Furthermore, the principles of justice and balance are central to Islamic teachings, advocating for fairness and equilibrium in all economic activities. Through Sustainability Index Reporting, companies can ensure that their operations are equitable and balanced, considering the economic, social, and environmental dimensions holistically. Transparency and accountability, emphasized in Islam, are also critical components of Sustainability Index Reporting, enhancing corporate

transparency and fostering trust with stakeholders (Djumadi, 2024). Lastly, the notion of accountability in the hereafter, a core tenet of Islamic belief, reminds individuals and entities that they will be held accountable for their actions in the afterlife. Sustainability Index Reporting can thus be seen as a means for companies to fulfill their responsibilities towards Allah SWT by demonstrating their commitment to reducing negative impacts and contributing positively to society and the environment (Mardiyah et al., 2018).

Overall, Sustainability Index Reporting provides Islamic companies with a framework to measure, communicate, and enhance their sustainability performance within the parameters of Sharia law. However, it is imperative that this reporting be conducted critically and responsibly, always adhering to Sharia principles and the broader objectives of Islamic economics.

CONCLUSION

The analysis reveals that Gross Domestic Product (GDP) significantly influences Sustainability Index Reporting in the ASEAN region during the 2018-2022 period. This is evidenced by the t-test results, which show a positive and significant relationship between GDP and sustainability reporting. Conversely, the total population in the ASEAN region during the same period has a negative, yet insignificant, impact on Sustainability Index Reporting. The t-test results confirm this, indicating that while the population variable trends negatively, its effect is not statistically significant. Interest rates also play a crucial role in Sustainability Index Reporting within the ASEAN region for the specified period. The t-test results demonstrate that interest rates have a positive and significant influence, underscoring their importance in the dynamics of sustainability reporting. However, the exchange rate, while positive, does not significantly impact Sustainability Index Reporting, as shown by the t-test results.

Furthermore, the F-test results reveal that GDP, population, interest rates, and exchange rates collectively have a significant effect on Sustainability Index Reporting, confirming the interconnectedness of these macroeconomic variables. The R-squared value further supports this, indicating a substantial proportion of the variability in Sustainability Index Reporting can be explained by these factors. From an Islamic economic perspective, the principles of responsibility (al-Musā'alah), justice (al-'Adl), simplicity (al-I'tidāl), and balance (al-Tawāzun) are integral to the understanding and implementation of Sustainability Index Reporting. ASEAN countries are increasingly aligning with these principles, striving to enhance sustainability reporting practices. These efforts not only contribute to the development of Sustainability Index Reporting within the region but also position ASEAN as a potential model for other countries that have yet to fully embrace such reporting frameworks.

For future research, it is advised to extend the study period and broaden the scope of the objects studied to ensure more accurate and comprehensive results. Researchers should consider utilizing variables with a greater influence on Sustainability Index Reporting. While this study employed panel data regression analysis using Eviews 10 software, future studies could benefit from employing different methodologies and more advanced software. The findings of this research, despite its limitations in data acquisition, should serve as a valuable reference for subsequent studies. Expanding the range of research variables and extending the research period could yield more robust results. For ASEAN countries that have not yet established a Sustainability Index, it is recommended to consider developing such an index. Additionally, ASEAN countries should place greater emphasis on sustainability reporting to enhance the region's overall sustainability performance, thereby improving competitiveness within Asia and setting a benchmark for other nations.

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